COMPETITIVENESS AGENDA FOR THE GAP REGION

GAP Entrepreneur Support Centers Project
October, 2007

GAP GİDEM Project is financed by the European Commission and executed by the United Nations Development Programme in strong cooperation with GAP Regional Development Administration.

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ABOUT THIS REPORT

The Competitiveness Agenda for the GAP Region is one of the final outputs of the GAP-GIDEM Project. The present report is an outcome of a study conducted by a group of national and international consultants in close cooperation and consultation with GAP Regional Development Administration, Delegation of the European Commission to Turkey, UNDP's Country Office in Turkey, and the GAP-GIDEM Project Team.

The objective of the study was to provide an "outside-in" view, evaluating the region's resources and opportunities in the context of the world economy, and developing recommendations that could provide a comprehensive framework for programs and policies to be undertaken within the region in the future. In short, the competitiveness agenda was designed as an effort to develop a framework for transforming the region's economy.

The study was conducted during a four-month period. Accordingly, no attempt was made to make the study comprehensive – only a limited number of sectors and provinces could be studied with any depth, and detailed work plans for each strategy could not be developed. Instead, the goal was to chart a new direction for the region and develop a cohesive framework for its further elaboration and implementation.

It is worth mentioning that the team's ability to pay sufficient attention to important social and cultural issues, such as gender and poverty alleviation was also limited. While these important issues are touched on in passing, they are a dimension to the analysis that should be encompassed in any extensions of the Competitiveness Agenda for the Region. Over 100 interviews took place in the GAP Region, with companies, officials, and academics and dozens of focus groups and workshops allowed the team to gather information efficiently.

We are thankful to Ms. Nana Adeishvili, Ms. Sehriban Bal, Mr. Alex Boyd, Ms. Tadeja Colnar, Ms. Sevinc Demirci, Mr. Alpay Filiztekin, Ms. Serap Gultekin, Mr. Alec Hansen, Mr. Eric Hansen, Ms. Paula Morgan Hansen, Mr. Anders Hoffman, Ms. Gaye Ozerkan, Mr. Bill Scott, Ms. Funda Suran, Ms. Nurcan Talay, Mr. Sinan Ulgen, Ms. Renata Vitez and Mr. Peter Wilson for their invaluable contributions to the studies carried out for development of this report. A lot of effort went into this report; however we bear a special debt to Mr. Niels C. Nielsen.

The present report was launched by HE Nazim Ekren, State Minister and Deputy Prime Minister, and HE Mr. Kemal Dervis, Administrator of UNDP, on November 12, 2007 in Ankara, and enjoyed considerable support both from national and regional stakeholders. We are also thankful to Mr. John Zysman, Mr. Jonathan Murray and Mr. Daniel Schydlowsky for their invaluable contributions.

We are confident that the Competitiveness Agenda will contribute significantly towards achievement of higher levels of wealth in the GAP Region.

GAP-GIDEM Project
UNDP

PREFACE

With the main objective of eliminating socio-economic disparities between the Southeast Anatolia Region and the other regions of Turkey by increasing the income levels and the living standards of the inhabitants in the Region; and contributing to the achievement of national development targets such as social stability and economic development through increasing the efficiency and employment opportunities in rural areas, GAP is a multi-sector, integrated and sustainable regional development project. The Project area covers nine provinces geographically located at the basin formed by the Fırat and Dicle Rivers (Adıyaman, Batman, Diyarbakır, Gaziantep, Kilis, Mardin, Siirt, Şanlıurfa, Şırnak). In this sense, developed as an integrated and sustainable development model, GAP, at the macro scale, has contributed to the convergence of the Region to the other regions of Turkey, whereas, through SME support mechanisms such as GAP GIDEM, the Project concurred to the improvement of competitiveness of the Region on national and international markets.

At this point, based on the regional development achieved through the trigger effect of GAP; under the auspices of local dynamics and contemporary global trends, it is quite important to bring up a medium and long term development vision for the GAP Region. In the specification of this vision, it is worth mentioning that, the potentials of the GAP provinces play a crucial role. These potentials range from agricultural production to cattle breeding, from traditional handicrafts to tourism, from manufacturing industry to service sector.

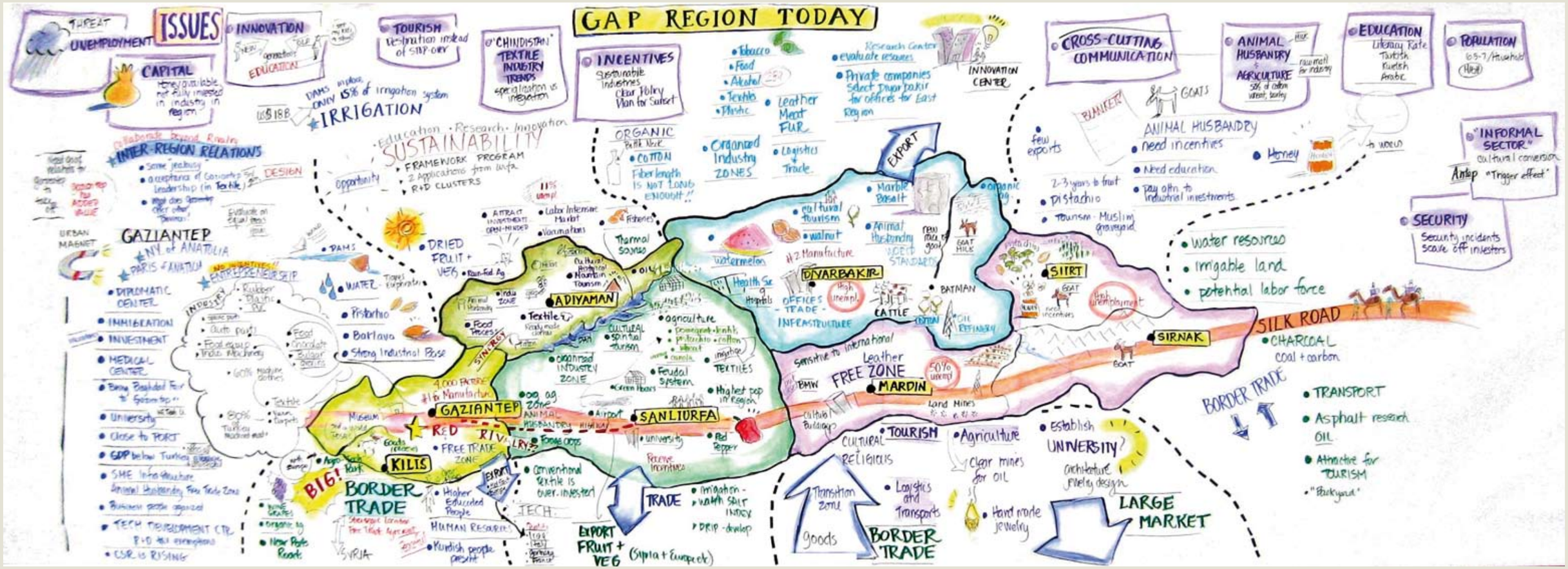
The geographical location of the Region and global trends constitute the second major branch of the vision to be developed for the Region. The status of the Region as the gateway to the Middle East and its proximity to the Middle Eastern markets; the orientation of the global capital to the relatively cheap labour force and the areas where the state supports and incentives concentrate should be regarded as important inputs for the vision. The Instrument for Pre-accession Programme (IPA), which Turkey can benefit from during the transitional period as an EU candidate country, should also be regarded as an important external financial instrument besides the national resources for the vision to be developed for the GAP Region.

In the light of these, specification of the vision for the GAP Region requires considering the regional development approaches and strategies which are applied and generating success stories in the world. Amongst these approaches and strategies, sector-specific clustering initiatives, innovation policies, entrepreneurship strategies, public-private sector partnership and industry-university collaboration turn out to be the most important ones. Undoubtedly, within the context of these approaches and strategies, during the process of both policy making and policy implementation, interaction and synergy amongst the local, regional and national stakeholders are prerequisites to obtain successful results.

I entirely believe that the Competitiveness Agenda for the GAP Region study which introduces the vision for the Region and specifies development policies, operational programs, strategies and intervention instruments, will play a crucial role for the improvement of socio-economic conditions in the Region.

We are thankful to all national and international experts, GAP RDA personnel, GIDEM Project Team and UNDP personnel for their valuable contributions to this precious study, and to the European Commission for its financial support.

Muammer Yaşar ÖZGÜL
President
GAP Regional Development Administration



One of the visuals that came out of an August 2007 workshop on setting a competitiveness agenda for the GAP region.

"The GAP Region, like most regions, is a complex amalgam of people of different life experiences, different beliefs, and different circumstances."

SECTION 1
EXECUTIVE SUMMARY

The GAP region has been the subject of a decades-long effort to "normalise levels of development, income, and living standards between the southeastern region and other regions of Turkey."[1]

Danger of Stagnation

Significant efforts have been undertaken, most notably via the hydro-electric and irrigation system projects; $19 billion out of $35 billion has been disbursed over the past 25 years. This project, in addition to other infrastructure, and more recently, economic and social development programs, has not managed to close the gap between the region and the rest of Turkey. Such a situation cannot continue – the economic, social and political stakes are too high.

There are two fundamental reasons for the failure to "normalize" income and living standards: the delays in completing the GAP infrastructure projects, and the overall approach to economic development. The delays in completing the infrastructure projects, while understandable in terms of the economic challenges facing Turkey during this period, have had a devastating impact on the reasonable expectations for the GAP region's economic growth. The hydro power components of the project are 74% complete. The irrigation system, which was to cover 1.82 million hectares, is only 14% complete. Availability of irrigation on more of this land could have a substantial impact on productivity, job growth, and average incomes, particularly if it is combined with a more ambitious economic development program.

This report lays out a Competitiveness Agenda, pointing out policies and programs that could contribute to the impacts of past policies in the region, and transform it economically. Bold new strategies and actions, based on regional distinctiveness, are required to catalyze regional growth. The infrastructure investments (1980 – 2000) and social program investments (1995-2005) of the past are necessary but insufficient to stimulate the region's economic growth for the future.

New Vision and Strategies

Strategic economic development planning recognizes the need for a guiding light - a shared vision among the region's leadership that is best articulated in terms of those core values and characteristics that are central to key development goals and the aspirations of the community. And as the GAP region strives to articulate this clear vision, it finds itself at a critical juncture: confronted by rapidly changing international economic trends and the increasingly globalized marketplace, yet in possession of several unique natural, economic and cultural assets that offer significant economic potential if leveraged appropriately.

1 GAP Master Plan

Opposite: Early morning in Şanlıurfa

The GAP region's new economic potential is possible first of all due to the considerable public infrastructure investments (dams, roads, electricity) made during the past three decades. But the new potentially transformative element is that the GAP region is willing to create a new "value proposition" upon which to distinguish itself from other regions in Turkey and elsewhere.

The GAP region today stands poised to undergo a transformation from a region mired with low productivity, unemployment, rural emigration, internal strife, and poverty to a region based on new competitive advantages. After decades of public investment, the GAP region now has many of the basic foundations for creating a successful new economy. It has the strategic location, water, land, people, leadership and historical and cultural "authenticity" upon which to grow a unique, distinctive value-added economy to compete in the global economy. After decades of lagging behind the rest of the nation, the GAP region must now seize the opportunity to establish itself as a leader in strategic areas and distinguish itself as a leader both in Turkey and among developing regions.

In the next decade, the GAP region can become a new, value-added economy-based on reengaging its identity as the "cradle of sustainable civilization" - thereby both renewing the region's cultural and economic distinctiveness and establishing the region as a new role model for developing regions in Turkey and worldwide. The new GAP economy will be based on a dynamic mix of sustainable agriculture, productive and "clean tech" manufacturing, and innovative service industries that create jobs and a rising standard of living for all its people.

GAP regional distinction will be based on becoming the premier testing ground for environmentally and socially sustainable, clean tech-based growth among emerging economies worldwide. By aligning the infrastructure and social investment of the past with a "clean-tech" approach, the region has what it takes to establish regional distinction in global markets. While the current strategy does not leverage the major accomplishment of the GAP Project – the hydroelectric power – it becomes a cornerstone of the new strategy. The region is already well on the way to becoming the region with the highest proportion of renewable energy in local consumption – by complementing this asset with appropriate policies to incentivize additional solar, wind, and bio-fuel investments, this goal could become a reality. This strategy is one of five cross-cutting strategies that, taken together, can fundamentally transform the region's economy:

Sustainable production strategy. A bold realignment of key productive sectors (e.g. agriculture, tourism and textiles) around a common strategy of sustainable production – featuring organic products, produced by largely renewable energy resources, under fair market labor practices. This combination of techniques is not only sensible in itself all along the production chain, but is in high and increasing demand in world markets (particularly OECD countries). Thus, by carving out a leading position among emerging regions worldwide, the GAP region can attain a "re-branding" of its international image that is positive and completely the reverse of its current image.

Entrepreneurship development strategy. A regulatory framework and business climate that is far more entrepreneurial and promotes innovation (not all "high-tech but including high tech where appropriate), catalyzed by a "Co-investment Fund" that can kick-start this new economy. One area where private sector co-investment can be crucial is in privatizing major elements of the secondary and tertiary canal system, thus accelerating the expansion of irrigated land area in line with GAP's original goals.

An internationalization program that will aggressively expand the mastery of foreign languages, especially English, and raise by an order of magnitude access to foreign study tours, exchange programs, and trade fairs.

Applied technology strategy. Strong expansion of the region's applied technology resources, making it far easier for companies in all key sectors to access appropriate production technologies and marketing resources. These can range from organic fiber production centers to renewable energy to a Culinary Institute – across a broad range of sectors and applications.

Clustering and networking strategy. A comprehensive application of clustering and networking techniques, fostering higher levels of coordination, collaborative strategy development and resource sharing. This program will fulfill the need for a greater number of public-private partnerships and institutions for collaboration (IFCs).

While these five strategies will be effective across all sectors, and are in essence aimed at enhancing the underlying productive capabilities of the region, the team has explored in some depth the three largest existing export sectors of the economy, since it is clear that they will have a major role to play in the region's future.[2]

Agriculture: combining the region's water, land, and people to create sustainably produced food products, cotton, and other fibers, maximizing the use of renewable energy sources and organic farming methods;

Textiles and apparel: accelerating innovation, international market linkages and "clean tech" to establish a competitive edge in textiles and apparel; and

Tourism: coordinating the region's people and historical/cultural authenticity to excel in creating an "Cradle of Sustainable Civilizations" tourism brand.

As shown in Figure 1-1, the three sectors chosen for more in-depth treatment are not the only sectors that will be impacted by the strategy. While the figure is illustrative, and the size of the bubbles is not proportional to employment, it indicates directions in which the region's economy can evolve.

2 It should be emphasized that this in no way constitutes a suggestion that these are the only sectors with potential. Their selection for this study was more a pragmatic issue, based on limited time and manpower.

Figure 1-1: The Gap Region of Tomorrow

"Dashboard for Development"

Progress toward the goals for 2023 need to be monitored regularly in order that priorities future investments and policies in the region can be tracked and occasionally re-evaluated. The lack of up-to-date and well-organized data in the region is so serious that policy makers are practically "steering blind" currently. The Competitiveness Agenda should consequently be supplemented by a *Dashboard for Development*. The Dashboard can show whether or not the large investments suggested in the strategy have the desired effect on everyday live in the region. Furthermore, it can bring the attention of policy makers to areas, where the development is lacking in the region or where further investment is needed. Some data already exist and are presented in the current strategy, but much further work is needed in other areas. Funding for the future development of the Dashboard is an essential part of the overall budget for the strategy. The Dashboard is described in Annex 1.

Why So Much Attention to Environmental Issues?

It is worth mentioning that the most innovative element of this strategy – the ambitious upgrading of sustainability-related capabilities – emerged as a hypothesis to test from the first round of regional reconnaissance and was initially greeted with some skepticism by team members and counterparts alike. However, by ground-truthing the strategy sector by sector, the team was able to verify that it is not only sound, but the optimal strategy for a region with resources like the GAP region has.

For example, in meetings with top executives in major global corporations like Marks and Spencer, the team learned the crucial role of pro-actively establishing on-the-ground capabilities to provide investors with ready-made solutions on energy use, green building, organic inputs, and fair market labor practices. While major investors from companies in that sector appreciate having good applied technology centers focusing on product development and production management, for example, such capabilities are necessary but no longer distinctive – while talented staff and strong organizations with capabilities in sustainability can save the investors considerable time and uncertainty as they map out their new global value chains based on higher and higher levels of sustainable production.

Such research led to a variety of innovative concepts that could be woven into the detailed sectoral strategies. For example, again in textiles, while the region obviously will seek to develop a high degree of expertise in production of organic cotton, our sectoral expert also deduced that a winning strategy would be to also develop local organically produced supplies of other fibers, such as flax, hemp, silk and wool. Even though the region may not be the lowest-cost producer of these products, the structure of the textiles industry is such that international buyers will want to be able to source all their production in one region. Thus, by becoming the "go-to" location for the full range of organic fibers, the region becomes more attractive for location of large, fully-integrated facilities, which are becoming more popular recently.

Boosting Competitiveness

The international competitiveness environment is strongly affected by a country or region's ability to convert comparative advantages to competitive ones. To become a value-added economy, the GAP must learn to compete nationally and internationally on the basis of higher productivity by adding value to products and services, not simply on the basis of low cost. The GAP region traditionally has seen low costs and basic exploitation of its natural resources and labor as its competitive advantage, but in the new global economy, economic advantage comes from higher productivity and added value, and regional distinctiveness.
A coordinated set of bold strategies and action must shape this distinction by focusing both externally at branding the region and establishing markets beachheads, strategic alliances with companies and regions internationally and internally, by creating awareness and supporting companies, public agencies, universities and citizens throughout the region to shift to "clean tech" activities and behaviors. Clustering will provide a mechanism to make these internal shifts. Linking with and mobilizing Turkish expatriates, creating highly visible strategic alliances and partnerships with "clean-tech" companies, regions, international agencies, NGOs, etc. around the "clean-tech" concept will help the region create its external linkages in establishing regional distinction.

Reversing Current Trends

The above strategy is implementable, and should finally begin to move the region's economic and social indicators in the direction sought by the GAP project a quarter-century ago: eliminating regional development disparities by raising people's income level and living standards. Figure 1-2 illustrates the anticipated impact of the Competitiveness Agenda on GDP per capita.

One of the key tasks in the coming 12 months should be to dis-aggregate the components of GDP in the region, testing how much needs to be spent to achieve specific changes in productivity, output, and incomes necessary to achieve this degree of convergence. While the price tag will come to several billion dollars, the return on this investment should be excellent, since it leverages the previous investments totaling $35 billion, finally completing the "last mile" that actually makes those investments pay off for the local population.

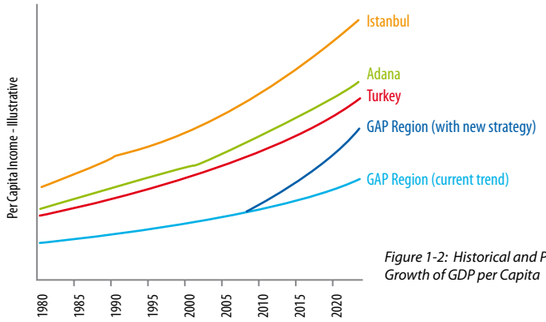


Figure 1-2: Historical and Projected Growth of GDP per Capita

Implementing the Competitiveness Agenda will require expenditures on incentives for solar and biofuels investments, the Co-investment Scheme, ambitious expansions in funding for English language training and study tours abroad, a variety of applied technology and marketing centers of excellence, and similar investments. However, not to allocate these funds would be to reduce the likelihood of success significantly.

Equally important, however, would be the exercise of political will to change policies, procedures, and regulations that currently shape the business climate. By offering salaries high enough to attract talented people to the region during the crucial launch stage, by allocating funds to set up the Co-investment Scheme, by exploring innovative methods of using private sector funding for the accelerated completion of the secondary and tertiary irrigation canals (necessitating some privatization of the system), policymakers can ensure that most of these funds will truly generate returns, as with any good investment. The Co-investment Scheme is modeled on a similar practice in other countries, which eventually repays the government's entire investment with interest. Similarly, the cost per hectare of new lands under irrigation, given the existing infrastructure already built, is quite low, and government expenditures will be recovered through tax revenues on the direct and indirect economic activities that are generated on that land.

Implementing the Competitiveness Agenda

Adopting a bold new concerted effort to step-up to a new level of competitiveness will generate new jobs, new and stronger industries, and enable the region to close the income gap.

Achieving this vision will not be easy.

The region must make the case for establishing itself as the world's premier testing grounds for "clean tech" development in the developing world, and garner the necessary national and international support, not only from governments (i.e., Ankara, Brussels, and Washington D.C.) but also from domestic and international private investors with vision and a sense of mission.

Urgent strategic actions must be taken in specific areas to accelerate development. New risk-taking behavior will be required. New public-private partnerships and new agile institutions and action teams will be needed to implement key actions. This will require bold leadership, concerted action and collaboration at all levels – local, regional, national, EU and other international partnership. But together, a bright future for a charming, historical, and physically beautiful region — an integral part of Turkey — can be forged.

Next Steps

Over the next 12 months, the government and private sector leaders will need to evaluate the recommendations in this report, determine a course of action, and begin implementation. Clearly, it takes some time to adopt a new strategy and allocate funds. However, during this coming year, it is important that momentum not be lost, particularly in the region itself.

One way to move toward implementation without making major commitments that are premature is to move forward vigorously on the clustering and networking agenda. By engaging public and private leaders in the GAP region in a serious collaborative strategy development process, the national government will be able to test the assumptions in this document, while engaging in a participative, broad-based detailed planning that will assist in refining and fine-tuning the Competitiveness Agenda and its budget. At the same time, a well-executed clustering process generally starts to yield benefits from "low-hanging fruit" so that some early wins from the new strategy can immediately be seen. Such early wins often derive from the business brokerage aspect of the process, such as joint study tours and marketing trips to target countries, which allow new products to be introduced and deals to be made. Similarly, several potential investors in the new concept have already been identified, in sectors ranging from renewable energy to apparel manufacture to irrigation technology.

By providing funding for a clustering initiative in the GAP region, associated with a separate budget that can quickly disburse funds for study/marketing trips, rapid feasibility studies, and other activities that can accelerate the transformation process in the short run. In this way, by the time the national decision-making process has had an opportunity to consider the far more costly aspects of the program, considerable progress toward the necessary alignment toward these goals will already have been made.

SECTION 2
THE GAP REGION CHALLENGE

Indicators

The nine provinces of Southeast Anatolia, known as the GAP region (Turkish acronym for "Southeast Anatolia Project") have been lagging behind most of Turkey in terms of per capita income and most quality of life indicators. In the latest year for which we have per capita income figures by province, only two provinces had lower income than Şırnak, and only a handful have incomes lower than the regional average. In Figure 2-1, the GDP per capita for the GAP provinces are presented with several other reference provinces.

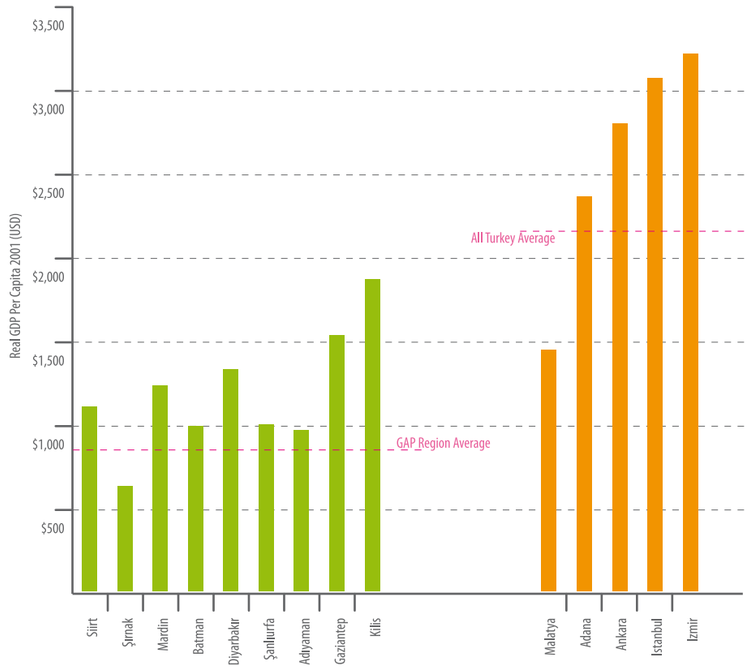


Figure 2-1: Per Capita Income Comparisons for Gap Region, from East to West
Source: Turkish Statistical Institute

Opposite: Textile factory Adıyaman - Over the past few decades, the economy of the region has been transitioning from a primarily agrarian, trading economy, to a more modern industrial one.

Of course, income figures are only part of the story. As shown in Table 2-1 below, the official unemployment rate for the various provinces in the GAP region range from 6.2% to 17.4% -- only two provinces are above all of the reference regions in other parts of Turkey.

	GDP per Capita 2001 (USD)	Unemployment Rate (2006)	Number of Primary School Students per Teacher	Number of Expert Doctors per 100,000 Inhabitants
GAP REGION				
Siirt	1,111	10.7	33	17
Şırnak	638	10.7	48	8
Batman	1,215	17.4	36	23
Mardin	983	13.0	38	15
Diyarbakır	1,313	14.2	36	31
Şanlıurfa	1,008	14.5	43	22
Adıyaman	918	11.1	26	19
Gaziantep	1,592	11.4	36	65
Kilis	1,817	6.2	26	28
Regional Average	1,186	12.1	36	25
REFERENCE REGIONS				
Malatya	1,416	8.9	22	51
Adana	2,339	14.3	29	67
Ankara	2,751	11.0	23	172
Istanbul	3,063	12.7	34	135
İzmir	3,215	10.8	24	139
National Average	2,146	7.8	25	45

Table 2-1: GDP per Capita and Unemployment Rate
Source: Turkish Statistical Institute; Edam

However, interviews suggest that the actual rate of unemployment is significantly higher in many parts of the GAP region. Displacement of rural populations, due to dam construction and security concerns, for example, have accelerated the flow of poorly educated migrants from rural areas into cities, with the attendant social issues that accompany widespread unemployment.

Across a wide range of social and health indicators, from number of students per classroom to years of education, the region lags significantly below the Turkish average. In certain crucial indicators, such as doctors per capita, even where the absolute number of doctors has actually grown faster in the past ten years than in other parts of Turkey, the ratio is actually worsening, because the rate of population growth is even faster than the growth in the number of doctors.

Economic Restructuring

Over the past few decades, the economy of the region has been transitioning from a primarily agrarian, trading economy, to a more modern industrial one. While the region has traditionally exported food products, it has more recently begun to generate 'export-based' income from a more diverse set of industries, such as marble, tourism, and especially textiles and apparel.

Despite some notable successes, especially in the yarn industry in Şanlıurfa and carpet weaving in Gaziantep, many of the companies in the apparel industry have been based on a relatively primitive understanding of production techniques and market forces, and have been characterized by "copy-cat" production, whereby dozens of producers replicate the success of one pioneer. Many of these companies would be completely unprofitable without the extremely generous incentive schemes provided by the national government – so that entire sectors are being implanted whose sustainability is in question. Many of the necessary ingredients for more robust development of these sectors – such as linkages to the outside world, entrepreneurial skills, production methods, foreign languages, and the like – are in short supply.

Programs and Policies

There are many programs under way, some national and some specially targeting the GAP region, to address these issues. While individually many of these programs are praiseworthy, and are making progress, the overall momentum toward the goal of an economically vibrant and socially stable region appears to be stalled.

Among the programs alluded to above, none is more ambitious than the Southeast Anatolia Project (Güneydoğu Anadolu Projesi, GAP) itself. Comprising some 22 dams and 19 power plants (including the Atatürk dam, one of the world's largest), the expenditure to date has totaled some $35 billion. While the hydroelectric portion of the project is approximately 85% completed, the original goal of irrigating nearly 1.8 million hectares of farmland has lagged far behind – to date only 15% of the lands originally slated to be in production are currently being irrigated (see Table 2-2).

Stage of Completion	HA	Percentage
In Operation	266,994	15.2%
Under Construction	118,011	6.3%
Design Completed	281,234	15.8%
Planning	1,114,254	62.7%
TOTAL	**1,780,493**	**100.0%**

Table 2-2: Status Of Irrigation Development in the Gap Region - 2007
Source: Gap - Şanlıurfa Administration and Author Calculation

Thus, despite the considerable expenditures on infrastructure in the region, the local economy and inhabitants have to date received limited benefits from the "big ticket" item in the GAP project – the irrigation systems. Even in the area that has currently benefited the most from the project – the Harran Plain south of Şanlıurfa, has not seen the types of income growth that should be attainable, since the utilization of the water resource has not been optimized at the farm level through conversion to higher value crops, development of more advanced irrigation technologies, and associated post-harvest processing. Of greatest concern is the fact that budget expenditures for the irrigation component have been falling in recent years, and current forecasts suggest that the irrigation system will not be completed until the year 2050 at the current rate.

Nevertheless, the other components of the GAP project, ranging from transportation infrastructure to entrepreneurship support centers to public health projects, appear to have been widely beneficial, although their scale, unlike the planned extent of the irrigation component, seems modest in proportion to the challenges facing the region.

The overall impression is of a region that is rich in natural resources, but lagging in development of human capital and plagued by social issues, which does not appear likely to 'catch up' with the rest of Turkey with a continuation of existing economic trends and policies.

While many individual programs and many individual public and private sector leaders in the region are clearly making valiant efforts, there appears to be little cohesion behind a single, consistent strategy to reverse these trends. Broad agreement across all institutions in the region, both public and private, as well as across the entire nation of Turkey, on a new set of strategies is needed to reverse the currently lackluster performance and prospects for the GAP region.

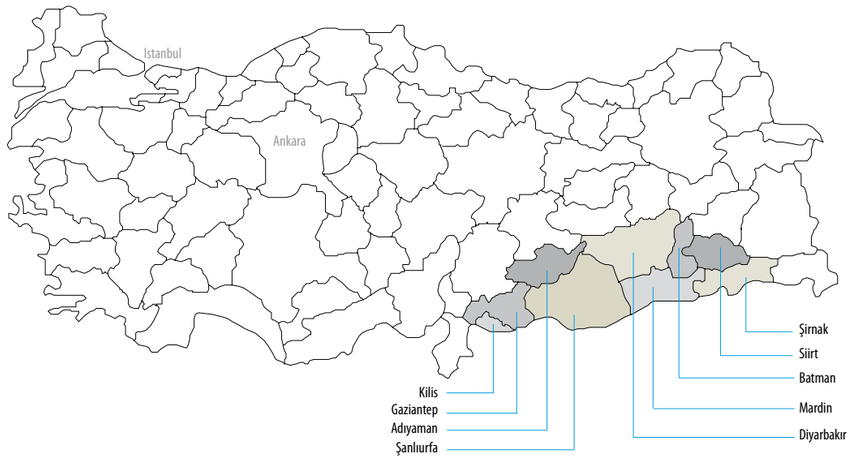


Figure 2-2: Map of Gap Region in Relation to Turkey

One of the visuals that came out of an August 2007 workshop on setting a competitiveness agenda for the GAP region.

"...if the GAP Region is to achieve a more competitive economy, its leaders are going to need to come together around a shared vision of the future."

SECTION 3
COMPETITIVENESS AGENDA FOR THE GAP REGION

3.1 OVERALL VISION

The Competitiveness Agenda for the GAP Region is about strategic planning for a sustainable economic future. The GAP Region, like most regions, is a complex amalgam of people of different life experiences, different beliefs, and different circumstances. But if the GAP Region is to achieve a more competitive economy, its leaders are going to need to come together around a shared vision of the future.

Strategic economic development planning recognizes the need for a guiding light—a shared vision among the Region's leadership. A vision is required before strategy and a strategy before tactics. In this context, vision is best articulated in terms of those core values and characteristics that are central to key development goals and the aspirations of the community.

And as the GAP Region strives to articulate a clear vision, it finds itself at a critical juncture as it struggles to emerge from prolonged economic stagnation while adapting to rapidly changing international economic trends and the increasingly globalized, marketplace. This struggle in large part results from ingrained constraints that have been well-documented for some time and have hampered the GAP Region's efforts to become more economically competitive.

Irrespective of these critical constraints and the GAP Region's leadership's efforts to address them, the Region is fortunate to possess several unique natural, economic and cultural assets and maintains comparative and/or competitive advantages in key strategic areas that can be leveraged to effectively further its competitiveness objectives.

3.1.1 New Competitive Advantages

The GAP region today stands poised to undergo a transformation from a region mired with low productivity, unemployment, rural emigration, internal strife, and poverty to a region based on new competitive advantages. After decades of public investment, the GAP region now has many of the basic foundations for creating a successful new economy. It has the strategic location, water, land, people, leadership and historical and cultural "authenticity" upon which to grow a unique, distinctive value-added economy to compete in the global economy. After decades of lagging behind the rest of the nation, the GAP Region must now seize the opportunity to establish itself as a leader in strategic areas and distinguish itself as a leader both in Turkey and among developing regions.

In the next decade, the GAP Region can become a new, value-added economy—based on reengaging its identity as the "cradle of sustainable civilization"—thereby both renewing the Region's cultural and economic distinctiveness and establishing the Region as a new role model for developing regions in Turkey and worldwide.

The new GAP economy will be based on a dynamic mix of sustainable agriculture, productive and "clean tech" manufacturing, and innovative service industries that create jobs and a rising standard of living for its entire people. The key ingredients for this success will be based on five cross-cutting strategies:

- A bold realignment of key productive sectors (e.g. agriculture, tourism and textiles) around a common ***strategy of sustainable production*** – featuring organic products, produced by largely renewable energy resources, under fair market labor practices. This combination of techniques is not only sensible in itself all along the production chain, but is in high and increasing demand in world markets (particularly OECD countries). Thus, by carving out a leading position among emerging regions worldwide, the GAP region can attain a "re-branding" of its international image that is positive and completely the reverse of the image described in the preceding chapter.
- A regulatory framework and business climate that is far more ***entrepreneurial*** and promotes innovation (not all "high-tech but including high tech where appropriate), catalyzed by a "Co-investment Fund" that can kick-start this new economy. One area where private sector co-investment can be crucial is in privatizing major elements of the secondary and tertiary canal system, thus accelerating the expansion of irrigated land area in line with GAP's original goals.
- An ***internationalization program*** that will aggressively expand the mastery of foreign languages, especially English, and rise by an order of magnitude access to foreign study tours, exchange programs, and trade fairs.
- Strong expansion of the region's ***applied technology resources***, making it far easier for companies in all key sectors to access appropriate production technologies and marketing resources. These can range from organic fiber production centers to culinary institutes – across a broad range of sectors and applications.
- A comprehensive application of ***clustering and networking*** techniques, fostering higher levels of coordination, collaborative strategy development and resource sharing. This program will fulfill the need for a greater number of public-private partnerships and institutions for collaboration (IFCs).

While these five strategies will be effective across all sectors, and are in essence aimed at enhancing the underlying productive capabilities of the region, the team has explored in some depth the three largest existing export sectors of the economy, since it is clear that they will have a major role to play in the region's future. [1]

- combining the region's water, land, and people to create ***sustainable agriculture***;
- accelerating innovation, international market linkages and "clean tech" to establish a competitive edge in ***textiles and apparel***; and
- coordinating the region's people and historical/cultural authenticity to excel in creating an ***"Cradle of Sustainable Civilizations" tourism brand***.

1 However, it should be emphasized that this in no way constitutes a suggestion that these are the only sectors with potential. Their selection for this study was more a pragmatic issue, based on limited time and manpower. Additional studies of some emerging sectors, such as ICT and healthcare was attempted, but proved impossible in the available time frame. Again, throughout the report, these three currently dominant sectors are used as examples to illustrate the application of the strategy, but the potential for other sectors to expand rapidly and play a major role in the future must be kept in mind.

3.1.2 The Gap Region's New Value Proposition

The international competitiveness environment is strongly affected by a country or region's ability to convert comparative advantages to competitive ones. To become a value-added economy, the GAP must learn to compete nationally and internationally on the basis of higher productivity by adding value to products and services, not simply on the basis of low cost. The GAP region traditionally has seen low costs and basic exploitation of its natural resources and labor as its competitive advantage, but in the new global economy, economic advantage comes from higher productivity and added value, and regional distinctiveness.

The GAP's new economic potential is possible first of all due to the considerable public infrastructure investments (dams, roads, electricity) made during the past three decades. But the new potentially transformative element is that GAP region is willing to create a new "value proposition" upon which to distinguish itself from other regions in Turkey and elsewhere.

A Clean Green Region
The starting point for new value proposition is that the GAP region is able to offer clean, renewable energy in all its products and services. Despite the disappointment in the current progress on irrigation hectarage, this new "clean tech" value proposition—given its growing appeal in the marketplace as well its impact on bottom-line efficiency gains—positions the GAP region to leverage itself into a high value added economy.

The GAP Region's existing and emerging industries all stand to benefit from this new orientation. At a time of exponential growth of attention and demand for sustainable, organic, and clean technologies, the GAP Region will be one of the first regions in the developing world to declare itself a clean, green region.[2]

Sustainable Agriculture
The GAP Region is poised to combine its newly created and vast water resources with the abundant "greenfields" of untainted lands and abundant workforce to create sustainable agriculture – growing organic cotton, bulgur wheat and duram wheat for pasta, nuts, olives, oilseeds, fruits and vegetables for export.

At the doorstep of Europe's burgeoning marketplace for healthy, organic, and sustainably produced foods, the GAP is well positioned to specialize in organic food production, and leverage its own exotic cuisine and specialties such as pistachio, baklava, and bulgur.

Sustainably Produced Textiles and Other Manufactured Products
Similarly, GAP can boast its ability to produce sustainable, ecologically-friendly, socially responsible manufactured products. By increasing current hydro energy resources, and harnessing new renewable energy particularly from solar and bio-fuels, the region will increase its net exports of renewable energy. Its textiles and apparel and other products can leverage the region's new value proposition – "Made with 100% (or greater than 50%) renewable energy from Turkey's GAP

2 This strategy may appear to be based on wishful thinking ñ both in terms of the actual demand in the marketplace, as well as the regionís ability to truly convert to sustainable production methods. However, we ask for the readerís patience. Many members of the international team were also skeptical initially, but the strategy has been tested and verified with experts and companies worldwide, and many of the report authors found to their surprise that the strategy is far more robust than they could have imagined.

Region" - and distinguish its products from those of other similar cost producer in highly competitive markets.

Sustainable Tourism
In addition to simply growing on the basis of a major campaign to develop and brand "Cradle of Sustainable Civilizations" tourism, the GAP Region can further develop competitive advantages in tourism by proactively building an eco-friendly tourism image. Tourists of the future will be received at GAP airports in electric or bio-fuels powered vans and delivered to hotels and attractions lit and heated by clean hydro-electricity and solar energy. Restaurants will feature the region's unique gastronomical delights using sustainable agriculture ingredients. Tourism attractions and accommodations will be constructed using "green" building methods.

While not all electricity needs to be based on renewable sources, not all buildings need be green buildings, and not all vehicles zero-emission vehicles, what is important is that:

- the region can boast entire sub-systems – entire groups of hotels, restaurants, and vehicles that can give tourists an "all green" experience, or entire supply chains of companies that produce "sustainable clothing" all the way from the organically-grown cotton and related fibers to the final sewing using machines consuming renewable energy, and
- that the region be ahead of other regions in this respect – especially in the developing world.

Such a distinction will be able to give the region a leading edge that can begin to turn the economy around. Note that all of the elements of the strategy so far are actually in line with the traditional authentic values of the region. Even the organic agriculture, as new lands come under irrigation that have never been subjected to chemical fertilizers and pesticides, will be in fact easier to promote than in other parts of the world.

3.2 THEORY OF THE CASE

The argument for this bold new strategy can be boiled down to its essentials:

The five cross-cutting strategies, as applied to these three main sectors and most likely other sectors as well, will transform the region's economy, increasing the growth rate and raising the quality of life significantly, if sufficient resources can be mobilized for implementation.

Despite the hitherto slow pace of irrigation system implementation, the strategy leverages the already-completed hydroelectric system to launch a significant transformation of the region's economy and image – and also includes a component to accelerate completion of the irrigation system, at lower cost to the government.

However, many other components of the plan will require spending – not approaching the $35 billion already spent, but several billions – to fund the renewable energy program, the co-investment fund, the internationalization program, upgrading of archeological sites, and so on. In particular, during the first five years ways will need to be found to attract talented people into the region, and this will require attractive salaries to compensate such persons to take up residence in a less cosmopolitan location.

These funds should only be spent if the return on the investment is large and positive, of course, but the logic of this strategy is that the IRR (internal rate of return) will be high, since it leverages the previous investments in water for electricity and irrigation – by spending a little more, the government will finally begin reaping both financial as well as social rewards on the huge investments it has made.
Figure 3-1 illustrates the objective of the Competitiveness Agenda. While the GAP region has not only lagged the rest of Turkey, but actually fallen slightly behind over the past 25 years, the strategy must aim at "closing the gap" with the rest of Turkey, bringing the region and its residents closer to the mainstream of Turkish society in every respect.

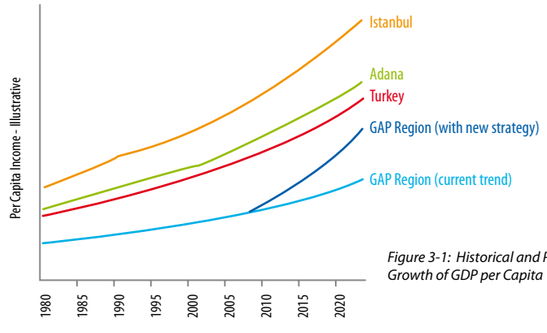


Figure 3-1: Historical and Projected Growth of GDP per Capita

Changing the underlying dynamic – beginning to significantly raise income and quality of life, will reverse several negative cycles. For example, as raising incomes begins to slow down the rate of population growth, then the social programs such as health care will begin to catch up with the challenges they face, rather than falling constantly behind.

3.3 ACHIEVING THE COMPETITIVENESS AGENDA

Clearly, "business as usual" and a continuation of existing trends in the GAP Region is no longer an option. The risk of further stagnation is too great. The stakes—for Turkey and for the EU—are too high.

Achieving this new vision will require breakthrough strategies and bold action by the region's leaders, increased collaboration and resources for priority investments supported by Turkey and the EU. Urgent strategic actions must be taken in specific areas to accelerate development. New risk-taking behavior will be required. New public-private partnerships and new agile institutions and action teams will be needed to implement key actions. This will require concerted action and collaboration at all levels – local, regional, national, EU and other international partnership.

The stagnation of GAP region economy has created a notable disparity of income growth over the past decades. Income per capita in the GAP region has been growing either more slowly than or in parallel with the national average, and the divergence shows an increasing trend that is disturbing.

The choice is clear. On the one hand, to continue the current trends, which means using the potentials of the Region inefficiently by not achieving structural change of the Region. On the other hand, by adopting a bold new concerted effort to step-up to a new level of competitiveness will generate new jobs, new and stronger industries, and enable the region to close the income gap.

In order to compete effectively in the global economy, the GAP Region must move to higher value added activities. See Figure 3-2.

Cotton Growers - GAP Region. The stagnation of the GAP region economy has created a notable disparity of income growth over the past decades.

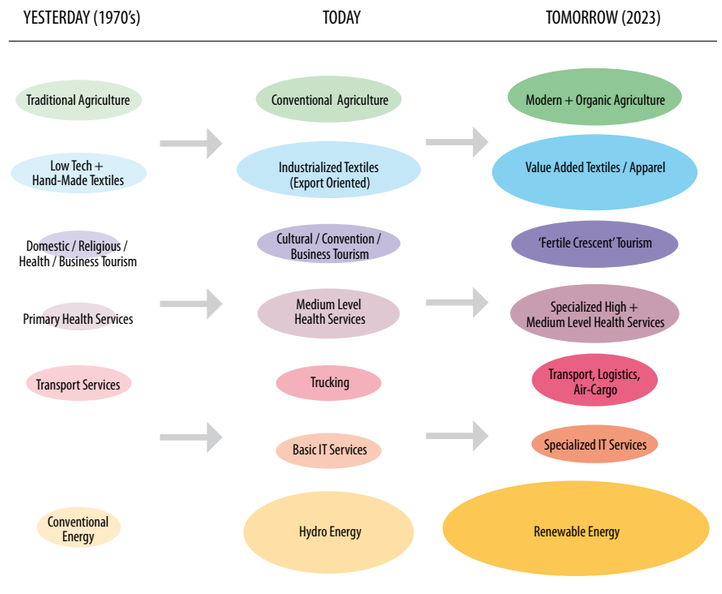


Figure 3-2: The Gap Region of Tomorrow

In textiles and apparel, for instance, the challenge posed by extremely low-cost producers (China, Bangladesh etc.), creates an imperative for higher value added products and services, rapid response and enhanced adaptability to changing markets and increased competition.

Italy, with its textile/apparel's smaller, more flexible industry structure has been much more successful than France's large producers, in confronting this challenge and can provide an inspirational model for the GAP region. Turkey is currently being successful in this respect particularly in the Western areas such as Istanbul and Izmir where Fast Fashion is starting to dominate the exports to the EU due to geographical proximity and improved manufacturing lead times. The GAP region can learn from both the Turkey model and the Italian model, which when coupled with the vision of "organic and renewable" will give a competitive edge for the GAP textile and apparel producers.

In the past the region (and nation) has invested in developing the basic infrastructure foundations (physical infrastructure, dams, electricity, etc.) now it is time to build stronger economic foundations--human, technology, financial resource, business climate and "clean tech" foundations to support high-productivity economic growth and generate a higher standard of living.

Of course, this new proposition must be branded externally such that the region's distinctiveness becomes known worldwide. Simultaneously, the importance and value of "clean tech" must penetrate deeply internally into the local mindset of business, community, government leaders and the community-at-large. In other words, the region must believe in clean tech.

That will require branding, entrepreneurship, clustering, and strengthening all aspects of the region's economic infrastructure. (See Table 3-1)

	Before 1990	1990-2007	2008-2023
Changing Environment	• Domestic competition • Rural-urban migration	• International Competition • Privatization • Crises in Iraq	• Globalization • Climate change
Economic Structure	• Agriculture • Textiles	• Agriculture • Textiles, Carpets, Apparel • Tourism	• Sustainable agriculture • Value-added textiles/apparel • "Cradle of Sustainable Civilizations" tourism • ICT, medical, and advanced services
Economic Foundations	• Low-cost labor	• Low-cost land and labor • Regional dev. incentives	• Irrigated land • Clean energy • Quality work force • Capital availability
Economic Strategy	• Infrastructure development	• Government-driven planning • Infrastructure development • Dams - Hydro projects • Social development programs	• Attract, retain, and grow value-added industry • Promote new enterprise • Regional distinctiveness branding based on "clean tech" • Public private collaborative clustering and action

Table 3-1: Evolution of the Gap Region Economy

By aligning the infrastructure and social investment of the past with a "clean-tech" approach, the region has what it takes to establish regional distinction in global markets. A coordinated set of bold strategies and action must shape this distinction by focusing both externally at branding the region and establishing markets beach-heads, strategic alliances with companies and regions internationally and internally, by creating awareness and supporting companies, public agencies, universities and citizens throughout the region to shift to "clean tech" activities and behaviors.

Clustering will provide the mechanism to make these internal shifts. Linking with and mobilizing Turkish expatriates, creating highly visible strategic alliances and partnerships with "clean-tech" companies, regions, international agencies, NGOs, etc. around the "clean-tech" concept will help the region create its external linkages and establish a unique and sustainable, regional distinction.

SECTION 4
SECTORAL STRATEGIES

The study team necessarily conducted extensive interviews with company managers and conducted tours of factories and farms. As a matter of practical necessity, the decision was made to focus these visits on specific sectors, in order to allow for some concentration of knowledge, and more in-depth understanding.

While there are many important industries in the region, such as marble and health care, which received few visits from team members, it was nevertheless obvious that the region's economic future is going to be significantly impacted by developments in the three largest existing industries: agriculture, textiles, and tourism. Thus, without making any specific endorsement that these three should be the three "target industries" for the GAP region's economic development, brief profiles of each of these three sectors have been prepared, with suggested strategies that are consistent with the overall Competitiveness Agenda.

It is quite possible that this section will receive the greatest attention of any section in this report, but will in certain important respects be the least critical in terms of the region's future. While we believe that the overall direction of these pieces is correct, circumstances can change rapidly, and industry-specific strategy development is an art in itself. So it is important to understand, before reading these sections ***that the main purpose of the sectoral strategies at this stage of the Competitiveness Agenda was to verify that the underlying assumptions and cross-cutting strategies in the Agenda were consistent with the needs of each sector.*** In other words, rather than using these sectoral strategies as a blueprint for detailed planning in each sector, they should be seen largely as a testing of the key assumptions, that building capacity and branding the region as a renewable energy and organic products powerhouse, along with improved entrepreneurship, access to English training, study tours, clustering, networking, and a rapid expansion of irrigation infrastructure will be a key asset for companies seeking to grow and export in each sector.

It is important to keep this in mind, because most of the policies and programs that emerge from the Competitiveness Agenda will not be sector-specific – most of the decisions that impact the expansion of employment, output, and exports in each of these sectors are taken by companies. However, the joint decisions that need to be taken by government, in dialogue with the private sector, will have enormous indirect impacts on each sector – so they need to be designed with the needs and requirements of each sector in mind.

Opposite:
The rich history & culture of the GAP Region is reflected in this close up of a mosaic from the Gaziantep Archaeological Museum.

4.1 TEXTILES & APPAREL INDUSTRY

4.1.1 Textiles Sector Vision

An increasing number of consumers are concerned about the effect that conventional techniques of farming and the use of fossil fuels is having on both the environment and the effects to human health. Consequently, many of the brand owners and retailers are increasing the use of organic fibres in their product offerings, and many are working with organisations that are committed to working with manufacturing techniques that reduces the carbon footprint for society at large. As a result, the demand for Organic textile products is accelerating at a rapid rate and the supply of raw organic cotton is unlikely to meet the demand, even though Turkey currently produces some 40% of the Worlds Organic cotton supplies.

Turkey has a good reputation with the European buyers for fast fashion and the processing of Organic fibres does not require any different technology than currently available in the GAP region. Moreover, the pre-dominant textile industries in the GAP region are mostly appropriate for quick conversion to organic products except carpets. Fashion knitwear, apparel, spinning, knitted fabrics and cotton ginning could all easily participate in organic production. This presents a good opportunity for the GAP region to both grow and process the fibres into products.

Below: Employees at a textile factory in Adıyaman

To exploit niche marketing opportunities and deliver unique services, the vision of the GAP region's textiles sector is to become a ***"World Centre for Competitive Organic Textile Production from 100% renewable energy Resources".***

Many apparel retailers and brand owners believe there's widespread and increasing consumer concern about human rights and the environmental impact of the clothes they wear. And market research shows that these two topics of Organic and Renewable Energy are extremely important in the future commercial development of the major brand owners and retailers in Europe and the USA.

Therefore, this vision has a high probability of succeeding providing the appropriate national and regional authorities and entrepreneurs commit to its success.

YESTERDAY (1970's)	TODAY	TOMORROW (2023)

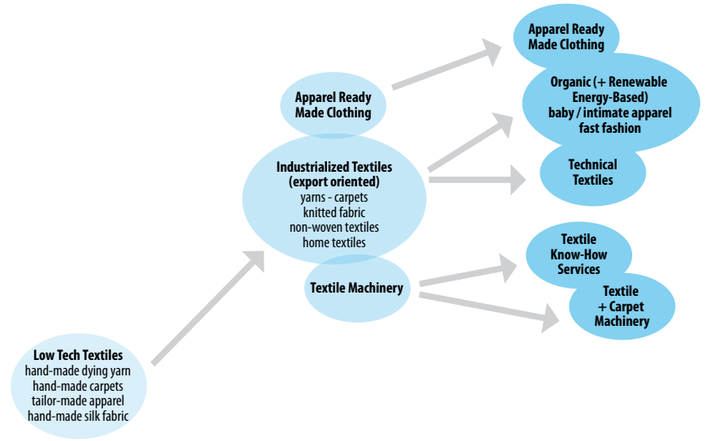


Figure 4-1: Evolution of the Textiles Sector

4.1.2 Textiles Sector Situational Assessment

Utilizing the facilities within the GAP and ABIGEM offices shows that there are several cities that have textile/apparel production. The total number of companies reported is shown in Annex II. Whilst these areas have several of the production processes relative to the value chain there can be said to be a pre-dominance in Gaziantep (814), Adıyaman (79), Diyarbakır (60) and Şanlıurfa (172). It should be pointed out that the data obtained varies according to the database accessed. Statistics provided below are based on data supplied from the TOBB database.

The regions are distinctive for different components in the value chain and each of the major textile regions has a distinctive textile product or operation and from the segmentation the following are significant.

Dominant Districts in the Region
Gaziantep
Gaziantep has the highest number of textile related companies in the GAP region. Significantly Gaziantep is dominated by components that are capital intensive (Carpet Production and Spinning). Some 40% of the textile sector is dominated by spinning and 27% by carpet manufacturing and 20% for the knitting industry. The spinning and carpet sectors will undoubtedly continue to rely on research and technology for development as they are capital. Also whilst carpets and knitting have a large design input they will continue to rely on buyers inputs in the absence of their own design skills. The market development appears to be focused towards the Middle East and former CIS countries.

Adıyaman
In the case of Adıyaman the predominant companies (66%) are contractors or subcontractors of apparel products often working for the larger companies situated in İstanbul, İzmir or Bursa and they are at the end of the manufacturing value chain where the price/cost values are low. The remaining companies are involved in cotton ginning or yarn spinning.

These apparel companies are relatively new into the region taking advantage of the government incentives for investment. They are well invested with equipment however they are not skilled technically in the manufacturing techniques of apparel and they also lack connections to the market due to the high reliance on sub-contracting.

Diyarbakır
Some 82% of the textile companies in Diyarbakır are involved with cotton ginning. This is very seasonal work and the gins tend to operate for only three to four months in a year during the cotton harvesting time. Discussion with several of the cotton gin owners indicated that they felt that there was not demand for organic cotton and if there was it would be to expensive. Many seemed un-informed about the trends in organic cotton and indicated that if there was a demand they would be happy to supply.

Şanlıurfa
The share of the textile industry in the Şanlıurfa manufacturing sector is 44%. The breakdown of the textile industry is as follows; 79% cotton gin, 11% cotton yarn, 7% ready made clothes, 3% cotton weaving and home textile. Most of the factories, especially the yarn manufacturers are established recently, therefore their machinery, equipment and facilities are new and modern.


"Gray" fabric waiting for export from Şanlıurfa

The manufacturing facilities of almost all of these companies are in the organized industry zone which is 15 km to the city centre. The zone is 291 hectares at the moment, but another 109 hectares of neighbor land will be added to the zone. 138 entrepreneurs have parcels in the zone and 122 of them have finished their investments and are active at the moment.

The amount of agricultural land around Şanlıurfa with water resources is around 200.000 hectares. The watering facilities will also reach another 18.000 hectares shortly. 600.000 tons/year of cotton is produced in Şanlıurfa and also 250.000-300.000 tons is processed in Şanlıurfa.

Apparel and Textiles Finished Products and Primary Textile Products and Services
Before making recommendations on interventions to assist the regions to improve its competitiveness it is important to try and understand where the GAP Region lies relative to the value chain and how that currently impacts on its operational activities. First of all it is important to distinguish the differences between "Apparel and Textiles Finished Products and Primary Textile products and Services"
The textile and apparel industries have traditionally held a fundamental role in Turkey's economy, providing thousands of jobs and revenue for local economies. In one sense, the industry is easy to define - the creation of fabric or cloth out of original fibres, using mechanical or chemical processes. Traditionally, most people think of textile products as feeding directly into apparel. Yet textiles & apparel is an expansive industry, with textile products showing up in a variety of places, from construction materials to air filters, from automotive fabrics to upholstered furniture. Specifically, the industry can be broken down in a number of different ways, including:

- By fibre type (including natural fibres like cotton and wool, and synthetic fibres like nylon, polypropylene etc).
- By fabric production process (including using yarn in knitting or weaving, or using non-woven processes)
- By fabric finishing process (including unfinished fabrics, dyed fabrics, coated fabrics, and a variety of other treatments)
- By end product use (including apparel products, but also including household textiles such as tablecloths towels, curtains, medical products, construction products, automotive products, and a host of other end uses)

In the textile and apparel industries, other than the broad range of markets for textiles, there are two other distinctions to understand about producers and their products:

1. Production vs. Consumer Inputs:
There are two product categories to classify textile firms, namely: (i) products used as inputs by the textile and apparel industry (e.g., chenille yarn or non-woven fabrics for auto interiors); and
(ii) products sold directly to wholesalers and retailers for consumer use (e.g., apparel, hosiery and bed sheets).

It can be said that these primary inputs (i) (yarn fabric etc) can either drive new innovation at the end product stage (apparel or other products) due to some specific properties developed that allows new innovation in the end product. i.e. anti bacterial fabrics/yarns, poro-meric yarns, fibres, fabrics that allow fabrics to "breathe".

2. Commodity vs. Unique Products:
Commodity products such as un-dyed white yarn, white cotton socks, and T-shirts are characterized by low margins and fierce competition, with many in Turkey still trying to hang on to existing markets for these products. "Unique" products are those that are characterized by higher margins and more defensible barriers to entry.

A significant issue for the apparel and made up products industry (i.e. household textiles etc) is that it can be said to truly operate within a "Buyer Driven Network". Such buyer-driven commodity chains refer to those industries in which large retailers, marketers, and branded manufacturers play the pivotal roles in setting up decentralised production networks in a variety of exporting countries, typically located in the third world. This pattern of trade-led industrialisation has become common in labour-intensive, consumer goods industries such as garments, footwear, toys, consumer electronics, and a variety of handicrafts.

Buyer-driven commodity chains are characterizes by highly competitive locally owned and globally dispersed production systems. Thus, profits in buyer-driven chains derive not from scale, volume, and technological advances as in producer-driven chains, but rather from unique combinations of high-value research, design, sales, marketing and financial services that allow the retailers, branded marketers and branded manufacturers to act as strategic brokers in linking overseas factories with evolving product niches in the main consumer markets.

In such buyer driven chains the power lies with the purchaser. As such the lead firm's that control and co-ordinate the production are retailers, designers and trading companies, mostly from the developed countries in the West. What is special about buyer-driven chains is that the lead firm does not manufacture goods that compete with the goods of its suppliers.

The barriers to entry in production within the apparel industry have fallen making it easier for entrepreneurs, often without specific sector knowledge to invest in apparel manufacturing plants. In addition regional initiatives in Turkey offering financial incentives have encouraged entrepreneurs to invest in the more capital intensive parts of the industry without having in-depth technical or market skills.

In a broader perspective, it is difficult to compete on price with countries such as China which has an abundance of well educated labour low cost labour with good technical skills and the same standards of equipment.

In particular from the angle of the lead firm in the apparel and made up sector i.e. the buyer: "The primary profits in the chain of production are increasingly to be found in areas outside production."

This is highly significant for the GAP region. The majority of the companies in this region have started relatively recently (3 -5 years) utilising local investment incentives and operate on a sub-contract basis. As such they have little in-depth knowledge of the markets they serve or the technical/management requirements that are needed to run a complex manufacturing operation efficiently.

Undoubtedly the "Buyers" are exploiting the opportunity to place business in the GAP region which is based more on price than other important capabilities such as design and product development. ***Obtaining business purely based on price is not sustainable.***

One of the key objectives of many of the companies in the region is to develop their own product design and development so that they can influence the lead firms in the buying network to obtain business. This is a longer term solution to competitive improvement and will undoubtedly involve the creation of other added value services, much of it currently outside the scope of the GAP area knowledge or skill base. Such added value services will undoubtedly include world class communication, merchandising, sourcing of raw material, and product innovation and development.

Turkey has some unique advantages relative to the market for fashion and backward linkages to raw material supplies. The fashion industry operates in a quick response environment and Turkey is geographically positioned to offer "Fast Fashion" due to its proximity to Europe and quick supplies of raw material. In addition they are also likely to include the use of high tech information systems that are web enabled. The lead firms demand the best communication at all levels as this is their method of exercising control on their own operations within a "Lean Retail" environment.

It is also important to understand that the lead firms are concerned about their supply chain risks. Within the apparel industry these come mainly from three sources: ***management of overseas contractors, delays in the delivery of products from overseas, and missing the all-important "fashion window."*** Interventions are usually put in place by the buyers to mitigate these risks. The successful implementation of these interventions helps to ensure continuity of business and builds confidence.

Effective implementation of systems and processes to assist the buyers offer good opportunities for companies to improve their value to their customer and develop business relationships which are not just based on "price".

It will be important for the GAP Region companies to provide the buyers with confidence that their own operations are run professionally and that they can manage contracts appropriately and on time. This will only come about if the GAP companies have appropriate management and systems capability.

It is pointed out that the industry at all levels is sensitive to price, particularly apparel and made up textile products (household textiles etc) where it is easier to move production due to the ease and low cost of entry. As such, and with the removal of Quotas in 2005 Turkey has been suffering from a decline in sales, particularly to the USA market. When this is coupled with high import duties some Turkish products are no longer competitive in the USA market. This has resulted in some 300 firms relocating to Egypt and Jordan to take advantage of the concessions offered by the USA for products being produced in their Qualified Industrial Zones (Q.I.Z.'s)

Finally there is a lot of discussion about companies moving up the value chain and developing their own brand. This will undoubtedly be easier to achieve in the developing domestic and emerging export markets such as former CIS Countries.

The development of brands that are seen to compete with the Western brand leaders will be met with resistance. The majority of the retailers and the buyers really want reliable ***"suppliers"*** who can offer additional services to streamline their own business operations.

They are not looking for competitors in design and marketing. Brand development at an individual company level will be more effective and less expensive if the target markets are the emerging economies including the former CIS countries and the Middle East.

Buyers want clothes better, faster, cheaper and more responsible. But no two buyers want the same thing.

There is one thing most buyers agree they want from a supplier. Reliability:

- Reliability that the goods will arrive when contracted for;
- Reliability that the goods, when they arrive, will be as specified and that the whole production process can be monitored;
- Reliability that restrictive regulations (like import duty or quotas) will be the same when the goods arrive at a home port as when the contract was signed, and that currency fluctuations will not have changed the price paid either; and
- Reliability that local newspapers will not carry stories about a supplier's poor treatment of the environment, workers or other bad public relations.

Some of these concerns can be managed by finding the right supplier, or might look to be managed by tough negotiations ensuring suppliers take responsibility. But, as the pool of sophisticated and competitive suppliers in established production centres grows, it becomes more difficult for a new supplying country or region as in the case of GAP to break in. Transport might be difficult, with few ships or trains to choose from, so a slightly-missed deadline might turn into weeks' delay waiting for the next boat.

There will certainly be wide folk memory among the buying community of the teething troubles that Vietnam or Romania had in creating customer-responsive, reliable factories, and a general reluctance to go through all that again with so many keen suppliers in Honduras, Thailand or the western Part of Turkey where manufacturing is more established. This is particularly important when there are so many imponderables affecting all supplying countries and regions.

The textile producers in the GAP region are widely differentiated in their position in the value chain and the markets they serve. A universal strategy based on products or markets will not be appropriate for all members. However one thing is certain: They must serve the buyers needs as described above.

The vision for the region based on Organic Textiles, Renewable Energy and Eco Friendly production is a hot topic with the Brand owners and Major retailers and it is considered that the GAP region is ideally positioned to capitalise on these trends which are affecting world wide consumers.

The provision of products based on organic principles and those of renewable energy are not dependent on fashion, or product technical capability. They are dependent of the implementation of the vision and a commitment to developing the region to exploit the opportunities available and they are not product or process dependent. The adoption of these opportunities will position the GAP textile region at the forefront of current market and process development and will undoubtedly gain the agreement and consent from the demanding buying network that are looking to expand their own supplies of products manufactured under the vision of "organic and renewable".

The initial review shows that there are several key areas in the GAP region that have some specific textile/Apparel clusters that are important to that region:

4.1.3 Market Outlook

The Case for Organic Cotton
The textile and apparel industry has been concerned for some time about the effect that its production techniques are having on the environment, the general public and also the workforce involved in production. These concerns have been either as a result of public pressure or out of a more aware and moral business ethic. The development of improved business ethics and corporate responsibility are seen as a trademark of a socially and morally responsible company and many of the Brand owners and Retailers are now taking pro-active steps to ensure that they are complying as far as possible with both legislation and corporate targets for improvement in these areas.

Organic cotton developed out of the organic food industry and the global organic cotton fibre supply has increased 392% since the 2000-01 harvest to 25,394 metric tones during the 2004-05 crop years. In 2005, U.S organic fibre products sales grew by 44% to $160 million.

Globally, sales increased an estimated 35% annually, from $245 million in 2001 to $583 million in 2005. Global organic cotton product sales projected to skyrocket to $2.6 billion by the end of 2008, reflecting a 116 % average annual growth rate. (OCE)

Growth by category: (Source Organic Cotton Exchange OCE)

- Women's apparel (43%)
- Infant clothing/diapers (40%)
- Men's clothing (43%)
- Sheets/towels (38%)
- Child/teen (52%)

The growing of organic fibres is without the use of toxic and persistent pesticides or fertilizers, sewage sludge, irradiation or genetic engineering, and that are certified by an accredited independent organisation.

During the 2004-05 harvest, cotton was produced in 22 countries with Turkey growing 40%, India, 25%, the United States 7.7% and China, 7.3% respectively. In 2005-06, these four countries combined are projected to produce 79% of the global organic cotton fibre crop. See annex I for Production Data.

Turkey is a pioneer in producing organic cotton. Organic cotton production started in Turkey in Kahramanmaraş in the Eastern Mediterranean region in 1989/90. The project was called Good Food Foundation and was followed by a second multinational project initiated in Salihli (Manisa) in the Aegean region by Rapunzel, a German company. Turkey significantly increased its organic cotton production during 1999/00 and 2000/01. According to Aksoy (2003), Turkey alone produced close to 10,000 tons of organic cotton in 1999/00 and 2000/01.

Latest statistics show that this will now be in excess of 14,000 tons (2006). In Turkey, there are small growers owning 15-20 hectares who produce organic cotton, and on average organic cotton growers suffered a 5.4-7.4% reduction in yield. The research suggests that some varieties suffered as high as 17-22% losses in yield. Varietals differences were significant. Fibre quality was similar in both conventional and organic farming systems. Data for the year 2001/02 suggest that farmers received premium prices for organic cotton of approx 26% when farmers sold seed-cotton and 20% if they sold lint. The data comes from TARİŞ, a large farmers' cooperative that plans to expand organic cotton.

Turkey has a full chain of organic cotton products and most organic cotton is processed to produce summer clothing, T-shirts, baby wear, towels and home textiles.

Undoubtedly there is a growing interest in organic products, and an increasing interest in organic textile products. There is a greater interest in the environment and the consumer is starting to become more discerning regarding purchases which either have an increased health value or positive environmental impact.

The Case for Renewable Energy and Eco Friendly Manufacturing
The development of improved eco/environmental thinking is being fuelled by the increasing pressure by both national and international governments and their strategies designed to reduce the carbon footprint.

The European Emissions Trading Scheme (EU ETS) is the backbone of European

Global organic cotton product sales are projected to skyrocket in the near future.

Best Practice Spotlight:
RAPUNZEL NATURKOST AG

RAPUNZEL NATURKOST AG, based in Legau/ Allgäu, is one of the leading producers, manufacturers and distributors of organic foods and textile products. In 30 years, a whole food shop has developed into a company with 250 employees and a turnover of around 70 million Euros. RAPUNZEL products can be found throughout Germany in over 2,000 whole-food and health food shops. RAPUNZEL obtain organic raw materials from over 30 countries around the world for their wide range of over 400 products. RAPUNZEL products are exported to almost as many countries. In their relationships with suppliers, both the quality of the products and the quality of life of the farmers who produce it are important to RAPUNZEL.

"The Turkey project is our biggest and longest-running project. In 1985, we laid the foundation stone for an organic farming project. Initially, figs and sultanas were exported to Germany. Soon, many farmers showed interest in collaboration and further organic products were being cultivated all the time. In 1991 we opened an advice office in Izmir. In 1997 this led to the founding of a subsidiary, RAPUNZEL Organic Ltd".

"We have set a positive seal on our several years of preparatory work in farming projects in Turkey, Spain, Brazil and the Dominican Republic. For more than 100 Demeter farmers, this has created an important marketing opportunity for their raw materials".

"As early as autumn 2000 we began to change 15 farmers in 4 different project regions of Turkey over to biodynamic farming. Since they had already been farming according to the strict certification guidelines of the Bio-Suisse Knospe for a long time, to our great joy the farmers already received the Demeter approval in 2001. Since then, all participating farmers and agricultural engineers have been trained intensively in a training concept on biodynamic agriculture".

"Motivated by the positive results in Turkey, we began the change-over of the RAPUNZEL Iberica project, two HAND IN HAND partners in the Dominican Republic and in Brazil and a cooperation with the Sekem project in Egypt".

efforts to tackle climate change, and a central instrument for countries to deliver their Kyoto emission targets. In setting a price for carbon, it has also become the focal point for industrial interest – and in some cases concern – about the impact of measures to tackle climate change.

During 2006, twenty-seven EU Member States proposed 'National Allocations Plans' for distributing allowances to emit CO2 under the EU ETS during Phase II (the Kyoto first period of 2008-12).

The European Commission ruled that almost all the submitted plans violated its interpretation of the EU ETS Directive, and proposed an allocation formula that in aggregate turns the proposed 5% increase into a 5% decrease below 2005 levels. The key criteria were Kyoto constraints in most of the EU-15, and the imposition of a growth and intensity formula based on independent sources for most of the new Member States. The total is below emission trends and all 'business as usual' forecasts, and in winning the ensuing political struggle, the Commission decisions have thus established EU ETS Phase II as a viable carbon market for 2008-12.

Initiatives have been created at a national level in many EU member states which has both raised awareness with the general public and has provided incentives to industry and business to reduce their energy inputs and carbon emissions.

As such now most apparel retailers and brand owners believe there's widespread consumer concern about human rights and the environmental impact of the clothes they wear. A recent Just Style report suggests that how a buyer makes their purchasing decision matters just as much as where a garment is made - and that it won't be long before declarations about ***carbon emissions and air freight appear on every label***. This is evidenced by Tesco, one of the UK's largest supermarkets, undertaking a study to determine the carbon footprint for many of its products sold.

Energy Efficiency
The effective usage of natural sources, mainly water and energy, is a critical way of decreasing environmental obligations and increasing productivity. Textile production has a high density of water usage; one hundred litters water is used to process one kilogram of textile.

More environmentally friendly systems of wet textile processing are being developed to reduce the amount of water used and also increase the efficiency of the production. These systems include the use of new dyestuffs, lower temperature dying, and the recycling of water.

Utilising the concepts of renewable energy available in the GAP region will have a very positive effect on the energy efficiency of textile production.

Pollution and Wastes
Each step of the textile and clothing chain can create pollution and waste. In additional there is some discussion on the subject of potential genetic pollution that is caused by genetically regulated cotton plants together with the pollution problem caused by the wrong usage of pesticides and herbicides. Textile production itself can cause considerable water pollution as well. Some 70% of textile by-products

and 20% of fabric inks and dyes are added to water in the final process of the product, and can cause pollution of a high level. Water pollution is the most significant with ink and dyestuff solids being discharged into the watercourse via sewers or rivers.

Air pollution is mainly related to the burning of fossil fuel oil, and absorption of sensitive organic compounds. Although packaging is mostly emphasised as solid waste, each year six million tones of clothes are disposed of in Europe.

Apart from the more visible elements of apparel and textiles such as the actual product, and their manufacturing and retailing environments, high energy usage also occurs within the primary textile production areas such as weaving, knitting dyeing and finishing. Large textile enterprises operate in a competitive global market and may be highly integrated. Energy costs can account for an average 5% to 15% of overall manufacturing costs. Typically, energy costs can be reduced by 10%, and competitiveness improved, through no-cost and low cost measures.

These concerns are forcing the large brand owners and retailers to re-think their sourcing and retailing strategies and there is a huge move on behalf of both the consumers of textile products as well as the producers towards more eco-friendly textiles. The above comments are just a few of those available demonstrating the huge impact that Eco Friendly Systems is having on both the retailing and manufacturing of textiles and apparel.

A strategy to encourage development of this nature needs to be formulated to ensure that Turkey harnesses it natural resources of organic textiles, hydro, wind and solar power to its advantage.

4.1.4 Textile Sector Strategies

Textiles Strategy 1: Promote "Eco Friendly" production utilizing organic textiles and renewable energy to capitalize on new consumer trends.
Buyer-driven commodity chains are characterizes by highly competitive locally owned and globally dispersed production systems. Thus, profits in buyer-driven chains derive not from scale, volume, and technological advances as in producer-driven chains, but rather from unique combinations of ***high-value research, design, sales, marketing and financial*** services that allow the retailers, branded marketers and branded manufacturers to act as strategic brokers in linking overseas factories with evolving product niches in the main consumer markets.

In such buyer driven chains the power lies with the purchaser. As such the lead firm's that control and co-ordinate the production are retailers, designers and trading companies, mostly from the developed countries in the West. What is special about buyer-driven chains is that the lead firm does not manufacture goods that compete with the goods of its suppliers.

In this context, it is difficult to compete on price with countries such as China which has an abundance of well educated, low cost labour with good technical skills and the advanced equipment standards. In particular from the angle of the lead firm in the apparel and made up sector i.e. the buyer: "The primary profits in the chain of production are increasingly to be found in areas ***outside*** production."

Undoubtedly the "Buyers" are exploiting the opportunity to place business in the GAP region which is based more on price than other important capabilities such as design and product development. ***Obtaining business purely based on price is not sustainable.*** Thus it is very important that the GAP Region differentiate itself on something other than price.

At the same time, world business is being increasingly more aware of the necessity to enhance the responsibilities it must have for the social, economic, and environmental effects it has created. It has to notice that this is not valid only in the framework of its activities, but it is also valid for the suppliers up the chain and the customers down the chain. Increasing globalisation means that the widening institutional responsibility now generally includes many complex issues in far regions. The pressure on the institutional performance of the clothing retail sector has been seen a sharp increase evidenced by he new social and corporate responsible targets now set by many of the key companies.

The clothing retail sector, which depends on the brand loyalty of the customers for a high profile and business benefits, has had several episodes of poor publicity opposing the good image it has created for itself, due to problems of abuses in the labour and environmental conditions within the supply chain.

This negative pressure and publicity has made for increased awareness and change to take place within retailers at the highest level.

Actions to determine a positive strategy for the sector will make sustainable development for the textile and clothing sector so as to increasingly exceed these demands and not just to regulate these social and environmental effects.

As brand owners and major retailers respond to the growing consumer preference for sustainably produced products, the GAP Region is ideally positioned to capitalize on these trends and distinguish the region from competitors by building a reputation as a quality producer of high quality organic textiles that were produced using renewable energies. It is necessary to determine a sectoral regional strategy for GAP on social and environmental issues, and to promote the strategy in international arena.

Promoting production utilizing organic textiles and renewable energies would position the GAP Region as a major source for eco-friendly products bound for Europe, the United States and other advanced countries. Actions to determine a positive strategy for the sector will make sustainable development for the textile and clothing sector so as to increasingly exceed these demands and not just to regulate these social and environmental effects.

Textiles Strategy 2: Establish a Sustainable Production Resource Center
With the development of "Fast Fashion" concepts, European brands and retailers increasingly need sourcing from regional suppliers if these manufacturers are able rapidly reacting to new fashion trends and Turkey is geographically positioned to respond to "Fast Fashion" requirements due to its proximity to Europe and quick supplies of raw material.

With growing demand for organic, sustainably-produced products, these brands and retailers are now looking for the same type of responsiveness from suppliers. However, many firms have complained about the length of time it is taking for their productions centers to incorporate sustainable production methods.

By establishing a Sustainable Production Resource Center the GAP Region would be in much better position to respond rapidly to buyers' needs related to sustainable production. The Sustainable Production Resource Center would serve as "one-stop shop" offering off-the-shelf solutions for companies that want to invest in sustainable facilities in the Region. The Center would provide staff with the technical capabilities to assist companies in the Region to qualify for fair-trade employment, organic and sustainability certifications among others, thereby providing a value-added service to brands and retailers interested in investing in sustainable production facilities. As such, the Sustainable Production Resource Center's effective implementation of systems and processes to assist the buyers offer good opportunities for companies to improve their value to their customer and develop business relationships which are not just based on "price".

Textiles Strategy 3: Investigate Validity of Branding Initiative targeting CIS and Middle East Markets
Moving up the value chain and developing brands are goals of many textile-related firms. However, the development of brands that are seen to compete with the Western brand leaders will be met with resistance. They are not looking for competitors in design and marketing. The majority of the retailers and the buyers really want reliable ***"suppliers"*** who can offer additional services to streamline their own business operations. Moreover, the GAP Region's design capability is not considered to be suitable for the western market tastes and the majority of the companies produce traditional designs suited to their target markets.

That said, the Region's textile cluster maintains some "unused" competitive advantages and the feasibility of branding initiatives targeting other markets should be explored. Brand development at an individual GAP Region company level would be more effective and less expensive if the target markets are emerging economies such as the former CIS countries and the Middle East.

Market research should be conducted to investigate the validity of a implementing a potential branding initiative targeting the CIS and Middle Eastern markets.

Textiles Strategy 4: Develop Joint Activities and Supply Chain Partnerships
The carpet producers in Gaziantep are mainly export oriented and they consider the international market as their main market. Even in international market the producers treat their domestic competitors as the main competitor with the competition mainly based on price. As a result of this competition, the profit margins are getting lower and lower over years and in consequence pay back periods of investments are getting longer and longer.

To implement the textile cluster's vision, strong supply chain partnerships will need to be created both with the customers and the suppliers of appropriate technologies. A joint platform is necessary for the producers and retailers on which they can develop a strategy for sustainable development, and develop it. Real partnerships must be established with all the actors to prove that the vision is achievable and sustainable. These partnerships might revolve around leveraging combined resources, purchasing collectively and shared marketing costs or shared technology development.

Textiles Strategy 5: Implement Entrepreneurship and Training Program
The majority of the companies in this region have started relatively recently (3-5 years) utilising local investment incentives and operate on a sub-contract basis. As such they have little in-depth knowledge of the markets they serve or the technical/management requirements that are needed to run a complex manufacturing operation efficiently.

Consequently, many of the companies operating within the GAP region (textiles) do not have good information, skills, or understanding of the market. It is of vital importance that the entrepreneurs quickly understand the dynamic changes in the market and make appropriate changes to their businesses; otherwise they stand the chance of failure.

Also, there are concerns that the GAP SME entrepreneurs are not technically or market competent. This is a gap in the skills needed to develop the local business and also to take advantage of the "Vision" of organic and renewable energy.

Investment in human resources development and training is critical for this cluster to become more competitive. Education and training at all levels for entrepreneurs and for management is needed and thus, a comprehensive training program should be implemented to enhance SMEs' management skills.

4.2 AGRICULTURE AND FOOD PRODUCTS

4.2.1 Agriculture and Food Products Sector Vision

Turkey has invested a large amount of capital in the infrastructure of the GAP region. While the dams and hydroelectric facilities are complete, only 15 percent of the irrigation infrastructure has been completed. Farmers are taking advantage of this water to irrigate crops such as corn and cotton. However, the sustainable transformation of the region's agricultural economy into a producer of high value crops and animal products is far from complete. Creating new public-private partnerships to speed the development of the irrigation infrastructure and encouraging private investment to develop the agricultural and food sectors, the GAP region can move its agricultural sector up the value chain, creating more wealth for its citizens and a greater contribution to the Turkish economy.

To achieve the vision of a higher value agricultural economy, accelerated irrigation development is only one of the necessary steps. The identification of sustainable market opportunities - organic agriculture, biofuel, high-value animal products (meat and dairy), alfalfa, new fruit and vegetables crops for processing and the fresh market – is necessary. In addition, investments in the agribusiness infrastructure to bring these agricultural products to the market are needed. This includes the development of improved input supply; post-harvest facilities (cold storage and packing sheds); better packaging; improved market linkages to domestic and international markets, including the appropriate international certifications (EurepGap, organic, HAACP, etc); and more processing facilities. There are also needs to create a better trained workforce in the agricultural and food sectors and improve the linkage between research and the extension of knowledge to farmers.

Atatürk Dam in Turkey's GAP Region

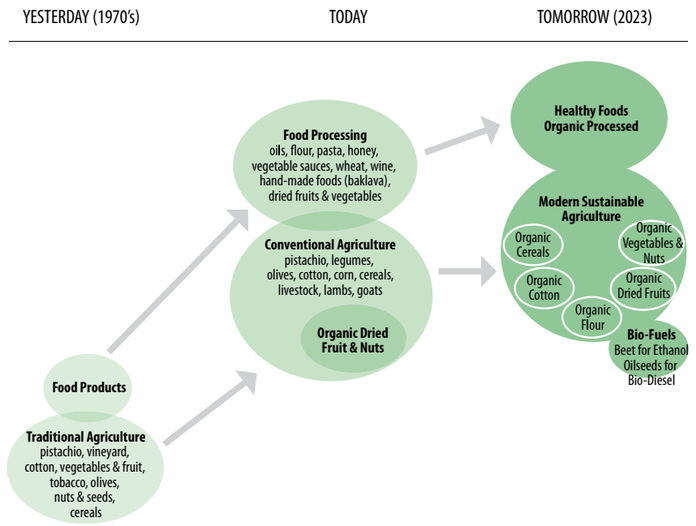


Figure 4-2: Evolution of the Agriculture and Food Products Sector

4.2.2 Agriculture Sector Situational Assessment

Irrigation

The GAP region is a major supplier of hydropower to much of Turkey. The dams and hydroelectric power generation facilities have been completed. However, the development of the irrigation infrastructure has been somewhat slow. As shown in Table 4-1, the total percentage of developed irrigation infrastructure is some 15.2 percent, with another 6.3 percent in construction. Discussion with farmers and irrigation officials suggest that irrigation development has been paid for entirely through government budget allocations. Public-private partnerships were of interest to both farmers and officials, but few steps have been taken to bring this type of arrangement in practice.

Stage of Completion	HA	Percentage
In Operation	266,994	15.2%
Construction	118,011	6.3%
Planning	1,114,254	62.7%
Design Completed	281,234	15.8%
TOTAL	1,780,493	100.0%

Table 4-1: Status Of Irrigation Development in the Gap Region - 2007
Source: GAP - Urfa Administration and Author Calculation

Agriculture

Historically, the GAP region has been a major producer of cereals and pulses. Table 4-2 suggests that this is still the case to a certain extent. Over 65 percent of the value of crops in the GAP region is derived from field crops, compared to some 42 percent for Turkey as a whole. Vegetable and fruits as a percentage of agricultural value account for some 34 percent in the GAP, while they account for amount 58 percent in Turkey as a whole.

Over the past 15 years, there has been shift in cropping patterns to more irrigated crops such as corn and cotton. While the margins on these crops are somewhat higher than crops such as wheat and pulses, there has not been a major shift towards higher value crops such as fruits and vegetables, nor has there been a pattern of converting feed crops (such as corn and alfalfa) into higher value animal products such as meat and dairy.

	Structure of Agriculture in the GAP and Turkey (as percentage of total value)	
Value of Agriculture ('000 YTLira)	**% of Total Value of GAP 4,984,098**	**% of Total Value of Turkey 50,939,689**
Total	100.0%	100.0%
Field Crops (Total) of which	65.8%	42.3%
Cereals	35.7%	24.3%
Pulses	10.3%	3.1%
Industrial Crops (Total) of which	18.5%	7.8%
Cotton	14.7%	3.2%
Oil Seeds	0.3%	2.1%
Tuber Crops	0.9%	4.9%
Vegetables	16.1%	23.6%
Fruits	18.2%	34.1%

Table 4-2: Structure Of Agriculture in the Gap and Turkey
Source: TÜİK (Turkish Statistical Institute) publication "Agricultural Structure, Production, Price and Value-2005" and Author's Calculations

The GAP region remains a major producing zone for pulses and cotton, as shown in Table 4-3. The region has over 54 percent of the hectares planted in cotton in Turkey and some 36 percent of the country's pulses.
See Annex Table 1 for more details on agricultural production in the GAP region.

Best Practice Spotlight:
Irrigation Collaboration in the Western United States

In California and the western United States, there are many different shared arrangements for the development of irrigation systems. Local irrigation districts may partner with municipalities to develop hydroelectric and irrigation operations. Federal and State agencies may collaborate to share the costs of irrigation infrastructure.

Private entities (farmers and corporations) collaborate with government agencies to bring irrigation water to the places it is needed. For example, in Idaho, the Federal government paid for a large, primary canal and then let a private company develop the secondary canals and on-farm irrigation, and allowed the private company to charge farmers fees for every cubic meter of water used to irrigate farms.

These arrangements are often complex and long in the making, but the irrigation system operates at high efficiency and high rates of capacity utilization.

Structure of Agriculture - GAP Region and Turkey			
Cropping Pattern (HA)	**Total - GAP**	**Total - Turkey**	**GAP as % of Turkey**
Field Crops	2,678,034	17,209,467	15.6%
Cereals	1,862,422	13,893,241	13.4%
Pulses	465,478	1,277,100	36.4%
Industrial Crops	326,076	1,149,273	28.4%
Cotton	295,185	546,880	54.0%
Oil Seeds	18,708	643,773	2.9%
Tuber Crops	5,350	246,080	2.2%
Vegetables	77,346	805,898	9.6%
Fruits*	50,587,458	683,656,300	7.4%
Agricultural Production (Tons)			
Total	7,824,680	103,122,634	7.6%
Field Crops	7,143,503	62,894,926	11.4%
Cereals	5,168,296	36,231,600	14.3%
Pulses	638,017	1,565,360	40.8%
Industrial Crops	542,738	16,269,628	3.3%
Cotton (lint)	447,658	863,700	51.8%
Oil Seeds	697,974	2,421,338	28.8%
Tuber Crops	90,478	6,407,000	1.4%
Vegetables	1,872,351	24,320,229	7.7%
Fruits	808,826	15,907,479	5.1%
Value of Agriculture ('000 YT Lira)	**Total - GAP**		
Total	4,984,098	50,939,689	9.8%
Field Crops	3,278,103	21,523,272	15.2%
Cereals	1,778,504	12,398,724	14.3%
Pulses	515,725	1,602,599	32.2%
Industrial Crops	922,268	3,956,731	23.3%
Cotton	731,893	1,604,658	45.6%
Oil Seeds	14,898	1,080,019	1.4%
Tuber Crops	46,687	2,485,197	1.9%
Vegetables	800,124	12,028,209	6.7%
Fruits	905,861	17,388,204	5.2%

Table 4-3 - Structure of Agriculture - GAP Region and Turkey
Source: TÜİK (Turkish Statistical Institute) publication "Agricultural Structure, Production, Price and Value-2005"
** Number of Trees*

Best Practice Spotlight: The Diversity of California's Agricultural Economy

California, with a similar climate, produces a great diversity of crops (over 250) and leads the United States in overall value of agricultural production - over $31 billion in 2006. California also led the nation in dairy products, with almost $5 billion worth of production in 2006. California is also a leader in organic production. The state's agricultural economy is highly export oriented, exporting over $10 billion in 2006. One in four jobs in the agricultural sector was linked to exports. These arrangements are often complex and long in the making, but the irrigation system operating at high efficiency and high rates of capacity utilization.

Table 4-4 shows the shift in cropping patterns for a specific area, the Harran Plain, which is one of the major areas where irrigation infrastructure development has taken place.

Crops	Cropping Pattern – HA (1995)	Percent of 1995 Total Hectares	Cropping Pattern – HA (2003)	Percent of 2003 Total Hectares
Wheat	14,700	49%	25,580	20%
Barley	6,000	20%	1,457	1%
Corn	0	0%	4,625	3.0%
Lentils	2,400	8%	0	0%
Cotton	6,300	21%	92,859	75%
Fruits	0	0%	182	.5%
Vegetables	600	2%	1,372	.5%
TOTAL	30,000	100%	126,172	

Table 4-4 - Shift in Cropping Patterns in Harran Plain

This table confirms the shift away wheat and pulses to corn and particularly irrigated cotton. The area in fruit and vegetables has more than doubled from 600 hectares over 1,500 hectares, which is a positive trend. However, the fruit and vegetable sector remains a small percentage of the overall crop patterning.

Cotton production in the GAP region has in general increased greatly since 1980, when the region accounted for some 6 percent of the area planted in cotton in Turkey. In 2005, the GAP region accounted for 54 percent of the land planted to cotton in Turkey. Farmers are also planting organic cotton in the area, in part reaction to low margins for conventionally grown cotton. There is an opportunity for textile manufacturers to encourage the farmers to plant organic cotton by signing contracts and establishing others methods of stabilizing the income of farmers.

Agribusiness Structure

The structure of the agribusiness in the GAP region is fairly conventional, with many of the agribusiness companies oriented towards processing the cotton grown in the area - cotton gins, cotton seed presses, textile mills, etc. There were 181 textile or apparel-related companies in 2000, and only 77 food and beverage companies. Many of these are food processing and food service companies oriented largely towards local markets. In recent years, small companies oriented to producing organic products have been started.

In terms of employment, the textile sector employed in 2000 some 21,785 workers and the food and beverage sector some 4,344. There were only 31,576 employees in the manufacturing sector as a whole, only 2.8% of the total number of workers in the manufacturing sector for the whole of Turkey. The food and beverage sector in the GAP region only employed 2.5 percent of the whole of Turkey. For more information, see Annex Tables 2 and 3.

In general, there is a lack of packing sheds for sorting and packing fresh produce, or processing plants for fruits and vegetables. There is also a lack of cold storage facilities.

The GAP region is only marginally linked to markets outside of the region. Insufficient volume has made it difficult for firms in the region to supply large urban markets in Turkey, much less in markets outside of the country.

Opportunities in the Organic Agricultural Sector

Organic agriculture has been growing rapidly in Turkey since its beginning in the 1980's. According to the Ministry of Agricultural and Rural Affairs, some 8,600 farmers produced 210 different organic products on an area of 162, 130 hectares of land throughout Turkey (See Annex ___ for a "Report on Organic Farming in Turkey).

	Number of Products	Number of Producers	Area (hectares)	Production (tons)
2003	179	14,798	113,621	323,981
2004	174	12,806	209,573	378,803
2005	179	13,000	108,597	300,000
2006	210	8,654	162,131	309,521

Table 4-5: Organic Production Statistics (Including Data from Transition Period)
Source: Ministry of Agriculture and Rural Affairs (MARA), ETO web site

This represents less than 1 percent of the total area farmed and the total tonnage of agricultural goods produced. In 2005, the GAP region produced about 75,000 MT of organic agricultural goods (25 percent of Turkey's total) on 18,900 hectares of land (some 11 percent of the land producing organic crops). The GAP region is the second largest organic producing region after the Aegean region, which had almost 60,000 hectares producing organic crops in 2005.

Best Practice Spotlight: Agricultural Exports and Cold Storage in Colombia

Colombia, which has already established itself as a major exporter of flowers, is beginning to move into the export of fruits and vegetables to the United States. One of the key elements of their export strategy is to develop a privately-run cold storage facility near the airport in Bogota. This will allow farmers to ship their products to export markets in a timely fashion and an unbroken cold chain, improving quality and shelf life of its products.

Over 95 percent of the organic production is directed to export markets. The European Union is by far the largest importer of Turkish organic products, with much smaller quantities going to the United States, Thailand, Canada, Australia, and Japan. The largest exports are raisins, dried figs, hazelnuts, and dried apricots. Organic apple juice, frozen fruit, and organic cotton are higher value products that are in the next group of exports in terms of value.

The domestic market in Turkey for its organic products remains very small, with most Turkish consumer highly price sensitive. Growth in demand for organic products in export markets remains strong. ***Organic products are an excellent opportunity for farmers in GAP region who are able to grow and market certified organic products.***

A more widespread certification programs for farmers wishing to grow organic crops is necessary. For export to the EU, the involvement of European certification agencies is necessary. However, this is expensive and therefore not readily available to smaller farmers. Support for wider certification programs could be jointly funded by the EU and the Turkish government to assure that small farms are able to get their organization certification. In the case of cotton, the textile manufacturers could assist farm groups in obtaining their organic certification.
The development of a modern agribusiness infrastructure – organic inputs, post-harvest facilities such as packing sheds, cold storage, and modern (organic) packaging are also needed to make sure that organic producers in the GAP regions can sell into urban markets in Turkey and export markets.

Best Practice Spotlight: Export Infrastructure in Israel

Israel has privately run cold storage near the airport, which facilitates the movement of agricultural products to markets in Europe. Israeli farms are able to harvest, pack, and ship fresh fruits and vegetables to export markets in a 24 hour period or less. Israeli exporters are closely linked to importers in export markets. They are well aware of the market requirements for varieties and the optimal market windows to gain the highest markets for their products.

Opportunities in the Biofuel Sector

The production of biofuels in Turkey is potentially of great interest to farmers in the GAP region. Sugar beets, while not as efficient a source of making ethanol as sugarcane, can be used to make ethanol given the high price of gasoline in Turkey. France is a leader in using sugar beets as the raw material for ethanol sold in the EU. If yields are high enough and competitive, large-scale ethanol plants are built, it is entirely possible that Turkey could export ethanol made from sugar beets to the EU. In theory, the GAP region has the land, water, and climate to become a large producer of sugar beets which could be converted into biofuels.

The Market for Ethanol in Turkey: In 2006, Turkish drivers consumed some 3.3 million MT of gasoline. There is a non-mandatory blending possibility of 2 percent, and the amount of ethanol sold in 2006 was some 65,000 MT. If Turkey targets a 10 percent ethanol blending rate (which is the target in EU countries), the market in Turkey could be as large as 350,000 MT, which does not take into account possible exports in Turkish production of ethanol is internationally competitive.

Turkey is already the 15th largest producer of sugar in the world, according to FAC statistics. In 2005, Turkey produced some 15.2 million MT of sugar beets. This is down from a record 22 million MT in 1998, due largely to a policy in Turkey which limits the production of sugar. The GAP region only produce 40,500 MT in 2005, or less than .3 percent of the total produced in the country. It is interesting to note that econometric models had predicted that hundreds of thousand of hectares of sugar beets would be planted in the GAP region, given available land and water. The restrictive policies on sugar have been no doubt one of the principal reasons that sugar beets did not take off. However, biofuels make offer to the GAP as new major possibility for growth.

There will of course be competition to gain the biofuel market within Turkey. A number of sugar factories - including Erzurum, Eskişehir, Malatya, Turhal, Amasya, Kütahya, and Adapazarı - have or are in the process of installing ethanol distilleries at their sugar plants. It is estimated that there may be as much as 150,000 MT of ethanol capacity in the country by 2008. In addition, sugar producers expect that their quota of 15 million MT will be reduced considerably under EU rules (at some point in the future), making more sugar beets available for the ethanol market. The key is competitively produced sugar beets and large scale processing in order to be a low cost producer.

Opportunities in Biodiesel: A number of companies have started making biodiesel in the GAP region as well as in other areas of Turkey. These plants have a capital cost in the range of $1-2 million and use as a bio-source different edible oils. One plant had used during the year different sources, including cottonseed oil, palm oil, and soybean oil. Some of these oils are imported, others locally produced.

The tax regime for biodiesel up until now has made it so that biodiesel could be sold below the price of diesel made from petroleum, which has meant an attractive market for biodiesel producers. They blend the biodiesel and also sell it as 100 percent biodiesel. However, the government apparently is thinking about changing the taxation regime in a way that will make biodiesel much less competitive and possibly even more expensive than petroleum diesel. This is unfortunate for consumers, biofuel manufacturers, and for the environment. It is also large missed opportunity for the farm sector. The chance to grow oilseeds for a new, growing market such as biodiesel is very important.

It would seem important for the Government to establish a policy which encouraged farmers to grow oilseeds; biodiesel manufacturers were encouraged to use domestically produced oils; drivers of vehicles with diesel engines could fill their tanks with biodiesel, and air pollution reduced and air quality improved. It will take the cooperation between different ministries, and a concerted research effort by the Ministry of Agriculture and universities to find the right oilseeds to produce. But the benefits of these activities are so attractive that they should not be missed.

4.2.3 Agriculture and Food Products Sector Strategies

Agriculture Strategy 1: Accelerate Completion of Irrigation System

The GAP region has lagged behind other areas in Turkey in moving up the value chain for its agriculture. The relatively slow development of the irrigation system – despite very large investments – has been one cause of this problem. Given irrigation's key role in enhancing agricultural sector competitiveness, it is critical that the completion of the GAP Region's irrigation system is accelerated.

Other areas of the world have utilized innovative shared arrangements to accelerate the development of irrigation systems; some of these innovative shared arrangements can be adapted to the GAP Region context. Public-private partnership entities could share the cost of irrigation infrastructure. This would result in new ways to finance the irrigation system other than from the Federal Budget. This would be a major departure from the way irrigation infrastructure has the financed in the past. In addition, irrigation infrastructure finance must be clearly linked to reasonable pricing of water. With such a mechanism in place, the entities financing an irrigation system could reasonably expect to earn a return on their investment through higher water prices or increased taxes.

The financing of irrigation infrastructure through public-private collaboration is a different approach from what is currently being employed in Turkey. It would require cooperation between irrigation officials, Turkish legislators, farmers, municipalities, provinces, private companies, and other interested parties. Changing the law regarding water/irrigation is no simple matter, nor is formulating irrigation projects which the government and investors could be willing to finance.
There are many possible way to approach this issue. One way would be to use a modified cluster approach where stakeholders were invited to a conference to discuss the issue and form working groups to examine ways of increasing private investment in the irrigation sector.

An international organization might be able to assist this group in hiring international consultants who could work with different working groups to study the key issues, benchmark examples from other countries, and make detailed proposals for changing laws and policies in order to encourage private investment in irrigation and agriculture. Legislators and local officials should be fully involved in the process. The irrigation cluster group would then work with legislators and all interested parties to implement the changes needed for increased private sector investment.

The Turkish government could consider about creating a Water Fund or other

financing mechanisms that would provide funding for public-private water projects. For example, the Government might be able to float Water Bonds in international water markets to help local entities finance the irrigation project. Local entities -- municipalities, water user groups composed of farmers from a particular area, private investors -- would submit projects to the Water Fund to receive financing. These local entities would decide how to charge farmers in their district for water. Projects in disadvantaged areas could receive some sort of additional incentives to undertake irrigation projects. In all cases, farmers should plant high-value crops in irrigated areas to help pay for the irrigation system.

Agriculture Strategy 2: Implement Agribusiness Investment Promotion Plan
The lack of private sector investment in high value agricultural projects has also contributed to the GAP Region's agricultural sector's slow movement up the value chain. Investment promotion for agricultural projects is greatly needed in the GAP region. Attitudes heard from some farmers during field work can be summarized: "Let investors come and see what we have."

There are many opportunities to develop a healthy and sustainable agricultural sector in the region. These include:

- Organic fruit and vegetables
- Organic cotton
- Biofuels, including sugar beets and oilseeds
- Beef and dairy – organic and conventional
- Feed crops, including alfalfa
- Organic and conventionally grown new crops such as almonds, blueberries, raspberries, pomegranates
- Geothermal greenhouses for flowers and winter vegetables and fruits
- Organic and conventional processing and packaging facilities

However, it is clear that investors in İstanbul and elsewhere must be actively sought with projects that are well-thought out and show potential for good return on investment. The competition for investment between regions is too great to do otherwise.

Investment promotion agencies funded by donor funds and the Turkish government must make investment in agricultural and agribusiness projects a priority. These agencies must concentrate on bringing projects – both large and small – to the region. Only a cluster of agricultural activities – inputs, production, post-harvest facilities, processing, and marketing – coming together will move the GAP region's agriculture up the value chain.

To attract private sector investment to the GAP Region's agricultural sector, Agribusiness Cluster Groups should be formed to formulate and promote specific agribusiness investments in the GAP Region. Partnerships with local Chambers of Commerce and Chambers of Commerce in İstanbul, Ankara, İzmir, etc. should also be pursued. Visits of the GAP region through study and investment tours should be encouraged.

Then, working with local and foreign consultants, new agribusiness investments can be promoted by undertaking feasibility studies and encouraging local agribusiness to formulate and promote projects to outside investors. New opportunities in the agricultural sector should also be explored and promoted. This could include a number of high-value opportunities in sectors as diverse as organic fruit and vegetables; biofuels, including sugar beets and oilseeds; beef and dairy; alfalfa; conventionally-grown new crops such as almonds, blueberries, raspberries, pomegranates, etc.; improved packaging; geothermal greenhouses, and more processing plants. Finally, in order to link agriculture in the GAP region to export markets, further work on promoting the certification of conventional producers under EurepGAP standards must be expanded. These standards must be obtained by GAP growers and packers if they wish to ship their product off to Europe or other export markets, or if they wish to gain premium prices in the local market. There are a number of accredited EurepGAP trainers, particularly in Western Turkey, but more need to be trained and certified.

Agriculture Strategy 3: Promote Organic Production
Organic agriculture is beginning to grow in the GAP region. Cluster groups of organic farmers need to work with local input suppliers to make available more supplies approved for organic use (including bio-pesticides, fertilizers, integrated pest management, etc.). To encourage the growth of organic agriculture, the Government could lower or eliminate import duties on these types of organic inputs.

Finally, although the Government has made a commitment to provide organic specialists in the provinces through the Ministries, more information about all aspects of organic production must be made available to organic growers through private companies, input suppliers, conferences, study trips and visits by local and international experts in various fields of organic agriculture.

Marketing linkages between organic growers in the GAP region and outside marketing agents that can help the growers reach new markets must be found. For example, the team visited an organic spice farm in the area, which had been certified organic and was doing an excellent job of production. But, the marketing program at the farm was weak and had too few links to spice merchants in Turkey and internationally. The owner agreed that marketing problems have adversely affected the profitability of the enterprise, which had failed to reach profitable production after a number of years. Local projects and investment promotion agencies need to work closely with organic producers and companies on marketing issues.

The cluster group of organic producers and companies in the GAP region could undertake more activities to promote organic agriculture. For example, working with the tourism cluster, the organic cluster could undertake promotion activities with restaurants and food stores in the GAP region, featuring locally grown and processed food. These promotional activities might also expand to Istanbul and other urban areas in Turkey.

One of the concerns of a number of organic farmers was that the cost of certification programs for organic producers was too high. The farmers in the organic cluster might be able join together to obtain volume discounts on certification. Another key to lower certification costs would be to have more locally trained people able to certify for organic certification organizations.

Organic cotton growers need to work with the Textile Association to promote the production of organic cotton through better contracting and technical outreach to growers. The Textile Association could also serve as the base for a research and outreach program to develop other organic products that can be used in textiles such as flax, hemp, silk, and wool.

Agriculture Strategy 4: Implement Biofuels Initiative
Increasing the production and consumption of biofuels is a large undertaking, one which will require investment, changes in government regulations, and awareness on the part of consumers about the advantages of using biofuels. Working together with groups such as the Association of Biodiesel Industrialists (www.biyosiad.org) and the Association of Alternative Energy and Biodiesel Producers (www.albiyobir.com), potential biofuel producers in the GAP region and private investors need to promote awareness of the need for a biofuel policy that encourages the production of biofuels in Turkey. Among other things, there needs to be clarification of the policies restricting sugar beet production to make sure that this policy will allow the producer of sugar beets to be made into ethanol. There also needs to be a review of the taxation policies applied to biodiesel in order to move the biodiesel sector forward.

With its land and water resources, there is a huge opportunity in the GAP region to undertake large integrated biofuel projects in the GAP region. Ethanol could be produced by the large plant processing sugar beets grown in the area and biodiesel could be made in smaller plants processing oilseed grown in the region. Promotion of this idea can be made by provincial officials and by investment promotion entities in the area.

Biodiesel producers would like to be able to purchase oilseeds locally, without importing soybeans or palm oil. However, there appears to be a scarcity of locally grown raw material for processing into biodiesel. Again, there is a major opportunity for the GAP region to produce oilseeds for biodiesel. However, there needs to be a major effort to identify the best oilseed crops to grow. This effort should be a public-private partnership with bio-diesel companies, researchers, and the Ministry of Agriculture to research and promote oilseeds have high yields in the GAP region and can be made into biodiesel.

4.3 TOURISM - "CRADLE OF SUSTAINABLE CIVILIZATIONS"

4.3.1 Tourism Sector Vision

The turbulence and complexity of modern world lead many to seek to reconnect with the roots of human existence. The Region witnessed the rise of the first human civilizations and modern tourists can reconnect to this ancient heritage through archaeological sites, traditional villages and religious sites and through the legends, folklore and creative crafts of today's people of South-East Anatolia. Few other tourism destinations demonstrate the same levels of sustainability, consideration for authenticity, openness and hospitality.

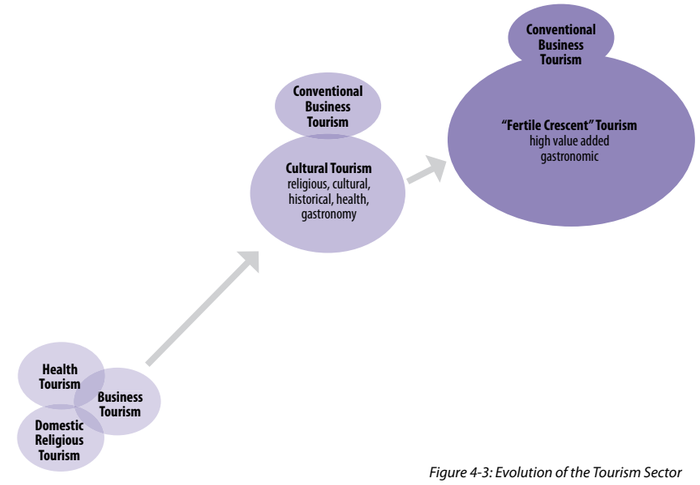
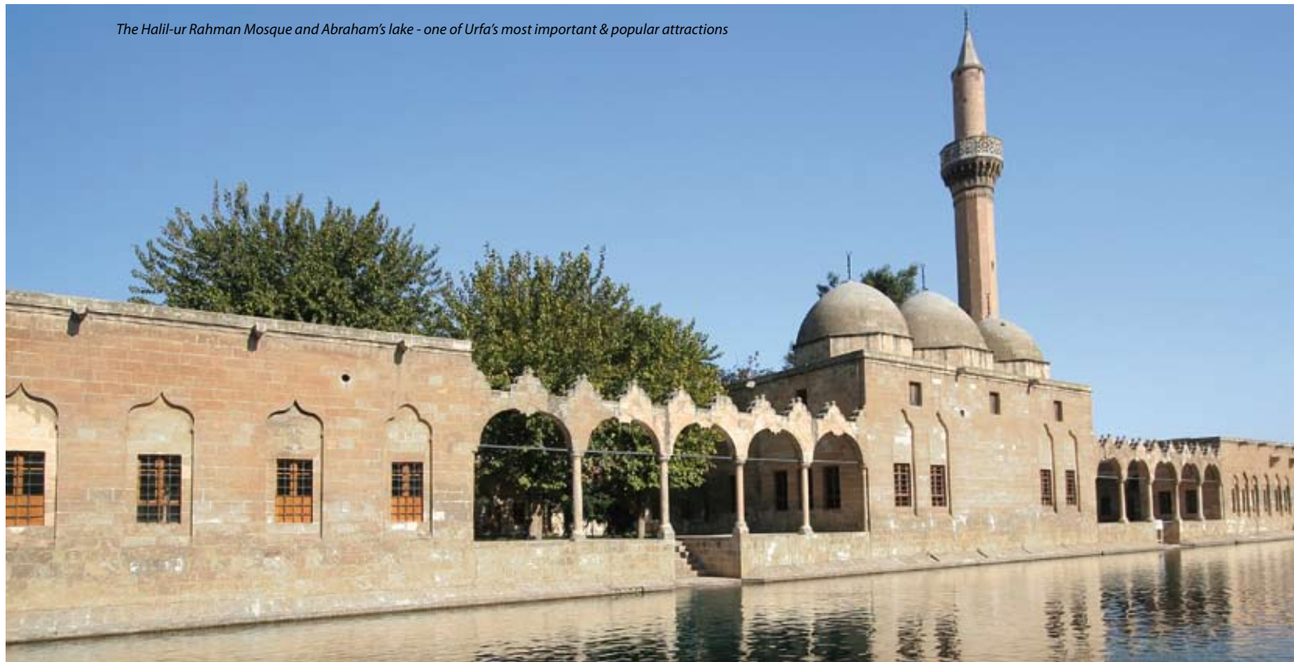


Figure 4-3: Evolution of the Tourism Sector



The Halil-ur Rahman Mosque and Abraham's lake - one of Urfa's most important & popular attractions

Over 1,200* cultural and natural sights, still retaining their pristine beauty and enriched by fascinating stories will dazzle visitors to the Region. They willl be hosted by friendly and creative people who truly care for what visitors experience in their home-land. And if – from all the possible destinations around the world - visitors to the Region had to choose again, they would return.

**According to Southeast Anatolia Cultural Heritage Preservation and Tourism Development Plan there are 1207 immovable cultural and natural assets in SE Anatolia that are under the administration or supervision of the Directorate General of Foundations.*

The vision of the Southeastern Anatolia tourism sector is to ***become a world premiere cultural and eco-organic tourism destination***. "Cradle of Sustainable Civilizations" is an exceptional tourism product proposition that invites tourists from all over the world to go to the roots of human civilization and reengage with nature and natural ways of living.

The civilization of the Region lay in a valley between the Tigris and Euphrates Rivers and was referred to as "the land between the rivers". The people of the Region learned to use the rivers to their advantage by irrigation for agriculture. They proudly offer eco-organic farm practices and other activities which benefit the environment while rewarding people. Tourists can enjoy accommodation in buildings (sometimes even in caves) renovated/built according to ecological architecture (natural materials), organic culinary, attractive learning of natural ways of living (e.g. organic gardening, fruits and wild herbs collection and drying, traditional food and beverage processing), and rational use of natural resources (e.g. in-house solar energy, water re-use and re-cycling, energy-saving transportation).

The "Cradle of Sustainable Civilizations" are offered as an integrated, consistent, top-quality tourism product proposition to sophisticated tourists who appreciate cultural and historical heritage, nature and sustainability. In adopting a sustainable approach tourism development in SE Anatolia seeks a balance between economic growth, impact on the environment and community support but the approach is customer focused and market driven. Success can be achieved in an entrepreneurial and collaborative way, focusing efforts and measuring results. Tourism development contributes significantly both to the overall economic success and attractiveness of Southeast Anatolia for investors, and visitors who want to witness and co-create the world's most unique sustainability success story.

Strategic objectives for tourism sector development in SE Anatolia are:

- To double the total number of overnight stays in the next 5 years (2,5 million overnight stays in 2013)
- To increase international tourist arrivals at least by 10% every year (1 million international arrivals in 2023)
- To increase visitor tourism revenue by 20% every year

4.3.2 Tourism Sector Situational Assessment

The international competitiveness environment is strongly affected by a country or region's ability to convert comparative advantages to competitive ones. There are many regions with great physical assets that have not taken advantage of them properly, and other regions with only moderately attractive assets that have nevertheless managed to leverage them quite well, attracting large numbers of tourists.

To date, several Turkish regions' tourism industries have performed quite well in the highly competitive global tourism market, largely building leadership positions through investment in, and strategic promotion of, their respective natural, cultural and historical assets. These strategic approaches have essentially converted some of Turkey's comparative advantages (physical beauty, sun and sand, cultural heritage, unique cuisine, favorable exchange rate, geographic proximity to the European market, etc.) related to tourism into competitive ones, effectively differentiating several Turkish regions from competing regions that offer similar tourism products and attractions.

Through these efforts, Turkey consistently secures an enviable tourism base. Many other countries' tourism industries primarily preoccupy themselves with just attracting tourists to their respective countries or regions. Not to say that continued innovation in the areas of marketing and promotion will be required to maintain Turkey's leadership position in the overnight tourism market, still, the fact that Turkey already enjoys such a consistent existing tourism base represents a huge advantage and opportunity for the Region's tourism actors.

The Ministry of Culture and Tourism is the main source of statistics for tourism in Southeast Anatolia region. Existing accommodation facilities can acquire a "Tourism Management Certificate" from the Ministry of Culture and Tourism or/and can be registered by Municipalities. The statistics about tourist arrivals, overnight stays, average length of stay and occupancy rates are also gathered on the Municipality level.

In the last decade Southeast Anatolia attracts on average 2% of total Turkish tourist arrivals and accommodates 1% of total overnight stays. According to the Ministry of Culture and Tourism and Municipalities' statistics regions' tourism reached its peak in 2006 when tourist arrivals and overnight stays increased for 19% and 24% respectively compared to the previous year.

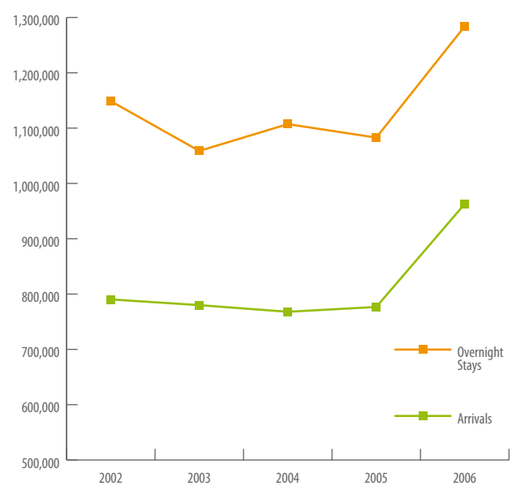


Figure 4-4: Number of Tourist Arrivals and Overnight Stays in SE Anatolia 2002-2006 (provinces: Adıyaman, Diyarbakir, Gaziantep, Mardin, Şanlıurfa, Batman, Şırnak, Siirt) Source: Ministry of Culture and Tourism, Municipalities

Average overnight stay per establishment varied between 1,0 (Mardin) to 2,1 (Kilis) in 2006. The Ministry's statistics of foreign tourist arrivals show that foreign tourists represented 8,5% of total tourist arrivals in 2006 compared to 9,9% in 2005 and a maximum of 10,8 % in 2002.

Southeast Anatolia still has a lot of opportunities in tourism income generation. Compared to much smaller countries Northern Ireland and Slovenia, Southeastern Anatolia could almost double the total number of overnight tourist stays with

existing bed-capacity, however additional investments will be needed to facilitate international tourism growth of the region.

	Southeastern Anatolia	Slovenia	Northern Ireland
% of GDP Derived from Tourism	N/A	5,5%	2%
No. of Overnight Tourist Stays (2006)	1.28 M	7.72 M	12.99 M
No. of Tourist Arrivals (2006)	0.52 M	2.49 M	3.33 M
No. of Bedspaces (2006)	13,752 (2003)	53,949	148,542 (2005)
Av. Hotel Bed-Space Occupancy (2006)	N/A	43%	43%
The Value of Exported Trips (2006)	N/A	1,143.4 M Eur	755.5 M Eur

*Table 4-5: Tourism Results of SEA, Spain, Italy…..Slovenia, Northern Ireland**

Many elements for competitiveness already exist in the region…
The Project Team was impressed by the depth and breadth and authenticity of the Region's tourism assets and the high levels of creativity that seem to be flourishing throughout the Region. Thus, it is apparent that the Region enjoys significant comparative advantages in some areas that can be leveraged to effectively further its competitiveness objectives. These include (among others):

- Unique historical attractions and architecture of very important historical significance.
- Unique religious attractions of very important historical and religious significance.
- Unique geography and landscapes
- A strong and tangible indigenous sense of Place, Identity and History that leaves the visitor feeling that they have in some way connected to the "source" of human civilization.
- Diverse cultures, religion heritage and traditions and a strong sense of religious tolerance and compatibility
- Unique cuisine, wine and local agricultural products
- Skilled artisans, and high quality handicrafts, dance and music.
- Adequate physical infrastructure to access most tourism attractions by road

The question is how can the Region's tourism cluster's leaders most effectively capture and present this authenticity in a marketable yet sustainable way?

**Benchmarking with Northern Ireland and Slovenia rationale: not a primarily SSS (sun-sand-sea) destination, eco-organic and historical heritage destinations - inhabited as long ago as 7000 BC, Celtic and early-Christian archaeological sites, post-conflict societies that required intensive destination branding, similar to GAP in the share of GDP derived from tourism, success stories in tourism development, high value-added tourism development concept, success stories based on private-public partnership.*

However, the Region's tourism sector still faces many challenges….
Many useful studies have been commissioned to prioritize the allocation of resources to enhance competitiveness in the tourism sector resulting in the deployment of numerous resources towards improving the performance of the Region's tourism industry. However, the Project Team noted that for the most part, these resource allocations are not having the type of impact one would hope.

Previous analyses and the results of the stock-taking exercise indicate that the Region has a very limited and inappropriate structure of bed-capacity (only 13,752 beds in according to the data from 2003 and a very limited number of attractive boutique hotels), historical and cultural sights are not prepared for high-quality tourist learning experiences, cultural events are still in its development phase etc. The overall observation is that ***the tourism offer is deeply fragmented and lacks marketing/customer-driven approach***, hindering the tourism industry's ability to leverage resource allocations and respond effectively to current market opportunities. The Project Team noted a feeling of ***passive observance*** on the part of the Region's private sector actors with respect to government-sponsored resource allocations a tourism development programs. Private sector actors were aware that programs were underway, but did not see how these resource allocations were helping their businesses in meaningful ways. Thus important synergies are not being realized. Other challenges that were identified include:

- As noted, although many institutional programs exist that support the tourism sector, there are few vertical linkages between institutions, product and service providers and companies that actually sell tourism products and services. Private sector actors in the cluster for the most part are disconnected from the country's institutional and governmental infrastructure and there is no formal mechanism for the cluster to seek resources to alleviate supply chain bottlenecks.
- There are few formal mechanisms in place for tourism actors to market to, and engage effectively with, end-sellers of tourism-related products and services (Istanbul, Europe etc.) in established supply chains.
- There are few horizontal linkages between buyers, suppliers and institutions responsible for supporting the private sector. Thus, resource and cost-sharing opportunities are not realized and scarce resources are not allocated as efficiently as they could be.
- There are also few institutional feedback loops that feed market information back to product and service providers and the institutions involved in supporting these elements of the private sector and thus, many products and services do not meet the expectations of specific customer segments in terms of quality, design etc.
- Little local capacity exists to develop new tourism products or link into existing sales channels. Thus, most product development decisions are made in source countries or gateway cities such as Ankara or Istanbul, signifying that most of the value is captured by these actors in the value chain.
- Many SMEs lack the technical training required to produce quality products consistently and the management training required to effectively manage their

businesses and engage with tourism supply chains.

- There is little private sector understanding of who their existing markets are, who their target markets should be and how to most effectively expand existing or penetrate new markets.
- The South-Eastern region's diverse culture is not adequately incorporated in a systemic way into the country's promotional and marketing campaigns, missing an opportunity to build awareness about the Region's cultural assets.

Given the high degree of fragmentation, the Region's tourism-related SMEs are largely not integrated into established supply chains in source countries and gateway cities. These realities point to a breakdown in relevant cluster actors' ability to organize, network and collaborate to provide the conditions necessary to overcome critical challenges and enhance the cluster's competitiveness.

Market Outlook
According to the most recent tourism trends development study by the European Travel Commission environmental and social responsibility will become one of the most important drivers of change in tourism industry. The following ***trends are very much in favor of the vision of tourism development in South-Eastern Anatolia:***

- The growing awareness of the finite nature of most natural products – and the need to conserve them – will place a premium on the remaining "unspoilt" destinations.
- The rising demand for "eco-tourism" and nature-based holidays will increase the number and sophistication of products on this market.
- The provision of more information on product sustainability will help to increase tourists' environment awareness.
- Marketing activities will need to promote tourism product sustainability as an aspect of customer re-assurance.

(Source: Tourism Trends for Europe, 2006)

Best Practice Spotlight:
Eco-Organic Holiday Farms in Italy

The Italian Association for Organic Agriculture (AIAB) developed a national program on sustainable tourism, based on the concept of eco-organic holiday farms. The main objective is to convert rural tourism activities to environmentally-friendly tourism through the involvement of organic farmers. While organic farms that undertake agro-tourism or restaurant/catering activities are the main targets for such conversion.

Several Italian Regions (e.g. Tuscany, Emilia-Romagna, Lazio) have adopted organic agriculture as a best agricultural practice in parks and protected areas in order to support tourism activities: financial support is granted to convert to organic management, numerous awareness raising activities have been performed for farmers within parks and demonstration activities are undertaken.
An example of the region Tuscany ("22.993 km2 of art, culture and tradition") shows how art and culture, tradition and folklore, "la dolce vita" can combine in a successful tourism product proposition.
Source: www.aiab.it and www.waytuscany.net

There are examples of tourism destinations all over the world that have developed a sustainable tourism product propositions. One of the most promising market segments is so called: eco-organic holidays. It is based on the fact that rural areas re-define themselves as consumption spaces in which history and rural tradition take over from modern agricultural production.

According to Eurostat (Statistics in Focus, 69/2007) Italy accounts for nearly 18% of total organic rural area in the EU-25, Germany and Spain follow with a share of nearly 14%. Austria has the highest share of organic rural area over total utilized agricultural area, posting 11% in 2005. The highest growth rates are recorded in Malta and Latvia.

The leading eco-organic tourism destinations in Europe that South-Eastern Anatolia is expected to compete with are: Italy, Austria, Spain and Germany. Eco-organic tourism is being developed in some Eastern European Countries as well: e.g. Poland, Slovenia and Latvia.

"Cradle of Sustainable Civilizations" is a unique tourism product proposition because of its ***authentic blend of eco-organic (sustainable) and cultural tourism.*** Cultural tourism is frequently quoted as being one of the largest and fastest growing segments of global tourism (e.g. WTO, 2004).

In the market segment of cultural tourism once a top-quality destination "Cradle of Sustainable Civilizations" is expected to compete with the following destinations:

- Egypt (cultural site Ancient Thebes with its Necropolis, the Pyramid Fields from Giza to Dahshur, Nubian monuments from Abu Simbel to Philae),
- Greece (archaeological sites of Delphi, Mystras, Mycenae, Tiryns and Olympia, medieval city of Rhodes, mount Athosa and Meteora, many monasteries of Daphni, Hosios Loukas and Nea Moni of Chios, cave of the Apocalypse on the Island of Pátmos etc.),
- Jordan (cultural site Petra, Quseir Amra, Um er-Rasas),
- Tunisia (Amphitheatre of El Jem, Carthage, Kairouan, Dougga / Thugga),
- Israel (Cultural site Masada, Old City of Acre, Biblical Tels - Megiddo, Hazor, Beer Sheba and Incense Route - Desert Cities in the Negev),
- Syria, Lebanon, Iran, Saudi Arabia etc.

As culture is increasingly utilized as a means of social and economic development, the cultural tourism market is being flooded with new attractions, cultural routes and heritage centers. However, many tourists, tired of encountering the serial reproduction of culture in different destinations are searching for alternatives. Increasing competition in the cultural tourism market means that sights and basic services are no longer enough and that destinations must differentiate their products by transforming them into 'experiences' which engage the tourist (G. Richards and J. Wilson, 2006). See Table 4-6 for some of the leading examples of such tourism experience.

Example	Description of activities
Catalan Gastronomy and Cooking **Location:** **Barcelona, Catalunya** **Creativity Base:** **Gastronomy and Cooking Courses**	Emphasizes the active involvement of participants, who can 'Learn about the variety and quality of Catalan food in a guided visit to the famous La Boqueria market' after which 'Jaume, our active and experienced cooking teacher, will cook with the help of the group, two main dishes and a dessert based on some of the most famous recipes of regional Catalan cuisine'.
Creative Tourism New Zealand **Location:** **Nelson, New Zealand** **Creativity Base:** **Traditional Crafts and Handicrafts, Languages, Gastronomy**	A network of creative businesses New Zealand offering products to tourists via a wide range of creative experiences, including bone carving, Maori language classes, weaving, felting and woodwork and New Zealand gastronomy.
Galimard Perfumeries **Location:** **Grasse, Provence France** **Creativity Base:** **Perfume Making**	Learn to create and make your own perfume, the recipe for which will be kept for future orders. Their claim that Grasse is the 'World's Capital of Perfume' underlines the importance of the location of the perfume making experience.
Arts in the Wild **Location:** **Ontario, Canada** **Creativity Base:** **Creative Activities such as Painting, Drawing, Sculpture, Carving and Photography**	Courses are provided by a network of arts organisations, cultural sites and tourism suppliers, who base their work on the inspiration of nature. The experience is designed to be transformational: 'Ontario can help you transform your desire for creative expression into a lifelongexperience and a great feeling of accomplishment'

Table 4-6: Examples of Creating a Unique Tourism Experience

4.3.3 Tourism Sector Strategies

As previously noted, many useful studies such as the Southeastern Anatolia Cultural Heritage Preservation and Tourism Development Plan have already been conducted that identify structural weaknesses and prioritize allocations of resources to enhance competitiveness in the tourism sector resulting in the deployment of numerous resources towards improving the performance of the Region's tourism industry.

The integrated strategic framework proposed here seeks to build on the valuable analyses that have been conducted to date, take the insights captured in these analyses and the findings during this particular Consultancy and convert them into actionable strategies by which the Region's tourism cluster can most efficiently enhance its competitiveness using an approach that is market driven, yet collaborative and sustainable.

Analysis of previous studies conducted to date on tourism in the Region and qualitative information collected during stock-taking exercises indicate that the challenges confronting the Region's tourism actors generally fall into one of four overall strategic issue areas (see Figure 4-5):

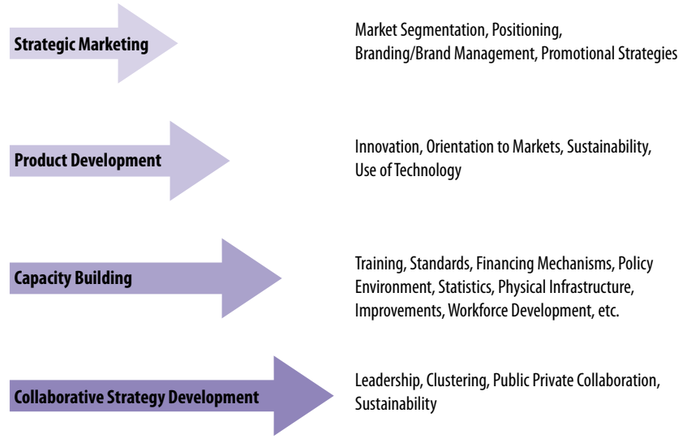


Figure 4-5: Primary Competitiveness Issue Areas Confronting the Region's Tourism

Organizing critical issues and challenges into these four issues areas allows the cluster's stakeholder to address these critical issues strategically and efficiently allocate scarce resources, thereby developing a competitive edge. Significant progress in all four of these issue areas will be crucial if the GAP Region is to truly transform its tourism offering and raise this cluster's international visibility.

From the activities undertaken during this Consultancy and using a competitiveness framework, the Project Team has put together an integrated set of strategies that will help tourism cluster stakeholders and observers alike to better understand where this cluster could allocate resources in order to address bottlenecks and foster the development of competitive advantages:

Tourism Strategy 1: Implement "Cradle of Sustainable Civilizations" tourism destination branding campaign.
If Southeast Anatolia is to achieve international excellence in cultural and eco-organic tourism, it needs to be conscious of how it portrays itself in the world. It is important to take proactive measures to improve Southeast Anatolia image at home and abroad.

Destination branding is gaining importance as a primary tourism marketing tool due to increasing competition and substitutability of tourism products and destinations. Strong destination brands have rich "emotional meaning", "great conversation value" and provide "high anticipation" for potential tourists (Morgan, 2002). A brand name emerges from the level of satisfaction, past visits and word-of-mouth recommendation. It is a promise of consistency delivering consumers certain features that they appreciate.

Tourism destination branding requires understanding the market well, benchmarking, capturing a market position that appeals to visitors' and it can be done by identifying, simplifying, distilling and focusing on the core values and assets that

are unique, appealing, distinct and non-substitutable at the destination (Taşçı, Kozak, 2006).

Destination branding activities are well aligned with the overall Tourism Strategy of Turkey – 2023 adopted by Ministry of Culture and Tourism in 2007. The specific objective within the Strategy is to manage branding of cities rich of cultural and natural heritage and thereby convert them into a point of attraction for travelers. However, many case references from around the world show that higher impacts on international tourism income generation can be leveraged from branding the regions with compelling story (Mundo Maya, Irish Celtic Experience etc.) instead of individual cities. Tourism destination branding also proved to be of vital importance for tourism development especially in so called "post-conflict" societies, such as Northern Ireland or countries of ex-Yugoslavia (particularly in Slovenia and Croatia).

Some parts of Turkey have experienced much success to date in promoting their respective regions as sun and sand, cultural or historical tourism destinations. Yet thus far, the South-Eastern Anatolia has not shared in or leveraged this success. This is unfortunate given the Region's heritage and "open museum" and "undiscovered" qualities together with a series of experiences that could be built around those assets, extending them to the "living culture" and atmosphere of the place.

Tourism destination branding is a collaborative public-private effort which can be most effectively implemented within an organization which would act as a kind of Tourism destination (brand) management organization (some of the most successful examples of such can be found in lower Austria - Kaernten Werbung: www.kaernten.at and Northern Ireland – Northern Ireland Tourism Development Board: www.nitb.com).

To market the Region's tourism assets and products most effectively, it must be recognized that each market segment is distinct and each has its own profiles and customer preferences. These main market segments (e.g. Domestic, Europe, Middle East, Asia, North America etc.) should then be broken down into more specific market segments. For instance, does a German religious tourist have the same preferences as a French religious tourist? In that same vein, does a French backpacker have the same preferences as a French religious tourist? Knowing the customer preferences of each market segment will allow the Region's tourism stakeholders to maximize their marketing resources.

However, the Region might start working on its marketing strategy, only to realize that what the country is marketing in terms of tourism products is not necessarily as good in some respects as their competitors. Therefore, Issue Area #2 is oriented toward improving the Region's existing tourism product mix, with new products and attractions, and improvements in existing ones.

Tourism Strategy 2: Shift to the development of higher value-added tourism products that are demand-driven by market requirements and customer preferences.

The development of new market-driven products and attractions and improvement of existing ones will require learning from benchmarking and market segmentation analyses and applying these lessons to product improvement through improved production standards and practices at the enterprise level.

Presently, many of the Region's tourism products are produced in the absence of market intelligence and therefore, products often do not meet international standards in terms of quality or design, nor are they in alignment with specific customer preferences. For example, Dara Village is a truly remarkable archaeological site. Yet an international tourist walking down the streets of Mardin would be hard-pressed to find any travel agency offering a product to this destination and even if the tourist arrived, he/she would not find the kinds of tourism infrastructure (e.g. information displays, toilet facilities etc.) a sophisticated international tourist typically requires.

The Project Team identified two major flagship attractions in the region – both of which can become a high-value added tourism product based on the clustering approach:

- ***Nemrut Dağı*** with Adıyaman and Şanlıurfa (Harran) – Western GAP tourism cluster,
- ***Mardin with Hasankeyf*** and Diyarbakır – Eastern GAP tourism cluster.

Both flagship attractions are underlined by numerous product development opportunities in the areas of historical and archaeological tourism, culinary and wine tourism, agricultural tourism, religious tourism, culture, entertainment, folklore tourism and handicrafts (among others).

Nemrut Dağı, the only Unesco World Heritage sight in the region, needs re-assessment of its unique position. The sight itself is far from being a "world-class" sight which is the status it deserves. The mighty fallen heads are poorly marked and tourists receive no guidance in learning about the history of the place. The sight does not help visitors in any way to create any kind of memorable experience. Nemrut Dağı calls for creating magnificent stories, events and comprehensive experiences for tourists. It can become a unique case that can describe ***the evolution of destination from a single-attraction site to a multi-centered network (cluster) of unique "Nemrut experiences"***. "Nemrut experiences" can relate to top quality cultural performances, hiking, motor-biking, photo-safaris, discoveries of other amazing and unspoiled historical sights (Harran and others), fabulous food and cuisine, accommodation in pure nature etc.

Mardin with Hasankeyf, Midyat, and Diyarbakır are other tourist gems that need to be reawakened. Hasankeyf specific position attracts many visitors who want to see the place before it will disappear under the Tigris waters for ever and it acts as a highlight attraction for new visitors to experience the rest of South-eastern Anatolia.

Many high-quality actions have already been implemented for tourism development of charming historical town of Mardin (restoration of the old city, city branding, promotional material development, festivals, culinary schools etc.) however the city still exists as a passive single-attraction destination with heavy dependence on the day-trip coach market. The opportunity for Mardin lays in proactive market-driven public-private partnership for the development of integrated tourist experience (offer) with the surrounding places of interest (Hasankeyf, Savur, Midyat, Dara village, Diyarbakır etc.). This opportunity requires interdependent relationships between historical sights and museums, accommodation suppliers and transport

operators and all complementary tourism service providers (restaurants, vine cellars, festivals, handicraft producers etc.).

A few individual companies, mostly in Istanbul and Ankara are large enough and modern enough to learn these lessons and develop new quality products on their own. However, most SMEs and CBOs find that it is not easy to do this on their own, and that it would be much easier if they had help from other organizations. Excellence in tourism enhancement can also be done by "role modeling". A selected number of "success stories" in tourism development can act as a major motivator for others to follow. It is our recommendation to launch at least 4 pilot projects to develop tourism "success stories" within the next year. The recommended ***pilot projects*** are (see Pilot Project Action plans in Appendix):

- Touring Mardin mini cluster,
- Eco-organic tourism in Halfeti,
- Motor-biking in the Region,
- Cradle of Sustainable Civilizations marketing website.

Each of recommended pilot projects focuses on the overall strategies of tourism development in South-east Anatolia: high-value added product shift, private-public partnership development, capacity building. Some of them also promote integration of provinces to create "Cradle of Sustainable Civilizations" tourism destination brand.

Tourism Strategy 3: Build capacity in four key areas (education, business climate, physical infrastructure and access to finance) to institutionalize competitiveness principles throughout the GAP region's tourism sector.
Building additional capabilities in the Region's provincial and local tourism agencies, chambers of commerce, NGOs, training centers, and inside companies to develop new products, develop and apply standards, link to international organizations, mount major advertising campaigns, evaluate and suggest changes in design of physical infrastructure, and improve the management of key natural resources tied to the viability of the attractions.

The critical challenges confronting the competitiveness of the tourism cluster indicate that the most urgent upgrades in terms of capacity building are required in the areas of:

- training and education
- physical infrastructure
- access to finance and
- business climate

For example, many SMEs and CBOs lack the management skills to cost and price their products or produce business or marketing plans that meet the requirements of financing institutions, limiting their ability to strategically plan and invest in their businesses.

Travel agencies in major gateway cities such as Istanbul and Ankara also report that there is not enough complementary tourism services in the region, that hotel facilities are inadequate and that guides lack the language and customer service skills that their clientele expect.

Major focus of capacity building activities should be in enhancing training programs in the following areas: language, customer service, SME management skills, entrepreneurship, marketing and design skills. Enhancement of physical infrastructure includes restoration, tourism infrastructure development and key destination sites, cleaning campaign – sanitation. Access to finance can be stimulated by implementation of local investment audit, EU structural funds awareness raising and training, microfinance programs and international funding.

Tourism Strategy 4: Improve coordination among sector stakeholders to overcome fragmentation, maximize scarce resources and develop a culture of collaboration within the sector
High levels of coordination and shared vision among the Region's tourism cluster actors will be required to implement actions in Issue Areas #1, #2 and #3. Thus improved public/private dialogue, partnerships, and leadership will be called for, which are most easily achieved using a clustering approach. High levels of public-private collaboration will be required, not only between government and the private sector, but with certain training institutions as well.

The clustering approach is oriented toward identifying sources of leadership within the Region's tourism cluster and supporting them to set goals for the cluster and to achieve them. Such clustering efforts typically develop early initiatives focused mainly on joint marketing and branding activities, but evolve into broader, more comprehensive efforts to develop new products and build new capacities. Smaller companies especially feel more involvement and get greater benefits when they can participate at some level in cluster evolution.

The Region's success in leveraging what it has will be largely determined by the type of thematic actions local leaders undertake with respect to these four issue areas which are more institutional in nature, rather than just based on the country's physical attractions. Again, the recommendations put forth here are very much in alignment with those put forth in previous studies such as the Southeastern Anatolia Cultural Heritage Preservation and Tourism Development Plan. Yet, organizing critical issues and challenges into these four issues areas will allow the cluster's stakeholders to approach these critical issues strategically, identifying the most appropriate implementation mechanisms and resources to meet identified needs, and thereby efficiently prioritizing and allocating scarce resources. Significant progress in all four of these issue areas will be crucial not only if the Region is to truly transform its tourism offering and raise this cluster's international visibility, but also to attract the type of market intelligence-based investments into the sector stakeholders require.

An essential first step in adopting this type of systemic and integrated strategic approach will be leveraging indigenous knowledge and leadership. To tap into these resources, some of the key competitiveness principles and success factors that will need to be incorporated into strategic planning to effectively integrate the Region's

tourism cluster's actors include:

- Conduct Market-Driven Analysis: shaped by the Region's tourism requirements in relation to different types of tourism (e.g., domestic, international religious, etc.).
- Develop the concepts of Strategic Vision and Competition: Understanding that real competition is about the Region versus international and domestic competitors, not between local businesses.
- Encourage Collaboration, New Dialogue and Linkages/Interaction: Working together to change market response and foster institutional innovation, not programs.
- Support Committed Leadership: Mobilizing those cluster actors with a stake in the Region's competitiveness.
- Employ an Action Focus: Taking responsibility, not just planning.
- Support Entrepreneurship: Use existing resources in new ways.
- Encourage the Private sector to own and drive the process of tourism cluster development.
- Understand that the most important determinant of success is "Sweat Equity" investment by the cluster.
- Understand that Cluster-based competitiveness initiatives are not a "quick fix".

The cluster-based, collaborative approach called for in this Action Plan strives to articulate a clear vision for the Region's potential for developing a tourism cluster that is consensus-based and informed by the market. True and enduring change will derive from local individuals, institutions, enterprises and industry groups. By using a collaborative model to forge partnerships with local public and private groups, culture tourism-related development strategies can be established. Then the tactics or priority actions for implementing these strategies can be set forth.

4.3.4 Tourism Development Actions – Pilot Projects

The actions proposed here seek to enhance competitiveness through certain "Success Stories" from which tourism development and competitiveness principles can be more effectively transferred to adjoining regions.

"Success Stories" pilot projects have been identified for their potential to deliver world-class excellence in tourism. In achieving international promotion these projects will have a significant impact on Southeast Anatolia's tourism performance.

The key partners in delivery will be stakeholders with relevant expertise and experience for each pilot project.

The approach that will be adopted in the development of pilot projects:

- ***Short term:*** look for a small number of "low hanging fruits", focus on best practice and positive performance with good strategic fit to the whole "Cradle of Sustainable Civilizations" product proposition. Use these opportunities as "role models" to generate energy and promote both in Turkey and on international markets. Start with quickly achievable goals so as to build confidence.
- ***Medium term:*** encourage public-private partnership and within clusters assist both new and established businesses of all kinds to deliver high quality products and business processes. Focus on improving quality, presentation and service to bring more businesses up to international standard.
- ***Long term:*** nurture, work with and assist businesses to develop long term strategies, focusing on growth through excellence so that they become 'stars' of tomorrow.

"Cradle of Sustainable Civilizations" Tourism Destination Branding	
1. Analyze Targeted Customers	Identify Market Research Gaps, Enhance Market Research and Data Collection Abilities, Segment Markets Appropriately.
2. Establish Tourism Destination Management Organization (DMO)	Identify Key Private and Public Stakeholders, Define Major Objectives and Activities Of Dmo, Define Organizational Structure and Financing
3. Develop Tourism Destination Brand	Identify, Simplify, Distill and Focus On the Core Values and Assets That Are Unique, Appealing, Distinct and Non-Substitutable for the Region. Work in Collaboration with Experts, Public and Private Sector to Decide for the Most Appealing Brand.
4. Promote "Cradle of Sustainable Civilizations" Internationally	Develop Regional Promotion Website. Identify Target Markets based on Differentiating Features and Products. Develop Comprehensive Promotional Strategy and Marketing Campaign That Is Customized to Target Market.
High Value-Added Tourism Experience Proposition	
5. Develop Existing and New International and Domestic Sales Channels	Build Region Products into Existing International Tourism Base and Tourism Products. Collaborate with Key Domestic and International Tour Operators for Cultural and Eco-Organic Tourism
6. Develop "Success Stories" of Tourism in the Region	"Touring Mardin" Product Proposition. Eco-Organic Tourism in Halfeti. Motor-Biking in the Region.
Capacity Building and Investment Attraction	
7. Develop Human Capabilities of People Working in Tourism	Learn from the Best Experiences in the World. Improve Language Skills. Learn How to Take Care of Tourists.
8. Attract Investors	Conduct Local Investment Audit. EU Structural Funds Awareness Raising and Training. Develop Microfinance Programs. Promote International Funding.
Collaborating in Clusters	
9. Initiate Western Gap Tourism Cluster (Nemrut with Adiyaman and Sanliurfa-Harran)	Identify Public and Private Partners. Jointly Develop Compelling Product Propositions. Create Experiences that Engage Tourists in Authentic Ways. Promote PPP
10. Initiate Eastern Gap Tourism Cluster (Mardin with Hasankeyf, Diyarbakir)	Identify Public and Private Partners. Jointly Develop Compelling Product Propositions. Create Experiences that Engage Tourists in Authentic Ways. Promote PPP.

Table 4-7: Strategic Framework for "Cradle of Sustainable Civilizations" Tourism Development

Pilot Project 1: Touring Mardin

Description and Motivation:
Many high-quality actions have already been implemented for tourism development of charming historical town of Mardin (restoration of the old city, city branding, promotional material development, festivals, culinary schools etc.) however the city still exists as a passive single-attraction destination with heavy dependence on the day-trip coach market. The opportunity for Mardin lays in proactive market-driven public-private partnership for the development of integrated tourist experience (offer) with the surrounding places of interest (Savur, Midyat, Dara village, etc.). This opportunity requires interdependent relationships between historical sights and museums, accommodation suppliers and transport operators and all complementary tourism service providers (restaurants, vine cellars, festivals, handicraft producers etc.).

Goal:
Mardin as a World Class and Historically Unique Cultural Sight.

Objectives:

- to develop a highly marketable Mardin Tour product proposition,
- to promote effective public-private partnership (collaboration) for competitiveness enhancement of all stakeholders,
- to improve international recognition of Mardin as a unique cultural sight,
- to extend an average length of tourist stays in Mardin,
- to build capacity of people working in tourism sector,
- to attract investment in tourism sector,
- to contribute to the increase of Mardin tourism sector employment and revenue.

Obstacles and Impediments Likely to Affect Implementation:

- Low level of collaboration between private/private and private/public stakeholders as a part of culture in the region will require long term actions oriented towards "paradigm shifting".
- Specific political situation on the Syrian border will influence the development of the pilot project.

Outcome/Results:

- highly marketable Mardin Tour product proposition developed,
- at least three effective public-private partnership projects in tourism sector launched (new routes, integrated tourism products that engage tourists – culinary, wine tasting holidays etc.),
- extended average length of tourist stays in Mardin,
- training implemented for at least 50 people working in tourism sector,
- international promotion plan developed and first actions implemented (high-quality international events for Mardin promotion),
- investment attraction plan developed
- contribution to the increase of Mardin tourism sector employment and revenue.

Action Steps:

- Identify key players in Mardin tourism development, provide inter-institutional co-ordination and initiate public-private collaboration sessions with the purpose to develop excellence in Mardin tourism.
- Identify market research gaps and enhance market research and data collection abilities in order to develop a market oriented product proposition.
- Within a public-private partnership initiative perform audit that identifies differentiating features and products of Mardin related to other competing tourism destinations (develop a set of Mardin routes, congress and convention products that would be naturally drawn to Mardin - religious, architecture, archaeology, unique culinary and wine tasting experiences, training etc.).
- Identify target markets based on Mardin's differentiating features and products.
- Develop existing and new international and domestic sales channels.
- Provide training for at least 50 people working in tourism to facilitate pilot project implementation.
- Organize study tours.
- Develop capacity building program in other key areas (business climate, physical infrastructure and access to finance).
- Develop comprehensive promotional strategy and marketing campaign (international promotion plan) and implement initial promotional activities (international tourism promotion events in Mardin together with National Geographic, Discovery Channel etc.).

Timeline:
10 - 12 months

Funding:
300,000 EUR

Pilot Project 2: Eco-organic Tourism in Halfeti

Description and Motivation:
The success of any tourism industry is its ability to innovate and match the attractions, resources and products of a destination with the right visitors. Many tourists, tired of encountering the serial reproduction of culture in different destinations are searching for alternatives. Increasing competition in the cultural tourism market means that sights and basic services are no longer enough and that destinations must differentiate their products by transforming them into 'experiences' which engage the tourist. Halfeti can become a prime example of engaging tourists in eco-organic experiences.

Goal:
Halfeti as a top quality experience in eco-organic tourism which invites visitors to go back to nature and natural ways of living.

Objectives:

- to develop a role model of eco-organic tourism in Southeast Anatolia,
- to enhance visitor driven innovation,
- to extend average length of tourist stays in Halfeti,
- to promote effective public-private partnership (collaboration) for competitiveness enhancement of all key players in Halfeti tourism,
- to improve international recognition of Halfeti,
- to launch Halfeti to international eco-organic tourism sales channels,
- to build capacity of people working in tourism sector,
- to attract investment in tourism sector,
- to contribute to the increase of Halfeti tourism sector employment and revenue.

Obstacles and Impediments Likely to Affect Implementation:

- Low level of collaboration between private/private and private/public stakeholders as a part of culture in the region will require long term actions oriented towards "paradigm shifting".
- Specific political situation on the Iraq border will influence the development of the pilot project.

Outcome/Results:

- role model of eco-organic tourism in Southeast Anatolia developed,
- at least three effective public-private partnership tourism projects in Halfeti launched (i.e.: accommodation in caves, attractive learning programs of natural ways of living for tourists - organic gardening, fruits and wild herbs collection and drying, traditional food and beverage processing),
- capacity building implemented for people working in tourism sector,
- programs for Halfeti eco–green certifications and programs for Fair Trade Certified Handicraft Products implemented,
- extended average length of tourist stay in Halfeti,
- international promotion plan developed and first actions implemented (high-quality international events for promotion).

Action Steps:

- Within a public-private initiative, develop Halfeti tourism products for niche international and domestic markets. Expand boutique offerings to capture "boutique" experience:
- Distinctive regional cuisine
- Ag tourism and wine corridor
- Trekking
- Culture and folklore
- Distinctive food-processing
- Prepare programs for Halfeti eco–green certifications and Fair Trade Certified Handicraft Products.
- Build Halfeti eco-organic tourism into existing international tourism sales channels (i.e. www.responsibletravel.com) and conduct promotion campaign.
- Provide intensive capacity building program in four key areas (education, business climate, physical infrastructure and access to finance) for successful marketing and production of Halfeti eco-organic tourism product propositions.

Timeline:
10-12 moths

Funding:
280,000 EUR

Pilot Project 3: Motor-Biking in the Region

Description and Motivation:
The success of any tourism destination is its ability to innovate and match the attractions, resources and products of a destination with the right visitors. Motor-bikers are a specific tourism market segment known for their appreciation of nature and freedom. They are also a "high-spending" market segment. Their mobility enables them to experience the Region in all its size. Pilot project "Motor Biking in the Region" can become a success story in integrating all Southeast Anatolia provinces in "Cradle of Sustainable Civilizations" high-value added product proposition.

Goal:
Integrating all Southeast Anatolia provinces in "Cradle of Sustainable Civilizations" high-value added product proposition with strong appeal to international motor-biking tourism market segment.

Objectives:

- to develop a success story of motor-biking/adventure tourism in Southeast Anatolia,
- to contribute to the development of "Cradle of Sustainable Civilizations" tourism destination branding,
- to enhance visitor driven innovation,
- to promote effective public-private partnership (collaboration) for competitiveness enhancement of all key players in adventure tourism,
- to launch "Motor-biking the Region" in niche international tourism sales channels,
- to build capacity for adventure tourism in 4 areas: training, physical infrastructure, access to finance and business climate,
- to attract investment in tourism sector.

Obstacles and Impediments Likely to Affect Implementation:

- Low level of collaboration between private/private and private/public stakeholders as a part of culture in the region will require long term actions oriented towards "paradigm shifting".
- Specific political situation on the Iraq border will influence the development of the pilot project.

Outcome/Results:

- role model of adventure tourism in Southeast Anatolia developed,
- at least three effective public-private partnership projects launched for motor-bikers (i.e.: photo safari, hiking/paragliding the Region etc.),
- capacity building implemented for people working in adventure tourism,
- "Motor-biking the Region" launched in niche international sales channels,
- international promotion plan developed and first actions implemented (high-quality international events for promoting motor-biking and "Cradle of Sustainable Civilizations" destination branding).

Action Steps:

- Conduct comprehensive market research and benchmarking activities for biker tourism market niche.
- Within a public-private initiative, develop "Motor-biking the Region" tourism product for niche international and domestic markets. Capture unique experiences: camping, hiking, paragliding, climbing, photo-safari, culture, good food and party.
- Contribute to "Cradle of Sustainable Civilizations" tourism destination branding activities.
- Build "Motor-biking the Region" tourism into existing international tourism sales channels (ie. www...)
- Establish twinning with bikers clubs all over the world.
- Provide intensive capacity building program in four key areas (education, business climate, physical infrastructure and access to finance) for successful marketing and production of "Motor-biking the Region" tourism product propositions.

Timeline:
10-12 moths

Funding:
280,000 EUR

Pilot Project 4: "Cradle of Sustainable Civilizations" Marketing Website

Description and Motivation:
In order to maximize the GAP Region's tourism potential, the Region needs to take proactive measures to improve its image at domestically and abroad. Drawing attention to the Region's differentiating features in promotional materials and campaigns can help raise the Region's profile in international circles and enhance the marketability of the Region's tourism products. Developing a region-wide "Cradle of Sustainable Civilizations" promotional website will not only help brand the entire Region as a tourism destination, but also help develop a culture of collaboration between the different provinces in the Region.

Goal:
Integrating all South-east Anatolia provinces in "Cradle of Sustainable Civilizations" promotional website with strong appeal to targeted international market segments.

Objectives:

- to develop a success story of regional collaboration through a public-private partnership involving all key players in the tourism sector,
- to contribute to the development of "Cradle of Sustainable Civilizations" tourism destination branding,
- to enhance visitor driven innovation, to promote effective public-private partnership (collaboration) for competitiveness enhancement of all key players in adventure tourism,
- to launch key tourism products targeted at niche international tourism sales channels,
- to attract investment in tourism sector.

Obstacles and Impediments Likely to Affect Implementation:

- Low level of collaboration between private/private and private/public stakeholders and between provinces as a part of culture in the region will require long term actions oriented towards "paradigm shifting".
- Specific political situation on the Iraq border will require constant monitoring and adjustments.
- Outcome/Results:
- "Cradle of Sustainable Civilizations" website launched.
- Key governmental tourism actors and private sector actors from each province participating in development of website and contributing relevant tourism product/service and other marketing materials.
- Website becomes vehicle for promoting a variety of region-specific assets and characteristics.
- Website becomes channel for private sector actors to actively promote and market their products and services.
- Website's usefulness to private sector actors provides for fee-based services that make website self-sustaining.

Action Steps:

- Perform audit that identifies differentiating features and products of Region related to other competing tourism destinations.
- Obtain marketing and product/service materials from all relevant tourism actors throughout Region.
- Identify and contract web design service provider
- Develop GAP Region promotion website.
- Launch website
- Update website regularly with new products/service and promotional content

Timeline:
3-6 months

Funding:
150,000 EUR

4.4 NEW ACTIVITIES

4.4.1 Gaziantep as New ITC Capital of SE Anatolia

Gaziantep is a very entrepreneurial city, and if a more specialized IT center evolves in the region, it is likely to be in Gaziantep. It is already starting to service textile machinery, which is becoming more software driven; this could expand to create a more significant sector. Whether this will eventually become an export-oriented activity remains to be seen, but even as a support for the other key transformations taking place in the region, it will be important to support this small but pivotal sector.

YESTERDAY (1970's)	TODAY	TOMORROW (2023)

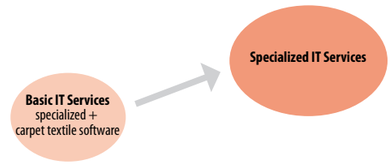


Figure 4-6: Evolution of IT Services

4.4.2 Health Services

Health services is another sector where there is some potential for significant expansion in the region – perhaps in Gaziantep, Diyarbakir, or both. Not only will additional capacity make it a major employer in these cities, but the advent of more private hospitals and clinics will transform the industry. It is possible that it will become a region that attracts patients from a much wider region than even the GAP provinces, also from Syria, Iraq, and other neighbors.

YESTERDAY (1970's)	TODAY	TOMORROW (2023)

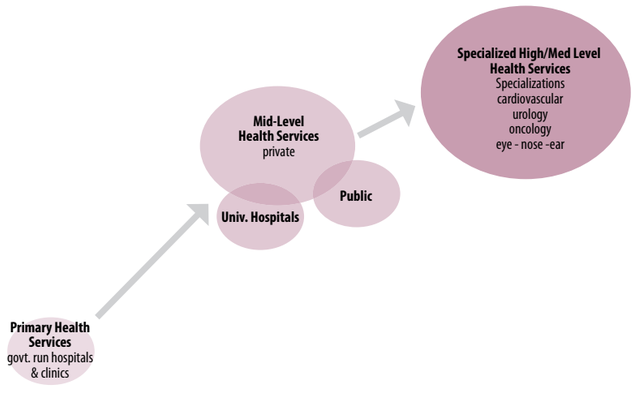


Figure 4-7: Evolution of Health Services

4.4.3 Renewable Energy Industry

Renewable energy might someday become an export industry in its own right. Of course, the region is currently exporting hydro-derived electricity, but as this has been primarily a national initiative, so far it has had little direct spill-over into the region's economy.

However, the renewable energy strategy outlined in this report is primarily aimed at ensuring that key products and services produced in the region – particularly those focusing on export markets, such as the ones outlined above – are produced with high levels of renewable energy. Therefore the main argument is presented as one of the cross cutting strategies.

YESTERDAY (1970's)	TODAY	TOMORROW (2023)

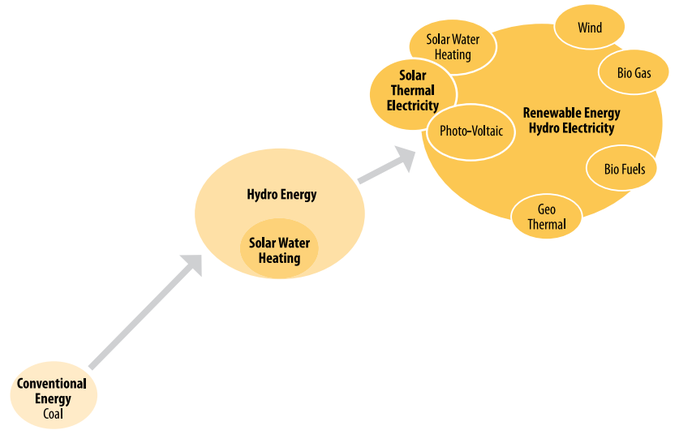


Figure 4-8: Evolution of Energy

Values, Outcomes & Strategies - One of the visuals that came out of an August 2007 workshop on setting a competitiveness agenda for the GAP region.

SECTION 5
CROSS-CUTTING STRATEGIES FOR ACHIEVING THE VISION

5.1 GLOBAL ENTREPRENEURS

5.1.1 The Vision for Global Entrepreneurs

The Gap region has immense opportunities. Chapter 2 describes possible shifts from traditional farming into high-value organic farming, from undeveloped tourism to unique world attritions, from mass-production of textiles to high-value organic clothing. All the shifts are movement away from commodity to products that deliver more value to the buyer.

Textiles can be bought and sold at the world market as a commodity. The supply excesses the demand so the buyers are king. Cut-throat competition consequently exists among producers of textiles. Many GAP textile producers therefore move into the informal economy in order to survival. Similar stories can be told about the other industries in the GAP region.

GAP needs to break away from the price competition by offering the buyers unique bundles of good. This can be the full supply of organic textiles from cotton to silk. Organic buyers would then only need to buy their products from one place which would reduce their cost.

These shifts from commodities to the correct bundles of products do not occur by themselves or by government planning. This report offers some ideas in the sections on the potential clusters. Combining renewable energy and organic framing holds great promises.

However, a lot of new bundles of products and business ideas need to be tested in the market. These tests are created by people who seek to generate value by identifying opportunities and exploiting new products, processes or markets. These people are the entrepreneurs of the region.

The role of entrepreneurship in society has changed drastically over the last 60 years. In the period following World War II, the importance of entrepreneurship and small businesses seemed to be fading away. The focus was on mass production and scale efficiency. Small business were preserved and protected for social and political reasons. The emerging of global competition and more knowledge-based economies have reversed that trend (Audretsch and Thurik, 2001).[1]

Successful regions around the world now thrive on entrepreneurs. Entrepreneurs are the backbone of Silicon Valley in the US and Bangalore in India. The growth miracle in China is also fuelled by their entrepreneurial capacity. The GAP region has its own cases of entrepreneurship, which the GAP strategy strives to build upon and foster.

1 http://www.aeaweb.org/annual_mtg_papers/2006/0107_1430_0301.pdf

One such story involves an entrepreneur named Mr. Enver Ataseven, the owner of "Değirmen Makina Ltd", a small machine building company in Gaziantep. Değirmen Makina Ltd. employs 50 people and boasts 1.5 million TL in profits a year. Mr. Ataseven entered the machine building business at seven years old. At the time, he could no longer afford attending school and entered an apprenticeship school where he began working for food equipment companies. At the time, the business was dominated by foreign capital. Mr. Ataseven developed his skills but realized that without engineering knowledge, there was a finite limit to his success. One particular day he noticed the managers writing notes in a technical notebook, which they never let leave their side. Mr. Ataseven, being the cunning entrepreneur he is, snuck away several times with the book in order to copy the notes. He then taught himself how to make the equipment using the notes. After his father passed away, Mr. Ataseven borrowed a very small amount of start up capital (enough to buy 62 gr of gold) to open a small workshop and hire 5 employees. He then decided to travel to observe the production practices of competitors. During his travels, he found foreign competitors were using metal instead of wood. As a result, he changed his production practices and now, his company exports to Canada, Europe, and Central Asia. Mr. Ataseven saw a niche and filled it. As a result, his company is prospering and doing very well for the region.

International organisations like the OECD are also now citing entrepreneurship as a separate and important driver of growth (OECD, 2001; 2007). Some people are even beginning to talk about the entrepreneurial economy, which is the economic model for the future (Kauffman, 2007).

The GAP region will be no exception to the rule. The region cannot compete with China on wage for its products and it cannot compete with Europe on economics of scale. An entrepreneurial creation of new markets and bundles of products is the only option for the region to prosperous.

The cultural heritage of the GAP region is that of traders. The history of traders runs all the way back to the hay days of the Silk Road. The latest example is the valuable trade in the food for oil programme with Iraq. Traders generate values by moving goods from one place to another.

However, trading will not be enough to support sustainable change in the region. The trade mentality needs to be supplemented by an ambition to create value by creating new markets and products like organic baby cloth.

One person with an idea can be an important catalyst for change but only if the rest of the conditions in the region also support the change. A series of interlinked conditions need to be in place in order to make change happen in the region.

The entrepreneurial strategy for the GAP region aims at releasing its entrepreneurial potential by building on its culture and addressing all of the necessary conditions for entrepreneurship to escalate.

How does the GAP region perform today?
Turkey has seen a large increase in its entry rate over the last years from 9.6% in 2002 to 14.6% in 2005. Entry rate is one of the key indicators of entrepreneurship, defined as new firms (those that were registered in the current year) as a percentage of total registered firms. Entry rates in developing regions range between 7 and 9 percent. The rates in industrialised countries are slightly higher around 10% (World Bank, 2007).[2] Turkey in general is therefore doing reasonably well in international comparisons.

Entrepreneurship is more than creating new firms. It is also about growing these new firms (OECD, 2007). Unfortunately, no international data is available of the share of new firms that growth.

5.1.2 The Entrepreneurship Strategy

Many words are used to describe the drivers of entrepreneurship.[3] The differences between the words used are often semantic; the essence is that a growth-oriented firm is created by a combination of three factors: opportunities, people and capital (Figure 5-1).

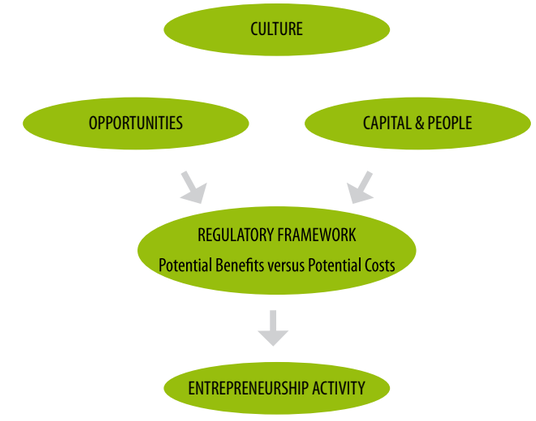


Figure 5-1: Drivers of Entrepreneurship

Opportunities are the ideas that create genuine value in the minds of other people, and they are essential for starting and growing businesses. ***Skills*** include the competencies of the entrepreneur and also access to other competencies within the entrepreneurial infrastructure. ***Capital*** is a necessity for firm expansion and growth.

A combination of opportunity, people and capital does not necessarily lead to entrepreneurship if costs, such as opportunity cost (e.g. loss of health insurance) and start-up cost, outweigh potential benefits. In this event, the opportunity should not be pursued following the rationale of basic economic theory. These incentives are to a large extent determined by the ***regulatory framework***. High taxes may for example lead to people setting up their company in the informal economy rather than in the formal economy.

2 http://siteresources.worldbank.org/INTFR/Resources/Entrepreneurship_and_Firm_Formation_Sep_2007.pdf
3 The discussion of the drivers of entrepreneurship is based on Hoffmann (2007a; 2007b)

A final component is culture. The GAP region has it history and values, which are to be preserved. The creation of entrepreneurship therefore needs to leverage on the parts of the region's culture than support entrepreneurship.

The Elements in the Strategy
A coherent strategy for entrepreneurship needs to address all of the elements in Figure 5-1. Regions might become world class in the regulatory framework but if the mindset of the people is not entrepreneurial then it does not matter. Several examples exist of countries that have been pushing reforms in only some of the areas in the framework and therefore have not unleashed the full benefits of entrepreneurship.

Opportunities are not lacking in the GAP region. It is the demand side of entrepreneurship – ***people and capital*** – that seems to be the problem. Furthermore, the ***regulatory framework*** might not be optimal for fostering entrepreneurial growth. The strategy founded on the culture of the region and build around the three main areas – people, capital and the regulatory framework.

Furthermore, the strategy is designed to especially foster women entrepreneurship. Women are faced with specific obstacles (family responsibilities) that have to be overcome in order to give them access to the same opportunities as men. Also, better education and participation of women in the labour force is a prerequisite for improving the position of women in society and self-employed women (OECD, 2004). Most of the elements of the women entrepreneurship strategy is dealt with under capital, as access to finance is one of the largest barriers to women entrepreneurship.

The strategy consist of 10 main initiatives aimed at the improving the various drivers of entrepreneurship (Table 5-1). Some of these are costly like fostering entrepreneurship education, whereas others require leadership like role modelling.

	People	Capital	Regulatory framework
Initiatives	• Preparing women for entrepreneurship • Promoting role models • Creating networks • Creating global links • Fostering: entrepreneurship education	• Creating micro credit banks • Creating a co-investment fund	• Evaluating and retargeting public incentives • Inducing a time restricted exemption from the minimum wage • Making life simpler for business

Table 5-1 – The Initiatives in the Strategy

The sections below will discuss the initiatives in the strategy in more details. The descriptions are kept in general temps. The goal is to create an understanding of the initiatives needed to change the current situation. All of the initiatives need more work if they should be implemented successfully in the region.

People
Peoples' behaviour is determined by their context. Entrepreneurs are often seen as lonely stars that overcome all difficulties by taking tremendous risk. This picture is far from reality. Entrepreneurship is a social process involving many people (Howard Aldrich, 1986).[4] People from India moves to the US for studying and end up as entrepreneurs because of the US context, whereas their friends at home look for jobs in large firms.

Several interviewed people in the region have emphasized lack of co-operation and a follow-others mentality as two major characterises of the current situation. No hard data is available to back these claims but the lack of successful firms in new industries does support them. The willingness to take risk does however not seem to be a problem in region. Several large investment in marble and textile plants suggest a willingness to take risk.

The strategy for people is therefore aimed at changing the context by focusing on four things – role modelling, networking, international exposure and education.

Role Modelling
The only really robust result in the research about the personal determinants of entrepreneurship is that personal relationship with other entrepreneurs has a significant positive impact on the probability of becoming an entrepreneur. Furthermore, many interviewed people in the region emphasis a culture based tendency to follow in other peoples' footsteps. "If one opens a carpet shop in a street soon other people will open carpet shops next to this" as one interviewed person explained. This culture can be used in the entrepreneurship strategy by focusing on role modelling.

Role modelling can play a powerful role in the region. Role modelling can be promoted though rewards like "entrepreneur of the year" or by having successful entrepreneurs to give lectures at schools and universities.

Role modelling can be quite effective in stimulating women entrepreneurship as females under representation in entrepreneurial efforts is related to never trying in the first place (Davidson, 2005). Egypt has used role modelling as an important tool in stimulating women entrepreneurs. The top women entrepreneurs in Egypt have for example meet with US Business people to discuss how to expand future the opportunities for women entrepreneurs.[5]

Networking
Networking is another powerful tool in stimulating entrepreneurship. Even though the literature provides no straightforward picture, the bulk of empirical evidence indicates that entrepreneurs who are able to draw on broad and diverse social networks are more successful in terms of growth and innovation than are entrepreneurs who do not have access to such networks.

Networks can contribute to the successful launch and growth of businesses through various mechanisms including:

- ***Knowledge Exchange:*** Through networking with peers entrepreneurs can get access valuable information and knowledge (e.g. to identify good business service providers).

4 Howard Aldrich (1986) http://64.233.183.104/search?q=cache:5PxgQfG0pXwJ:www.stanford.edu/class/e145/materials/Characteristics.html+characteristic+entrepreneurs&hl=da&ct=clnk&cd=2

5 http://telaviv.usembassy.gov/publish/peace/archives/2000/may/me0511a.html

- ***Knowledge Development:*** Networks are frequently used as a setting for various events and activities that serve to enhance the competences of the members.
- ***Strengthening of Professional Network:*** Networks are forums where entrepreneurs and new companies can strengthen their professional network and identify strategic business partners. Furthermore, networks can ease the access to experts and business service providers.

Basically all types of the networks are needed in the region.
Some networks are targeted towards all people, who plan to start - or are in the process of starting – a new business while others are targeted at entrepreneurs with specific characteristics for example gender. The 2nd OECD CONFERENCE OF MINISTERS RESPONSIBLE FOR SMALL AND MEDIUM-SIZED ENTERPRISES (SMEs) in Istanbul[6] 2004 listed "Promote the development of women entrepreneur networks" as one of the key policy instruments to stimulate women entrepreneurship.

The Women into the Network (WIN) from the United Kingdom is a programme aimed at stimulating networking and empowerment of women through sharing of best practices. The International Labour (ILO) is also promoting women entrepreneurship in Egypt through a programme called Women's Entrepreneurship Development and Gender Equality" (WEDGE).[7]

Not only women entrepreneurship can be stimulated by networking. The CONNECT network established at the University of California San Diego (UCSD) in 1985 and later spread to large parts of the world shown the importance in creating network of entrepreneurship advisors.

6 http://www.oecd.org/dataoecd/6/13/31919215.pdf
7 http://www.oit.org/public/english/region/afpro/cairo/countries/socio-economic.htm

The UK's National Council for Graduate Entrepreneurship (NCGE) joined forces with the Ewing Marion Kauffman Foundation in the United States to create a scholarship program for 20 of Britain's most promising young entrepreneurs in a move backed by the UK's Department for Education and Skills (DfES) and its Small Business Service (SBS).

The NCGE-Kauffman Entrepreneurship Fellows, highlighted in Chancellor of the Exchequer Gordon Brown's budget speech and due to start in September, will help Britain's future business hopefuls develop their entrepreneurial skills and ideas for starting a business by spending six months in the United States with some of America's most innovative entrepreneurial thinkers, experts and business leaders.

The target will be any student who is genuinely interested in starting a high-impact business in the UK, who would return after the program not only with the skills to set up but willing to share the benefits of their experience with others in their higher education institution, with a view to engendering a similarly dynamic culture of entrepreneurship in the UK.

The students, selected by the NCGE, will spend the first three months in the UK in preparation for their period in the States where, hosted by the Kauffman Foundation, they will spend time both in an entrepreneurial university setting and at entrepreneurial companies.

In the next few months, the NCGE will be calling on higher education institutions across the country to nominate candidates for the program with a keen interest in starting and growing a business relevant to their area of study.

Networking should be stimulated at the local level. People need to meet on a regular basis. The support the network should be quite low. The need for special women network is due to the fact that women entrepreneurs and SME owners often are exclusion from male-dominated informal networks.

International Exposure
The assumption is that people become entrepreneurial by being exposed to entrepreneurial people and surroundings. Business owners and want-to-be entrepreneurs should therefore be taken on study trips to entrepreneurial regions to see and experience the dynamics.

The most extreme case of international exposure can be found in the UK and Finland. The UK sends students to the US to work for US entrepreneurs and get trained at the best US universities in order to stimulate the entrepreneurial spirit (Box 1).[8] The Oulu region in Finland subsidies local firms that establish themselves in the US in order to get access to venture capital, management capabilities and business service advice. Currently, 10 firms are assumed to get support through the Finnish scheme.

The GAP region is not even well connected with the major economic centres in Turkey like Istanbul and Ankara. This needs to change in order to stimulate entrepreneurship. Two initiatives are suggested.

First, money should be set aside so all universities students of entrepreneurship will get a change to travel to the hot-spots of the world for inspiration. These trips could be to Northern Italy to learn about the fashion industry or to Israel to learn how to move agriculture up the value chain. These trips should be combined with teaching at the leading universities.

Second, business trips to other countries for trade fairs and study tours would be essential, and should also receive generous incentives, especially during the first five years of the strategy. This is explained further in the section on the Internationalization Program.

These trips are also an excellent way to stimulate women entrepreneurship, so equal participation of men and women is desirable.

Education
In order to strengthen entrepreneurial abilities through education, teaching methods must be adapted from primary schools through universities. These teaching methods should on developing both the skill set and the mind set of the people in the GAP region. While entrepreneurship programs traditionally have been the domain of the business school, the GAP region should develop a variety of programs aimed at instilling the spirit and skills of entrepreneurial studies into everyday life. Several countries and regions are focusing on these issues currently. The EU Commission is working very actively in promoting entrepreneurship education in all level of the education system.

8 http://www.kauffman.org/items.cfm?itemID=697

A role out of entrepreneurship education in the region is a very ambitious plan and it will require substantive resources. Successful countries have used different approach although some common features exist – commitment of resources and a devoted institution focusing on developing entrepreneurship education.

Entrepreneurship education is expensive, as teachers have to be trained, new methods of teaching have to be introduced and links to local entrepreneurs and business have to be established. Several international resources exist, which can be used to leverage the local strategies. Junior Achievement of Turkey is for example an internationally linked organisation, which can provide teaching materials and networking opportunities.[9] Another possible source of inspiration is the high-school pilot project (ERG programme) run by the Sabancı University in İstanbul, which has one participating high-school in the GAP region.

The most well-known institution promoting entrepreneurship education is the Kauffman Foundation in the US. The Foundation supports teaching all the way through the education system but has it emphasis on universities. The Kauffman Foundation's Kauffman Campuses initiative aims to transform the way colleges and universities prepare students for success in the American economy. The program was launched in December 2003, when eight universities were awarded up to $5 million each to make entrepreneurship education available across their campuses, enabling any student, regardless of field of study, to access entrepreneurial training. As part of the initiative's matching funds (three-to-one match) were required.[10] The cost of introducing entrepreneurship teaching at one university is therefore up to $20 million for a large university.

Other countries have public backed Foundation although all of them have a public-private partnership component. The UK is for example expected to launch a giant public-private partnership foundation to boost entrepreneurship education at all levels of education in the UK.

Capital

Access to capital is always mentioned as a key problem by business owners, whereas banks and investors claim that the lack of good business ideas is the problem. No one has been able to prove any of the two to right or wrong (ICE, 2007). Turkey has launched several national programmes to improve the access to loan capital. KOSGEB works on improving entrepreneurs and SMEs access to debt finance.[11] The need for regional tailed initiatives in order to improve access to loans in the GAP regions is therefore questionable except in the area for women entrepreneurship.

The access to larger amount for investment in new plants or farming equipment might be lacking in the region. These investment will typical be more risky than what banks normally wants to engage in. Developing better access to equity capital is a policy task where very few countries and regions have had success. Israel is according to the OECD one of the few countries where this has been developed successful through co-investment schemes (Baygan, 2003).[12]

9 http://www.ja-ye.org/Main/Default.aspx?Template=TMain.ascx&phContent=MemberShow.ascx&CatID=29&ArtID=0&LngID=0&OrganizationID=56

10 http://www.kauffman.org/items.cfm?itemID=475

11 http://www.oecd.org/dataoecd/5/11/31932173.pdf

12 http://www.oecd.org/dataoecd/41/56/2491258.pdf

Stimulating Women Entrepreneurship through Microcredit Banks

An important part of the current situation in the GAP region is that a large part of the region's women lack education and are working in the informal sector of the economy. This is preventing the women from becoming entrepreneurs. A giant push is needed to enable many of the women in the GAP region to become entrepreneurs. Observing the region suggests that this push is starting slowly to develop.

While new rural employment opportunities are growing as new modern agriculture and agribusiness activities develop newly irrigated lands, a quiet revolution is also taking place in rural villages throughout Southeast Anatolia. A women-led self-empowerment, savings to entrepreneurship movement has emerged and is spreading across the region and has enabled humble rural women to take a more active role in their own lives and in their communities for creating small productive home, handicraft, and ag-based projects that provide a greater level of self-employment at a minimum, and, as they grow, new entrepreneurial businesses generating employment in villages.

This movement is not unlike Ghandi's village-based home spinning, self-reliancy programs in India's villages that spawned and unleashed a new productivity and authenticity for development that was being overwhelmed in the rush to industrialization, modern agriculture, and modernization in a British-controlled India. And it is similar in a way to Muhammad Yunis, the Bangladeshi godfather of microcredit and the village based Grameen banking system--who has brought new hope and rural dynamism in Bangladesh and has virtually transformed and lifted what was once deemed a rural "basket-case" to a place with more dignity and opportunity, especially based on the ingenuity and reliability of women villagers.[13]

As the vision for this new shift in Southeast Anatolia unfolds, the key will be that new self-employment opportunities are emerging in many, small, self-organizing ways, from the bottom-up in villages across the region. By shedding light on new possibilities and igniting small shifts in which women are encouraged to recognize their hidden potential for self-help, empowerment, and entrepreneurship, latent internal and village-based entrepreneurialism and leadership is born.

The model is simple. The idea is to unlock the existing potential for self-help, entrepreneurship, and rural development for women "on their own terms". The basic starting point is helping women to form small savings circles, in which women can help each other, lira by lira, day by day, make the sacrifices and learn to collaborate, and begin to grow their savings, ideas, and aspirations into small successes.

The savings groups, with the small capital, eventually give rise to new possibilities for making money. Village-based entrepreneurial support networks (such as creating new village-oriented women's entrepreneur programs run by say a more rural-oriented ABİGEM or small NGO's throughout the region) are formed to help women conceive of simple productive projects that they can do to earn some additional money. The women start out slowly — using their savings to grow a few more chickens and selling eggs, creating foods to sell, selling basic goods and opening their little shops, purchasing the initial raw materials needed to weave car-

13 Muhammad Yunus, the Bangladeshi godfather of microcredit, has declared that it will end poverty. One day he says, there will be "poverty museums." (Yunus, Muhammad. "Nobel Lecture." (Nobel Foundation, December 10, 2006)

HISTORY OF LAS CAJAS, Women's Savings Groups in Tabasco, Mexico

All great things start small.

Much in the same way that Nobel Laureate Mohammed Yunus started the Grameen Bank of microfinance in Bangladesh with a small personal effort, in 1999, Mexican agronomist Armando Mejia organized fifteen women to save $1 each per week a rural community in Tobasco, Mexico. In the three years following Mejia's initial foray into popular finance, he helped found 25 new savings groups with 360 women in the region of Costa Grande, Tabasco. By 2002 they had an annual savings and income from savings of over $100,000.

While women's savings groups both create and are created by complex social and political networks, their underlying economic premise is surprisingly simple. Community members organize into self-selected groups of anywhere from ten to two-hundred fifty members, with an average group size of twenty-five. They save a minimum weekly quantity, usually around $1 each. Members' savings are pooled together and loaned out to members in the saving circle and non-group community members with interest rates, usually between 5-10% monthly for members and 10-15% for non-members. The women pool their savings and then added value to the savings by selling food, hosting lotteries, and loaning out money to its members and others.

In the years since, Las Cajas blossomed into an organization of over 12,500 members across ten municipalities of Tabasco. The members, about 80% of whom are women, save between one to five dollars per week. Because they loan this money out within their own communities, they enjoy a nearly 100% loan repayment rate on loans. In 2006, women in Tabasco's savings circles earned an average 36.5% annual interest on savings, with combined savings and earnings of over US $1.1 million.

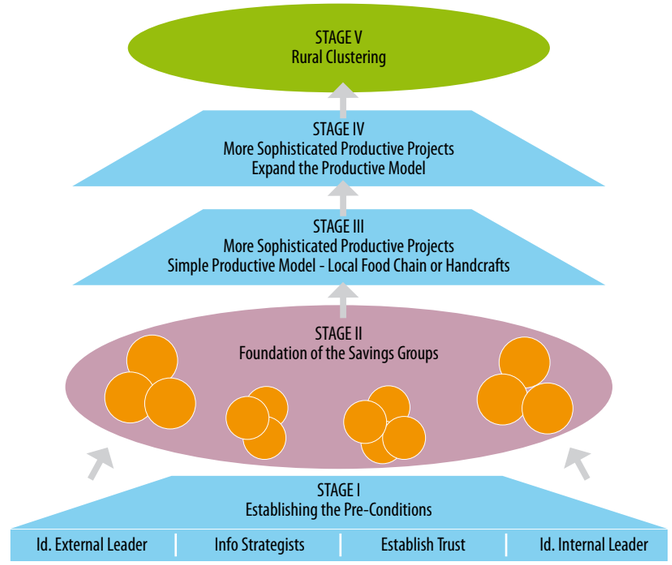
Las Cajas has added many other innovations as well. Local field agents with advanced agricultural degrees consult the women on how to identify and launch microenterprises. These field agents have helped access grant money to start chicken, pig and fish farms.

Las Cajas has also partnered with the Tabascan state-government and local non-banking financial institutions to provide microcredit loans to over 10,000 Tabascan women.
The creation of new income earning opportunities for members translates into an additional income of US$2-10 a day. Because rural unemployment and underemployment of the men in the state ranges from 40-60%, this means that with these new self-made jobs, the women are becoming significant income providers for their families.

Social Benefits
The value of Las Cajas far surpasses its economic benefits. The philosophy is that women's economic empowerment must come hand-in-hand with social and political empowerment. Las Cajas savings cooperatives are member-owned and member-run in order to promote women's leadership and community activism. Savings cooperatives gather in weekly meetings where they set group charter, elect leadership and strategize for the future. Las Cajas is also helping thousands of women to move from one or two meals a day to three, from one or two sets of clothing to three or four, and to be able to send their children to school, buy medicine, and have a little extra to deal with emergences.

"It opens up a world for you to know," says Maira Ibáñez, the president of the Comalcalco cooperative. "You lose your fear, gain confidence and learn that you if you want something you can get it."

pets (thereby eliminating the middlemen brokers), making handicrafts, etc.— and eventually some of them spawn into small entrepreneurs.



The women's savings groups are the starting point for this transformation and continue to support the women by providing both basic financial and moral support to take on new challenges. At some point, they find new credit possibilities through rural credit schemes to support their small home-based food, agriculture, handicraft, carpet-weaving, and other income-earning activities. Once the social capital base is established in the solidarity and support of these savings circles, micro-entrepreneurship supported by micro-credit (popular finance) is promoted, as much as possible through self-organizing, bottom-up approaches.

For people committed to addressing intractable problems of inequality and poverty, popular finance has recently come to have great appeal. Its premise is simple. By accessing small-scale financial services, poor people, mainly women, create self-employment and break free from destitution. Self-empowerment and innovation are the weapons in a bottom-up global battle against poverty. This is a sustainable approach, sometimes even profitable, as the financial services are paid for by interest from loans and savings (or in the Turkish context, where "haram" is not acceptable, "profit-sharing" whereby credits are repaid in the form of sharing the profits of the business activity).

The key is that these rural development processes are self-organizing and emergent—not something that can be imposed by government—and require patience, endurance, and commitment. Yet, success also can spread remarkably quickly—women's group to women's group and village to village—when conditions are primed and self-determinism is encouraged to flourish.

Three steps are needed to unlock the potential of the uneducated women in the region:

1. Promote the Start-up of Women-led Saving and Empowerment Circles in Villages throughout the region.
    a. Action Plan: Women's Saving Groups, Empowerment, and Entrepreneurship Program—Pilot Project in Kilis
    b. Create Regional Women's Based Sustainable Rural Development Centers in Each Province of the GAP Region—based on the Kilis model
2. Promote Village Women's Entrepreneurship
    a. Broaden the Mandate of ABIGEM to focus on Rural Village Women's Entrepreneurship
3. Encourage Growth of Popular Finance & Village Microcredit Banks
    a. Invite Grameen Bank, Accion International, and other successful popular finance NGOs to establish operations in the region

Co-Investment Scheme

The basic of the approach is to use public money to leverage private money. An independent institution (a foundation) is created with an endowment of say €150 million. This money is not to be spend but work as a guarantee for the foundations investments. The public is thereby given the foundation a loan without interest.

The foundation is given an independent board mainly consisting of high-level local business people. The foundation is then given the mission to develop the capital market in the GAP region by co-investing with private firms. See Figure 5-2.

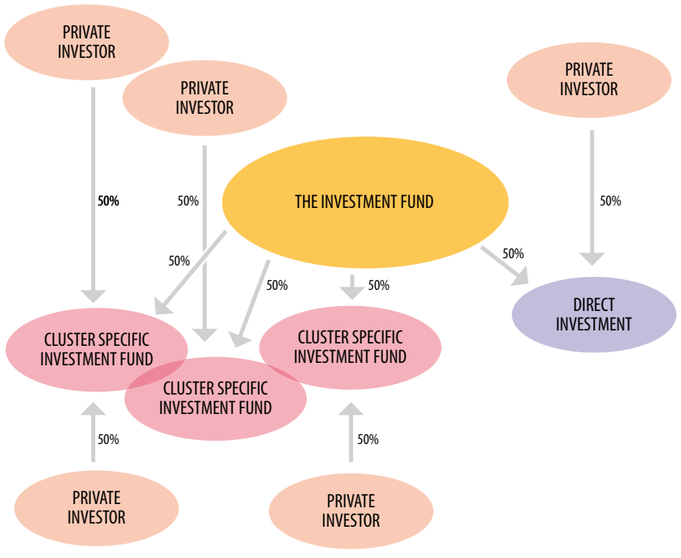


Figure 5-2: Structure of the Co-Investment Scheme

Two types of co-investment are expected:
First, the foundation will work as a fund-of-fund. The GAP region plans to develop three separate clusters. Investment funds specialised in each of these cluster could be a possibility. The semi-public foundation would provide half of the money for a cluster fund and the rest would come from the private sector typically banks. The cluster fund would then finance development project. No rules should be given on the type of finance the fund should use. Some projects might require equity capital, whereas others might require a mix of equity and loans.

Second, the foundation can also do direct investment together with private partners. These investments would typically be bigger like expansions the construction of the bio diesel plant. Again, the foundations investment is used to leverage private money.

The foundation is very different approach than most regions and countries use. Most other countries are using guarantees or subsidies but their results are less impressive than Israel's results (ICE, 2007, OECD). Furthermore, the foundation set-up makes privatisation of the foundation possible as the markets develop. The cluster fund might for example be sold of if they become financially sustainable.
The main drawback of the co-investment approach is that success is very dependent on the quality of persons managing the foundation and on the management's ability to stay independent of political interests.

Turkey already has some institution structures that can be used to set-up such a foundation, which will be discussed in the subsequent chapter. The joint investment scheme has also been suggested in a report by the Istanbul Stock Exchange and the OECD Istanbul Centre for Private Sector Development.[14]

The Regulatory Framework

Turkey has in recent years undergone major reforms in the macro-economic area. The current macro-economic stability brings huge benefits for entrepreneurs and SMEs. A lot of reformed aimed at making life easier for business has also been introduced. The time to start a business has for example been reduced substantially.

However, some mayor problems remain in the business environment in Turkey. A study from Edam for example showed that the informal economy in Turkey accounted for a significant part of the economy – around 22%. This figure is assumed to be even higher in the GAP region. The World Bank has published several reports on the negative impact of a large informal sector on growth.[15] Previously this large informal sector was viewed as a lifeline for the poor in time of macro-economic instability. The current macro-economic stability has introduced a level playing field for firms with much less insecurity. The informal economy has now become the hiding place for less competitive firms. This reduces growth. The large informal economy also hurts women, as women are three times as likely as men to be hired informally (a global average based on World Bank data).

The Edam study highlights two main reasons for this large informal sector - taxes and labour market regulation. Both problems are national, so the GAP region

14 http://www.oecd.org/dataoecd/32/52/35645635.pdf
15 http://rru.worldbank.org/PapersLinks/reducing-informality

does not have any change of correcting these problems without exemptions from national policies.

Another problem in the GAP region is the use of financial incentives (subsidies). Firms get subsidies to electricity, tax reduction and rebate, reduced rent in developing parks.

These incentives need to be redesigned. Many of them focus on supporting firm survival instead of stimulating growth and change. This project did not have the time or resources to map out all incentives in the GAP region. This task should be undertaken during the coming year as part of the detailed implementation planning for this policy. Each incentive should then be evaluated based on its contribution to creation of new value. As outlined in the excellent paper by Harvard researcher Dani Rodrik, subsidies should not be used to support unsustainable sectors, but more as an incentive to pioneers who do the risky work of discovering whether a particular sector or technology can be operated in a cost-efficient manner in a given region. Unlike innovators in high tech industries, who can generally patent their inventions or find other ways to recover the costs of discovery, in regions like the GAP the pioneer often paves the way for imitators who drive the gains down to a ìnormalî level. So pioneering investors with new ideas for the region stand to either lose all their money, when their idea doesnít pan out, or to only gain modest profits. Incentives that are designed to shift that balance, encouraging more experimental investments, without providing on-going support for the entire sector, and the best types of subsidies for the kinds of transformation the Competitiveness Agenda is seeking.

Turkey also offers a lot of support programs to SMEs and entrepreneurs. The major programmes operated by KOSGEB and its Enterprise Development Centres (IGEM) and Technology Development Centres (TEKMER) are according to OECDs review of Turkey structured much like successful programmes in a number of OECD countries. The laboratories operated by KOSGEB are similar to centres operated by Japanese prefectural governments and provide SMEs with access to state-of-the-art testing and analysis equipment and methodologies that would otherwise not be available to most small firms.

5.2 RENEWABLE ENERGY INITIATIVE

5.2.1 Vision - A Clean And Green Southeast Anatolia

Approximately 5,000 years ago, the GAP region was a flourishing eco-system, part of the world's unique emerging cradle of civilization referred to as "the fertile crescent." The land was green and forested, through which flowed the renowned Tigris and Euphrates, and contained a rich diversity of wild plants and animal species which enabled early domestication of the eight "founder crops" and animals upon which human civilization was first created. However, the region's decline from fertile woodland to the eroded scrub or desert terrain of today occurred as a result of progressive environmental self-destruction. As Jared Diamond characterized this transformation, the Fertile Crescent societies "committed ecological suicide by destroying their own resource base."[16]

In the GAP region of tomorrow—by using sustainable, ecologically sensitive, and "clean" development practices and harnessing the vast new amounts of water contained in the reservoirs created by the damming of the Euphrates and Tigris River valleys and the large tracks of land long underutilized—the region that was once the cradle of civilization can be reborn as the "Cradle of Sustainable Civilization."

16 Thanks to this availability of suitable wild mammals and plants, early peoples of the Fertile Crescent could quickly assemble a potent and balanced biological package for intensive food production, "Jared Diamond, Guns, Germs, and Steel" The Fates of Human Societies, 1999, p. 141. However, today, the expressions "Fertile Crescent" and "world leader in food production" are absurd. Large areas of the formal Fertile Crescent are now desert, semidesert, steppe, or heavily eroded or salinized terrain unsuited for agriculture. The region is transformation from fertile woodland to eroded scrub or desert has been elucidated by paleobotanists and archeologists. Its woodlands were cleared for agriculture, or cut to obtain construction timber, or burned as firewood or for manufacturing plaster. Because of low rainfall and hence low primary productivity (proportional to rainfall), regrowth of vegetation could not keep pace with its destruction, especially in the presence of overgrazing by abundant goats. With the trees and grass cover removed, erosion proceeded and valleys silted up, while irrigation agriculture in the low-rainfall environment led to salt accumulation. These processes, which began in the Neolithic era, continued into modern times. Thus, Fertile Crescent and eastern Mediterranean societies has the misfortune to arise in an ecologically fragile environment. They committed ecological suicide by destroying their own resource base. p. 410.

The region's vision is to be the pioneering renewable energy region in Turkey and Middle East, known worldwide as one of the most forward-looking regions in the production and export of renewable energy, in piloting new solar, geothermal, and bio-fuels projects and experimenting with electric and fuel-celled cars and trucks, and a pioneer in adopting and promoting "clean tech" in industry, tourism, transportation, and construction. GAP will be the best region to pilot, test, and apply renewable energy applications in a Third World setting. Products coming from the GAP region will be distinctive in world markets because they will be made with 80% or greater renewable energy. By 2023, the GAP region will be the largest exporter of renewable energy in Turkey and the Near East.

Hyderabad, India: Emerging Clean Tech R&D Center

Whereas Bangalore is known as a software capital of India, Hyderabad, capital of Andhra Pradesh, has a long standing academic and research tradition that it's now steering into clean tech, especially solar power. Hyderabad is home to a variety of solar companies including solar-power lantern maker NEST and Photon Energy Systems, a seller of hot-water system know in India as solar geysers. NEST's Hyderabad factory cranks our 100,000 solar cells a year to power the $30 devices, which replace polluting and hazardous kerosene lamps in rural villages. Hyderabad is also taking aim at the biodiesel industry, as Andhra Predesh is home to India's largest biofuels initiative. In a $9.4 million, 10-year project, BP and the influential Indian nonprofit Energy and Resources Institute will plant 8,000 hectares of jatropha, an oil-producing tree with high hopes as a next-generation biofuels feedstock. But the crown jewel of Hyderabad's clean tech collection is the Confederation of Indian Industry's Godrej Green Business Centre, one of the highest-rated green buildings in the world. The center offers consulting and research on green building design and energy efficiency, and plays regular host to international conferences on those topics.

Abstracted from Pernick and Wilder, The Clean Tech Revolution: The Next Big Growth and Investment Opportunity, Collins, 2007, p. 257

The GAP region of tomorrow will stand out as a region powered by renewable energy, with its products manufactured using renewable energy, and as an experimental hotbed for testing and applying renewable technologies in a Third World setting. The GAP region will proactively recruit innovative companies, NGOs, and tech centers that are looking to test their renewable energy and sustainable products in a developing country setting. Strategic alliances with international universities and applied research centers will establish a base and critical mass of technical capability in the region.

The region will be top-ranked in the world as a renewable energy powered region because of the very high percentage of hydro and solar energy harnessed in the region. Already, nearly half (47%) of Turkey's clean, renewable energy, hydro-electric energy is produced in the GAP region. Within the next few years, the region's most important exports will be its clean, green energy coming from hydro, solar, wind, bio-fuels, and geothermal energy—exported both in the form of "clean" electrons as well as via the sale of green carbon credits.

The GAP region will be able to distinguish itself in world markets will result because its products will be produced with a high percentage of renewable energy. Imagine the GAP region as a renewable energy leader where all industries will find their niche markets because their textile, apparel, food, and other products will be branded as "80% or greater renewable energy produced" and attract consumers with socially responsible purchasing preferences. Similarly, "Cradle of Sustainable Civilizations" tourism packages will be sold to discriminating, high value tourist markets—not only on the basis of the region's world-class cultural and historical attributes—but also that the hotels, restaurants and attractions can boast "carbon neutrality". Imagine visitors transported in vehicles whose power supply is certified 100% renewable. The region's attractions become even a more interesting proposition to the tourist who is looking for something exotic, and doesn't want to have a negative impact on the environment. Similarly, clothes, carpets, food, and other products will offer higher value and distinctiveness in the marketplace by this label of "made with 80% or more renewable energy produced from the Cradle of Sustainable Civilization - Southeast Anatolia, Turkey".

The GAP region will capitalize on this base by branding, growing, and marketing organic "cradle of sustainable civilization", renewable food products in high end markets.

The GAP region of tomorrow will be a developing country "hotspot" for renewable energy experimentation—the locus of centers, laboratories, and experimental activities to test emerging renewable energy related products and innovations.

Finally, the Gap Region of tomorrow will grow new high tech sustainable industries around the renewable energy field, and combining information technology, logistics, call centers, and other advanced services – building on strong alliances established through the European Union, Turkish citizens abroad in other regions, and the growing recognition of the GAP region's unique capabilities and talents achieved through tourism growth.

By 2015, we estimate that new job growth related to the growth of the clean tech industry and renewable energy industry could be several thousand jobs per year.

Turkey and the GAP Region Enter the "Clean Tech" Revolution

Worldwide, there is a growing trend among people, businesses, governments, and places to switch to clean energy solutions for transportation fuels and electricity generation, clean sources of water for drinking, irrigation and manufacturing, and clean, environmentally safe materials for building construction and industrial processes. After the success of the computer, Internet, and biotech revolutions, »clean tech« is the next wave bringing unprecedented opportunities for wealth creation, high-growth career development, and innovative solutions to a range of global problems. Clean tech, renewable energy, and sustainable practices make sense in today's world because clean-energy costs are falling as the costs of fossil fuel energy is going up, because billions of dollars, euros, yen, and yuan are pouring in to support clean tech development and adoption, because across the globe, developing nations (including China, India, and Turkey) are realizing that clean energy sources such as solar, biofuels, and wind are a critical, urgent, and growing parts of a diversified energy mix needed to fuel their rapidly developing economies and middle classes.

In Europe, Japan, and the U.S., cities, regions, and states are competing to be leaders in the "clean tech" revolution. This competition is driven by the need to develop high paying jobs and competitive, efficient, and innovative industries. In cities and countries as diverse as diverse as Abu Dhabi, San Francisco, Bangalore, and Tokyo, forward-thinking governments are shifting regulatory and financial support away from conventional polluting technologies to more efficient technologies that create jobs, reduce pollution, and make regions and countries more economically competitive.

Worldwide, many regional and national governments are pushing initiatives that could result in more than 20% of their energy coming from renewable sources. A global shift is underway and those regions who take early steps to embrace clean tech will achieve leadership and competitive advantage over lagging regions. Turkey is one of eleven developing nations that have some sort of national policies in place to promote, incentivize, or directly fund clean energy development.[17]

With the current high level of hydro-electric production in the GAP region, and the considerable future potential for harnessing solar, wind, bio-fuel, geothermal, and additional hydro, the GAP region can become a clean tech leader in Turkey and a pilot region for testing and developing new renewable energy and clean tech approaches.

17 Pernick and Wilder, The Clean Tech Revolution: The Next Big Growth and Investment Opportunity, Collins, 2007, p. 12.

5.2.2 Renewable Energy

Turkey needs to increase and diversify its energy sources in order to meet growing demand and address domestic and global environmental problems. Turkey's current electricity demand of 168 billion kWh will double by 2015. With the current imbalance in supply and demand conditions, Turkey will face serious electricity bottleneck by 2009, at the latest. The recent supply shortage of August 2006, due to insufficient investments and bottlenecks in efficiency, proved that even though 2006 production capacity is around 203 billion kWh, 80% demand caused serious problems on the supply side. ''Estimations of the Ministry of Energy and Natural Resources evaluated investment needs for the domestic market for the period 2005-2020 at about US$ 130 billion. The State alone cannot meet the investment needs, which is the reason why the energy sector has been opened to private national and international capital. The Turkish government indeed encourages foreign and Turkish private sector investors to undertake energy projects and is currently working on a new investment model for the construction of new generation plants to create the additional capacity needed." [18]

"Renewable energy production in Turkey reached 12.3 % of total primary energy supply in 2004. Electricity generation from renewables was 31 % in 2004. Renewables are the second largest contributor to domestic production after coal. Renewable energy supply in Turkey is dominated by hydropower and biomass. The contribution of wind and solar is limited but is expected to increase." [19]

5.2.3 Hydro

With its eight hydroelectric power plants constructed in GAP Region, the GAP region is already a net exporter of renewable energy. The region's existing 8 hydro electric dams currently produce 19,000 MW/year, supplying 47% of Turkey's hydroelectric energy (20% of Turkey's entire electricity supply). Local electricity consumption in the region is 17,000 MW/year. Therefore, GAP region currently contributes to the national energy production an estimated 2,000 MW/year.

There is potential for the region to produce additional hydro electric energy. Another 11 hydro electricity projects are included in the GAP Master Plan. Currently, 10 new hydro-electricity projects have been announced in the region by private sector developers and are in the bidding phase, in various stages of construction, or on hold.

Since hydroelectric energy is a renewable source, it can be easily exported to EU member countries where use of clean, green energy is encouraged. While losses due to electricity transmission are not insignificant, Turkey's location and its existing and planned vast energy transmission infrastructure make the country a key player in both a regional and European context. A project is currently underway to link Turkey's electricity grid to neighbouring Greece, which is negotiating an eventual link to the pan-European electricity network, UCTE.[20] Italy, a market 10 times greater than Greece, is already connected to a Greek power network via an existing underwater power line and it will be accessible to Turkish energy exporters once Turkey's connection to Greece is completed. Italy is a net energy importer, short of all forms of energy, and especially lacking in renewable energy. An alternative connection route to European markets is through Bulgaria, via the existing Turkey-Bulgaria 1,250 MW power line.

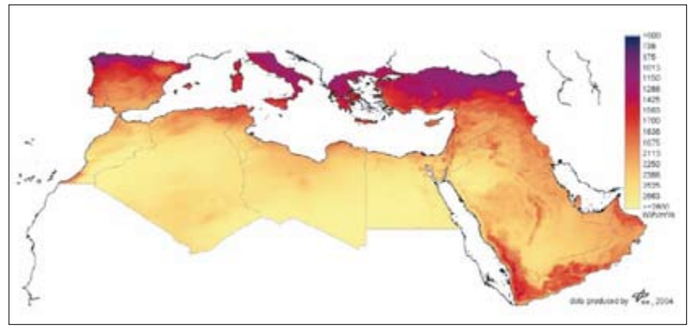
In addition, Turkey's commitment to UN Framework Charter for Climate Change (UNFCCC) was approved in the Turkish national parliament on 2003. Now, Turkey can participate and benefit from Green Certificate trading with participating EU member countries. The export of clean energy can be significantly increased by harnessing Turkey's and, in particular, the GAP region's significant solar power.

5.2.4 Solar Energy

One of the most potent areas for renewable energy development in the region is from solar energy. The GAP region has the highest solar energy potential in the country—with 1460 kWh/m2/yr and sunshine duration of 2993 hrs/yr. (see Table 5-1).[21]

REGION	TOTAL SOLAR RADIATION (kWh/m2-year)	SUNSHINE DURATION (hours/year)
Southeastern Anatolia	1460	2993
Mediterranean	1390	2956
East Anatolia	1365	2664
Central Anatolia	1314	2628
Aegean	1304	2738
Marmara	1168	2409
Black Sea	1120	1971

Table 5-1: Regional Distribution of Solar Energy Potential of Turkey
Source: General Directorate of EIE



The most promising solar energy technology for affordably harnessing solar power is solar thermal power, whereby solar energy is reflected by mirrors and concentrated on pipes to heat water and pass through turbines to create electricity.

Recent reports show that 'even without pricing cost externalities, the cost of solar

18 Renewable Energy in the Southern and Eastern Mediterranean countries: Current situation, Observatoire Méditerranéen de l'Energie (OME), June 2007, p. 141

19 Ibid, p. 148

20 The Union for the Coordination of Transmission of Europe (UCTE) coordinates the operation and development of the electricity transmission grid from Portugal to Poland and from Belgium to Romania, Bulgaria and Greece. Through the networks of the UCTE, about 450 million people are supplied with electric energy; annual electricity consumption totals approx. 2300 TWh.

21 However it has been recognized that the existing meteorological data is lower than the actual solar energy data of Turkey. EIE and DMI have been taking new measurements since 1992 to determine the more accurate solar energy data. Although the measurements have not been completed yet, the collected data indicates that the actual solar energy radiation values are 20-25% higher than the existing data.

thermal power is going down. Currently, the cost of solar thermal produced energy can be close to 12 cents (US) per k/Wh. However, many economists and investors predict that this price will continuously drop over the next ten years with increased installed capacity, to 6 cents per kW/h, as a result of technological improvements, economies of scale and volume production.' (source?) For production of 500 MW to 1,000 MW, gas-run utilities in California tend to average a price of 10 cents per kilowatt-hour (kWh), while solar-run utilities are initially higher at around 15 cents per kWh. Over time and as fixed costs are covered, however, costs for solar-run utilities can be cut down to a mere four cents per kWh, according to Avi Brenmiller president of Solel, a leading producer of solar thermal energy plants.

Solar thermal energy is currently being developed in large solar farms in California, Spain, Australia, and Israel. The current price per kilowatt/hour for producing solar thermal electricity in Spanish electricity projects stands at 30 cents. The rate is subsidized by the Spanish Government for a period of 25 years in order to support and encourage the innovation and implementation of alternative domestic energy sources, environmentally friendly clean electricity and to support local electricity production.

For decades, governments have played a key role in supporting oil, coal, natural gas and nuclear power with subsidies and tax incentives. Now, the clean tech revolution requires the creation of long term consistent government policies and the bolstering of subsidies for solar, wind, and other sectors. Those countries and regions that embrace the growth and development of clean technology—that support policies and programs that speed up the transition—will lead and win in the twenty-first century.

There is a strong case for subsidies and support for solar energy development, especially given the GAP region's excellent solar potential. Based on the success of Spain and other countries that are providing subsidies for solar energy production, it makes sense for Turkey to consider offering solar energy price subsidies to stimulate the launch pilot solar energy generation projects in the GAP region. Several recent 500MV solar farm developments in the Mojave Desert with 20 year purchase agreements by PG&E, Southern California Edison, and San Diego Gas & Electric are due to go online by 2009 (www.solel.com/files/press-pr/pge_solel.pdf).

Ausra Inc. is just one of a host of contenders in the race to deliver emission-free energy with solar thermal technology. Spanish clean-energy giants Abengoa Bioenergy and Acciona have jumped in with projects in Spain, Algeria, and the U.S. Israel's Solel Solar Systems has contracted with PG&E to deliver 553 MW from future plants. BrightSource Energy in Oakland, Calif., has reunited some of the pioneers who, in the 1980s, built nine solar plants in the Mojave Desert. "With Ausra, the Spanish companies, and Israel, the solar space has gotten very competitive," says Michael R. Peevey, president of the California Public Utilities Commission. [22]

These companies are not only looking at putting up plants in the developed countries like the US, Spain, and Australia. "Not only is this [concentrated solar thermal] the best renewable technology, it is one that could really scale up, both here and in developing countries like India and China," says Vinod Khosla, co-founder of Sun Microsystems Inc. and one of Silicon Valley's most prominent venture capitalists.

The GAP region needs to establish strategic alliance with players in the solar energy field. Already there are other alliances from which to model this kind of development in the GAP region. For instance, in pursuing the vision that "Europe could get all of its electricity from Big Solar plants in Morocco" the Trans-Mediterranean Renewable Energy Cooperation (TREC) is an initiative that campaigns for the transmission of clean power from deserts to Europe. Since it was founded in 2003 by The Club of Rome, the Hamburg Climate Protection Foundation and the National Energy Research Center of Jordan (NERC), it has developed the DESERTEC Concept and researched it in cooperation with the German Aerospace Center (DLR). Now TREC is making this concept a reality in cooperation with people in politics, industry and the world of finance. [23]

Similarly, a case can be made that Turkey and the GAP region must begin to offer incentives for solar energy development for both private home and power generation projects, similar to that of California's past 50% subsidies for capital investments in home solar panels.

Solar Water Heating - The one area that is currently benefiting from solar energy is in solar water heating. Currently, the main use of solar energy in Turkey is from the flat plate collectors in the domestic hot water systems. Turkey is one of the leading countries in the world with a total installed capacity of 8,2million m^2 collector area as of 2001. The systems are mostly used in Aegean and Mediterranean regions. Total energy production equals to 290 000 TOE (ton oil equivalent). The industry is well developed with high quality manufacturing and export capacity. The number of companies is around 100. Annual manufacturing capacity is 750 000 m^2.

In the GAP region, it is estimated that 70% of the homes in Gaziantep, and about 20% of the urban homes in the rest of the region, are heating their water using solar water heating systems.

22 Business Week, Oct. 15, 2007 "Solar's Day in the Sun".
23 Source: http://www.trecers.net

5.2.5 Bio-Fuels

There appears to be excellent potential to develop biofuels in the GAP region, as outlined in the previous chapter on agriculture.

5.2.6 Wind Energy Potential

Turkey is one of the wealthiest countries in Europe in terms of wind energy, and the wind energy resources are at a level that is sufficient to meet the entire energy requirements. In total, technical wind potential is approximately 88,000 MW, the second most powerful wind area on the European continent after the UK, and economically viable wind potential is approximately 10,000-12,000 MW.

Although the strongest wind resources by far are found in the Marmara Region, the GAP region ranks second in the country with considerable wind resources.

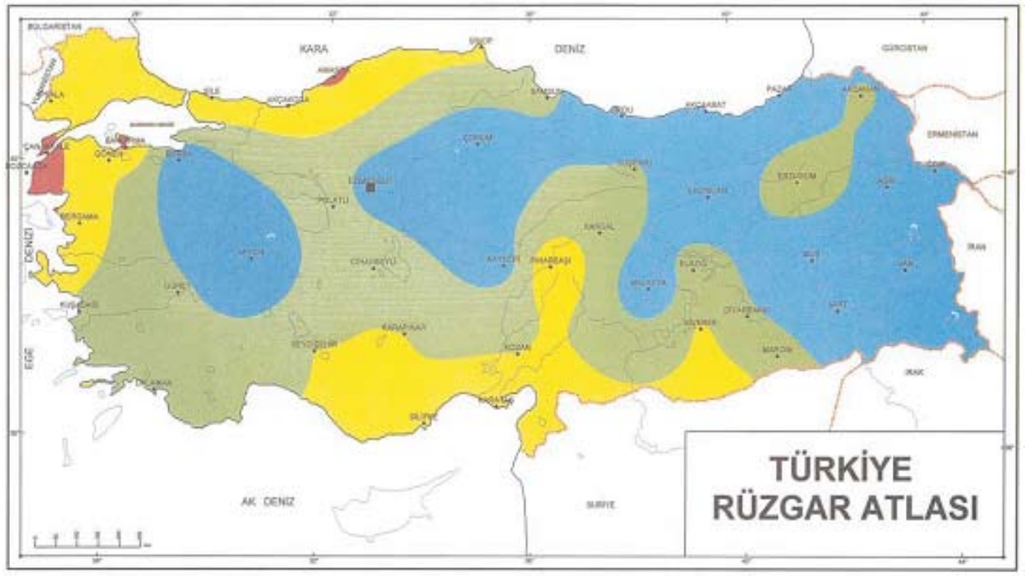
Rank	Name of Region	Average Wind Power Density(W/m2)	Index of Wind Power
1	Marmara region	51.91	100
2	Southeastern region	29.33	57
3	Aegean region	23.47	45
4	Mediterranean region	21.36	41
5	Black Sean region	21.31	41
6	Central Anatolia region	20.14	39
7	East Anatolia region	13.19	25

Table 5-2: Regional Wind Power Densities

5.2.7 Geothermal Energy

Turkey has one eight of the world's geothermal potential and is ranked 7th in the world.

Turkey, located in an interesting position between the Euro-Asian and African continents, is among the lucky countries from the aspect of geothermal potential. Although the geothermal resources in the GAP Region do not reach temperature high enough for electricity production, the region has significant geothermal resources for utilization in greenhouse heating.



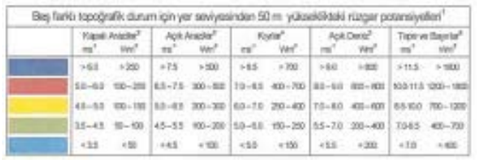


Figure 5-3: Wind Atlas of Turkey
Source: OME, June 2007

5.2.8 Strategies & Action Plan

Pilot Project 1: Establishment of Price Subsidy to Incentivize Solar Energy Production in Turkey and GAP Region

Description and Motivation:
This project is designed to stimulate the production of renewable energy using solar energy resources in Turkey and the GAP region. The goal is to develop a strategy and campaign to persuade Turkish authorities of the importance and value of harnessing its solar energy resources to help meet growing demand for electricity in Turkey and neighboring countries. Demand for electricity in Turkey and internationally is growing and there is a need to diversify sources of energy and lessen dependence on fossil fuels. Other countries are subsidizing solar energy production as a means to stimulate diversification and renewable sources. This pilot project will develop the case for Turkey to consider subsidizing solar energy production.

This project aims to convince Turkish officials to establish new price subsidies for solar energy production, benefiting the GAP region due to its relatively high solar resources. The aim is to set price subsidies for solar thermal energy (similar to Spain which offers $0.30/kwh) and other incentives for solar and renewable energy development for the region with national government and with the support of the EU.

Goal:
To initiate and grow solar energy production in Turkey by persuading the Government of Turkey to establish price subsidies to incentivize solar energy production.

Objectives:

- Harness Turkey and the GAP region's high solar resources availability.
- Increase the solar energy production and in Turkey and in the GAP region.
- Move Turkey and the GAP region into a leadership position in solar energy utilization and solar energy technology development.
- Increase employment, especially skilled and technical jobs, and income in the region.
- Make it possible for Turkey and the GAP region to become a test bed for solar energy technology development and the establishment of pilot solar energy plants.

Obstacles and Impediments Likely to Affect Implementation:

- Challenges and difficulty of influencing government institutions and lawmakers to make special solar energy production subsidy.
- Political situation presents a challenge for attraction of foreign investment. Political risk puts in question the viability of the solar-rich GAP region to serve as a test-bed for pilot solar projects.

Outcome/Results:

- New legislation providing price subsidy to stimulate solar energy production in Turkey.
- Attraction of pilot international pilot solar projects in Turkey and GAP region.
- Recognition for Turkey and the GAP region as an emerging leader and testing grounds for solar energy production and technology.
- Increase in solar electricity production in Turkey, diversification of energy production.

Timeline:
12 – 18 months

Funding:
350,000 EUR

Pilot Project 2: Center for Renewable Energy Research & Training.

Description and Motivation:
This project will establish a center for applied research and training on renewable energy applications, that will serve as a magnet nationally and internationally for pilot renewable energy projects and research and establish the GAP region as one of the premier emerging regions in the world for renewable energy applications. The aim is to develop partnerships and joint ventures with other renewable energy research centers, such as the UC Berkeley/Livermore Labs. The center will establish laboratory and research project ranging from Solar Thermal and Photo Voltaic labs, to wind research measuring wind resources in the GAP Region, to BioGas projects in Municipality of Gaziantep, "Clean tech" consulting services for Turkey and Middle East region. The center will attract top professors with research and teaching positions and establish Renewable Energy Training Programs (Masters in Renewable Energy), and support renewable energy clustering activities in the region.

Goal:
Establish a center for applied research and training on renewable energy applications.

Objectives:

- Host renewable energy project for adaptation in developing country environment and conditions
- International promotions
- Capacity building -
- Awareness raising
- Support to business
- Develop low-cost applied renewable energy technologies for rural communities (solar ovens, solar micro-panels, etc.)

Outcome/Results:

- Develop a capacity for hosting international and national pilot projects testing renewable energy.
- Attraction of national and international investors in renewable energy projects.
- Contribution to value-added business.
- Helping to develop branding the region as center for renewable energy in Turkey.
- Attract skilled and talented people and professionals.

Action Steps:

- Develop initial concept paper for establishment of the center.
- Develop a leadership team (university researchers and leaders, private sector, local government, international experts, NGOs, environmental group, TUBİTAK)
- Benchmark & study tours of best practices in other countries (e.g., Spain, Japan, Israel, Denmark, California).
- Design applied research center and prepare feasibility
- Identify and seek national and international joint venture partners for the center (e.g., Lawrence Livermore Labs at UC Berkeley, Spanish solar research institutes, EU funding programs, TUBİTAK and other national research, and private sector partners).
- Launch center, hire director and staff.
- Develop training curriculum, develop research agenda
- Identify and develop pilot renewable energy projects
- International networking
- Establish renewable energy industries incubator

Obstacles and Impediments Likely to Affect Implementation:

- Lack of interest from the part of local business and government for applied research in renewable energy.
- Lack of skilled and experienced technical staff in renewable energy.
- Specific political situation on the Iraq border will influence the development of the pilot project.

Timeline:
12 - 24 months
Funding:
850,000 EUR

5.3 INTERNATIONALIZATION PROGRAM

In evaluating the measures needed to implement the Competitiveness Agenda, it is clear that nearly every aspect of the Agenda requires improved linkages to other countries. Whether it be for marketing the region's products, upgrading technologies, attracting tourists, training the workforce, or benchmarking against competitors, knowledge of foreign languages, familiarity with foreign countries, and networks of international contacts are required. Such recommendations appear piecemeal in other sections of this report, as they apply to individual sectors or strategies, but the pervasive nature of the issue implies that it be included as a cross-cutting strategy, as well.

The Internationalization Program cannot be restricted to any on segment of the population. Children and students, of course, must be included, but so also must companies, teachers, researchers, and government officials be included. There is hardly a sector of society that would not, in some way, need to become more internationally oriented, in order to make the Agenda successful.
The main elements of the Internationalization Program include:

- Intensive language training (especially English)
- Ease of access to study tours & marketing trips
- Expanded use of exchange programs, at all age levels
- Leveraging Turkish emigrants overseas
- Extensive use of media

Each of these elements is described below.

Programs for studying abroad for all lengths of time (weeks, months, and years) should be expanded

5.3.1 Intensive Language Training

A "crash program" in foreign language training can be launched almost immediately, without the need to coordinate carefully with other elements of the Agenda. It would not only involve expanded capacity in classrooms from primary schools up to universities and adult education, but also a media campaign to ensure that the population is aware of the existence of these programs, and will utilize them.

In order to quickly increase the availability of qualified language instructors, a fixed-term subsidy could serve to attract both instructors and companies that provide language training. While the use of subsidies is not always recommended, in this case, the incentive it would provide to overcome the existing very low level of availability in the region would be needed.

Courses should be provided in Arabic, Russian, Farsi, and other languages spoken by neighboring countries that are potential trading partners. However, the bulk of the effort should be in English, as the majority of overseas markets for the region's future products will be dominated by English, even where the target country speaks a different language. It has become the lingua franca of Europe, and much of Asia and Africa as well. It might be strategic to also provide greater access to Spanish and Chinese, for example, as languages for large regions where English is not much spoken – but there is no question that the primary objective, and a vital element of the dashboard, would be the rapid expansion in English language proficiency.

5.3.2 Study Tours & Marketing Trips

Well-designed study tours can have a tremendous impact on the level of understanding of business and government leaders alike. Providing a generous budget for trips to Europe, North America, and Asia, as well as neighboring countries in the Middle East and North Africa, would be an investment that would pay for itself many times over in terms of smarter, faster, more successful companies, and more effective government servants. Reading books about foreign countries can only go so far, and there is nothing like seeing a society that is quite different to expand the mind and open the way for new ideas. Since innovation and entrepreneurship are key elements of the Agenda, a program to provide easier access to a wide variety of study tours is essential.

Such trips not only provide new ideas, but also new contacts, which can rapidly become a network of international contacts – an essential tool for an exporter, but also for importers, researchers, and policy makers.

The ability to develop new products and associated marketing materials is covered in other sections of this report, as is the value of "showing up" at trade fairs, conventions, and other marketing-related international gatherings. Providing a soft budget that makes it much easier to access matching funds for marketing trips and related activities will help to lubricate the rapid expansion of exports on which this Agenda depends.

5.3.3 Exchange Programs & Study Abroad

Another excellent avenue for expanding the awareness of the international economy and other cultures is exchange programs. The opportunity for a young person to spend a year in another country, living with another family, going to a different school, and absorbing the new culture directly, can be enormously influential. Programs for studying abroad for all lengths of time (weeks, months, and years) should be expanded.

Exchange programs can be a two-way street. Inviting young people to come and stay in the GAP region for specific programs (usually of shorter duration) can be a wonderful way to provide exposure to other cultures the other way around. While the direct costs of such programs is not high, since the travel costs would be usually borne by the partner country, the indirect costs can be significant, since a highly professional staff would need to be established in the GAP region to ensure that the incoming students are looked after in a way that inspires confidence in the partner country.

Although these visiting students are unlikely to want to come to the GAP to partake in the general education system, attractive opportunities to experience archeological digs, develop tourist programs, learn about certain types of farming, and religious exposure are among the types of activities that could attract students to come to the GAP region for a period of time. The indirect benefits, in terms of exposure of GAP children to foreigners their own age, and the knowledge gained of the region when the student returns home, can be invaluable.

5.3.4 Leveraging Turkish Emigrants Overseas

There are significant numbers of Turks who have emigrated from the GAP region to parts of Europe, especially Germany that can be tapped in an intelligent fashion. India, Israel, and many other countries have had a significant boost to their development when they learned to successfully engage these migrants. Pro-active efforts to reach out to these population centers could result in increased direct investments in the GAP region, as well as improved "bridges" to the target country for product marketing, technology acquisition and other similar benefits.

5.3.5 Use of Media

Simply allocating budgets and expanding capacity for the Internationalization Program will be important, but not sufficient. A genuine media campaign, totally comprehensive in nature, can be launched (in conjunction with the "Re-branding Strategy" outlined below) to ensure that all segments of the population understand the importance of the Internationalization Program and how to access different components of it.

This will require not only use of television, radio and print media, but also more non-standard approaches, such as offering, for example, certain popular motion pictures on television only in English without dubbing, but with subtitles, providing an incentive for the wider use of English. Clever competitions could be launched, similar to spelling bees, in which students who have shown a rapid improvement in their language ability in a certain year earn high profile prizes, a chance to travel or study abroad, etc.

Active promotion of clubs and societies with international would also help expand the scope of the Internationalization Program. Perhaps appropriate incentives can be offered for programs such as "French Clubs", "German Clubs" and the like, which already exist in Ankara and Istanbul, to open up branch programs in the GAP region.

As a whole, the media campaign should promote the value of language skills, and travel to foreign countries, as a road to economic advancement as well as quality of life.

5.4 APPLIED TECHNOLOGY STRATEGY

The GAP region strives to compete nationally and internationally on the basis of higher productivity by adding value to products and services, rather than simply on the basis of low cost. This orientation can help to develop a much more dynamic economy based on a mix of sustainable agriculture, productive and "clean tech" manufacturing, and innovative service industries.

The GAP region's goal of becoming an experimental hotbed for testing and applying renewable technologies in a developing country setting will require careful selection of areas of applied technology specialization. Strengthening the GAP region's applied research technology capacity can help position the GAP region for thought leadership in these strategic areas and establish a regional distinction in global markets.

The Project Team has proposed building applied research capacity to accelerate innovation and support the region's primary growth sectors through the establishment of specialized applied research centers such as a Center for Renewable Energy Research & Training, a Sustainable Production Resource Center, and a Culinary Institute. A principal aim of these centers will be to develop partnerships, strategic alliances and joint ventures with international universities and applied research centers which will establish a base and critical mass of technical capability in the GAP region. The Region would then be in a much stronger position to proactively recruit innovative companies, NGOs, and tech centers that are looking to test their renewable energy and sustainable products in a developing country setting.

These types of applied research centers proposed for the GAP region can also serve as a bridge between both market place inefficiency and social constraints that limit the rate of enterprise formation and entrepreneurship within a community. Regions with natural concentrations and synergies tend to create centers of this type without outside intervention – while in the GAP Region today, the right elements are in place to somewhat artificially create the intellectual ferment and entrepreneurial atmosphere that more advanced applied research centers already have today.

The GAP region's goal of becoming an experimental hotbed for testing and applying renewable technologies in a developing country setting will require careful selection of areas of applied technology specialization.

Institutions for Collaboration and Accessing Global Value Chains
Many regions we encounter such as the GAP Region have many small companies that local economic development professionals are trying to support, while one or more multi-nationals have headquarters or large branch plants that are unconnected with the local economy. These Multinational Corporations are focused on managing their own Global Value Chains. For a region like the GAP Region, this is like accessing a jet stream of untold power at 60,000 feet, from which locally-oriented companies only feel the occasional breeze at 10,000 feet.

One could decide that the most important thing for the GAP Region is acquiring "technology" and accordingly, invest in top-quality university research. This is a good thing! But then one might end up subsidizing other regions that commercialize patents developed at our universities – if one hasn't developed a good technology commercialization system as well.

The companies in the local supply chains depicted in the table opposite do not feel much benefit from either of these two phenomena. The only connection they feel to "globalization" is outsourcing – somehow the revenues they used to earn are now going to Malaysia, China, India, etc. and thus, they feel powerless.

But a region cannot just depend on universities and other educational institutions to do it themselves. The GAP Region will need to develop strong technology commercialization systems, a network of applied research centers that work collaboratively with the entire workforce development infrastructure. This is the essence of public-private cooperation.

Institutions for Collaboration, or IFC's (a term coined by Professor Michael Porter at Harvard Business School) are necessary not only for technology commercialization and workforce development, but also in efforts to market the region's clusters – creating a new brand image – and to bring local specialists together in development of new products, formation of networks, and a variety of cluster development initiatives.

If this type of approach is employed, the middle area of the table above will be filled in with new and expanding companies. In a sense, through this type of approach, we are "crossing the T". Cluster development is not just networking local suppliers to strengthen linkages, and neither is it accessing global markets or branding alone. It is doing both.

The clustering activities, represented mainly by the Institutions for Collaboration (red diamonds) in the table above are the "economic infrastructure" or "economic foundations" that help knit the various elements of the cluster together:

- Local companies get the benefits on research done at local universities
- Multinational Corporations also get those benefits in ways they had not before
- Multinational Corporations find themselves collaborating with local companies on new product development, joint marketing, etc

Again, our objectives for emphasizing this focus on applied technology research

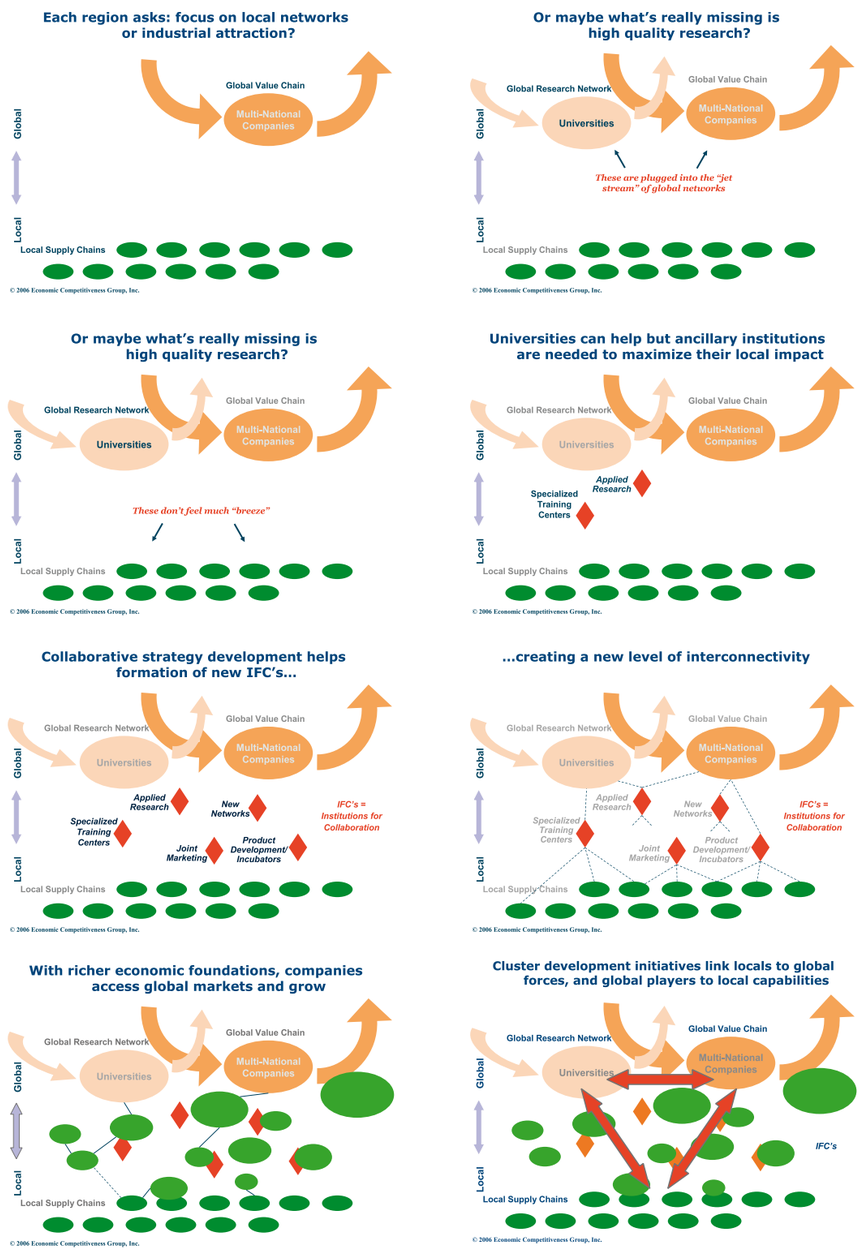


Figure 5.4: Clusters as a Nexus for Networking

and the cultivation of Institutions for Collaboration in the GAP Region are to replicate what happened "more or less" automatically in Silicon Valley, Northern Italy, Hollywood, and some other "ideal" clusters that developed this on their own. And to the extent that these research centers, these Institutions for Collaboration, will also act as incubators for new businesses, they will be recruiting and preparing both people with ideas and people with business acumen, and putting them together. In this sense, they will act as bridges between entrepreneurs and services – mainly research and venture capital.

By aligning the infrastructure and social investment of the past with a "clean-tech" applied research approach, the region has what it takes to establish regional distinction in global markets. However, to sustain world-class applied research, the GAP region will have to commit to international standards in terms of wages, resources and facilities in order to attract and retain applied research talent and continue to provide thought leadership in these key strategic areas.

5.5 CLUSTERING & NETWORKING

Given the high levels of fragmentation within the GAP Region's strategic sectors, to date it has been very difficult for the GAP Region's enterprises to take advantage of market opportunities for their products and services. These realities point to a breakdown in relevant strategic sector actors' ability to organize, network and collaborate to provide the conditions necessary to overcome critical challenges and enhance the Region's competitiveness.

The Project Team's field work interviews demonstrated however, that there is significant enthusiasm among business and government leaders and key institutions to overcome sector fragmentation and adopt competitiveness principles in order to diversify the economy and improve the GAP Region's enabling environment.

Clustering and networking will play especially pivotal roles in the Gap Region's overall efforts to enhance its competitiveness as these two processes help to both better understand the environment in which sector enterprises operate and identify the existence of (and quality of) linkages and institutional relationships. Not only will these efforts contribute to the diversification of the Region's economy by principally supporting three key sectors, the processes proposed here will help to mobilize and organize cluster leaders and provide a mechanism for leaders to meet cluster challenges and take advantage of cluster opportunities.

Clusters are geographically concentrated sets of competing and complementary industries, operating in similar markets, linked by their buyer-supplier relationships and their shared reliance on inputs from local universities, colleges, sources of technology and capital.

In recent years, traditional top-down, government-led economic planning based on preparing 5 and 10-year sectoral plans have been supplanted by more collaborative private-sector led clustering practices. Evidence from regions and countries worldwide shows that collaborative visions and strategies and joint action resulting from cluster-based working groups of business, education, and government leaders can lead to higher levels of economic success. When enterprises and other local stakeholders operate in proximity and share business interests such as markets for products, develop joint actions to resolve infrastructure needs, and identify joint strategies to meet external competition, the whole economic system benefits. The system becomes more competitive due to cost efficiencies resulting from the sharing of fixed costs, greater market reach, and more efficient labor, capital, technology, and informational flows within the region. A key to the clustering approach is the acceleration of communication, mutual knowledge, and trust within and between cluster stakeholders.

The Cluster Approach in the GAP Region Context
The Project Team's overall observation is that the GAP Region's strategic sectors are deeply fragmented and largely lack market driven orientations, hindering these sectors' ability to leverage resource allocations and respond effectively to current market opportunities.

The Project Team also noted a feeling of passive observance on the part of the Region's private sector actors with respect to government-sponsored resource allocations and economic development programs. Although many institutional

program that support the GAP Region's strategic sectors, there are few vertical linkages between institutions, product and service providers and companies that actually sell the strategic sectors' products and services. Private sector actors in these sectors for the most part are disconnected from the Region's institutional and governmental infrastructure and there are few formal mechanisms for the sectors to seek resources to alleviate targeted supply chain bottlenecks.

The cluster-based, collaborative approach called for in this Competitiveness Agenda strives to address these realties and there are two key stages of this approach's methodology: cluster analysis and collaborative strategy development, or clustering. The essential feature of cluster analysis is the uncovering of key linkages and relationships, which can be expanded upon during the strategy development phase. The essential characteristics of the clustering phase are a gradual building of mutual trust, identification of specific obstacles to development, and the engagement of local business leaders in creating change strategies that work for them. Given that many of the GAP Region's clusters' challenges are directly related to the clusters' lack of collaboration and coordination, the collaborative strategy phase will be especially important.

The development of new exports in any sector requires working on the complete chain linking primary production with final markets. Analyzing the GAP Region's strategic sectors and relevant supply chains through a "cluster" rather than an "industry" lens reveals that many seemingly disparate economic actors are actually interdependent and share common objectives:

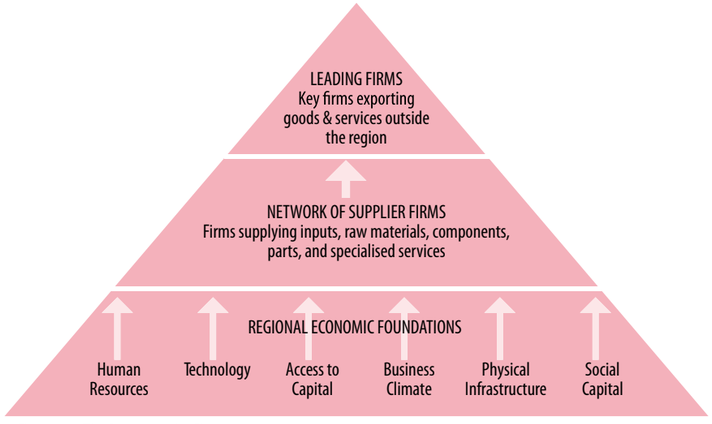


Figure 5-5: The Structure of a Cluster

A cluster's leading firms are those that sell goods or services outside a country or region, bringing economic wealth into the country or region. But to maintain competitive advantage, these leading firms rely on a vast network of specialized suppliers, service and infrastructure providers, and companies in industries that are downstream, or otherwise complementary to the lead firms. A cluster's institutional infrastructure includes the schools, research centers, regulators, trade associations, and other institutions strongly tied to the clustered industry. For example, human resources, research and development, access to finance, the business climate and physical infrastructure, though not direct links in a supply chain per se, are key inputs that can either enhance or inhibit supply chain competitiveness.

The Difference Between Cluster Analysis and "Clustering"

The key difference between cluster analysis and "clustering" is based on the principal that, to have a real and sustainable economic impact, an economic development strategy must go beyond analysis and planning to mobilizing business and government institutions to play new roles in the economy. These new roles will comprise the strategies that will increase a region's competitiveness in global markets…..strategies based primarily on quantitative analyses do not address the fundamental issues that are at the root of competitiveness and economic change--the behavior of public and private institutions in the marketplace. Consequently, despite their insights, many traditional strategy studies based primarily on analysis and recommendations rarely catalyze change and actions required for competitiveness…[rather, what] a region [requires] is not only a study, but an action-oriented initiative mobilizing a set of strong leaders from business, government and academia in a process that will both inform and enable action.

Source: Hansen, UNIDO

The GAP region's cluster development strategies must support the broader elements of competitiveness and sustainability by using whole systems approaches that examine and strengthen inter-firm and inter-industry cooperation, and the development of institutionalized support services that foster continuous innovation within firms, between firms, and associated institutions, that, together, enhances competitiveness. When one of the GAP Region's clusters is functioning efficiently, leading firms will sell products and services competitively in the marketplace and then economic gains can be recycled through the chain repeatedly in the form of targeted interventions at specific points of the supply chain.

This cluster-based, collaborative approach also underscores the key role of linkages between different elements of each of the GAP region's clusters. Adopting this type of approach will allow stakeholders to better understand how companies compete, for example how a particular input might positively or adversely affect the competitiveness of a firm's product or service. Importantly, those companies with unique advantages are the ones that grow and achieve market share in their industries. Cluster stakeholders can use their understanding of the competitive dynamics of their sector's firms to understand their own market opportunities, reinforcing the importance of continually identifying and leveraging any specialized competitive advantages.

The cluster-based, collaborative approach called for in this Competitiveness Agenda strives to articulate a clear vision for the GAP region's potential for developing clusters that is both consensus-based and informed by the market. True and enduring change will derive from local individuals, institutions, enterprises and industry groups working together to achieve this vision. By using a collaborative model to forge partnerships with local public and private groups, cluster development strategies can be established to take the GAP Region to where it wants to be by 2023. Then the tactics or priority actions and targeted interventions for implementing these strategies can be set forth.

5.6 RE-BRANDING THE GAP REGION

5.6.1 Why Regions Need Branding

Global economic restructuring has relegated the region as the most appropriate scale for global economic competition. Global regions now compete among and between each other for both FDI and consumers. Decisions made by investors and customers follow different trajectories. While investors take time and conduct comprehensive analysis before investing, customers, on the other hand, are influenced by an altogether separate set of factors and therefore, make purchasing decisions faster. Branding will help to ensure easy identification for the GAP region as:

- Customers outside the region and especially outside Turkey, lack time, information and interest about the region; and,
- Investors are facing a variety of choices and proposals to invest in regions from all over the world.

The Chairman of Unilever captured the importance of branding best when he said, "A brand is a storehouse of trust that matters more and more as choices multiply." (N. Fitzgerald, Chairman of Unilever) As global regions position themselves within the marketplace, it is crucial to communicate the GAP's strengths and weaknesses, as well as those of its competitors, to target groups. The vision and strategy should therefore position the GAP region with this in consideration.

Time is of the essence. GAP's altogether unique vision strategically positions it as a leader. It is this front-runner advantage that must be instilled in the minds of target groups. The strategy for GAP will not necessarily be the same formula that will work for followers.

Super brand regions like Silicon Valley (below) send a strong message of having well developed clusters.

5.6.2 Why Re-Naming?

What do we want from the branding exercise? In the same vein as England conjures the Big Ben, "conservative", the Queen, pageantry and Italy conjures sun, food, art, and fashion, our goal is for the GAP region (name to be decided) to be identified with the following core words: renewable, clean, healthy, and business-friendly.

The name alone has enormous power in a society oversaturated with catch-words and marketing strategies; the most important marketing decision is how to name the GAP region (Al Ries and Jack Trout. Positioning: The Battle for your Mind, 2001).

There are several reasons why "GAP" name should be changed:

- It is associated with the underdeveloped region in Turkey; for investors, this sends signals of inefficiencies and a lack of resources, which increases the risk of doing business there;
- It is associated with the failed multi-billion dollar government funded irrigation system project, which is a critical factor for agricultural development in GAP;
- For non-Turks it is associated with the garment manufacturer GAP and for English speakers the word gap in this context would have negative meaning.

5.6.3 Regional Branding is Going International and Moving Towards Clustering.

The second basic principle of branding is to have CLEAR BENEFITS for target groups.

For a region to globally promote itself and position itself for FDI, its name must convey the existence of a cluster. Super brand regions like Silicon Valley, Napa Valley, and Hollywood in the USA, Bordeaux in France, and Parma in Italy are sending a strong message of having well developed clusters. Only one superbrand - "Silicon Valley" - conveys additional benefits associated with innovation. Many regions are trying to replicate the success of this area by combining their names either with the word Silicon or with the word Valley to convey a notion of innovation and cluster strategies, Nevertheless, these "valleys" and "silicones" (Silicon Hills in Manhattan, Medicon Valley in Denmark and Sweden, etc) are known locally, but not worldwide.

Investors are not looking for the environment where doing business is simply easy. Investors are looking for more. A strong brand name and cluster offers positive externalities to companies operating in that region. Externalities are forces that exist outside the firm that influence its overall performance. Positive regional externalities include:

- Strong networking community with the flows of ideas, know-how and people, and positive image, which is not earned by that company but, rather, its association with that region;
- Physical externalities such as infrastructure and transport linkages;
- Social and cultural externalities such as attitudes, values, coherence;
- Institutional externalities: government, NGOs, education

It is important to maintain relevance and be aware of trends at a minimum. Strong regional brands manage to drive trends and create new demands for products. In our case, these products are primarily "renewable energy and clean" in origin.

Strong brands require building a brand strategy and effective marketing program. However, it is not an exercise for outsourcing, nor a task which should rely on advertising and mass media campaigns as the primary brand building device.

Strong brands measure against objectives
What has to be measured:

- Awareness of the brand, what is associated with the region by consumers and investors.
- Region related attributes (i.e., the economic indicators "dashboard")

Opposite: Graphic recordings of presentations given at the November 2007 Workshop on Competitiveness Agenda for the GAP Region.

From top to bottom:

- *Muammer Yaşar Özgül - President GAP Regional Development Administration*
- *HE Prof. Nazım Ekren - State Minister & Deputy Prime Minister*
- *HE Kemal Derviş - Administrator UNDP*

SECTION 6 - THE WAY FORWARD A COMPETITIVENESS AGENDA FOR THE REGION

6.1 ROLES OF INSTITUTIONS

6.1.1 Objective

> "Competitiveness is defined as] the ability to produce goods and services which meet the test of international markets, while at the same time maintaining high and sustainable levels of income or, more generally, the ability of (regions) to generate, while being exposed to external competition, relatively high income and employment levels'" and
>
> "In other words, for a region to be competitive, it is important to ensure both quality and quantity of jobs."
>
> The Sixth Periodic Report on the Regions (1999)

Appropriate economic governance processes need to be developed that complement the social capital of the region and create an environment in which radical transformation of the region is possible, thus strengthening competitiveness of the region.

Regional Competitiveness and Public Policies

One of the recent studies, commissioned by European Commission, gives examples of policies that were instrumental to bring the competitiveness of certain regions within countries to a level higher than the overall competitiveness of a country and to a higher level than the overall competitiveness of EU.[1] As evidence suggests, the role of public policy has been subtle, but critical for achieving fast growth and superior competitiveness. Examples of such regions are Oberbayern and Darmstadt, Germany; Eterea Ellada, Greece; Ile de France, France; and Niederoesterreich, Austria. The policies provided infrastructure that supported business innovation and thus competitiveness and growth. This enabled firms to become successfully integrated into global competitive environment and to be better equipped for harnessing human knowledge of their regions.

Public policy designed by the mentioned regions, could not be developed in the absence of strong public private partnership, which in turn, could not be developed without the culture of trust. Knowledge is most effectively used in a trusting environment. For example, clusters and networks could not flourish in an un-trustful environment. Trust is needed between partners, between employers and employees, between boards and shareholders, and between state and citizens. Trust as Mr. Jorma Ollila, Chairman of the Board of Royal Dutch Shell and Chairman of the Board of Nokia Corporation said at the Innovation Lecture 2006 held in the Hague, I cite is "... a mother of entrepreneurship and a father of innovation. Trust, for instance, in the consistency of government policy, in the quality of legislation, in monetary policy, in open trading channels, and in a flexible labor market: in short, trust arrives from a scheme of things that is robust and predictable." End of citation. Therefore, it is not surprising that entrepreneurs consider excessive regulation and unpredictable changes in regulation as one of the most hindering factors to entrepreneurship.[2]

Examples of the cited regions and the role of trust for entrepreneurship to flourish, suggest that policy promoting competitiveness and entrepreneurship could be more effectively designed on the regional rather than on the national level. The bigger the nation state the truer this is. The reason for such argumentation is that globalization affects different regions differently, depending on the composition

1 Petrin, 2005

2 Petrin, 2007

of resources and that trust – between different partners, including trust between citizens and politicians – can more likely be achieved in a smaller community.[3]

Infrastrucure & Accessibility	Human Resources	Productive Environment
Basic Infrastructure • road • rail • air Technological Infrastructure • ict • telecoms • internet	Labor Force Characteristics • productivity & flexibility Management Skills • internationalised • levels of professionalism • levels of efficiency High Skilled Workforce • scientists & engineers • symbolic analysts High Participation Rates in Post School Education • tertiary education • vocational training Educational Infrastructure	Entrepreneurial Culture • low barriers to entry • risk taking culture Internationalisation • exports/global sales • investment • business culture Technology • application • management Innovation • patents • R&D levels • research institutes & universities • linkages between companies & research Capital Availability Nature of Competition Sectoral Balance

Table 6-1. Overview of the National Factors of Competitiveness
Source: A Study on Factors of Regional Competitiveness, 2004
Regional Governance

Over two hundred years ago Jean-Jacques Rousseau (1762) identified the relationship between good governance and economic prosperity. Recent empirical evidence on the experience of Central and East European countries identified that "once a certain degree of macroeconomic stabilization has been accomplished, the institutional environment becomes the more important determinant of growth" (Moers, 2002). These findings are also applicable for regions in developed economies. Research and analysis on both sides of the Atlantic make a clear link between regional competitiveness and the nature of economic development governance and regional capacity.

It is essential that policy makers understand the development options that are available to them and the related factors that must receive investment to allow a region to "change gear" or maintain its competitive position. This requires sound analysis of the region's drivers of competitiveness (the starting point), a clear understanding of the development trajectories available given the region's endogenous drivers (the end point); an understanding of the interventions that must be pursued and prioritized to facilitate the journey along the chosen trajectory and the appropriate economic development processes and capacity.

What are the Factors of Competitiveness?

The Welsh Development Agency in partnership with Barclays Bank PLC and an published the report Competing with the World in 2002 that compared fifteen competitive regions around the world and attempted to identify generic factors of competitiveness. Only a very small number of generic success factors were found to occur in each region. These were:

- Strong international orientation (both in terms of trade and/or investment) of the local economy;
- Specialization built upon the conscious creation of international competitive advantage by companies;
- Long established and deep rooted cultural, governmental or locational factors;
- Public and private sector focus on a small range of economic development activities that build on regional endogenous strengths and capability over a sustained period of time.

A Study on the Factors of Regional Competitiveness, Report for DG Regional Policy, 2004

3 Petrin, 2007

To a certain extent, policy makers have the ability to further enhance and develop characteristics that will sustain a region's competitive position by investing in the appropriate interventions. However, the reverse is also true. If the correct investments are not made, a region is more likely to witness critical bottlenecks in the determinants that underlie its competitiveness; and this may prevent it from maintaining its competitive position.

There is no standing still in regional development. The over-riding dynamics of regional development are virtuous circles that promote competitiveness or downward spirals that rob regions of their competitiveness. Sufficient flexible institutional capacity must be evident in a region to allow the regional policy to remain dynamic and not static.

Europe's regions have arguably many Regional Development Agencies that have been established to undertake one regional development role but are now challenged by a changed global, national and regional environment and are finding an institutional response difficult. It is therefore of a crucial importance to the success of the transformation of the GAP Region to create adequate institutional capacity to enhance the process.

Existing Institutions and Legal Framework - GAP Region
This short assessment of public investment and existing institutional set-up for the GAP Region is based on relevant analytical studies by selected Turkish authors.[4]

6.1.2 Institutional Framework for Public Investments

The institutional framework for public investments in Turkey presents three major challenges with regards to regional policy and development. Firstly, almost all project proposals are sector-specific and a systematic approach to cross-sectoral integration of public investment planning is lacking.

Secondly, the link between programming and annual budgeting remains weak. While the project proposals that are prepared and approved have a multi-year duration, the funds are approved and released on an annual basis.

Finally, structures for the horizontal and vertical co-ordination of public investments remain inadequate. In the absence of functioning co-ordination structures, the horizontal co-ordination efforts at provincial directorate level and at central ministerial level often take place on an ad hoc basis. Similarly, vertical co-ordination efforts between provincial and central structures are often hampered by the inefficiency of information flow and the centralized nature of decision making mechanisms.

Institutional Framework for the GAP
The GAP was the only major attempt to plan and implement a sectorally-integrated regionalevelopment project within this public administration structure.

Partly in an effort to evade the structural challenges posed by the institutional framework of public investments without reforming the entire public administration structure, a provisional administration under the Prime Ministry was established. The GAP Regional Development Administration (GAP-RDA) was given the

4 Bilen, Ertugal, Beleli, 2005-2006

responsibility to plan, coordinate, and ensure implementation of all activities under the GAP.

The unique structure and position of the GAP-RDA indeed allowed for experimental programming and co-ordination efforts for regional development. In the absence of an overall reform of the public administration structure, however, the GAP-RDA remained an outsider institution with limited influence on the overall planning and implementation systems and structures.

6.2 PLANNING OF THE GAP

The origins of the GAP go back to a plan of the State Water Works on hydraulic energy production and irrigation, which was prepared in 1977. The idea of preparing a sectorally integrated regional Master Plan was instigated by the Social Planning Directorate of the DPT on the grounds of increasing economic efficiency. Completed in 1989 by a consortium of contractors, the Master Plan attempted to link investments for the development of water and land resources to a time schedule; project changes in economic and social sectors, employment, population and its spatial distribution induced by this development; assess at macro level the needs for education, health, housing and urban infrastructure; and express the annual need for funds up to the completion year of 2005.

The low financial realization and the limited economic impact of the GAP led to the 1998 decision of the Council of Ministers for revising the Master Plan. Although the GAP-RDA was assigned only with the task to 'revise' the Master Plan to ensure its completion by 2010, in reality it prepared an entirely new regional development plan based on its newly-adopted principles of sustainability, participation and integration. Funded mainly by the UNDP, the outcome of the three-year long planning process was a 300 page-long list of projects that received limited consideration from public investment institutions. GAP-RDA's planning process was unique in terms of its participatory methodology. Unfortunately, it failed to link the participatory methodology to the reality of the existing public planning and investment processes.

6.3 CONCENTRATION OF PUBLIC INVESTMENTS IN THE GAP REGION

While official statements and five-year development plans have continuously prioritized the objective of overcoming regional disparities particularly with regards to Southeastern Anatolia, the public investment figures do not indicate a serious effort in this area in spite of the GAP. In fact, the total amount of public investments in the GAP region from 1990-2001 ranked the lowest among all seven regions of Turkey. During the same period, the public investments in the GAP region, whose population constitutes 9.7 percent of Turkey's entire population, has been on average 7 percent of the total public investments.

In terms of the social investments, the figures have been even more striking. From 1994 to 2004, the GAP region, which has the lowest education indicators and second lowest health indicators, received on average 3.2 percent of all public investments in the education sector and 4.8 percent of all public investments in the health sector.

6.4 ADMINISTRATIVE CAPACITY OF THE GAP-RDA

Despite being a regional development administration, the GAP-RDA has been a centralized institution with most of its decision-making power and human resources resting in the Ankara head office. The regional office is not authorized to pass accounts whereby the regional office can spend only through advances authorized by the Ankara head office.

Flexible hiring process supports neither transparency nor meritocracy. When combined with low payment and limited benefits, this flexible hiring process has made it difficult for the Administration to attract and retain experienced staff with the appropriate expertise for regional development.

The most significant lesson from the GAP experience is that effective regional development cannot take place in the absence of an overall reform of the public administration structure and the public investment system. Simply creating additional institutions at the regional level with the immense task of regional programming, project co-ordination and monitoring will not be enough to overcome the regional disparities within Turkey and in relation to the EU.

The GAP experience demonstrates that regional development efforts are significantly impaired by:
a centralized public administration structure;
a sectoral approach to public investment planning;
weakly linked processes of programming, budgeting and implementation;
top-down conventional planning practices;
limited concentration of public investments in less developed regions;
vaguely defined division of tasks and responsibilities among planning, implementing and coordinating institutions;
non-institutionalized co-ordination efforts; and inadequate administrative capacity of local and regional planning and implementing institutions.

6.4.1 Regional Policy and EU Accession: Learning from the Gap Experience, 2005

Coming Changes in the EU Pre-Accession Agenda

Turkey has to reduce regional inequalities to an acceptable level to meet an important condition of EU membership. Access to EU funds allocated to reducing regional inequalities requires permanent, consistent and result-oriented effort not only at the Government but also at the regional revel. In the Turkish context this would imply a much higher level of decentralization. As such the EU conditions are perceived »coercive policy transfer« as no consensus for decentralization has been reached.

To comply with the acquis, the candidate countries were to have in place:

- a territorial organization based on a provisional NUTS classification,
- a legislative framework allowing for the implementation of the specific provisions,
- an institutional framework and administrative capacity whereby clear tasks and responsibilities of all bodies and institutions involved are defined and an effective interministerial co-ordination is ensured,
- programming capacity whereby the country can design a development plan, has appropriate procedures for multi-annual programming of budgetary expenditure, and ensures the implementation of partnership principle at the different stages of programming, financing, monitoring and evaluation,
- financial and budgetary management to comply with the specific control provisions.

Criteria for Comparison	Turkey Regional Policy	EU Regional Policy	Remarks
Partnership	No tradition; non-existence of regional agencies in most cases, especially at NUTS 2 level	Different Practice	A draft law for establishing RDAs at NUTS2 level
Programming	No tradition except for GAP region; but recently some progress under EU influence	Already the third generation of programming documents	Excessive emphasis on analysis in regional plans, weak strategic component
Concentration	Weak	Focus on the most needy	
Implementation Structure	Prevailing sectoral approach	Different Systems	
Approach to Regional Policy	Narrow conception of regional policy and its insufficient coordination with other policies	Integrated multisectoral approach	Attempts towards an integrated approach in GAP
Selection of Projects	Problems of transparency, no separation of functions	Clear separation of management, monitoring & control function	
Evaluation of Efficiency & Effectiveness	Weak tradition, performed infrequently & ad hoc	Systematic attention and pressure for further enhancement	
Involvement of Private Sector	Low participation for preparation and limited awareness of regional policy	Strong role, often significant initiative	

Table 6-2. Comparison of Regional Policy in Turkey and the EU
Source: Europeanisation of Regional Policy and Regional Governance: The Case of Turkey, 2005

As regards to the implementation of regional plans, in addition to fundamental technical, budgetary and legal deficiencies, there are also problems with the administrative organization and power vacuums.

6.4.2 Territorial Organization and Institutional Framework

To comply with the EU requirements 26 statistical Nuts II regions were established, and a Law on Regional was adopted by Parliament to be later rejected by the previous President of the Republic. It is expected that the law will be adopted some time during the mandate of the present President of the Republic.

As a part of the pre-accession agenda relevant programs have been prepared which, to comply with the EU requirements, would "boost Regional Development of Turkey by reducing regional disparities, improving competitiveness and promoting environmental actions and transportation structure" as stated in the Strategic Coherence Framework. This is only one of the series of planning documents majority of them prepared by the State Planning Organization or the responsible ministries. GAP region includes 3 Nuts II regions (West TRC1, Middle TRC2, East TRC3). According to the Law on the Regional Development Agencies 3 agencies (Gaziantep, Mardin, Sanliurfa) would be established. The proposed complicated scheme is hardly more than an extension of the existing centrally managed system with the agencies constituting an integral part of the establishment (e.g. governors appointed by the Government are heads of the Administrative Board of the agencies; the appointed coordinating body is the State Planning Organization).

"Growth centers" model has come to agenda of state planners (State Planning Organization) as they are trying to a balance between convergence and competitiveness objectives thorough geographical concentration. They developed a series of criteria (32 different variables) according to which 13 medium size cities were identified to become priority locations for investment, thus engines for future economic development in the region. In the GAP region three growth centers are foreseen: Gaziantep in TRC1, Diyarbakir, Şanliurfa in TRC2 non in TRC3. At this point in time, "growth centers" are still a concept, of which implementation remains unclear.

6.4.3 Future Institutional Set-Up for the Gap Region

Proposed Principles

Ideas and principles have been selected form the article Industrial Policy for the twenty-first century by Dani Rodrik. Although promoting principles of a sound industrial policy they are perfectly applicable to the regional development context. A first-best policy in the wrong institutional setting will do considerably less good than a second-best policy in an institutional setting. Put differently, when it comes to industrial policy specifying the process is more important than specifying the outcome.

What is needed is a flexible form of strategic collaboration between public and private sectors, designed to elicit information about objectives, distribute responsibilities for solutions, and evaluate outcomes as they appear. An ideal industrial policy process operates in an institutional setting of this form.

Political leadership at the top. The success of industrial policy often depends on the presence of high-level political support.

Coordination and deliberation council(s). While institutional choices will naturally differ from setting to setting, depending on initial conditions, there is a generic need for coordination or deliberation councils within which the information exchange and social learning, can take place.

Mechanisms of transparency and accountability. Industrial policies need to be viewed by society at large as part of a growth strategy that is geared to expand opportunities for all, rather than as giveaways to already privileged sections of the economy.

Nine Design Principles for Industrial Policy:

1 Incentives should be provided only to "new" activities.

2 There should be clear benchmarks/criteria for success and failure.

3 There must be a built-in sunset clause.

4 Public support must target activities, not sectors.

5 Activities that are subsidized must have the clear potential of providing spillovers and demonstration effects.

6 The implementing agencies must be monitored closely by a principal with a clear stake in the outcomes and who has political authority at the highest level.

7 The agencies carrying out promotion must maintain channels of communication with the private sector.

8 Optimally, mistakes that result in "picking the losers" will occur.

9 Promotion activities need to have the capacity to renew themselves, so that the cycle of discovery becomes an ongoing one.

Source: Rodrik, Industrial Policy for the Twenty-First Century, 2004

6.4.4 Possible Scenarios

Scenario 1
Ideally, institutional set-up to service radical transformation of the GAP region would have the following features:

- Openness
- Participation
- Accountability
- Effectiveness
- Coherence

The model of a balanced regional development institutional arrangement would involve two key institutions and a funding structure:

- A Regional Economic Leadership Group such as a "Competitiveness Council" is the forum where consensus on development is built and decisions are met. It par excellence involves private-public partnership. The largest share of membership comes from the private sector (not just chambers and associations, but also key CEOs), and it also includes key leaders from the public sector, educational institutions, and society.
- A Regional Development Agency or similar professional body prepares proposals for the Council, it facilitates the implementation of the initiatives and provides analytical support to the Council.
- This structure is complemented by an Investment Fund - an independent body managed as a private venture. Generally, the idea to establish such a fund enjoys common support although the implementation may often be affected by poor performance of the management.

The key two institutions are only apparently similar to the structures suggested by the Law on the Regional Development Agencies. The so called Development Council foreseen by the Law as a form of public-private partnership with up to 100 members is an advisory body with no decision making power, this is concentrated in the Administrative Board of the agency, composed of mairs, presidents of chambers, some business men and NGO representatives while headed by a governor. The implementing level of the structure is called secretariat general. Planning remains in the domain of the State Planning Organization.

Note that implementation of the bold Competitiveness Agenda would require staffing of such institutions with highly talented individuals, of the caliber that currently Turkey sends to the World Bank and other like institutions. In some way, salaries commensurate with their other opportunities – or even exceeding them, to compensate for some compromises in terms of "quality of life", would have to be attainable, especially during the crucial first five years.

Scenario 2
The analysis of the existing institutional arrangements indicates that an important effort and strong political will would be needed to implement the suggested model. To reform the existing structures would require both time and resources.

If there is a common understanding that the transformation agenda for the region on the other hand is urgent and calls for immediate action some other intermediate solutions will have to be sought.

One possible approach is to the manage the initiative as a project, engaging international and local expertise, over a period of 3 - 5 years. Benefits could be contribute to the success of the process:

- Project can assure autonomous management of the initiative.
- Transparency and accountability are easily built into the project designed to be monitored. The same is true for the efficiency.
- Funded as a project initiative would have means and ways to attract highly educated and skilled people, overcoming existing constraints of low salaries.
- International exposure of the project would facilitate cooperation with high profile institutions in Turkey such as TOBB, TUSUAD, DEIK, TIM etc., thus facilitating re-branding of the region.
- No institutions are created which after compilation of the mission would prove redundant or not sustainable.
- There is a high probability that the regional development policy and institutional framework will by then be completed are ready for implementation.
- Critical point/critical mass in all project components will be achieved, thus making transformation process irreversible.
- Local capacity would be adequately developed to serve the process in the period to come.

The major potential weakness of the approach is lack of ownership of regional actors over the process of transformation. And consequetly lack of committment and resonsibility for results.

Scenario 3
The third possible approach is a compromise between the two extremes envisaging a gradual building of the institutional set-up. This more »realistic« option should still comply with basic principle of establishing public-private partnership to promote change in the region.

In 2008, a comprehensive initiative would be launched to start the transformation of the region through clustering of selected industries with highest potential.

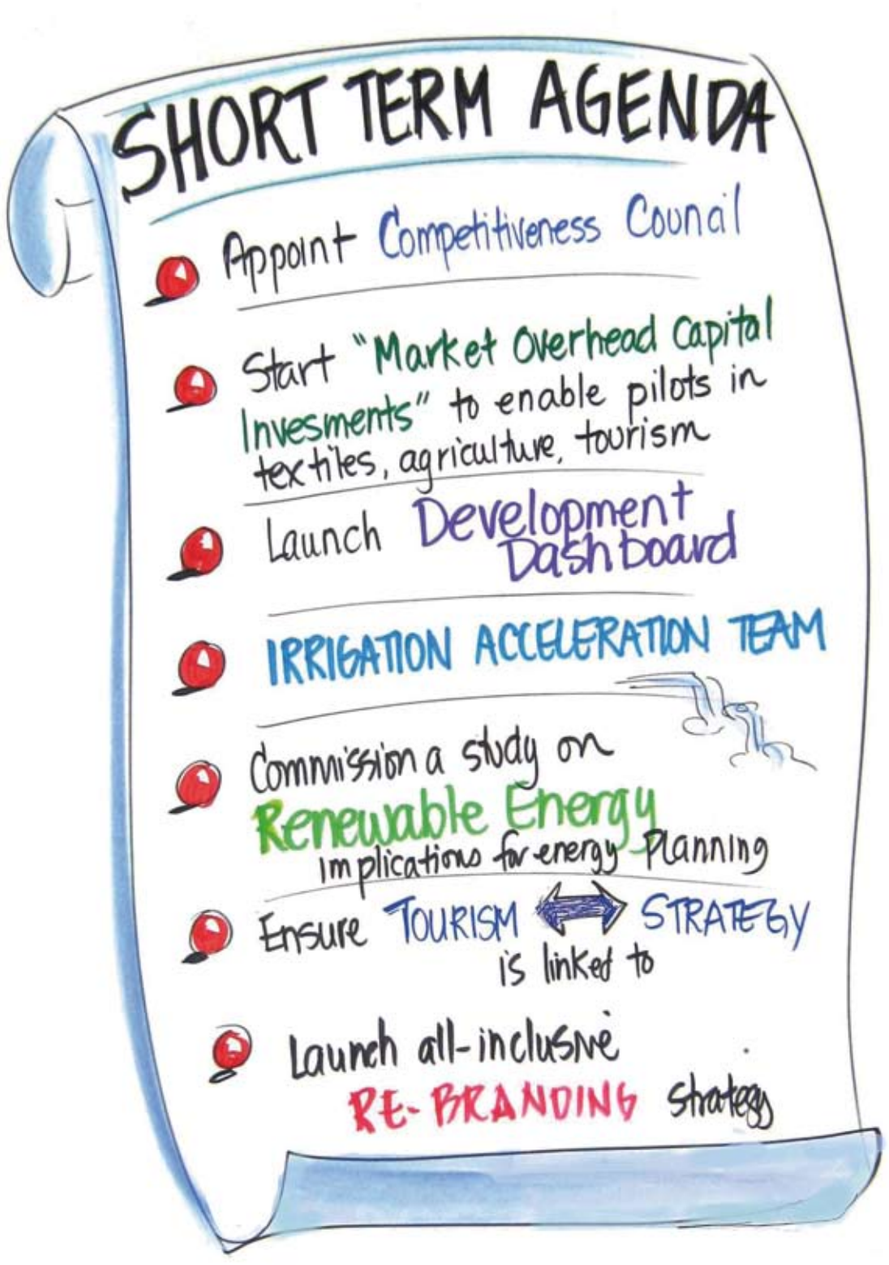
- Competitiveness Councils would be created at the level of individual regional clusters. Ideally, some funds would be made available to the Councils to support first entrepreneurial initiatives in the clusters. According to the number of clusters, the number of Councils created in the year 2008 would be between 4 and 6.
- In order to promote change and to facilitate the implementation of activities, local coalitions would be formed in each of the 9 Provinces. These coalitions would involve representatives of local Chambers, TOBB and GAP RDA. This form of public-private partnership would also aim at improving the communication between the region and the centre. Through TOBB representation and support inter-regional could be promoted.
- Professional support would be provided to the region by local and international experts, mobilizing also all existing local infrastructure (e.g. ABIGAM, GIDEM offices).

The advantage of this approach is a high probability that it would gain enough support to be implemented. It also does not conflict with any existing or potential institutional arrangement. Even when the Law on Regional Development Agencies is implemented, these structures can stay in place. The major weakness on the other hand is a very high probability that the decision making power and influence of this structure will remain very limited.

6.5 SHORT TERM AGENDA

Six initiatives have been identified that are on the "critical path" for implementation of the Competitiveness Agenda:

- Appoint a Competitiveness Council.
- Start Pilot Projects in Textiles, Agriculture, Tourism Using Cluster Development Methods and Making Investments in "Market Overhead Capital"
- Initiate Benefit/Cost Study and Development Dashboard
- Irrigation Acceleration Team
- Commission a Study on Renewable Energy – Implications for Energy Planning?
- Launch All-Inclusive Re-Branding Strategy



One of the visuals that came out of the November 2007 Workshop on Setting a Competitiveness Agenda for the GAP Region.

SOURCES

Government

- MILLENIUM DEVELOPMENT GOALS REPORT TURKEY 2005, SPO
- STRATEGIC COHERENCE FRAMEWORK 2007 - 2013, SPO, 2006
- PRELIMINARY NATIONAL DEVELOPMENT PLAN 2004 - 2006, SPO
- 2007 ANNUAL PROGRAMME, SPO
- OPERATIONAL PROGRAMME FOR REGIONAL COMPETITIVENESS, Republic of Turkey - Ministry of Industry and Trade, January 2007
- NINTH DEVELOPMENT PLAN 2007 - 2013, SPO
- MEDIUM TERM PROGRAMME 2008 - 2010
- THE EFFECTS OF STRUCTURAL FUNDS ON IRELAND'S DEVELOPMENT AND LESSONS FOR TURKEY, SPO
- DRAFT LAW ON THE ESTABLISHMENT, COORDINATION AND DUTIES OF DEVELOPMENT AGENCIES
- SOCIAL AND ECONOMIC PRIORITIES IN EASTERN AND SOUTHEASTERN ANATOLIA, TESEV Project

European Commission

- A GUIDE TO CLUSTER STRATEGIES IN LESS FAVOURED REGIONS, Stuart A. Rosenfeld, 2002
- A STUDY ON THE FACTORS OF REGIONAL COMPETITIVENESS, Report for DG Regional Policy, 2004
- PROGRESS REPORT 2006, European Commission, November 2006
- CHANGING REGIONS - STRUCTURAL CHANGES IN THE EU REGIONS, Report for DG Regional Policy, February 2007
- REGIONS FOR ECONOMIC CHANGE, Conference Proceedings, March 2007
- MULTI-ANNUAL INDICATIVE PLANNING DOCUMENT (MIPD) 2007-2009, European Commission

Articles

- Industrial Policy for the twenty-first Century, Dani Rodrik, September 2004
- Building on the Past, Imagining the Future: Competency Based Growth Strategies in a Global Digital Age, John Zysman, Niels Christian Nielsen, Dan Breznitz, with Derek Wong, Brie Working Paper # 181 - October 2007 © BRIE
- Europeanisation of Regional Policy and Regional Governance: The Case of Turkey, Ebru Loewendahl-Ertugal, Europen Political Economy Review, Vol.3 No.1 (Spring 2005), pp. 18-53
- Clustering, Innovation, and Regional Development: What Works! - Lessons from Successful Clustering Project Implementation. Hansen, Eric. UNIDO Workshop on Cluster- Based Economic Development, June 2003.
- Strategies for Regional Development: Challenges facing Turkey on the Road to EU Membership, Ebru Ertugal, Fall 2005
- Regional Policy and EU Accession: Learning from the GAP Experience, ÷zsel Beleli, Fall 2005
- Industrial Policy to Foster Medium-Sized Firms in Slovenia, Tea Petrin, 2005
- Regional Disparities and Territorial Indicators in Turkey: Socio-Economic Development Index (SEDI), Metin, Oyaslan, Bulent Dincer, Huseyin Ozgur, SPO, Pamukkale University, 2006
- Novel Regional Policy of Turkey in line with EU Standards, Gulhan Bilen, Development Bank of Turkey
- Entrepreneurship from competitiveness and growth perspective, Presentation by Prof. Dr. Tea Petrin, 37th Entrepreneurship, Innovation and Small Business Conference 2007

ii) http://www.psrc.org/publications/pubs/view/1204.htm
iii) Hansen, Dr. Eric. Clustering, Innovation, and Regional Development: What Works! - Lessons from Successful Clustering Project Implementation. UNIDO Workshop on Cluster- Based Economic Development, June 2003.

ANNEXES

Annex 1 - A Dashboard for the GAP Vision

Annex 2 - Implications for EU Funding and Accession

Annex 3 - Additional Textiles Tables & Analysis

Annex 4 - Additional Agriculture Tables & Analysis

Annex 5 - Articles Referenced on Renewable Energy

ANNEX 1 - A DASHBOARD FOR THE GAP VISION

ANNEX 1 - A DASHBOARD FOR THE GAP VISION

This report sets forth a vision for the GAP region. The vision is based on three equal goals - ***higher GDP per capita, social equality and a sustainable environment***. The report recommends the GAP administration sets specific political targets for each of the three goals.

The progress towards these three goals needs be monitored every year in order to prioritise future investments and policies in the region. A monitoring system can also be used to show whether or not the large investments needed in the region have the desired effect on everyday life in the region.

The parliamentary hearing on the GAP region on Oct. 4 2007 clearly demonstrated that the GAP administration cannot currently answer questions about the impact of the large investments in the region. A correctly structured monitoring system will enable the GAP administration to answer such questions in the future.

The report suggests that a Dashboard for development is constructed as a monitoring system for the region. The objective of this annex is to illustrate how such a dashboard can be structured and to highlight some initial results of the performance of the GAP region. The current annex does not develop the full monitoring system, as many of the needed indicators are not currently available. Resources need to be set a side for developing the system and data in the coming years. Such a system will require the hiring of two persons full time for at least three years. In addition, funding is needed for data development.

The dashboard should be organized with three objectives:

- Provide a yearly report about progress towards the political targets
- Provide input to prioritizing future initiatives
- Provide guidance to developing new data

The yearly report needs to be done by external, third party experts like the Edam Think Tank in Istanbul in co-operation with international experts.

The version of the dashboard shown in this annex only tracks economic related progress due to a lack of data for the other two goals.

The dashboard has four dimensions:

- Macro economic outcome
- Cluster development
- Drivers of productivity
- Framework conditions

The main results of the Dashboard should be presented on one page like the example opposite (Figure 1).

The region is currently far from the Turkish average on almost all important areas. The status column suggests main challenges in most areas except for some parts of human capital. Productivity is higher in some areas than the Turkish average, but the status is yellow. This is due to the fact that the high productivity can be explained by the large use of informal labour in the region.

Macro Economic Outcome

Macroeconomic outcome is measured by GDP per capita. A goal should be set which outlines the level which the GAP region aims to achieve by a certain date. For instance, the GAP region should have a GDP per capita, which is equal to Turkey's average by 2023.

Currently, the region is way behind the rest of Turkey (Figure 2). Some of the poorest areas in Turkey are in the GAP region. Sirmak has for example a GDP per capita which is very close the lowest in Turkey. Gaziantep is the richest area in the region but to increase its GDP per capita to equal the average GDP per capital in Turkey, it must raise it by 35%.

Changes in GDP per capita can happen either by changes in labour productivity, changes in the employment rate and/or changes in the number people living in the region.

		Average in the region	Distance to target (Turkish average)	Changes over time	Status*
Macro Economic Outcome	GDP Per Capita (US$ 2001)	$1200	$960	N.A.	
	Productivity Agriculture	1.9	-0,4		
	Productivity Industry	1.7	-0,3		
	Productivity Service	1.0	0,2		
	Employment Rate	33%	10%-point		
Cluster Development	To Be Developed				
Drivers of Productivity	Knowledge Building				
	Scientific Workers per 100 Inhabitants	0.8	0.7		
	Patents Per 1 Mio. Inhabitants	0.15	0.6		
	Human Capital				
	University Exams Rank	18			
	High School Exams Rank	69			
	Average Year of Schooling	3	1.5		
	Entrepreneurship				
	New Firms per 100 Inhabitants	3.2	3.8		
	Growth Firms	N.A.	N.A.		
Infrastructure and Public Investment	To Be Developed				
Framework Conditions	To Be Developed				

Figure 1 – Dashboard for the GAP Region's Development

Note: The first column shows the name of the indicator. The second column shows the current value for the region for example the average GDP pr capita is $1200. The third column shows the difference to Turkey's average. GDP in the GAP region is for example $960 lower than Turkey's average GDP per capita. The fourth column shows over time. This will show whether the region is catching up to its targets over time. The last column is a based on qualitative judgment of the area. Red suggests major challenges, yellow suggests the target is close and green suggests that the target is reached.

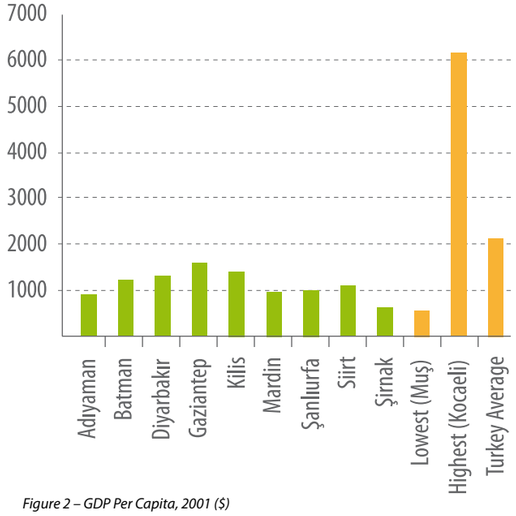


Figure 2 – GDP Per Capita, 2001 ($)

The current labour productivity in some parts of the region is relatively high compared to the Turkish average. The agriculture sector has, for example, a quite high productivity rate in the region (Figure 3). The high productivity rates in agriculture can be traced back to the fact that the region has a lot of informal employment. This claim is supported by a relatively low output per land in the region.

The low GDP pr capita is mainly due to a very low employment rate. Data is only available at the SR2 break down but they show that Gaziantep (36%), Mardin (30%) and Şanlıurfa (32%) has the lowest employment rates in the country. The average employment rate in Turkey is 43% with the highest employment rate in Trabzon (62%) and the lowest in Mardin.

The people working in Gaziantep, Mardin and Şanlıurfa are mainly employed in services (Figure 4). More than 50% of the employed in Mardin are working in the service sector. This is well above the Turkish average. It is quite surprising that one of the least developed regions in Turkey should have such a large service sector. Again, the large informal employment numbers are distorting the data.

The low employment rate is one of the key challenges for the region. Part of this is due to very low labour force participation (properly due to a large informal economy) and a high level of unemployment.[1]

The employment rate is, to some extent, determined by the cluster development, as it is the clusters that employ people. The number of people living in the region is determined by demography factors and will only be traced at the aggregate level.

Aggregated productivity can increase either by changes in the industrial structure within a region and/or by increases in the productivity in the industries within the region. Changes in the industrial structure are tracked in a section on Cluster development and changes in the industrial productivity are tracked in the section on drivers of productivity.

Cluster Development

This part of the dashboard should track progress in the potential clusters in the region. Progress should be tracked on three dimensions – employment, production and productivity in the clusters. Ideally, these clusters should be compared with their competitors, although this might not be possible for many years to come.

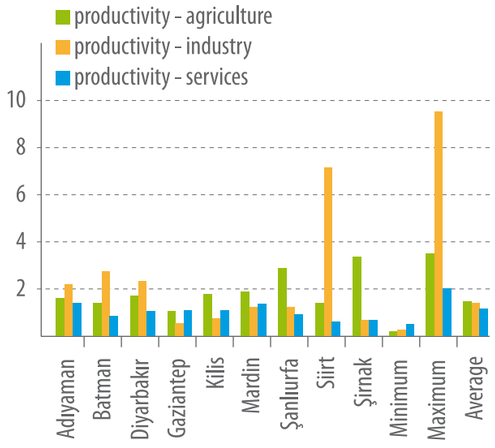


Figure 3 – Productivity in the Main Sectors of the Economy, 2001

1 Turkey's Statistical Yearbook, 2005 p.: 162

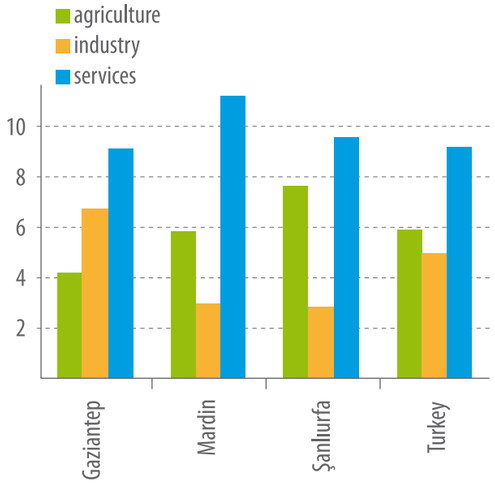


Figure 4 – Share of Employment in the Main Sectors

Drivers Of Productivity

Good macroeconomic and structural policies have had a great impact on growth, as they create a stable economy where firms seize the opportunities provided in the market. For example, a stable macroeconomic policy ensured low interest rates and created a good environment for investing in new technologies, while an effective labour market policy ensured that firms could organise their production in a more optimal way. A good competition policy ensured, for example, that ineffective firms were driven out of the market by new or more efficient firms.

Turkey has made great progress on their macroeconomic policies in recent years. The structural policies are also changing; they mainly affect the functioning of the markets – product and labour markets as well as the tax structure, the infrastructure and other public investments. Most of these are determined at the national level (except for infrastructure).

However, as growth is also determined at the micro-level of the economy, getting these policies right will not remove the large growth and wealth differences within Turkey. OECD notes "while a stable macroeconomic environment provides the overall basis for growth, investment in factors at the micro-level is crucial for sustained development" (OECD, 2005). Knowledge building, human capital and entrepreneurship are becoming important drivers of growth.

Differences in regional productivity can therefore, to a large extent, be traced back to differences in infrastructure and other public investments, knowledge building, human capital and entrepreneurship. These four areas should be the main parts in the section on measuring drivers of productivity. The aggregated productivity in a region is also determined by the industrial structure that is examined in the section on clusters.

Infrastructure and public investments

Currently, little data is available on infrastructure; this section is therefore not elaborated upon further.

Knowledge building

A region's ability to innovate by building and sharing knowledge is a vital element to introducing new products and services. An introduction of new products is needed in order to realise the vision for the region. Today, global competition is all about new ideas and innovation, regardless of the stage of development. It has become vital to build and share knowledge in response to sophisticated consumer demand and growing competition.
The normal indicators of knowledge-build cover the higher end of knowledge building, like patents and researcher. These

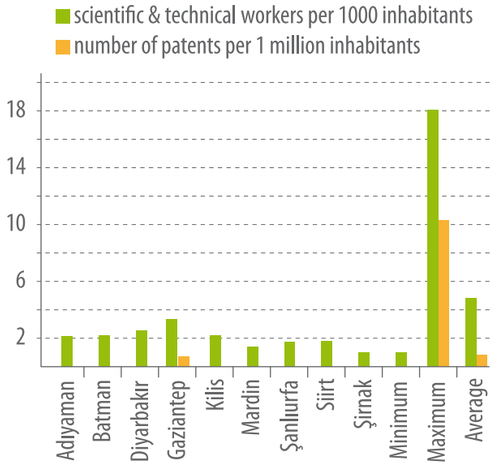


Figure 5 – Knowledge Building in the Region

indicators surprisingly do not show very weak performance in the GAP region (Figure 5). More indicators relating to adapting new technologies need to be developed to give a more comprehensive picture of the region.

Human capital

The production of goods and services is becoming increasingly knowledge-intensive, underlining the need for a highly qualified work force. Several good indicators exist which explain the qualification of the young people in the region. Turkey has national exams both for university and high school entry. These exams give a good picture of the qualification among the youth in the region (Figure 6). According to this data, the qualification in the region does not seem to be lacking. The high school entrance exam marks are quite high although University entrance is lower than Turkey's average.

An alternative indicator is average year of schooling among people living in the region (Figure 7). This shows a more negative picture of the qualifications in the region. According to this indicator, the GAP has some of the least educated people in Turkey. The literacy rate is also low in the region. Again, Şırnak is the least developed area.

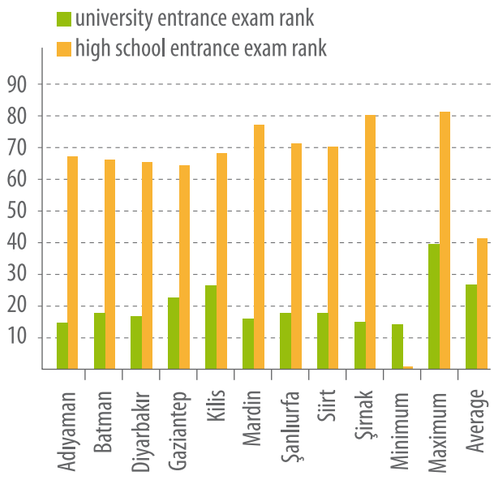


Figure 6 – Human Capital in the Region

Entrepreneurship

Entrepreneurial activity is vital in sustaining wealth through times of rapid change. The shift towards global competition increased pressure on companies across all industry sectors to rapidly introduce new products and processes. Some succeed, others fail. The level of new firm growth reflects the ability to expand the boundaries of economic activity, shift resources and adjust to changing customer needs.

The firm creation in the region is below the Turkish average (Figure 7). Gaziantep has the highest share of new firms per 100 inhabitants but is still far from the national average. This indicates that the entrepreneurship strategy highlighted in this report is very welcome in the region.

Note: The number equals the number of new firms in a given year divided by the number of people in the region.
Number of new firms is only one aspect of entrepreneurship. The second is growth among firms. Currently, no indicators are available for growth.

Framework conditions

All of the drivers of productivity are affected by the framework conditions in the region. Very few indicators are currently available for the framework conditions in Turkey. This section is consequently not developed in this report.

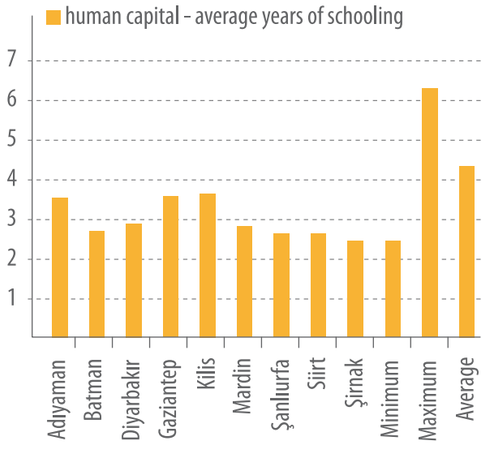


Figure 7 – Human Capital in the Region

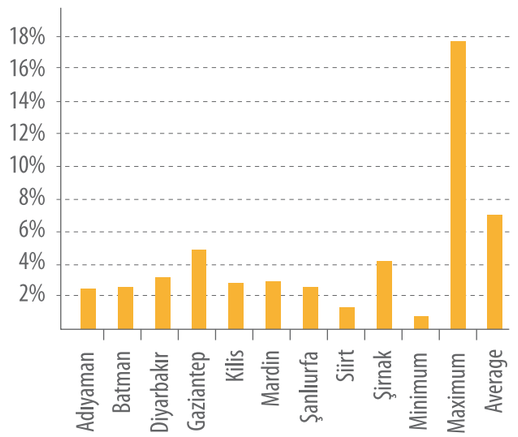


Figure 8 - Entrepreneurship

ANNEX 2 - IMPLICATIONS FOR EU FUNDING AND ACCESSION

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Content:

1. Assumptions

The proposal to employ the EU funds in the realization of the mission of radical transformation in the GAP region is based on the following assumptions:

- Objectives of the initiative are fully in line with the pre-accession priorities of Turkey supported by the EU assistance programs.

… the initial period (2007-09) of IPA assistance should contribute to policy development, strategic planning and mobilization of resources which can form the basis for a genuine, cohesive policy that would address Turkey's regional disparities, through investments in basic infrastructure, access to capital, and the improvement of the skills of the labour force, with particular emphasis on the less developed regions.
Multi-annual Indicative Planning Document 2007 - 2009

The EU is strongly recommending an integrated approach to the economic and social development planning in Turkey.

The interim evaluation of EU pre-accession assistance (Phare, 1999-2002) has highlighted a number of weaknesses, and in particular:

- ***absence of adequate planning documents and sectoral strategies (particularly as concerns economic and social cohesion) resulting in weaknesses in needs analysis;***
- ***insufficient attention to horizontal public administration reforms in the support for the development of administrative and judicial capacity; and***
- ***weaknesses in programme management resulting from understaffing and instability of the DIS institutions.***

Multi-annual Indicative Planning Document 2007 - 2009

There is an explicit request by the EU for institutional change in addressing regional development issues.

As set out in the 2005 Progress Report, the pace of the political transition has slowed in 2005 and implementation of the reforms remains uneven. Turkey's commitment to further political reforms should be translated into more concrete achievements in the areas of democracy and the rule of law, protection of human rights and minorities, and regional issues, for the benefit of all Turkish citizens.
Multi-annual Indicative Planning Document 2007 – 2009

2. Assistance Framework

The framework for assistance for the period 2007 – 2009 is introduced in the Multi-annual Indicative Planning Document 2007 – 2009 (MIPD).[1] In cooperation with Turkish authorities, the document is prepared by the European Commission. It serves as a basis for further preparation of annual and/or more detailed programs.

The Multi-annual Indicative Financial Framework for the period 2007 - 2009 foresees a financial envelope for EU assistance to Turkey of 1.6 billion euro. As a candidate country, Turkey is eligible for all five IPA[2] components: I) Institution Building, II) Cross-border Cooperation, III) Regional Development, IV) Human Resource Development and V) Rural Development.

1 In this report make reference almost exclusively to the MIPD and we hardy mention more detailed programs. The major reason is the fact that we only had assess to early versions of these documents. Final versions, if completed, are not at our disposal.

2 IPA – Instrument for Pre-accession Assistance

Component	2007	2008	2009	Total
I - Institution Building	252.3	248.7	231.9	732.9
II - Cross Border Cooperation	6.567	8.842	9.398	24.807
III - Regional Development	167.6	173.8	182.7	524.1
IV - Human Resources Development	50.2	54.4	57.0	161.6
V - Rural Development	20.7	53.0	85.5	159.2
Total	497.367	538.742	566.498	1,602.607

Table 1: The Turkey Multi-Annual Indicative Financial Framework
Figures are in current prices, million €
Source: MIPD 2007 - 2009

2.1 IPA

EU assistance shall help to prepare the beneficiary country for participation in Community's cohesion policy and rural development instruments from day one of accession. This is done through IPA components III to V. In view of the limited funds available, sectoral and geographical concentration of funds will be sought. The objectives of the revised Lisbon Strategy will be pursued, bearing in mind the state of Turkey's economic development. This will necessitate focusing interventions on the provision of the more fundamental physical, business and human infrastructure, before actions concerned with the technological frontier can be addressed.

One of the key objectives of IPA assistance is to support policy development, as well as preparation for the implementation and management of the Community's cohesion policy, in particular, in their preparation for the European Regional Development Fund and the Cohesion Fund. The approach to be followed in the programming of components III and IV must take account of the framework and guidelines for the EU Cohesion Policy for the period 2007-2013 as established in the "Community Strategic Guidelines on Cohesion".

As these Guidelines point out, in pursuing economic development, two complementary sets of conditions need to be satisfied. The first is the existence of a suitable endowment of both basic infrastructure and a labor force with appropriate levels of skills and training. The second set of conditions concerns innovation, which should be accorded high priority; information and communication technologies should be widely accessible. The precise focus and the mix of factors which are targeted will depend on the starting position: the level of development of a country's economy – its proximity to the "technological frontier" – and the severity of the regional disparities on its territory, the nature and extent of its structural deficits, and its potential areas of comparative advantage.

Although the logic of certain IPA measures will not be amenable to a uniform approach in this regard, IPA as a whole will seek to concentrate resources on a limited number of Turkish regions and sectors where the programmes' impact and contribution to IPA objectives will be the highest. Ensuring appropriate geographic and sectoral concentration will allow the impact of IPA to be maximised. Geographic concentration will also facilitate the exploitation of synergies among programme components. It will also encourage the development of a coherent Turkish policy addressing regional disparities, one of the principal challenges to Turkey's socio-economic development.
Multi-annual Indicative Planning Document 2007 - 2009

The regional development (III) component will support three Operational Programmes (OP): environment, transport, and regional competitiveness. Within the environment OP, the main priorities will be in the water and solid waste management sectors. Within the transport OP, priority will be given to rail and multi-modal transport. Within the Regional Competitiveness OP, the priority is given to the SME development and job creation.

The Human Resource Development (IV) component will support a single OP addressing three priorities: employment, education and social inclusion.

The Rural Development (V) component sets out two priority axes. The first concerns the implementation of the acquis under the common agricultural policy and related policy areas like food safety, veterinary and phytosanitary matters. The second focuses on sustainable development of rural areas. In particular, the envisaged priorities and activities aim at a gradual improvement of the agricultural production and processing sectors to Community standards and to improve employment and income opportunities in rural areas.

Four cross-cutting issues will be addressed by the different programme components. These are: (1) Equal opportunities for men and women; (2) Environmental protection; (3) Civil Society involvement; and (4) Geographic and sectoral concentration.

2.2 Other Forms of Assistance
In the previous period, collaboration with IFIs[3] and bilateral donors has focussed on (1) support to the private sector, (2) infrastructure investments and (3) support for sectoral restructuring. In general it is estimated that cooperation with IFIs has functioned well.

In the future, attention should be given to establishing procedures to facilitate the joint financing of projects. In view of the large costs of alignment in certain sectors, notably the environment, developing coherent programming is essential to ensure optimal use of the available loan financing sources as well as to ensure that their effective coordination with IPA grant financing will constitute a major challenge in the referenced period.
Multi-annual Indicative Planning Document 2007 - 2009

3. EU Approach in Financing Regional Development
Given the limited resources available, IPA interventions will only contribute to these objectives if they are accompanied by firm policy and budgetary measures on the part of the national authorities.

Resources will need to concentrate in a limited number of geographic areas and sectors where its impact to achieve the foregoing objectives will be the highest. In parallel with the criteria utilized in the definition of Convergence regions within the EU, the elements of IPA, which follow an intervention logic based on cohesion considerations, will be concentrated on NUTS II regions which have a per capita income below 75% of Turkish national average. As discussed in the following sections, these are: the Regional Competitiveness OP under component III and the Human Resources Development OP under component IV. This concentration shall not preclude the implementation of measures supporting national policies and institutions or projects which have regional dimensions and which contribute to enhance the competitiveness of the less developed regions. In this context, priority will be given to integrated regional development projects, with a focus on regional poles of growth and development.

It is also expected that strategies developed for other sectors of intervention may integrate the consideration of regional disparities. Consideration of beneficiaries' capacity for loan financing in the determination of IPA co-financing rates for investment projects (notably in the environment sector) will further tend to concentrate funds in poorer regions.

Taking account Turkey's specific economic situation where rural development needs to be considered in the framework of Turkey's overall economic development policy, the synergy between structural, employment and rural development policies needs to be encouraged. In this context, Turkey should ensure complementarities and coherence between actions to be financed by components III, IV, and V on a given territory and in a given field of activity.

4. Relevant Operational Programmes

4.1 Directly applicable Operational Programmes

Component III Regional Development: Regional Competitiveness
Within this Component, the OP for Regional Competitiveness involves the priorities which directly relate to the priorities of the GAP Competitiveness Agenda. The other two OPs are less relevant.

The expected results of the priorities supported under regional competitiveness priorities by 2010 are:

- New business will be created in the manufacturing and services sectors and existing business will be reinforced
- New jobs will be created and the quality of existing jobs will be upgraded
- SME turnover generated by manufactured goods and services will be improved
- Turkish exports of medium and high technology manufactured goods and services will be increased

Tentative financial indications for Regional Competitiveness are 25-35% of the total funding of the Component.

Component IV Human Resource Development
IPA component IV should have as its main goal the preparation of the country for effective implementation of ESF[4]: the main expected result should therefore be that by 2014 (at the end of the duration of IPA assistance) Turkey is able to undertake all the necessary tasks for ESF implementation.

In addition, assistance under component IV should bring Turkey closer to the EU policies and parameters of the revised Lisbon strategy. Future national HRD policies should take inspiration from EU-Lisbon guidelines and use IPA assistance as a tool towards their implementation. Within the limitations implied by the level of funding to be provided by IPA, the priorities supported under the HRD components should contribute to the following results:

- Improved public employment services able to implement active labor market policies throughout the country.
- Increased participation rates in employment, particularly for women
- Reduction of the levels of undeclared employment.
- Reduction of unemployment rates, particularly for young people.
- Increased enrolment rates, particularly of girls in secondary/ VET education.
- Improved quality of education, particularly through the adaptation of education and training to the needs of the labor market; attractiveness of VET as an option for studies increased;
- Alternative pathways of studies for graduates of secondary education.
- Enhanced policies for the social integration through employment and further training of women of vulnerable groups.
- Improved coordination and effectiveness of social services providing education, training and employment opportunities to particularly disadvantaged people.
- Facilitated access to training and active labor market initiatives in both rural areas and those urban areas with more needs.
- Regional disparities in the fields of labor market, education and training and social inclusion policies addressed strategically.

Tentative financial indications within the Component are as follows:

- Employment 40-50%
- Education 30-40%
- Social Inclusion 20-25%

4.2 Potentially applicable Operational Programmes

Component III Regional Development: Environment and Transport
The Operational Programmes (OP) where some funding could be provided for an integrated approach are those for Environment and Transport. Although, these OPs' main objectives may not be entirely in line with the primary goals of the GAP Competitiveness Agenda.

In the financial structure of the Component III they represent about 30% respectively.

Component V Agriculture and Rural Development
Pre-accession assistance in the agriculture sector has primarily focused on alignment with the acquis (see section 2.1.1) rather than economic support to agricultural holdings or to the food processing industry. Nevertheless, in the frame of regional development programmes, and notably the Eastern Anatolia Development Programme and the Greater Anatolia Project (GAP) development programme (see section 3.3.1) grants schemes in these areas have been implemented. The regional development programmes have also provided support for the economic development of rural areas.
Multi-annual Indicative Planning Document 2007 - 2009

Expected results and time frame
Component V has the main goal to facilitate the preparation of Turkey for the participation in the Common Agricultural Policy (CAP), while at the same time assisting Turkey with getting ready to effectively implement EU rural development programmes upon accession.

Priority axis 1: Interventions under this priority have to contribute to the sustainable adaptation of the agricultural sector and the implementation of the acquis communautaire concerning the common agricultural policy and related policy areas like food safety, veterinary and phytosanitary matters.

Priority axis 2: Interventions under this priority have to contribute to the sustainable development of rural areas.
Taking account of the limited amount of funding available for Component V of the IPA, the assistance provided under the two Component V priority axes should contribute to the following results by 2014:

Priority axis 1:

- Improved income of the beneficiary farmers and members of newly set up producer groups
- A better use of production factors on agricultural holdings
- Improved production conditions in terms of compliance with EU standards
- Increased added value of agricultural and fishery products through improved and rationalized processing and marketing of products
- Increased added value and competitiveness of agricultural and fishery products through compliance with EU quality,

3 International Financing Institutions

4 ESF - European Social Fund

health, food safety and environmental standards

- Improved competitiveness of the food processing industry in the selected sectors in the single market
- Improved processing and/or marketing of quality agricultural products as well as better preparation of the implementation of CMOs in the beneficiary sectors through the setting up of producer groups
- Better protection of natural resources in the beneficiary areas
- Development of practical experience with regard to the implementation of agricultural production methods designed to protect the environment and maintain the country side

Priority axis 2:

- Improved competitiveness of beneficiary rural areas
- Improved quality of life of the beneficiary rural population
- Increased income of the beneficiary rural population through the development and diversification of on-farm and/or off-farm activities
- Creation of new employment opportunities through the development and
- diversification of on-farm and/or off-farm activities
- Improved participation of local actors in the development and implementation of rural development strategies
- Better access to training in rural areas
- Tentative financial indications are a minimum of 50% of the overall allocation for the Priority 1 and a minimum of 20% of the overall allocation for the Priority 2.

5. Conclusion

The GAP transformation initiative is coming too late to be included into the IPA 2007 programming, but it might not be too late to make GAP Competitiveness Agenda a part of the 2008 programming targets within relevant Operational Programmes.

5.1 Estimation of potentially available funds

For a rough estimation, potentially available EU funds could be assessed in a relatively simple manner. It would be based on the following assumptions:

- GAP initiative can be incorporated into the 2008 – 2009 IPA programming for a Regional Competitiveness part of the Component III Regional Development and the Component IV Human Resource Development.
- GAP Region accounts for 3 NUTS II regions out of 13 eligible regions, thus being eligible for roughly 25% of the total funds available.

If this logic is applied, GAP Region could be eligible for EU funding in the amount of 50 to 60 million Euros in a (programme) period of two years (2008 – 2009).

5.2 Implementation Issues

Assessment of potential EU (co)funding is done with a limited ambition of identifying EU sources within the existing EU funding schemes without pretensions to be able to develop a "formula" for fund raising at this point.

What do we know from available documents?

- Reduction of regional disparities is one of key pre-accession objectives.
- IPA Components III and IV are sought to directly support regional development initiatives.
- GAP Region is composed of 3 NUTS II regions which are all eligible for the EU funding.
- EU is supporting integrated approach in reducing regional disparities.
- While the national planning (Strategic Coherence Framework) is performed by the State Planning Organization (SPO), ministries are responsible for the preparation of IPA Operational Programmes.

What do we not know from the available documents?

- The available version of the Operational Programme for Regional Competitiveness does not provide a clear picture of the programme implementation.
- The "Growth Centers" approach, promoted in the Strategic Coherence Framework is not elaborated to the point of understanding the implications of the proposed concept.
- It is hard to understand what mechanism to (co)finance integrated regional projects could be used within the Government to optimally combine available funds (national budget, EU, other donors).

As combining funds for integrated projects is a relatively demanding exercise in every context, it may prove to be extremely difficult when different responsibilities within governmental structures have to be combined to reach the objective e.g. GAP Administration being responsible for the development of the GAP Region on the one hand, while the Ministry for Industry and Trade is responsible for the Operational Programme. Another potential obstacle to the smooth combining of budgetary and EU funds are procedures themselves, not only because they tend to be different in many aspects but also because there is a major discrepancy in timing of disbursement – while financing from the national budget is planned for the following year, the period between programming and disbursement for EU funding can be more than a year.

For these reasons, it would be recommended to "negotiate" financing of GAP Competitiveness Agenda as one major integrated project, to which funds needed would be allocated from potentially different sources, without "splitting" the project up into various parts in order to be eligible for different Operational Programmes.

Sources

Government

- MILLENIUM DEVELOPMENT GOALS REPORT TURKEY 2005, SPO
- STRATEGIC COHERENCE FRAMEWORK 2007 - 2013, SPO, 2006
- PRELIMINARY NATIONAL DEVELOPMENT PLAN 2004-2006, SPO
- 2007 ANNUAL PROGRAMME, SPO
- OPERATIONAL PROGRAMME FOR REGIONAL COMPETITIVENESS, epublic of Turkey - Ministry of Industry and Trade, January 2007
- NINTH DEVELOPMENT PLAN 2007 – 2013, SPO
- MEDIUM TERM PROGRAMME 2008 - 2010

European Commission

- COMMUNITY STRATEGIC GUIDELINES 2007 – 2013, European Commission, 2005
- MULTI-ANNUAL INDICATIVE PLANNING DOCUMENT (MIPD) 2007-2009, European Commission
- PROGRESS REPORT 2006, European Commission, November 2006

ANNEX 3 – TEXTILES: ADDITIONAL TABLES & ANALYSIS

1. Dominant Products in the Region

a. Carpets

Turkey's carpet industry specialises in woven carpets made of man-made fibre. The production capacity in Turkey is far beyond the demands of the domestic market. The domestic market consumes less than 20% of the total production. Gaziantep is considered the centre of production with an 80% share in total production. All the necessary resources are within manageable distance from the operational base. However, it should be noted that the sector's major industrialisation has been recent. Major investments in carpet weaving technology have transformed the industry as recently as 2000. Many of the companies continue as "producers" and lack both product development and marketing skills. This is evidenced by discussions with the members of the industry and also the market place that it currently serves. A number of companies are vertical and also spin polypropylene yarn for use in their carpet production.

The carpet producers in Gaziantep are mainly export oriented and they consider the international market their main market. Even in international markets the producers treat their domestic competitors as the main competitor; competition is mainly based on price.

As a result of this competition, the profit margins are decreasing and have been over many years. As a result, pay back periods are getting longer and longer. Despite this, most of the companies visited during the study plan on capacity investments.

Gaziantep is a well known region in global carpet market. Although the majority of the well known suppliers are located in the region and geographically close to each other, there is no concerted practice to increase prices.

Representatives from the companies interviewed declares there is no price competition in the domestic market. The prices are relatively similar, but the competition is mainly on payment terms. Payment periods are getting longer and longer, causing problems in the cash flow of many producers. As a result, they need to increase their working capital.

In markets where well known brands exist with larger market shares (like Merinos and Kaşmir), leader-follower models in pricing are likely to occur. Besides competing on payment conditions, producers invest in branding in order to be more competitive in domestic and emerging markets. In order to accomplish this they are increasing the share of marketing activities within their budgets.

The sector is well established and has all of its needed resources within easy distance to the base of operations. It has been re-equipped with latest manufacturing technology. Belgium made Van der Wielle is the most widely used machinery brand. Although firms did not report any difficulty regarding the hiring qualified personnel, the lack of training programmes available in the region to improve the qualifications and skills of their personnel was among the major problems mentioned. Additionally, no structural training programmes are internally provided among the visited companies, except Merinos.

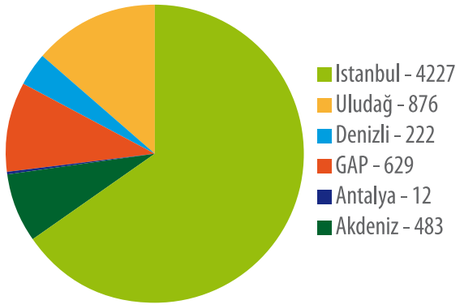
The main raw material is yarn including: polypropylene, poly/cotton and jute. The share of jute is very small. Polypropylene and poly/cotton are available in the region. The largest supplier of PP is SASA, which is located in the region. The other side of the region benefits from a close proximity to the main cotton cneteres of Turkey. Fluctuations in raw material prices occur according to changes petroleum prices and changes in the world cotton market.

On the human resource side, the firms did not report any specific difficulty in finding qualified personnel. There are energy cost concerns. Firms in Gaziantep reported satisfaction in being located in one of the priority regions for development.

The carpet industry in its current form does not offer opportunities to utilise organic fibres (except maybe Jute), however there are good opportunities to utilise the concepts of renewable energy.

b. Primary Textile Production: Spinning Weaving

The Turkish industry is mainly clustered in the regions of Aegean (Izmir and Denizli), Mediterranean (Adana), South East (Kahramanmaras and Gaziantep) and Central Anatolia (Kayseri) and Marmara (Istanbul, Bursa and Thrace).



Textile - Number of Exporters Registered in Exporters' Unions
Source: Member Lists of Exporter Unions

The Marmara region (with Istanbul, Bursa and Thrace) is the most significant of all regions. Among the clusters, Istanbul is by far the most important contributor in terms of the number of establishments, followed by Bursa, GAP region, and Mediterranean region.

The number of firms located in Istanbul has decreased over the last decade; many firms have relocated their integrated production sites to either Thrace or the GAP region.

The GAP region (including Gaziantep and Kahramanmaraş) has, due to their proximity to the agriculturally rich cotton areas, specialised in yarns and fabric-based on cotton.

Recent years have also proven that this area is the preferred investor area for clothing because of the attractive financial incentives available to them.

Over the years, the industry has successfully transformed from a labour intensive to capital-intensive industry as a result of around 40 billion USD by the firms. Turkey was the second largest investor of short and long staple spindles in the world in the period 2000- 2004 after Asia (including China). Approximately 10% is produced in the GAP region.

Turkey ranked fourth in the world in terms of installed capacity of long staple spindles in the period 2002 – 2004. Turkey was the second largest investor in short staple spindles and open end rotors, which are regarded as the most advanced technology in the world, in the period 1995-2002. The biggest share of fabric production is based on cotton.

Production of woven cotton fabrics was estimated to be approximately 1.9 billion meters for the last three years. On the other side, man-made textiles total production of synthetic fabrics was estimated about 642 million meters in 2004. During the years of 2002 and 2003, Turkey was the second largest investor of shuttle less looms in the world. Comparing established capacity in 2002 with machinery shipments clearly shows that Turkey at present posses 1, 5 times newer capacity of EU 25. Almost all of the visited companies (except one or two who were extremely pessimistic) are quite aware of that they need to produce quality products in a cheaper way in order to stand against the challenge from the east.Many of the companies believe that this can easily be done if energy prices and taxes re-regulated.

The export has, during years of 2001 – 2004, increased some 60 % to a value of almost 5.000 mil US$, representing 8 % of total export.

The largest export group of items in 2004 is in cotton based products (fibre, yarn and woven fabrics) which represents approximately 25 %. The second largest export group of items is recorded in man-made products (staple, fibre, yarn and woven fabrics) which totals to some 18 %. The EU 25 maintains its position as the major export market. There is one sector association directly relevant to the industry: Turkish Textile, Dyeing and Finishing Industrialists Association (TTTSD). CR4 and CR8 are estimated to be higher compared to other segments of the textile industry. In order to compete with the low cost Asian competitors, firms have to increase their overall process efficiency and be more productive. This is necessary for Turkish firms to compete in international markets.

Pprimary products are an input for other segments of the textile industry: clothing, home textile, carpets. The cost structure of the primary segment is critical for the performance of the overall textile industry. R&D and qualified human resources are crucial in order to efficiently utilise the state of the art technology. Lack of vocational training opportunities were mostly mentioned as a problem by the company representatives visited.

With Cotton being a pre-dominant fibre, the opportunities for increased development of organic is good. The spinning of other natural fibres (wool, silk, etc) are likely to be minimal

due to the capital investment requirements.
Spinning and weaving are high users of energy and therefore present an opportunity for transformating the energy use towards the utilisation of renewable sources.

c. Knitted and Woven Apparel
The global supply base for garments is rapidly changing as brand owners and retailers review their sourcing strategies and business models. The increase of retailers who "own" brand development coupled with the dilution of mainstream brands has resulted in changes in the price structures as well as purchasing policies of the main buyers. This has a great significance for the GAP region both in terms of ability to supply and produce at the required price.

Turkey's textile and clothing exports are rebounding this year in value terms after sales to the European Union stagnated in 2006. The recent rise in the lira may limit the growth in exports in the second part of the year, however, while elimination of EU's quota has resulted in additional competition from China. Textile and apparel imports continued surging in the first months of 2007. Turkey's textile and clothing exports clearly rebounded in the first five months of the year after suffering a serious slowdown in 2006.

Total textile and clothing exports jumped by 17% in January-May 2007 from the same period last year, according to latest data released by Exporters' Unions, TIM. Shipments to foreign countries even rose 18.40% in May as a clear sign that growth rate in exports is further increasing.

The EU's imports from Turkey continued to rise in the first quarter of this year for both major clothing categories, knitted and woven clothing, under HS chapters 61 and 62.

Consignments of knitted apparel from Turkey rose 14% in value terms in the first quarter of 2007, compared with their level three years ago, before quotas were eliminated.

In the meantime, imports from China surged more than two times in both families of products, although limits were re-imposed on certain categories. China's share of EU's import market for knit clothing jumped from 17% in the first quarter 2004 (value terms) up to 30% in the same period this year. Its share of the woven apparel market surged from 23% up to 40%. By contrast, textile and clothing exports only rose 4% in 2006 at US$19.70 billion, according to ITKIB.

Apparel exports surged 15% in the first five months of 2007 to US$6.20 billion after only rising 2% in 2006 to US$14 billion, according to TIM. The rebound in exports may however reflect last year's decline in the Turkish lira that obviously stimulated exports.

However, Turkish textile and clothing exporters are successfully reacting to surging competition from China, shifting more towards quality and value. They were also relatively protected by quotas re-imposed by Brussels in 2005, which will be removed at the end of the current year. Probably boosted by the rise in the lira, textile and apparel imports continued surging this year.

In Chapter 55 (man-made staple fibres and related textiles), imports even increased by 65% in April from the same month last year, according to latest official data.

Imports of woven clothing were up 53% at the same time while knit clothing imports were rising 40%.

In 2006, exports of textiles to the European Union already rebounded, as shipments increased by 19% to US$2.53 billion, against a 3% rise in 2005.

Textile exports to Belgium had even surged 46% while shipments to top market Italy were up 18% at US$582 million.

Russia is also rapidly becoming a major market for Turkish textiles, rising 25% in 2006 at US$513 million.

Although falling 5% to US$3.37 billion, clothing exports to Germany continued attracting the largest share of total shipments, followed by sales to UK, up 4% at US$2.28 billion, as shown by ITKIB's annual report.

Southern European countries like France, Italy or Spain may soon try extending quotas for another year. The future of the so-named Euro-med textile industries lies in a new strategy, as explained by the I.F.M.'s study.

Turkey has excessively remained a sub-contractor of the EU's retailers and brands, utilising a high proportion of domestically produced yarns. Turkey has a fully-integrated textile chain and enjoys a duty-free access to the European market under the customs union established in the past decade.

With the development of "Fast Fashion" concepts, European brands and retailers increasingly need sourcing from regional suppliers as they rapidly react to new fashion trends. Turkey has seen the arrival of several well known retailers and brands, setting up their buying and sourcing offices in Istanbul to take advantage of the Quick Response offered by Turkey's proximity to the market.

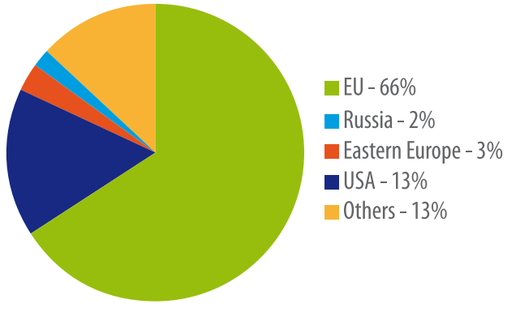
The executive arm of the European Union already urged Mediterranean countries to conclude free trade agreements allowing the elimination of import tariffs and boosting sales of Tunisian fabrics to Turkey or Turkish fabrics to Morocco.

A series of agreements were already concluded, including the Agadir agreement between Tunisia, Morocco, Jordan and Egypt which could be effective before the end of the year. Similar duty-free agreements were also reached between Morocco and Turkey on one side and Tunisia and Turkey on the other side.

Tariffs are being immediately or progressively eliminated, depending on products and countries. The current reform of EU's rules of origin could also accelerate the way fabrics are sourced in the region. Accumulation of origin would offer duty-free entry to EU's market when textile inputs are made in a Euro-med country, whatever their origin.

Whilst apparel exports are high foreign earners for the Turkish economy, exports to Europe is the major destination for Turkish clothing (66%), with the majority going to Germany.

Other important markets are the United States, the UK, France, the Netherlands, Italy, Belgium-Luxemburg, the Middle East, and the Russian Federation. However since the official export figures do not include the "cash-and-carry" figures. "Cash-and-Carry" are the goods that are exported to Russia and the former Soviet bloc by tourists from these countries. The unregistered export volume reached its peak in 1996 with 8.8 bio US$. There are different estimations for today's volume of "cash-and-carry", changing between 6-15 bio US$.



Source FTC Project 2005

The USA market has been adversely affected post MFA removal and many companies from Turkey are establishing operations in Egypt and Jordan to take advantage of the Qualified Industrial Zones (QIZ's) where export to the USA is duty free. Up to date over 300 Turkish firms have invested in the QIZ's. This is a significant drain on Turkey. Comparative bi-lateral trade agreements with the USA and Turkey would stop this exodus of capital and foreign earning power.

Knitted apparel is the most important product group in textile and clothing exports; 51% of Turkey's total apparel export value comes from knitted apparel, Woven apparel, (35%) and other made-up articles (14%). Overall, for Turkey, in 2006 knitted apparel showed a 6% increase against woven apparel for the same period.

The knitting sector based in the GAP region is mainly centred in Gaziantep. The companies visited operate in the fully fashioned sector and predominately supply the domestic, former CIS and Middle Eastern export markets. These markets are showing an increase in excess of 12% for 2006 (ITKIB May 2007), and it is estimated that future growth potential will come from these markets. Many of the companies are small with two or three knitting machines, and operate as both retailers and wholesalers. Due to their size these companies are predominately supplying the wholesale markets both domestically and internationally and as a consequence their order sizes are small.

Design capability is not considered to be suitable for the western market tastes and the majority of the companies visited produce traditional designs suited to their target markets.

Observed equipment shows that whilst the companies are small they have good equipment, with the majority having relatively new Shima flat bed knitting machines. Products are predominately manufactured using acrylic yarn which gives cost/price advantages for their target markets.

Woven apparel manufacturing can be found in most areas within the region. However, Adiyaman has some 33 companies registered in the area with most of them supplying the EU market, operating on a sub-contract basis for larger companies based in Istanbul Izmir. These companies are relatively new in the region, having been established by utilising the government incentives available for investment in the region. As such, they are well invested with equipment; however they have poor connections to the market hence the high proportion of sub-contract work.

The Case for Organic Cotton

The textile and apparel industry has been concerned for some time about the effect that its production techniques are having on the environment, the general public and also the workforce involved in production. These concerns have been either as a result of public pressure or out of a growing awarenss and moral business ethic. The development of improved business ethics and corporate responsibility are seen as a trademark of a socially and morally responsible company. Many of the Brand owners and Retailers are now taking pro-active steps to ensure that they are complying as far as possible with both legislation and corporate targets for improvement in these areas.

Many differing standards and codes of practice are in use. These include the ISO 14000 environment standard, SA8000 Social Accountability, WRAP (World Responsible Apparel Production) and the Fair Trade Label as examples. In addition there is a certification body that will provide verification that organic fibres (particularly cotton) have been grown and processed to meet acceptable standards. Undoubtedly, the application of improved standards is good for the environment, the workers and business profits.

These ideas are now very much in the public domain. It is now well known that chemicals used in fibre and textile production can cause serious health issues. Potential harm affects the employee taking part in the production as well as the health of the consumers wearing the products.

Campaigns in Europe have focused on this 'poison on the door'. A prediction in Germany shows that 30% of children have an allergy caused by fabric printing inks and dyes. Although the level of the public's consciousness on the health issues related to clothing is low, there are two major environmental threats. These are the usage of inks and dyes, and the effects of insecticides in cotton production.

Azo inks and dyes comprise one fifth of the articles used in textiles. Nearly 300 of these inks and dyes are potential hazards and 20 are known to be cancer-causing. Additionally the usage of chemicals such as formaldehyde, and pentachlorophenol, and the usage of chemical paints can have adverse effects on health.

A group of regulations and volunteer initiatives such as labelling and management laws have been exercised in Europe in order to decrease these threats and the introduction of Oeko-Tex 100 standard has assisted in reducing the usage of such harmful chemical compounds.

Cotton production has been effected by many harmful pests and diseases and cotton agriculture is an area in which chemical pesticides are widely used. Cotton production, that comprises approximately only 5% of the world agricultural area, uses 25% of total insecticide usage, and 10% of the world's pesticides. These chemicals comprise more than 50% of the total cost of cotton production. The unsuccessful management of these chemicals potentially harms the health of the farmers and agricultural workers especially in the developing countries. In addition there is the secondary effect of the chemicals running into the soil and entering the food chain. Finally to aid mechanical harvesting highly dangerous chemical defoliants are used, some of which are known to cause birth defects.

Organic cotton developed out of the organic food industry and the global organic cotton fibre supply has increased 392% since the 2000-01 harvest to 25,394 metric tonnes during the 2004-05 crop years. In 2005, U.S organic fibre products sales grew by 44% to $160 million.

Globally, sales increased an estimated 35% annually, from $245 million in 2001 to $583 million in 2005. Global organic cotton product sales projected to skyrocket to $2.6 billion by the end of 2008, reflecting a 116 % average annual growth rate. (OCE)

Growth by category: (Source Organic Cotton Exchange OCE)

- Women's apparel (43%),
- Infant clothing/diapers (40%),
- Men's clothing (43%),
- Sheets/towels (38%),
- Child/teen (52%).

The growing of organic fibres is without the use of toxic and persistent pesticides or fertilizers, sewage sludge, irradiation or genetic engineering, and that are certified by an accredited independent organisation.

During the 2004-05 harvest, cotton was produced in 22 countries with Turkey growing 40%, India, 25%, the United States 7.7% and China, 7.3% respectively. In 2005-06, these four countries combined are projected to produce 79% of the global organic cotton fibre crop. See annex I for Production Data.

Turkey is a pioneer in producing organic cotton. Organic cotton production started in Turkey in Kahramanmaras in the Eastern Mediterranean region in 1989/90. The project was called Good Food Foundation and was followed by a second multinational project initiated in Salihli (Manisa) in the Aegean region by Rapunzel, a German company. Turkey significantly increased its organic cotton production during 1999/00 and 2000/01. According to Aksoy (2003), Turkey alone produced close to 10,000 tons of organic cotton in 1999/00 and 2000/01.

Latest statistics show that this will now be in excess of 14,000 tons (2006). In Turkey, there are small growers owning 15-20 hectares who produce organic cotton, and on average, organic cotton growers suffered a 5.4-7.4% reduction in yield. The research suggests that some varieties suffered as high as 17-22% losses in yield. Varietal differences were significant. Fibre quality was similar in both conventional and organic farming systems. Data for the year 2001/02 suggest that farmers received premium prices for organic cotton of approx 26% when farmers sold seed-cotton and 20% if they sold lint. The data comes from TARIS, a large farmers' cooperative that plans to expand organic cotton.

TARIS started producing organic figs in 1992, followed by organic raisins in 1997, and organic olives in 1999. The organic cotton project was initiated in 1999, and by then the cooperative already had enough experience in producing crops under organic conditions.

The success of organic cotton in Turkey comes from experience, as contract farmers are the ones producing most of the organic cotton and very little production is directly initiated by the farmers themselves.

Turkey has a full chain of organic cotton products and most organic cotton is processed to produce summer clothing, T-shirts, baby wear, towels and home textiles.

Undoubtedly there is a growing interest in organic products, and an increasing interest in organic textile products. There is a greater interest in the environment and the consumer

Best Practice Spotlight:
RAPUNZEL NATURKOST AG

RAPUNZEL NATURKOST AG, based in Legau/ Allgäu, is one of the leading producers, manufacturers and distributors of organic foods and textile products. In 30 years, a whole food shop has developed into a company with 250 employees and a turnover of around 70 million Euros. RAPUNZEL products can be found throughout Germany in over 2,000 whole-food and health food shops. RAPUNZEL obtain organic raw materials from over 30 countries around the world for their wide range of over 400 products. RAPUNZEL products are exported to almost as many countries. In their relationships with suppliers, both the quality of the products and the quality of life of the farmers who produce it are important to RAPUNZEL.

"The Turkey project is our biggest and longest-running project. In 1985, we laid the foundation stone for an organic farming project. Initially, figs and sultanas were exported to Germany. Soon, many farmers showed interest in collaboration and further organic products were being cultivated all the time. In 1991 we opened an advice office in Izmir. In 1997 this led to the founding of a subsidiary, RAPUNZEL Organic Ltd".

"We have set a positive seal on our several years of preparatory work in farming projects in Turkey, Spain, Brazil and the Dominican Republic. For more than 100 Demeter farmers, this has created an important marketing opportunity for their raw materials".

"As early as autumn 2000 we began to change 15 farmers in 4 different project regions of Turkey over to biodynamic farming. Since they had already been farming according to the strict certification guidelines of the Bio-Suisse Knospe for a long time, to our great joy the farmers already received the Demeter approval in 2001. Since then, all participating farmers and agricultural engineers have been trained intensively in a training concept on biodynamic agriculture".

"Motivated by the positive results in Turkey, we began the change-over of the RAPUNZEL Iberica project, two HAND IN HAND partners in the Dominican Republic and in Brazil and a cooperation with the Sekem project in Egypt".

is starting to become more discerning regarding purchases which either have an increased health value or positive environmental impact.

The ways in which farms operate has a profound effect on the local soil and water which the nearby communities use for both human and animal needs. In particular the food crops that are grown in rotation with cotton.

There is an increasing awareness and concern amongst consumers of the environment and the impact that industry is having on the Earth's resources.

This has not gone unnoticed by the major brand names and retailers in the EU and the USA and there has been a significant commitment by many of the well known names to the increased use of Organic Textile products and the use of Eco Friendly Manufacturing.
Evidence of this move into "Organic Products and Manufacturing" can best be summed up by the following quotes and comments from the trade press:

- "Brands including C&A, M&S, Mountain Equipment Coop, Nike, Nordstrom, Timberland, Wal-Mart, and Woolworth's South Africa have set long term transition goals for using organic fibre (Cotton) and have annual implementation plans"
- "Nike has goal of incorporating 5% organic cotton into all of its cotton containing garments by 2010. Nike has gone from consuming 250,000 pounds in their 1998 product lines to more than 7 million pounds in 2006 products".
- "Nordstrom's first goal was to incorporate organic cotton into 5% of their units by 2007".
- "C&A, Wal-Mart and others have set goals to convert a percentage of their total cotton use to organic. Wal-Mart has gone from using less than 500,000 pounds in 2004 product to approximately 10 million in 2006 products".
- "Otto has a goal of converting 5% of all their cotton use to organic starting in 2008. From year 2004 H&M included 5 percent organic cotton in almost all baby and children's garments from Turkey. In 2004, we used 5 tonnes of organic cotton, and this quantity was increased to 50 tonnes in 2005".
- "In November 2005 H&M launched a collection designed by Stella McCartney, we were happy that one shirt in the collection was made of 100% percent organically grown cotton".

Finally, as part of the research for this report, visits were made to several International organisations based in Turkey including Marks and Spencer, Next Sourcing and the Taher Group.

All these companies were very positive about the use of organic textile products, especially cotton. M&S are committed to increasing their product offerings in organic cotton and have enlarged their buying departments based in Istanbul to cope with the increased business. Next and the Taher group also have similar plans.

It should be noted by the readers of this report that a very positive response to the Vision of the GAP region was received from the Region Head for Marks and Spencer and they have specifically asked to be kept informed of our developments at corporate level in the UK.

There is strong evidence that the use of Organic cotton is increasing and supports the Vision for the GAP region.

It should also be noted that whilst the predominant organic fibre is cotton, other organic fibres can also be produced within the GAP region including Silk, Flax (for linen) Jute (Hessian) and Soya bean.

The Case for Renewable Energy and Eco Friendly Manufacturing.

Energy Efficiency

The effective usage of natural sources, mainly water and energy, is a critical way of decreasing environmental obligations and increasing productivity. Textile production has a high density of water usage; one hundred litters of water is used to process one kilogram of textile.

More environmentally friendly systems of wet textile processing are being developed to reduce the amount of water used and also increase the efficiency of the production. These systems include the use of new dyestuffs, lower temperature dying, and the recycling of water.

Utilising the concepts of renewable energy available in the GAP region will have a very positive effect on the energy efficiency of textile production.

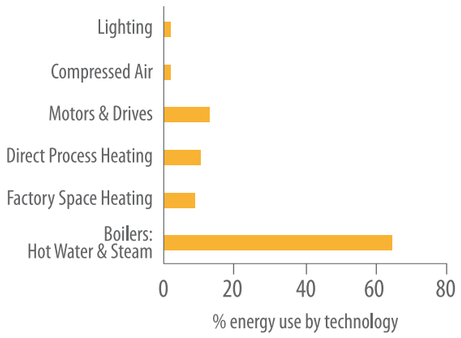
Pollution and Wastes

Each step of the textile and clothing chain can create pollution and waste. In addition, there is some discussion on the subject of potential genetic pollution caused by genetically regulated cotton plants coupled with the wrong usage of pesticides and herbicides. Textile production itself can cause considerable water pollution as well. Some 70% of textile by-products and 20% of fabric inks and dyes are added to water in the final process of the product, and can cause high levels of pollution. Water pollution is the most significant with ink and dyestuff solids being discharged into the watercourse via sewers or rivers.

Air pollution is mainly related to the burning of fossil fuel and the absorption of sensitive organic compounds. Although packaging is mostly emphasised as solid waste, each year six million tones of clothes are disposed of in Europe.

Apart from the more visible elements of apparel and textiles such as the actual product, and their manufacturing and retailing environments, high energy usage also occurs within the primary textile production areas, such as weaving, knitting dyeing and finishing. Large textile enterprises operate in a competitive global market and may be highly integrated. Energy costs can account for an average 5% to 15% of overall manufacturing costs. Typically, energy costs can be reduced by 10%, and competitiveness improved, through no-cost and low cost measures. Energy is typically used in textile companies to run boilers to produce and process hot water and steam, for the direct drying of textiles, for motors, generating compressed air, and for lighting, ventilation and space heating.

A typical breakdown of energy used in a textiles process UK) is shown below:



Energy Use Breakdown for Textiles
Source Carbon Trust

In particular, dyeing and finishing consume large quantities of energy. There is high energy consumption in the sector at low-temperature levels.

Solar energy could save a considerable part of this energy cost. In a recent study, solar energy was considered to reduce the demand on traditional fossil fuels by first using a preheat solar system that feeds boilers with hot water. The second step is to feed the process of textile dyeing that needs low temperatures (up to 85°C) directly with hot water.

It was found that the second system is more economic and efficient than the first and that the environmental impact of using such a system showed a reduction of carbon dioxide emissions.

The development of improved eco/environmental thinking is being fuelled by the increasing pressure by both national and international governments and their strategies designed to reduce the carbon footprint.

The European Emissions Trading Scheme (EU ETS) is the backbone of European efforts to tackle climate change, and a central instrument for countries to deliver their Kyoto emission targets. In setting a price for carbon, it has also become the focal point for industrial interest – and in some cases concern – about the impact of measures to tackle climate change.

During 2006, twenty-seven EU Member States proposed 'National Allocations Plans' for distributing allowances to emit CO2 under the EU ETS during Phase II (the Kyoto first period of 2008-12).

The European Commission ruled that almost all the submitted plans violated its interpretation of the EU ETS Directive and proposed an allocation formula that, in aggregate, turns the proposed 5% increase into a 5% decrease below 2005 levels. The key criteria were Kyoto constraints in most of the EU-15, and the imposition of a growth and intensity formula based on independent sources for most of the new Member States.

The total is below emission trends and all 'business as usual' forecasts, and in winning the ensuing political struggle, the Commission decisions have thus established EU ETS Phase II as a viable carbon market for 2008-12.

Initiatives have been created at a national level in many EU member states which have both raised awareness with the general public and have provided incentives to industry and business to reduce their energy inputs and carbon emissions.

As such, now most apparel retailers and brand owners believe there's widespread consumer concern about human rights and the environmental impact of the clothes they wear. A recent Just Style report suggests how a buyer makes their purchasing decision matters just as much as where a garment is made - and that it won't be long before declarations about carbon emissions and air freight appear on every label. This is evidenced by Tesco, one of the UK's largest supermarkets,

undertaking a study to determine the carbon footprint for many of its products sold.

These concerns are forcing the large brand owners and retailers to re-think their sourcing and retailing strategies as evidenced by the following:

- Sri Lankan garment maker The Hirdaramani Group plans to build a green factory this year and invest in a project to make all of its existing factories more environmentally friendly. The construction will start towards the end of June, costing approximately $5m. The factory will be ready by April 2008. To ensure green standards in the design of the new factory, they will get LEED (Leadership in Energy and Environmental Design) certification from the US Green Building Council. The new facility will supply men's, women's and children's knitwear for buyers like Marks and Spencer Colombia, Nike, Eddie Bauer Tommy Hilfiger, and Polo Ralph Lauren, Columbia, who are among the groups largest customers.
- Men's and women's tailored clothing manufacturer Bagir Ltd has joined the ranks of the 'green movement' with a new suit label called EcoGir. The three lines - EcoGir Organic, EcoGir Recycled and EcoGir Hybrid - each reflect the company's efforts to reduce its impact on the environment. The collection is unique because it includes suits made from organic cotton and Post Consumer Waste (PCW), which saves energy consumption, reduces carbon footprints by reducing CO2 emissions, and helps divert waste from landfills. To reduce their environmental footprints, they are changing the way they make suits by using sustainable materials such as discarded plastic PET bottles, bamboo and organic cotton, Organic suits feature a jacket that's made entirely out of 100% organic cotton. Even the fusing is made out of natural materials such as bamboo, and the buttons are constructed out of dried Tagua palm tree seeds, ecologically harvested from the rainforest. Also a 100% PCW a suit, which is actually made up of approximately 25 recycled 2-litre plastic bottles. This suit lowers energy consumption by 84% and reduces CO2 emissions by 77%. This hybrid is eco-friendly and washable. The collection is made from 55% PCW originally created from PET. By using waste as a raw material, it helps to divert waste from landfills and incinerators, and also reduces energy and carbon. In addition to using organic and recycled materials, Bagir also plans to implement a voluntary return programme called EcoGir Closed Loop, which will allow consumers to send their old polyester tailored clothing back to Bagir for recycling.
- Tesco is currently paying Oxford University $10m to carry out preliminary work towards setting up a Sustainable Consumption Institute, charged with developing common measurement systems to underpin carbon labelling on every single product Tesco sells.
- Inditex, Europe's biggest clothing retailer and owner of the Zara fashion chain, has unveiled a number of initiatives intended to lessen its environmental impact. The firm will switch to the use of biofuels, wind turbines and low energy lighting in its stores and factories over the next three years. As part of its Strategic Plan, the company intends to reduce the greenhouse gases emitted by its logistics and distribution activities, and use renewable energy to provide half of all the power at its logistics facilities. It will also review the environmental impact of its textile and garment production processes.
- Sri Lanka's MAS Holdings is to start building a 'green plant' in June this year to produce bras for UK retailer Marks & Spencer(M&S). This is a MAS investment of about US$6m to cater purely for M&S. They will start construction in the beginning of June this year and hope to begin commercial production by the end of 2007. M&S will fund them on technical areas like harnessing solar power and design aspects. MAS Holdings says the green plant project is in keeping with M&S plans to become carbon neutral by 2012. MAS says it will pilot the M&S carbon neutral programme in the Asian region. The factory will use rain water harvesting techniques to meet a portion of its water requirements, solar power and other renewable energy sources to generate electricity and will use natural light and low-energy cooling systems instead of air-conditioning.
- In addition to supporting its manufacturing supply chain to develop Eco Friendly systems, the UK retail chain Marks & Spencer will open its first two 'eco-stores' next month. The stores, both in Scotland, are designed to be environmentally-friendly - using less energy and emitting 95% less carbon dioxide. It is just one of the measures M&S has taken under the company's much publicised GBP200m 'Plan A' green commitment. The stores, to be based in Galashiels and Pollok, use lobby areas to improve air tightness and minimise heat and energy loss, together with more efficient lighting, refrigeration and heating and ventilation systems. M&S has installed roof mounted sun pipes and wind catchers on the stores, and hot water will be generated through heat recovered from the refrigeration plant. Daylight sensors will be installed in the windows to ensure that the lights only come on when needed. In addition, the stores will have low volume dual flush toilets using harvested rainwater. The company's Pollok store, located at the Silverburn Retail Park just outside Glasgow, will be powered by fully renewable energy sourced from the first M&S wind turbine located in Aberdeenshire. Making their stores more 'eco-efficient' is a challenge that they are determined to tackle, especially if they are to meet the target of becoming carbon neutral by 2012.

The above comments demonstrate that there is a huge move on behalf of both the consumers of textile products as well as the producers towards more eco-friendly textiles. The above comments are just a few of those available demonstrating the huge impact that Eco Friendly Systems are having on both the retailing and manufacturing of textiles and apparel.

A strategy to encourage development of this nature needs to be formulated to ensure that Turkey harnesses it natural resources of organic textiles, hydro, wind and solar power to its advantage.

ANNEX 4 – ADDITIONAL AGRICULTURE TABLES & ANALYSIS

ANNEX 4 – ADDITIONAL AGRICULTURE TABLES & ANALYSIS

Cropping Pattern (HA)	GAZİANTEP	ADIYAMAN	KİLİS	ŞANLIURFA	DİYARBAKIR	MARDİN	BATMAN	ŞIRNAK	SİİRT	Total - GAP
Field Crops (Total) of which	196,113	244,418	50,535	958,406	642,762	315,544	117,162	97,090	56,004	2,678,034
Cereals	146,238	176,878	29,817	616,004	464,195	227,045	86,367	77,649	38,229	1,862,422
Pulses	29,680	38,431	17,630	138,416	114,272	77,190	18,004	15,659	16,196	465,478
Industrial Crops (Total) of which	18,430	25,215	1,716	191,619	60,357	10,889	12,730	3,718	1,402	326,076
Cotton	14,900	14,954	376	183,750	58,420	10,875	6,995	3,718	1,197	295,185
Oil Seeds	249	3,009	354	11,927	2,869	107	10	31	152	18,708
Tuber Crops	1,516	885	1,018	440	1,069	313	51	33	25	5,350
Vegetables	6,963	3,600	11,332	20,482	17,989	8,537	5,089	1,584	1,770	77,346
Fruits*	16,969,554	6,666,962	2,369,610	15,623,025	1,194,730	1,014,398	362,267	179,304	6,207,608	50,587,458
Agricultural Production (Tons)	GAZİANTEP	ADIYAMAN	KİLİS	ŞANLIURFA	DİYARBAKIR	MARDİN	BATMAN	ŞIRNAK	SİİRT	Total - GAP
Total	1,078,438	711,877	347,682	3,589,475	223,575	1,057,406	417,279	238,088	160,860	7,824,680
Field Crops (Total) of which	647,683	601,684	116,138	2,810,333	1,574,045	823,283	269,758	189,999	110,580	7,143,503
Cereals	463,642	470,772	79,881	1,853,759	1,181,339	676,603	209,495	159,648	73,157	5,168,296
Pulses	39,347	45,041	21,393	208,706	147,258	98,583	28,340	17,278	32,071	638,017
Industrial Crops (Total) of which	57,934	39,943	2,374	307,549	96,725	16,492	14,711	5,025	1,985	542,738
Cotton (lint)	22,800	20,418	385	279,264	92,980	16,388	8,627	5,025	1,771	447,658
Oil Seeds	36,395	36,837	740	434,694	132,790	29,079	16,767	7,720	2,952	697,974
Tuber Crops	50,365	3,091	11,750	5,625	15,933	2,526	445	328	415	90,478
Vegetables	201,378	75,179	127,779	646,733	526,143	101,944	125,452	32,230	35,513	1,872,351
Fruits	229,377	35,014	103,765	132,409	123,387	132,179	22,069	15,859	14,767	808,826
Value of Agriculture ('000 YTLira)	GAZİANTEP	ADIYAMAN	KİLİS	ŞANLIURFA	DİYARBAKIR	MARDİN	BATMAN	ŞIRNAK	SİİRT	Total - GAP
Total	710,836	348,407	215,085	1,732,668	1,048,146	489,905	234,034	100,430	104,587	4,984,098
Field Crops (Total) of which	279,525	274,796	61,218	1,318,647	721,086	349,734	145,008	76,078	52,011	3,278,103
Cereals	150,022	161,216	25,844	644,205	412,644	232,044	74,674	51,432	26,423	1,778,504
Pulses	44,265	41,533	21,477	143,665	126,959	73,889	26,935	15,965	21,037	515,725
Industrial Crops (Total) of which	65,436	65,437	7,301	516,093	169,772	42,378	43,155	8,462	4,234	922,268
Cotton	44,136	39,089	897	411,337	162,722	42,014	19,002	8,462	4,234	731,893
Oil Seeds	250	1,023	382	11,171	1,760	149	12	52	99	14,898
Tuber Crops	19,550	5,584	6,212	3,511	9,948	1,272	230	165	215	46,687
Vegetables	97,671	29,215	58,208	263,008	208,551	51,568	57,307	15,545	19,051	800,124
Fruits	333,639	44,395	95,658	151,013	118,508	88,601	31,717	8,806	33,524	905,861

Annex Table 4-1: Gap Cropping Pattern, Production and Value of Agriculture (2005)
*Source: TÜİK (Turkish Statistical Institute) "Agricultural Structure, Production, price and Value-2005" *Number of trees*

	1990				2000			
Branches of Manufacturing Industry	Number of Establishments	Annual Average Number of Workers	Output	Value Added	Number of Establishments	Annual Average Number of Workers	Output	Value Added
Manufacture of Food, Beverages and Tobacco	1894	188373	10278	3714	1709	174400	19640	6467
Textile, Wearing Apparel and Leather Industries	2333	296119	9301	3445	3392	388276	20474	6828
Manufacture of Wood and Wood Products, Including Furniture	315	20299	674	224	433	27054	1582	618
Manufacture of Paper and Paper Products, Printing and Publishing	341	37122	1777	790	395	33824	3776	1266
Manufacture of Chemicals and Chemical, Petroleum, Coal, Rubber and Plastic Products	822	101262	16371	6813	1021	108293	28221	11348
Manufacture of Non-Metalic Mineral Products, Except Products of Petroleum and Coal	688	77554	3244	1863	855	73812	5541	2837
Basic Metal Industries	385	84298	5850	1582	383	60733	9302	2344
Manufacture of Fabricated Metal Products, Machinery and Equipment	2003	217968	11158	4497	2804	257432	26140	9228
Other Manufacturing Industries	92	5201	135	69	125	8650	735	263
Total Manufacturing	**8871**	**1028196**	**58788**	**22976**	**11117**	**1130474**	**115411**	**41198**
Part of Food in Total Manufacturing	21.4%	18.3%	17.5%	16.2%	15.4%	15.4%	17.0%	15.7%

Annex Table 4.2 - Evolution of Manufacturing Industry in Turkey (1990-2000) Million € at Current Prices

Year	Provinces	Industry Groups	Sector	Number of Establishments	Annual Average Number of Persons Engaged	Annual Average Number of Employees	Annual Payment to Employees	Total Man-Hours Worked at the Year	Total Capacity of Power Equipment Installed at the End of the Year	Changes in Stock	Gross Additions to Fixed Assets During the Year
1990	TOTAL OF GAP	31	A	61	4,454	4,398	59,635	7,190,748	29,439	89,004	22,716
1995	TOTAL OF GAP	31	A	55	3,692	3,662	910,503	6,612,289	33,146	820,748	91,858
2000	TOTAL OF GAP	31	A	77	4,344	4,334	17,164,729	8,184,906	29,173	24,513,217	3,637,464
1990	TOTAL OF GAP	3	A	168	20,545	20,388	269,984	40,172,157	217,457	214,037	92,548
1995	TOTAL OF GAP	3	A	246	23,412	23,294	4,044,787	45,998,578	300,091	5,481,795	6,837,064
2000	TOTAL OF GAP	3	A	359	31,576	31,532	88,138,950	65,479,761	379,906	124,201,591	48,473,105
1990	3 as % of 31 GAP	31/3	A	36.3%	21.7%	21.6%	22.1%	17.9%	13.5%	41.6%	24.5%
1995	3 as % of 31 GAP	31/3	A	22.4%	15.8%	15.7%	22.5%	14.4%	11.0%	15.0%	1.3%
2000	3 as % of 31 GAP	31/3	A	21.4%	13.8%	13.7%	19.5%	12.5%	7.7%	19.7%	7.5%

1990-2000 Manufacturing Industry - Provinces and Gap
Notes:
3 - Manufacturing Industry as a Whole
A: Total, B: Public Sector, C : Private Sector
31 - Manufacture of Food, Beverages and Tobacco

ANNEX 5 – ARTICLES REFERENCED ON RENEWABLE ENERGY

Solel Signs Frame Agreement with Sacyr to Build Three 50MW Solar Thermal Power Plants for US$890 Million

Israeli-Spanish Partnership Enhances Supply of Clean Electricity in Europe; Solel's Involvement Estimated at US$500 million

MADRID, SPAIN and BEIT SHEMESH, ISRAEL – November 7, 2006 - Solel Solar Systems, Ltd., a world leader in solar thermal technology for solar systems and central power plants for clean electricity, announced today that an agreement has been signed with Sacyr-Vallehermoso, the large Spanish infrastructure concern, to build three solar power plants in Spain with a total capacity of 150MW and at an estimated overall value of US$890 million. Within the frame agreement, Solel's scope of supply for all three projects is estimated at around US$500 million.

For Solel, based in Israel, this marks the first turnkey power project to be delivered in Spain on a Build, Own and Operate (BOO) basis. The project also enables Solel to act as provider of solar energy in Europe for the first time.

The current price per kilowatt/hour for produced solar thermal electricity in Spanish electricity projects stands at 30 cents. The rate is subsidized by the Spanish Government for a period of 25 years in order to support & encourage the innovation and implementation of alternative domestic energy sources, environmentally friendly clean electricity and to support local electricity production.

"Solel is delighted to be working with a highly reputable infrastrcture company in Europe such as Sacyr," said Avi Brenmiller, CEO of Solel Solar Systems. "We believe that the combination of cutting-edge solar technology, know-how and solutions from Solel, combined with the local knowledge and construction expertise of Sacyr will have a significant positive impact on the installation and delivery of highly efficient, clean energy projects of this type, both in Spain and other countries. We hope to successfully replicate this BOO model in other markets in the coming years."

"Sacyr is excited about working with Solel to enter the field of solar thermal energy projects," said Emilio López, CEO of Valoriza Energía, owned by Sacyr. "We believe that our extensive capabilities and successful infrastructure installations will enable Sacyr to implement the energy plants in Spain on time and inside budget, in order to begin generating clean energy for the Spanish people."

Solel CEO Mr. Avi Brenmiller will be presenting and is also co-sponsoring the Prime Minister of Israel's Conference on Renewable and Alternative Energy, taking place at the David Intercontinental Tel Aviv Hotel, November 8, 2006.

SAN FRANCISCO, CA (July 25, 2007) -- Pacific Gas and Electric Company announced today that it has entered into a landmark renewable energy agreement with Solel-MSP-1 to purchase renewable energy from the Mojave Solar Park, to be constructed in California's Mojave Desert.

The project will deliver 553 megawatts of solar power, the equivalent of powering 400,000 homes, to PG&E's customers in northern and central California. The Mojave Solar Park project is now the world's largest single solar commitment.

"The solar thermal project announced today is another major milestone in realizing our goal to supply 20 percent of our customers' energy needs with clean renewable energy," said Fong Wan, vice president of Energy Procurement, PG&E. "Through the agreement with Solel, we can harness the sun's climate-friendly power to provide our customers with reliable and costeffective energy on an unprecedented scale."

The plant utilizes Solel's patented and commercially-proven solar thermal parabolic trough technology. Over the past 20 years, the technology has powered nine operating solar power plants in the Mojave Desert and is currently generating 354 MW of annual electricity. When fully operational in 2011, the Mojave Solar Park plant will cover up to 6,000 acres, or nine square miles in the Mojave Desert. Solel is working closely with URS Corporation in the development of the Mojave Solar Park, which when commercial will rely on 1.2 million mirrors and 317 miles of vacuum tubing to capture the desert sun's heat.

"We are thrilled to bring 553 MW of clean energy to California," said Avi Brenmiller, chief executive officer of Solel Solar Systems. "Our proven solar technology means Solel can economically turn the energy of the warm California sun into clean power for the state's homes and businesses."

Solel Solar Systems of Israel, the world's largest solar thermal company, is the parent company of Solel-MSP-1 LLC. Solel's leading technology utilizes parabolic mirrors to concentrate solar energy onto its patented UVAC 2008 solar thermal receivers. The receivers contain a fluid that is heated and circulated, and the heat is released to generate steam. The steam powers a turbine to produce electricity, which can be delivered to a utility's electric grid. The electricity generated by Mojave Solar Park will use some of the transmission infrastructure originally built for the now dormant coal-fired Mojave Generation Station to deliver the power to PG&E's customers.

The agreement filed today with the California Public Utilities Commission is part of PG&E's broader renewable energy portfolio. PG&E currently supplies 12 percent of its energy from qualifying renewable sources under California's Renewable Portfolio Standard (RPS) program. With more than 50 percent of the energy PG&E delivers to its customers coming from generating sources that emit no carbon dioxide, PG&E provides among the cleanest energy in the nation.

PG&E is aggressively adding renewable electric power resources to its supply and is on target to exceed 20 percent under contract or delivered by 2010. With the Solel-MSP-1 announcement, and other recently signed renewable agreements, PG&E now has contracts to provide18 percent of its future energy supply from renewable sources. PG&E has recently signed several other renewable energy agreements including an 85 MW wind project with PPM Energy, 7 MW of utility-scale solar projects with Cleantech America and GreenVolts, and a 25.5 MW contract with Western GeoPower, Inc. for a new geothermal energy facility in Sonoma County, California. PG&E is seeking regulatory approval of these five renewable energy contracts. California's RPS Program requires each utility to increase its procurement of eligible renewable generating resources by one percent of load per year to achieve a twenty percent renewables goal by 2010. The RPS Program was passed by the Legislature and is managed by California's Public Utilities Commission and Energy Commission.

Solel Solar Systems also provides key technology components for new solar thermal plants currently under construction in the U.S. and in Spain. In addition, Solel and Sacyr- Vallehermoso are jointly building solar power plants in Spain and Solel recently completed the upgrading of more than 100 MW of solar facilities in California. Solel's headquarters, manufacturing plant, research and development center are in Beit Shemesh, Israel with its U.S. development office in Los Angeles, California. For more information about Solel, please visit the website at www.Solel.com.

300-900 MW Solar Project Planned for Southern California
Phoenix, Arizona [RenewableEnergyAccess.com]

Stirling Energy Systems' (SES) has announced a 300-900 MW solar power facility for San Diego Gas & Electric (SDG&E) in southern California. This is the second major solar project for SES in as many months, and when complete the project will provide 30 times more solar power than all the current solar capacity in the entire San Diego region.

Coming on the heels of last month's new contract announcement (see related story link below: "World's Largest Solar Project Unveiled") by Stirling for a 20-year power-purchase agreement with Southern California Edison for a 500 MW solar generating station, today's announcement is another substantial step forward for the SES solar technology in the commercial electricity generation field.

In this latest deal, SES and SDG&E have agreed to a 20-year contract to purchase all the output from a 300 MW solar power plant, which will consist of 12,000 Stirling solar dishes on approximately three square miles in the Imperial Valley of Southern California. SDG&E has options on two future phases that could add up to 600 MW of additional solar energy capacity to SDG&E's resource mix. This contract will still have to be approved by the California Public Utilities Commission.

"This large-scale application of SES technology will provide clean, renewable solar energy to SDG&E customers," said Bruce Osborn, CEO of SES. "We believe this is a truly historic moment for the solar energy industry, and we are pleased to be teaming with a progressive and innovative company like SDG&E." Its technology is said to be nearly twice as efficient as any alternative solar technology.

The entire energy conversion process in SES Stirling solar dish technology takes place within a canister the size of an oil barrel; it does not require water and the engine is emission-free. It uses a mirror array to focus the sun's rays on the receiver end of a Stirling engine. The internal side of the receiver heats hydrogen gas, which expands. The pressure created by the expanding gas drives a piston, crank shaft, and a drive shaft assembly, which then turns a small electricity generator.

"SDG&E has pledged to supply 20 percent of its customers' energy needs from renewable resources like solar and wind by 2010," said Edwin A. Guiles, chairman and chief executive officer of SDG&E. "With this purchase, SDG&E continues to demonstrate its commitment to bring more renewable energy to its customers."

The previous major contract for SES was in early August, when the company announced a contract with Southern California Edison for a 4,500-acre solar generating station in Southern California, calling for development of a 500 MW solar project in the Mojave Desert northeast of Los Angeles, with an option to expand to 850 MW. The first 500 MW phase, consisting of a 20,000-dish array, will be constructed over a four-year period.