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<table>
<thead>
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<th>Abbreviation</th>
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<tr>
<td>ÇATAK</td>
<td>Protection of Agricultural Areas for Environment</td>
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<tr>
<td>CORINE</td>
<td>Coordination of information on the environment</td>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EU</td>
<td>European Union</td>
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<td>GDCDE</td>
<td>General Directorate of Combating Desertification and Erosion</td>
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<td>GDF</td>
<td>General Directorate of Forestry</td>
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<td>GEF</td>
<td>Global Environment Fund</td>
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<tr>
<td>İŞKUR</td>
<td>Turkish Employment Agency – Turkish Acronym</td>
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<tr>
<td>KÖYDES</td>
<td>Supporting Rural Infrastructure – Turkish acronym</td>
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<tr>
<td>MCT</td>
<td>Ministry of Culture and Tourism</td>
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<td>MD</td>
<td>Ministry of Development</td>
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<td>ME</td>
<td>Ministry of Education</td>
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<td>MENR</td>
<td>Ministry of Energy and Natural Resources</td>
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<tr>
<td>MEU</td>
<td>Ministry of Environment and Urbanization</td>
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<tr>
<td>MFAL</td>
<td>Ministry of Food, Agriculture and Livestock</td>
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<td>MFWA</td>
<td>Ministry of Forestry and Water Affairs</td>
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<td>MH</td>
<td>Ministry of Health</td>
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<tr>
<td>MSIT</td>
<td>Ministry of Science, Industry and Technology</td>
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<tr>
<td>MTMAC</td>
<td>Ministry of Transport, Maritime Affairs and Communication</td>
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<td>NAPCD</td>
<td>National Action Plan of Combating Desertification</td>
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<td>ORKÖY</td>
<td>Forest Countryside – Turkish acronym</td>
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<td>SHW</td>
<td>State Hydraulic Works</td>
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<td>TARBİL</td>
<td>Agricultural Information System – Turkish acronym</td>
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<td>TEMA</td>
<td>The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats</td>
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<tr>
<td>TBMM</td>
<td>Turkish Grand National Assembly</td>
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<td>TÜBİTAK</td>
<td>Turkish Scientific and Technical Research Council – Turkish acronym</td>
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<tr>
<td>UNCCD</td>
<td>United Nations Convention to Combatting Desertification</td>
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<td>UNEP</td>
<td>United Nations Environmental Program</td>
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<td>UNDP</td>
<td>United Nations Development Program</td>
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“Turkish National Action Plan of Combating Desertification” was prepared by Republic of Turkey Ministry of Forestry and Water Affairs (MFWA) in 2005. Action Plan covers the period of 2005-2013 consisting 63 actions in the context of combating desertification and land degradation. The main aim of the actions is to evaluate the reasons of the desertification and land degradation in Turkey and so to determine preventing and combating activities and also create synergy among responsible organizations.

All actions were evaluated in the final report under light of the works done directed to the foreseen actions and realization status along with 10th Development Plan of Turkey.

Main scales in interpreting 63 actions in total defined in the framework of combating desertification in assessment report are given below.

a. Action harmonization with UNCCD
b. Action relation with Desertification, Land Degradation problems
c. Action’s strength(s)
d. Action’s Weakness(es)
2.1 AIM AND METHOD

Evaluation process of “National Action Plan of Combating Desertification (NAPCD) 2005-2013” was carried out primarily by evaluating the aims and targets of UNCCD’s COP decision number 3 and also adaptation capability to other countries’ action plans. In addition to these, the approaches and policies of FAO, European Union and Turkish National Programs have been also taken into account.

In the evaluation process, Global Environment Glance Approach that was brought forward by UNEP in 23 October 2014, Berlin (Germany) which intensified on poverty reduction, food security, agriculture, access to water, pastureland management, sustainable management of natural resources and renewable resources, were used as a data source in the reporting (http://www.unep.org/geo/).

The content and completion level of each action and also proposals, comments were supported with figures.
2.2 2005 ACTION PLAN ASSESSMENT

The contents, aims, outcomes, short views and finalization process of each action and short views and comments are given in the graph at the next chapter. In the review process FAO-UNEP-UNDP (2008), UNCCD (2007, 2012), FAO (2010) and FAO (2013)’s comments and views were taken into account.

Application of these action plans needs broad knowledge as mentioned in UNCCD 10-Year of Strategy Plan. In addition to this, desertification/land degradation and drought issues are interrelated directly and the actions are necessary to remove their negative effects. Putting forward the actions under the titles below, which will make impact from local to global, will provide integrity of national and international actions (http://www.unccd.int/en/programmes/pages/home.aspx).

Science: In the convention, scientific collaboration and supporting of impacts’ monitoring about subjects taken by common decision.

**Reporting, Scrutinizing and Evaluation:** In the frame of UNCCD, scrutinizing of performances, evaluating of application systems (PRAIS) and reporting of best practices.

**Increasing of the Awareness:** By influencing International, national and local processes to have them give importance to desertification/land degradation and drought issues provided.

**Thematic Priorities:** To take action in and define the relationships between desertification and land degradation, drought and biodiversity, climate change, food security, forests, gender, water.

**Synergies between Rio Conventions:** Joint activities in cooperation with 3 sister conventions which are Biodiversity-Climate Change-Desertification. Special importance was given to appropriateness of Rio+20 Final Declaration.

**Capacity Building:** Digital tools and knowledge were used for capacity building.

FAO (2013) approaches and proposals draws a frame for countries to assess their capacity on land degradation, drought and adaptation ways and means for desertification as well as to improve agricultural crops with sustainable land management, decrease greenhouse gas emissions, decrease fragility of agricultural based communities against climate change and share information and data. This frame was considered in the evaluation process of the actions.

In addition to FAO 2010 and 2013; among the Millennium Development Goals, eradication of extreme poverty and hunger and ensuring environmental sustainability were considered in the context of desertification and land degradation and also adaptation.

In conclusion, while evaluating Turkish National Action Plan of Combating Desertification (2005-2013) on the bases of Agriculture and Forestry, the harmony with the titles mentioned above along with 10th Development Plan (2014-2018)’s referring level to the desertification and land degradation with international integrity were all scrutinized (Figure1).

**Figure 1. Baseline sources for the evaluation of Turkish National Action Plan of Combating Desertification**
In following section actions were reviewed based on UNCDD’s strategic and operational objectives given below that set the basic guide for UNCCD partners and stakeholders activities from 2008 to 2018.

**Strategic objective 1:** To improve the living conditions of affected populations

**Strategic objective 2:** To improve the condition of affected ecosystems

**Strategic objective 3:** To generate global benefits through effective implementation of the UNCCD

**Strategic objective 4:** To mobilize resources to support implementation of the Convention through building effective partnerships between national and international actors

**Operational objective 1:** Advocacy, awareness raising and education

**Operational objective 2:** Policy framework

**Operational objective 3:** Science, technology and knowledge

**Operational objective 4:** Capacity-building

**Operational objective 5:** Financing and technology transfer

In this chapter, the actions related to desertification, land degradation and combating drought and also related to neutralizing both negative effects of climate change and biodiversity, were evaluated from the point of completion, cooperation and national and international compatibilities.
2.3 ACTIONS ASSESSMENTS RESULTS

National Action Plan of Combating Desertification in Turkey covers year of 2005-2013 and consists of 63 actions. Many actions were started in short term as a law, regulation and project. The fundamental of actions is coordination between organizations. This operation is carried out by GDCDE. Some actions were started and concluded in 2005. The actions had been prepared to mitigate and stop desertification. These actions are in conformity with UNCCD’s strategic and operational objectives. Therefore, all evaluations were made by taking into account UNCCD's objectives.

**Action 1: Integration Of Desertification Combating Programs to the Country’s Development Plans**

In the scope of this action, desertification issue was first taken into 10-year Development plan. Desertification issue was mentioned under the title of climate change, soil and water resources management in the 10-year Development Plan. In addition, Combating Desertification National Program was prepared in 2005 by the coordination of Ministry of Environment and Forest (now Ministry of Forest and Water Affairs, MFWA) and published as a circular on Official Gazette on 9 March 2005 and numbered 25750. In this context, the budget support of 2.417.000 TL was provided in the 2013 investment program. From aimed point, the action reached the target during 2005-2013. In addition to this, desertification processes should be taken into account under the umbrella of environmental protection issue and agricultural incentives. Because, desertification and land degradation are especially risk factors for the crops that consumes water excessively and needs cultivation. In this respect, Ministry of Food, Agriculture and Livestock (MFAL) must also consider these criteria in the supports.

The action is in conformity with UNCCD’s strategic and operational objectives.

**Action 2: Adaptation to EU Norms in the Field of Environmental Protection, Agriculture, Forestry and Pasture**

In the direction of the action's targets, improvements in the Murat and Çoruh River Watersheds and also Anatolia Water Basins during 2006-2012 were realized by MFWA. The project titled as Watershed Monitoring and Evaluation was carried out
in collaboration with TÜBİTAK. In the context of this action, some directives such as Water Frame Directive, Directive of Protection of groundwater towards pollution and degradation, Directive of Evaluation and Management of Flood Risks and also Nitrate Directive were realized into the harmony with European Environmental Agency. During the period of 2014-2018 of Action Plan, it is noticed that European Environmental Agency Standards will be used by Ministry of Forestry and Water Affairs. These activities are compatible with the aims of the action. Although the topic is related to environment and agriculture, the activities of this action to be carried out by MFAL and also Ministry of Environment and Urbanization (MEU) and other activities by the other organizations were not reflected sufficiently in the 10-year Development Plan and 2014-2018 Action Plan. However, the Project of Pasture Information System’s Improvement (MERBIS) developed by MFAL must be mentioned in the 2014-2018 Action Plan.

The action is in conformity with UNCCD’s strategic objectives of population and environment and operational objective of policy making.

**Action 3: Enhancing and Expansion of Rural Development Policies**

In the context of action plan, development projects were supported by IPARD at the country level. National Development Strategy was taken into force. The activities were carried out by the Ministry of Development, MFAL and MFWA. The biggest criticisms mentioned by the many stakeholders about Rural Development Projects are being incomprehensible and detailed project application process. In addition, project supports cannot be enough for the people who have no sufficient economic power. So, small scale enterprises that will be able to be effective in combating desertification must be also supported during the process of project call and budget sharing. Also financing should be based on gender neutral.

The action is in conformity with UNCCD’s strategic objectives of population and environment, and operational objectives of capacity building and finance.

**Action 4: Development of Programs and Policies on Natural Resources Management**

Organic farming practices to affect the soil organic matter in positive way are supported by the MFAL. Tangible incentives are given for the practices as minimum
ploughing, land rehabilitation and low irrigated crops. The projects and supports directed to forest villagers were realized by MFWA. MENR have determined targets about the alternative energy sources in 10-year Development Plan. Still, desertification and land degradation have not been sufficiently emphasized in the permission process of the mine. In the financial incentives given by MD, priority to combating desertification and land degradation will increase achievement of the plans related to combating desertification. Action was not fully satisfied during 2005-2013 periods.

The action is in conformity with UNCCD’s operational objectives of capacity building and also policy making.

**Action 5: Development of Policies for the Sustainable Use and Conservation of Wetlands, Highlands, Uplands and Coastal Areas**

The Wetlands Protection Regulation was came into force in 2005 by Ministry of Forestry and Water Affairs and revised in 2010. The MTMAC has provided the measures against oil pollution. Although it was determined in 10th Development Plan, MFAL had not made any protective definition except pasture events in highlands and mountains. In the same way, monitoring of the agronomic activities nearby directed wetlands protection is questionable. The changing in the Wetlands Protection Regulation revised in 2010 has indicated that rivers were main arteries but also were put outside of the protection. In addition, according to 10th Development Plan, it was seen that in spite of master plan of coastline buildings was completed, but also this master plan could have not been came into force as a usable guide for the stakeholders. Again, in the 10th Development Plan any measure to be taken by the MEU was not seen in order to protect the wetlands and the coastlines against urbanization pressure, because Turkey has surrounded by seas from three sides and also has many rivers. Generally Turkey is known as a mountainous country, but the settlements are dispersed and at random in the uplands and mountainous areas in Turkey. These measures must be taken by the relevant Ministries, because, agricultural irrigation is a critical issue for hydrological cycle of Turkey. So, misuse of the uplands and mountains are big threat from the point of water security in Turkey.

The action is in conformity with UNCCD’s strategic objective of environment, and operational objective of policy making.
Action 6: Realization of the Strategies, Precautions and Policies of the Turkish NESAP (in-situ) Preservation of the Turkish Genetic Diversity

With the harmony of this action, MFAL have carried out many works about gene resources in Turkey. As a total, 86,619 seed samples from 3,390 species had been taken into gene banks. Ministry of Food, Agriculture and Livestock have developed international cooperation in conjunction with EU such as Europe Gene Banks Integration Systems (AEGIS), Europe Surveillance Catalogue (EURISCO), International Institute of Plant Genetic Resources (BIOVERSITY=IPGRI), Food and Agriculture Organization (FAO), and Program of Europe Plant Genetic Resources. But, as indicated in the 10th Development Plan, genetic resources (agricultural and medicinal/aromatic) that have vast economic potential were not valued and processed adequately due to financial lacks and absences in the protection program. In this respect, more projects relating to plant genetic resources must be supported by TÜBİTAK. If the universities in their neighborhood would give much more importance to protect the local species, this action will go in better way to reach the targets. MFAL and MFWA must give incentives and supports to the local farmers and villagers to cultivate and to process as well for the value added crops in order to generate income. The action objective although not fulfilled during 2005-2013, the 10th Development Plan put emphasis on the subject matter which is a promising step.

The action is in conformity with UNCCD’s strategic objectives of global benefit and environment, and operational objective of policy making.

Action 7: Development of Marine and Lake Ecosystem Management Policies

The MTMAC has conducted some works to control harmful wastes and oil leaks. Deep Sea Discharging Monitoring Circular (2009/16) had been come into force by MEU. The regulation for the 21 pieces of wetlands has been prepared by MFWA. Genetic resource trial has been carried out as a sample work in Ilısu Dam. In addition to this, it was seen that the urbanization based on tourism investments could not be controlled sufficiently in sea and lake ecosystems. The details (biodiversity) of sea and lake ecosystems had not been studied sufficiently either. The agricultural activities in the sea and lake coasts must be controlled by MFAL and MFWA. Pollution due to especially excessive agrochemical in Malazgirt (Muş) and Euphrates River puts
forward the urgent obligation. Action objective needs more financial support as Turkey is rich in wetland and marine ecosystem.

The action is in conformity with UNCCD’s strategic objectives of global benefit and environment, and operational objective of policy making.

**Action 8: Development of Policies Towards Solid Waste Management Which Result in Environmental Problems**

The aim of this action met with activities mentioned in Action 7. Deep Sea Discharging Monitoring Circular (2009/16) had been come into force by MEU. Solid waste refining facilities have increased and serviced during years of 2005-2013. In this context, from the point of solid waste in the 10th Development Plan, the rate of municipality population to total population who takes advantages of regular storage were 34% in 2006, and 60% in 2012. The number of regular storage facilities in operating was 69 in 2012. These facilities provide services to people of 44.5 million in 903 municipalities. However, the agro advisers of the MFAL must make extension for the farmers in order to prevent the harmful effects of agrochemicals packages left around casually. The solid waste discharged to environment by industry and urban areas are still not well calculated. Thus, the urgent need is to determine solid waste production of Turkey for taking effective measures.

The action is in conformity with UNCCD’s strategic objective of environment, and operational objective of policy making.

**Action 9: Increasing the Efficiency of National Coordination Unit Established for the Coordination of Combating Desertification**

National Coordination Unit organized many meetings between 2005 and 2013 and this means that National Coordination Unit works and operates in positive way. In addition, unit participated actively to the meetings of desertification, drought and land degradation and played a crucial role to announce the subject to the concerned people and organizations. Participating to the meetings held by National Coordination Unit of the public organizations and institutions and also NGO’S which influenced by way of direct or indirect had been proceeded. However, eastern and southeastern part of the country is not well informed about measures undertaken by national coordination Unit. Thus more activity is needed in various parts of the country to create awareness among society.
The action is in conformity with UNCCD's operational objectives of public awareness and policy making.

**Action 10: Expansion And Supporting Farmer’s Organizations Such As Agricultural Cooperatives Etc.**

MFAL took effective steps and provided established of many unions. Especially irrigation unions’ law is a milestone. However, the wide spreading of these constitutions at the country level has been criticized. In addition, these constitutions and unions are faced with bottlenecks at the beginning stage of the establishment due to compulsory expenses are high and not paid by the small scale producer, so the numbers of the constitutions and unions are few. In addition to these, supplementary works that should be undertaken MFAL for the qualified education of the above mentioned organizations. Because, insufficient knowledge in the irrigation unions and in some organizations responsible on water management such as municipalities lead misuse of the natural resources. On the other hand, deciding of the regulations and laws related establishing of the unions or cooperatives by women will be useful and positive to support local production which may decrease misuse of natural resources due to income generation by women organizations.

The action is in conformity with UNCCD's strategic objectives of population, environment and source generation, and operational objectives of policy making, incentives, awareness and capacity building.

**Action 11: Taking Necessary Precautions in Order to Prevent Environmental Problems Originates From the Use of Advance Technology in Agriculture**

Advanced technology usage in agriculture has not been adequately described in this action. Because, advanced technology can possibly mean excess use dripping irrigation and deep groundwater abstraction. Although many efforts, works and promotions have been made about advanced technology, but in the scope of this action there is no any clear regulation and law into the force. Although advanced technology usage is mentioned in 10th Development Plan, but also the description of these technologies is not being found in the plan. So, ecofriendly advanced technologies and traditional technologies must be described by MFAL. Moreover the usages must be monitored by the agriculture adviser network in the field. This
action must not be confused with organic and ecological agriculture approaches.

The action is in conformity with UNCCD’s strategic objective of environment, and operational objectives of science and technology.

**Action 12: Increasing the Participation of Those Who Will Benefit From the Development Agricultural Infrastructure Services**

KÖYDES Project had given support to the important infrastructures in rural areas. In the context of KÖYDES Project, many road constructions were completed. Supportive Institution of Agriculture and Rural Development, Development Agency, Province Distinctive Administrations and Service Provider Union to Villages had been activated. But, this action will gain big force when the unions are established as mentioned in the item 10 of National Action Plan of Combating Desertification. In this respect, action targets will be able to be realized by decreasing of the expenses which get difficult to set up union in law of Agricultural Producer Unions. Otherwise, the farmers with low income will make pressure on natural resources and they will cause the desertification at the end.

The action is in conformity with UNCCD’s strategic objective of finance generation, and operational objectives of support, public awareness and capacity building.

**Action 13: Forming Policies which are Supportive to Rural Industry and Develop and Support Agriculture-Based Industries**

Research and Development Projects have been supported by MSIT. Many projects in Turkey have been initiated by MFAL. Especially, the investments in southeast and east Anatolia are considered as positive steps, although not mentioned sufficiently in 2005-2013 Action Plan. In addition, a new forest management regulation in forest villages was taken into force by MFWA; it is an important step and progress too. Though, the industrialists who are volunteers to invest in rural regions bring forward that incentives for the various regions must be same for the rural regions as well. In this context, MD must take into account this foresight. Rural development matter has a special importance in the 10th Development Plan and it is believed that the action will generate effective results.

The action is in conformity with UNCCD’s strategic objectives of population and finance generation, and operational objectives of policy and capacity building.
**Action 14: Passing the ‘Land Use Law’ and ‘Soil Protection Law’ From the Parliament**

Soil and Land Use Law, dated on 2005 and numbered 5403, was almost out of force and soil conservation boards is not holding regular meetings in many provinces of Turkey. These are the biggest critiques of the action plan. Although media promotions about prohibiting of construction in farmlands was made by MFAL, this subject must be dwelled upon seriously and scientific based because of TEMA sued many trials. The necessity of changing of the Soil Conservation Board’s member structure was expressed many times. In this context, in order to renew the law, the action must be scrutinized and drawbacks must be completed. Emphasizing importance of this topic was determined under the title of Soil Water Resources in 10th Development Plan. In addition, in 2014 positive steps taken were observed to prevent land fragmentation.

The action is in conformity with UNCCD’s strategic objective of environment, and operational objective of policy.

**Action 15: Elimination of Legal Measures Which Causes Decreases in Forest Areas and Replacing Them with New Legal Measures for Ensuring Sustainability of Forests**

Some laws were put into force by MFWA. Especially, Afforestation and Erosion Control Campaign Action Plan covers 2008-2012 was put into force by Prime Minister’s Office Circular, this progress provided possibility for many targeted realizations of the this action. Forest area of Turkey was 20.2 million hectares in 1972 and was 21.2 million hectares in 2004, and finally rose to 21.9 million hectares in 2014. Over the last four decades (1972-2014) forest area increased 8.4%, total growing stock (volume) increased 60% and annual volume increment increased 50%. These circumstances express significant improvement from viewpoint of these parameters. In addition, it is announced in 10th Development Plan that a special importance will be given forest areas to increase. On the other hand, proposals made by nongovernmental organizations (NGO) must be taken into consideration to remove the contradictions and gaps in article 2/B of Forest Law. Thus, the objective of the action is well fulfilled.

The action is in conformity with UNCCD’s strategic objective of environment, and operational objective of policy.
**Action 16: Development of Legal Measures Which Sustain Integrity and Prohibit the Fragmentation of Arable Lands**

This action is one of the most important and successful steps that MFAL has put into force. The land consolidation projects fulfilled action objectives. Because land fragmentation was generating negative results, so this step appears be able to solve land fragmentation matter. The most supporting action to the objective of the action was the law amendment of Soil Protection and Land Use Law promulgated on 15th of May 2014 Official Gazette no: S29001 that limited fragmentation of inherited arable lands. While land consolidation, not only field sizes but if inner attributes of the field are taken into account, better results will be achieved in terms of increasing soil quality parameters. Land consolidation was carried out more than 2 million hectares during years of 2003-2012. In addition, local people supported this action and they gave written support declaration for implementation. So this action can be accepted as a sample from these viewpoints. Implementing synchronous of consolidation and irrigation investments will make positive effect on water resources.

The action is in conformity with UNCCD’s strategic objectives of population and environment, and operational objective of policy.

**Action 17: Passing the ‘Land Consolidation Law’ From Parliament**

To prevent fragmentation of farmlands, laws of Soil Conservation, Land Use and also Civil Code were changed in 19.07.2005. So, consolidation of farmlands was put into force with the harmony of this action.

The action is in conformity with UNCCD’s strategic objectives of population and environment, and operational objective of policy.

**Action 18: According To Agricultural Producer Unions’ Law Providing Technical Support for the Organization of Agricultural Producers**

In the scope of action, technical support is provided in the frame of Regulation about Agricultural Extension and Advisory Services’ Arrangement, Agriculture Law numbered 5488, Written Decree in Force of Law numbered 441 about Organization and Missions of MFAL. However, special supports are required organization of women producer unions in forests and rural areas. By establishing woman organizations, distinct and processed products with high value added (the products
except processed forest products and processed products in form of family farming) will be produced in forest and rural, so it is expected to decrease the pressure on natural resources. Due to this action shows similarity with Action 10 takes part in NAPCD, similar opinions are valid.

The action is in conformity with UNCCD's strategic objectives of population, environment and finance creating, and operational objectives of incentive, policy, public awareness, capacity building.

**Action 19: Updating Laws, By-Laws and Regulations Relating To Conservation and Management of Natural Resources**

The laws related with management of national parks were enacted and also progressed by MFWA. General Directorate of Nature Conservation and National Parks in MFWA makes annual works to draw the border of the hunting areas by considering decisions made by Governmental Hunting Commission; these areas are like State Hunting Ground, General Hunting Ground, Closed hunting Ground, Private Hunting Ground, Wildlife Development Ground, and Pilot Hunting Ground. The importance of this subject was mentioned under the title of climate change and environment in 10th Development Plan. However, MENR must be more sensitive about the mine areas. Because, marble quarries are operated in limestone areas (Antalya, Burdur, Adana, Adıyaman, Isparta, Elazığ) without any care on hydrological and geological balances. This leads social conflicts between local people and investors. Laws on misuse of natural resources particularly soil and water must be very seriously implemented, because any inattention triggers desertification.

The action is in conformity with UNCCD’s strategic and operational objectives.

**Action 20: Passing the ‘Water Law’ From Parliament**

Although Water Institute was established in order to monitor the results of the law, the investigation are being made by MFWA has not been concluded yet. This is the most important barrier to improve the water resources. The law has been already sent to universities, public institutions and non-governmental organizations to get their opinions, but there is no result so far. So, objective of the action did not sufficiently met during 2005-2013.

The action is in conformity with UNCCD’s strategic objective of environment, and operational objective of policy.
**Action 21:** Amending the ‘Mining Law’ To Ensure That Exploiters of All Type of Mines Shall Prepare and Implement Exploited Land Rehabilitation Programs after the Exploitation of a Mine

In the context of this action, new arrangements for mining in sensitive areas were made by MFWA in articles 16 and 17 of Forest Law. But, in 10th Development Plan there is an expression related with more searching and production for especially marble. In this case, additional pressure will increase to get new mining license in limestone areas, as at the present time there are about 400 mine quarries, so rehabilitation works must be monitored in details. In this context, Mine Areas’ Rehabilitation Action Plan covers 2014-2018 and prepared by GDCDE must be applied effectively which is so crucial for mitigating desertification processes. This action objective is not fulfilled during 2005-2013.

The action is in conformity with UNCCD’s strategic objective of environment, and operational objective of policy.

**Action 22:** Amending Organic Laws of the State Hydraulic Works, MARA and MEF to Enable Them to Work in an Integrated Manner at the Watershed Basin

After the action plan preparation period, State Water Affairs was connected to Ministry of Forestry and Water Affairs in 2007. In this respect, the works made by MFAL and MFWA were examined watershed based. After 2005 works directed to watershed made by these two Ministries has increased at the high level. The Bulletin prepared by MFWA numbered 29361 regarding Establishing of Watershed Management Boards, Tasks, Working Method and Principles was published in Official Gazette on 20 May 2015. In this context, Chairmanship of Watershed Management Department was established under the umbrella of MFWA. Moreover within MFWA Water Management General Directorate was established. MFAL and MFWA prepared Agricultural Basin and National Watershed Strategies. The Strategy’s main focus was protection and sustainable management of natural resources which is essential for achieving Action 22’s objective. Establishing Department of Climate Change and Watershed Management under MFAL is important indicator for the action plan’s implementation. The activities in east Anatolia carried out by the department connected to MFAL were satisfied. Watershed Management was also mentioned under the title of Soil Water Resources in 10th Development Plan. It is accepted that watershed approach is one of the indicators of state policy.
The action is in conformity with UNCCD’s strategic objectives of environment and finance generation, and operational objectives of policy and awareness.

**Action 23: Development of a Plan Which Aims At Reduction of Greenhouse Gas Emissions**

In the context of this action, Ministry of Forestry and Water Affairs and Ministry of Food, Agriculture and Livestock have initiated organization courses and national projects about carbon management. Carbon management issues were entered into agenda of many Ministries and this can be scrutinized as a great step. However, evident budget has not been realized yet and few studies conducted on carbon markets in Turkey. The realizing of this subject as soon as possible will provide Turkey to take the role in the global carbon market that will be getting more importance. It is seen that Ministry of Forestry and Water Affairs is continuing to develop reasonable policies with RİO 20+ approaches. In 10th development Plan, it is reported that carbon emissions during 2007-2012 in Turkey is in a decreasing trend. Also, the sulfur dioxide emission was decreased by 50 % and particle matter decreased 36%. However, Turkish Statistics Institute reported an opposite data which pointed out an increase in CO2 per capita. This disagreement or misunderstanding between governmental institutions revealed lack of dialogue. So, this manifests the need of fulfillment of the objective action 56 of NAPCD. Thus, to decrease greenhouse emissions, lands low emission projects must be supported by MFAL in agricultural production. Moreover, low emission projects must be supported in urban and industrial areas by MEU and MD.

The action is in conformity with UNCCD’s strategic objectives of population and environment, and operational objectives of policy, science & technology and capacity building.

**Action 24: Taking Awareness Raising and Deterrent Measures on Environmental Pollution and Expanding These Measures**

Environment protection is among of main titles in 10th Development Plan. Additionally, in the context of policy making, extending and taking measures about eliminating all kinds of wastes cause environmental pollution, MEU aimed purifying 30 % of water used for irrigation by 2023 and also aimed 85 % of the municipalities will have solid waste storage facility during 2014-2017. Meanwhile, individual consciousness raising activities are at insufficient level. Except educational
organizations, sufficient informing about this subject is not being realized in visual media. Another problem is also the difficulties met while coming into force the laws. These laws are not being put into practice in small settlement units. To monitor this subject in large settlement units there are device and staff difficulties as well. Food and water security are threatened by people who throw the wastes in forest recreation ground and agricultural chemical packages’ wastes in farmlands (Figure 2). Collecting of these agricultural chemical used packages by way of depositor’s repayment will be able to be preventing this negative progress.

The action is in conformity with UNCCD’s strategic objectives of population and environment, and operational objectives of policy and capacity building.

Figure 2. Waste pesticide packages next to irrigation channel in Çukurova Plain (S Turkey) (August 2014)

Action 25: Government Support to Environmentally Sound Measures and Practices of Private Sector and Farmers

With the harmony of NAPCD, Ministry of Food, Agriculture and Livestock has initiated ÇATAK Project (Protection of Farmlands Program for the Environment) and this Project has been already going on. In addition, for the good agricultural practices MFAL gives supplementary support. Water save was achieved at the
considerable level in Turkey by donations and supports given to dripping irrigation. Fertilizer analysis obligation was put forward. In 10th Development Plan, although ecofriendly practices such as renewable energy, eco-productivity, clean production Technologies would be supported, and developing of new products and trade marking would be encouraged, lawful base of these is not clear. For instance, there is no any incentive for low carbon dioxide emission businesses and vehicles. It is hoped that MD and MEU must put into force the laws which encourage the low emission investments.

The action is in conformity with UNCCD’s strategic objectives of population, environment, and finance generation, and operational objectives of policy, science & technology and capacity building.

**Action 26: Facilitating Activities of Civil Society Organizations Activating in the Field of Environmental Issues**

The goal of the action overlaps completely with the approach of claiming combating desertification by civil society; this approach forms the base of UNCCD. In this context, realization of the action concerns closely period of 2005-2013 and later as well. In the 10th Development Plan, increasing the effectiveness’s of NGOs’ was targeted under the Environment Protection. NGOs who had been carrying out activities through the country increased number of projects on soil, water, desertification and natural resources management which lead creating awareness on subject matters within the society. As addition to these, private companies are supporting these NGOs’ activities subtracting of the value of these supports from the company’s’ taxes is an important step taken by government. The mentioned NGOs are working well in the harmony with governmental organizations as MFAL, MFWA and İŞKUR. If the UNCCD approach was taken into account, the government would include the NGOs which have projects in the same field, so the projects would be supported by the more stakeholders. Another suggestion is providing funding by MD to NGOs who will undertake projects in harmony with NAPCD and UNCDD’s objectives But NGOs complains ignorance of the project outcomes by the practitioner organizations.

The action is in conformity with UNCCD’s all strategic and operational objectives.
**Action 27: Ensuring Fastidiously Preparation, Supervision and Implementation of Environmental Impact Assessment (EIA) Reports In Accordance with the EIA Regulation**

Some poor contents are still valid in EIA regulation which was revised in years of 2008 and 2011. However, more than 20 trials were sued against EIA reports. Although the EIA regulation was revised, still conflicts puts forward necessity that the regulation must be reviewed again. Arranging of the regulation by taking proposals from NGOs will make a significant contribution to control the investments which can generate pressure for the natural resources. Except the content of the regulation, application of the regulation has problems that reflected to the press, and it is known that some NGOs sued against several EIA reports. In addition, the content and scientific level of the reports has some problems as well. In this context, it is thought that examining of the reports by the independent experts will make positive contribution to the effectiveness of the reports.

The action is in conformity with UNCCD’s all strategic and operational objectives.

**Action 28: Updating Land Capability Classes Criteria According to Turkey Conditions**

MFAL’s General Directorate of Agricultural Reform has been giving applied education about soil research mapping to its staff since 2013. This general directorate has taken an important step about the adopting international soil classification system for Turkey. However, a new soil classification by taking into consideration of Turkey’s geographical and climatic attributes still not achieved. In the classification of US Department of Agriculture 5, 6 and 7th class of lands considered as non-arable lands however, in Turkey these lands provide prime soils for olive, almond, vineyard, carob and fig cultivation. However, any construction license is easily provided to these lands since US Department of Agriculture’s Land Classification is used as a reference. To prevent these, a new national system must be developed in order to protect productive lands. So this may be only achieved via close cooperation between Universities, and MFAL. This national classification also will guide other organizations’ data requirement on soils.

The action is in conformity with UNCCD’s operational objective of science & technology.
Action 29: Determination of State Of Desertification in Turkey and Identification and Monitoring of Vulnerable Lands

During 2005-2013, many meetings, seminars and congresses were held, and created awareness at the country level. Especially, establishing General Directorate of Combating Desertification and Erosion in the MFWA in 2011 was drawn attention not only in Turkey, but also at the international level. GDCDE started evaluation of the country data related with desertification and erosion in close cooperation with universities, TÜBİTAK and other ministries. Desertification concept took part into 10th Development Plan and became a country policy. Desertification and erosion indicators special to Turkey will be about concluded by a project which is being carried out in cooperation with TÜBİTAK.

The continuousness of the action is carrying critical importance from point of providing data to UNCCD's strategic and operational objectives.

Action 30: Identification and Adaptation of Agriculture Pasture and Forest Plants Which Are Resistant to Drought

In the context of action, action program about combating drought was prepared. Forestry and agriculture were passed to determining of species phase. MFWA and MFAL acted sensitive in this subject and developed plans. But some projects did not fall into this policy as the one undertaken with poplar species because in terms of water saving employing poplar tree (a high water demanding species) is questionable. Endemic species that are resistant to drought must be studied with details in reclamations and pasturelands. It will be reasonable If MD and TÜBİTAK would provide support and manage controlled projects to carry out researches by selected universities in each climatic region. Although drought in 2014 was at severe level, as far as it was known MFAL has not applied Drought Action Plans. As droughts seem to occur more often in coming year MFAL must act more stable and certain in these events. In similar way, although drought period was available SHW MFWA did not act sensitive about irrigation scheme in 2014. This manifest the weak implementation of regulations even by ministries themselves.

The action is in conformity with UNCCD's adaptation works to climate change and science & technology objectives.
**Action 31: Preparation and Development of the Detailed Surveys for Mapping and Classification of the Soils of Turkey for Sustainable Land and Water Management**

The action overlaps to Action 28's objective of determination of land capability classes according to Turkey conditions. MFAL and WFWA jointly realized digital soil databank and created alignment of common standards. Within the objective of the action, 5547 map sheet was digitized by MFAL and put into service for various users. The CORINE data base was updated. MFAL initiated training courses on soil survey to its staff at General Directorate of Agrarian reform. However for the production of national soil map not only agricultural lands but also forest lands should be taken into account for sustainable forest management. Thus, soil survey of the country should be undertaken with joint project of MFAL and MFWA. Moreover, during soil survey campaigns, experts with academic experience should be incorporated to the survey teams for more precise surveys. The realization of the action objective is a positive level.

The action plan is in conformity with UNCCD’s strategic objectives of population and environment, creating partnership, and operational objectives of policy and science and technology.

**Action 32: Conducting Inventory of Land and Water Resources Which Is Necessary For Sound Planning and, Based on This Inventory, Establishment of National Data Bank**

Within the objective of the action, watershed borders at micro basin scale are digitally delineated by MFWA. For watershed monitoring and evaluation, a GIS center was established within MFWA. However, agricultural crop subsidy activity should be removed from the list of this action and to be incorporated to Action 30. In 10th Development Plan although assessing natural resources and ecosystem services are mentioned for policy making and implementation, no responsible agency was cited for undertaking these activities. Turkey is still far away for establishing national data bank due to lack of basic data such as soil map and biodiversity data.

The action plan is in conformity with UNCCD's strategic objectives environment, and operational objectives of policy, capacity building, science and technology.
**Action 33: Preparation of National Action Plan on Soil Protection and Land Rehabilitation**

MFWA and MTMAC put into force projects and legislations which are compatible to the objective of the action during 2005 and 2013. Other than said activities, the Forestation and Erosion Control Campaign between 2008 and 2012 increased the strength of the action. However, although the law no 167 on Ground Water Use cited in action objective activity, disregarding law requirements particularly in Central Anatolia and Mardin region (SE Turkey) several illegal groundwater well is in operation. These may be controlled by not providing electricity to these well by MENR. Moreover, the effective implementation of law 5403 on Soil Protection (mentioned in Action 14) will increase efficiency of action objective. Land consolidation projects of MFAL are also supporting action objective but not full filled the main aim because consolidation studies are undertaken at settlement site scale not a watershed scale.

The action plan is in conformity with UNCCD’s strategic objectives environment, and operational objectives of policy, capacity building and awareness.

**Action 34: Preventing Practices Which Result In Reduction in the Productivity of Soil**

The base of the action objectives is preventing land degradation which is the initial step of desertification. Thus, achieving the objective of the action is crucial for combatting desertification. To achieve the objective, soil analysis should be made annually by MFAL with highest precision for determining any changes. However, no precaution is still undertaken to prevent excess fertilization and irrigation which all negatively affect soil productivity. Protection measures are mainly undertaken following land degradation that requires high expenses. One of the striking examples to this is the MFAL’s high cost investments for mitigating salinity built up in Akçakale located in Harran Plain (SE Turkey). As well as MFAL, SHW of MFWA should monitor water user associations’ irrigation systems efficiency and volume of water used for irrigation. Thus, in intensive agriculture areas of the country where excess irrigation and fertilizer are used, the soil quality monitoring should not be only done with samples collected by farmers. Because farmer samples are sometimes questionable for how they represent the soil of the collected site. So, MFAL should monitor soil quality changes on samples which are collected by the ministry staff. Action objective is far from success because although amount of fertilizer and irrigation volume increases the yield amount is not increasing significantly.
The action plan is in conformity with UNCCD’s strategic objectives of population and environment, and operational objectives of policy and awareness.

**Action 35: Implementation of the Decisions Taken Within the Scope of Biodiversity Convention Ratified By Turkey**

Turkey particularly with its plant and bird biodiversity is among the special countries of the world. Within this context the decisions made in biodiversity convention was revised in 2007. Projects were accomplished in Yıldız, Kaçkar and Çoruh regions. However, studies on fauna biodiversity in Turkey is not sufficient in another words Turkey’s fauna potential is not well known. Since studies undertaken by various universities and NGOs are not stored in one center data are scattered and not easy to access. Thus, MFW A should be integrated studies on the subject matter that will be undertaken by universities or NGOs that will lead production of compatible data and easy access. As the MFWA is the signing body, we suggest storing all biodiversity studies data under MFWA. Unfortunately in 10th Development Plan biodiversity is not cited anywhere.

The action objective is one of the crucial data requirements of UNCCD’s objectives it is in conformity with UNCCD’s all strategic and operational objectives.

**Action 36: Preparation of Sustainable Land Use Planning**

Sustainable land management (SLM) is the main approach that will prevent occurrence of problems related to desertification, land degradation and drought. UNCCD’s ultimate strategic and operational objective is achieving SLM. MEU and other NGOs are extending their studies via SLM approach particularly for the last decade. GDCDE accomplished national criteria and indicators of desertification following a study exceeding 3 year, and almost finished publication of national guideline. This may provide determination of national status of desertification at all regions of the country. However, even the number of project on SLM is in an increasing trend, there is no national guideline or manual for SLM project preparation and/or application. For this purpose the joint project between GDCDE and TÜBİTAK for the preparation of national desertification indicators is considered as first serious step. With the use of this study outcomes MFWA can prepare a national SLM guideline. Otherwise setting up some objectives such as only concentration on increasing soil organic matter will not be considered as an integrated SLM approach if other components of
the area such as socio-economy, biodiversity and water availability are not taken into account. Holistic approach suggestion is compatible with several action objectives of next NAP-CD of Turkey 2014-2018.

The action plan is in conformity with UNCCD’s all strategic and operational objectives.

**Action 37: Management of Pastures In Terms of Management Plans Rules**

Within NAPCD’s 2005-2013 periods, one of the intense activities that are undertaken under this action objective and MFAL undertook project in 360.000 ha graze land area. MFAL established an open access web data bank (MERBIS) following these projects. However, illegal land uses (cultivated agriculture) are observed at graze lands against law no 3091 entitled “protection of trespassing to landed property ownership”. The urban and rural agricultural directorates of MFAL should be strict to employ above said law articles. The MFWA provides technical and administrative support to related agencies and institutions on grazing schedule, rangeland planning and rotational grazing for rangeland management. MFWA restored a total of 37,637ha grassland from 2010 to 2014. Range lands within 75% of forests are open for grazing. However, this should be well panned with taking care to carrying capacity of rangelands. Especially graze lands in Central and Eastern Anatolia are converted to cultivation illegally. This illegal uses should be monitored by remote sensing methods by MFAL. Overgrazing of small ruminants is still common in mountainous areas. In 10th Development Plan under Agriculture and Food title protection and increasing the quality of graze lands is cited. Thus, within the objective of the action MFAL and MFWA the joint projects on graze lands should be increased. Also reestablishing graze lands that are none now in intensive agriculture practiced Harran, Çukurova, Menderes, Ergene is crucial for protection of biodiversity at those sites. The action is strongly supported by MFAL projects which ease achieving the objective in few years.

The action plan is in conformity with UNCCD’s strategic objectives of population and environment, and operational objectives of policy.
**Action 38: Development and Expansion of Erosion Control Measures and Techniques**

As development of erosion control measures comprises the objectives of UNCCD’s strategic objectives of improving the living conditions of affected populations, improving the condition of affected ecosystems and operational objectives of science and technology, it is one of the crucial actions of NAPCD of Turkey. Within this context MFWA and MFAL are conducting several projects. Application and support of wind breaks on field borders in Central Anatolia by MFAL’s ÇATAK Project created awareness on the subject matter. MFWA’s Soil Protection and Erosion Control branch and establishment of GDCDE in 2011 created big support to the objective of the action. Although GDCDE established Dynamic Erosion Model, Erosion Monitoring System and Risk databank. For achieving sound and precise data, data enhancement is ongoing. Thus, as erosion monitoring requires high tech and intensive field study, training should be provided on erosion monitoring to the MFWA and MFAL staff, and transforming data to the said data centers of the ministries and setting erosion monitoring network will led achieving the objective of the study. Within this framework GDCDE initiated training courses since 2011 and established erosion control demonstration sites in Mediterranean and Central Anatolia regions of the country. These sites are used for training national and international participants. But for extending the training to more people, MFWA should provide courses to universities, NGOs and schools connected to ME. Thus, responsible ministries budgets should be utmost supported. Citing support to erosion control studies in 10th Development Plan under Soil and Water Management title is pleasing for the realization of action objective.

The action plan is in conformity with UNCCD’s strategic and operational objectives.

**Action 39: Expansion of Organic (Ecologic and Biologic) Agriculture and Encouragement and Extension of Use of Bio-Technology**

Good agricultural practices along with its preventive approach to natural resources it also increase livelihood of producers that also decreases pressure on natural resources. Thus, as the action objective covers protection of environment and increase population income objectives of UNCCD, it is effective on mitigating desertification and land degradation problems. MFAL provide additional subsidy to organic and ecologic producers via ÇATAK Project. This encourages farmers to
produce environmental friendly products. Also increasing demand to organic and ecologic products lead proliferation of organic production. However, management plans should be developed for balancing organic crop production pressure on natural resources. For example even at sufficient water resource availability, for planning crop pattern with taking care country’s needs low water demanding crop perforation will aid more efficient water resource use. Thus subsidizing crops should be considered not only the production method but also its pressure on natural resources. Along with these biotechnological production needs utmost care. For example MFAL’s policy on genetically modified organism is approved by majority of the society. Thus, biotechnological studies should be undertaken on topics that will not harm human, animal and environmental health.

The action plan is in conformity with UNCCD’s strategic objectives of population and environment, creating partnership, and operational objectives of policy and science and technology.

**Action 40: Monitoring the Performance of Irrigation Systems**

Training and financing modern irrigation systems by MFAL significantly increased drip and sprinkle irrigation in Turkey. However, even irrigation system is up to date; amount of water employed for irrigation is still not well measured. Water user associations charge farmers based on land size and crop type not on amount used for irrigation. For example in Central Anatolia silage corn is irrigated 12 hours with drip irrigation although 6-7 hours would be sufficient. Unfortunately this excess irrigation is almost valid for several regions of the country. Thus water clock installation at each field is needed for determination and charging the amount of water used for irrigation. The MFAL’s consultants’ field monitoring of irrigation and informing related bodies of the ministry is crucial for achieving action objective. SHW within MFWA would create opportunity for taking measures on efficient water use by more and intensive measurements on drainage channels with modern equipment that transfer data to data center of the ministry. Moreover, applying lower fee to less water use may encourage farmers for efficient irrigation.

Water saving is one of the pillars of UNCCD and FAO’s sustainable land management, thus action objective is in conformity with UNCCD’s strategic and operational objectives.
**Action 41: Expansion of Land Consolidations Activities**

Land size decrease below economical operation causes more pressure on natural resources for increasing productivity per unit area producers by producers. Thus, the action's success is crucial for preventing land degradation. The General Directorate of Agrarian Reform of MFAL initiated effective land consolidation projects recently that also set a good example internationally with high budget allocations. Approximately 3 M ha land was consolidated and project is ongoing at various regions of Turkey. Also with MFAL efforts, the changes in related laws the minimum land size for absolute agricultural lands, marginal agricultural fields and special products will be 2 ha, for tree plantations 0.5 ha and for greenhouse fields 0.3 ha. It is recommended that MFAL should focus on extensive fragmented lands that will be determined via geographical information systems (e.g. Afyon Tokuşlar region, Figure 3) for land consolidation studies. The action is strongly supported by MFAL projects that may easily lead achieving its objective.

The action plan is in conformity with UNCCD’s strategic objectives of population and environment, creating partnership, mobilizing resources and operational objectives of policy.

*Figure 3. Land fragmentation in Afyon region (Central West Turkey)*
**Action 42: Monitoring and Dissemination of Degradations That Might Be Happen in the Natural Resources**

Within monitoring framework of natural resources MFWA established almost 1400 water monitoring stations with high investments. These stations monitor nitrogen which is negatively affecting human health and an indicator of excess agricultural chemicals. MFAL implemented activities according to nitrate directive. MFAL at the same time span initiated soil pollution monitoring project that revealed pollution status of the soils of the country. Moreover, GDCDE and TÜBİTAK joint project entitled determination of national desertification indicators will set useful data source for achieving the objective of this action. However, the content and scale of the said studies are well defined in any road map by the ministries. Thus, for satisfying this shortcoming an action should be incorporated to next NAPCD. Also in 10th Development Plan under the title of Soil and Water Resources, support will be provided for realizing this action objective. However since monitoring studies request high technology and online data, activities defined in the action should be integrated to MFAL’s TARBİL project.

The action plan is in conformity with UNCCD’s strategic objectives of environment, creating partnership, mobilizing resources and operational objectives of science technology.

**Action 43: Ensuring Sufficient Drainage Conditions in Arable Lands Which Are To Be Irrigated**

The increasing irrigation projects after 1990s and their acceleration in 2000s necessitate investments to drainage constructions. At areas with insufficient drainage salinity and increasing water table caused crop and land losses. The most striking example is observed in Harran Plain. However, MFAL implemented drainage projects in Harran (Şanlıurfa), Tarsus (Mersin) and Suluova (Amasya) with high investments. The drainage network is accomplished in Suruç Plain prior to irrigation. However along with constructing drainage network excess water use should be monitored for efficient water use. Thus, this action should be in alignment with Action 40. Shifting from furrow irrigation to drip and sprinkle irrigation and subsidizing low irrigation demanding crops will reduce investments expenses by government. Although action is closely dependent to other activities of NAPCD, with strict irrigation monitoring it will achieve its objective.
The action plan is in conformity with UNCCD’s strategic objectives of environment, mobilizing resources and operational objectives of policy and science technology.

**Action 44: Ensuring Conservation and Sustainable Use of Soil and Water Resources at Watershed Scale**

The objective of the action overlaps with Actions 33, 36 and 43. MFWA accomplished its watershed scale monitoring unit. TEMA developed a watershed management model with its CROP-MAL Project, MFAL carried out projects on watershed scale water use and crop pattern. On 20th of May 2015, Watershed Administration Board Establishment, Duties, Working Procedure and Principles annunciation was published in Official Gazette. The agricultural basin approach was adopted. National Agricultural Basin and Watershed Strategy were established. Within this context case projects that set good examples for sustainable basin management were initiated by MFWA under Murat, Çoruh and Anadolu Watershed Projects. All actions of NAPCD prepared by GDCDE for alignment with UNCDD are based on basin management which created opportunity to combat desertification at large scale. But while setting up actions the requisite for watershed planning should be the first step in NAPCD. This will set the working scale of NAPCD. Especially Soil Protection and Water Laws evaluation at watershed scale plays a crucial role in desertification studies as all stakeholders of a basin will act in alignment for combating desertification. Action objective is met with the establishment of units within ministries that are responsible at watershed scale.

The action plan is in conformity with UNCCD’s strategic objectives of environment, mobilizing resources and operational objectives of policy and science technology.

**Action 45: Development and Implementation of Criteria and Indicators for Sustainable Forest Management**

The majority of the base criteria and indicators of the action objective were set. Within this framework 6 criteria and 28 indicators were defined. GDF of MFWA realized “Sustainable Forest Management”. Although not happened within NAPCD’s 2005-2013 period, MFWA increased number of projects on drought resistant species, nursery, seed research techniques, forest fires, pest and diseases combatting, wood and non-wood products, biodiversity and developing ecosystem services which all set important points in sustainable forest management. Moreover, in
private afforestation areas when productivity monitoring report setting the above said criteria and indicator should be used as basic requirements which may increase private afforestation input not only for economy but also for environmental quality. The 10th Development Plan only focused on increasing size of forest areas and the lack of sustainability definition for forestry should be compensated by MFWA sustainability based forestation activities. The criteria and indicators are set for sustainable forest management that is in accordance with action objective.

The action plan is in conformity with UNCCD’s strategic objectives of environment, and operational objectives of policy and science technology.

**Action 46: Designing Sound Tourism Activities in Vulnerable Ecological and Cultural Sites**

This action objective is evaluated as one of the least developed one among 2005-2013 actions of NAPCD of Turkey. MFWA set up National Parks regulation and a total of 41 National and Natural Park were managed according to updated regulation. However, measures of the recent regulation cause difficulties to hikers and campers in those areas. For example the paper work process for getting permission for accessing to parks lowers people's ambition for hiking or camping. Also MCT and other private or governmental agencies should be in close contact with MFWA for delineating ecological and cultural zones before any planning. Within this context in 10th Development Plan for encouraging sustainable tourism activities, environmental friendly accommodation facility standards were initiation in 2008 were cited. However, municipalities at these fragile areas did not take into account these regulations and laws and MEU are criticized for these misuses. Also, in coastal law 3621, the regulation in article 6 on construction ban and coastal construction and “Changes in Coastal Regulation” promulgated in Official Gazette’s 2 April 2013 publication made Culture and Natural Assets law out of force. Thus, these conflicts should be satisfied for achieving action objective.

The action plan is in conformity with UNCCD’s strategic objectives of environment, and operational objectives of policy, awareness and science technology.
Action 47: Taking Protective Measures to Prevent Degradation of Ecosystems and to Rehabilitate Degraded Ecosystems

Within the scope of action projects with the contribution of MFWA by NGOs were undertaken in Kaçkar Mountains and Aegean, Mediterranean and Black Sea regions of the country. However, there is no national guideline for determination and mitigating degradation of ecosystem in country’s different geographic environments at country scale. The study on determination of national desertification indicators undertaken jointly by MFWA and TÜBİTAK almost accomplished. This study may set a base data source for determination of national ecosystem degradation guideline manual. Also following determination of fragile and degrading regions by MFWA and MEU, canalizing NGOs to these areas are crucial otherwise NGOs chose study sites according to funding agencies and areas need urgent study are neglected. In 10th Development Plan under Environment Protection title citing ecosystem services is pleasing even it was not mentioned in 2005-2013 NAPCD. Also government agencies should employ findings of university projects in their routine studies. So, same topics will not be studied by repeating projects.

The action plan is in conformity with UNCCD’s strategic objectives of environment, and operational objectives of policy, science technology.

Action 48: Increasing the Numbers and Areas of Protected Sites (National Parks, Nature Parks etc.)

The protected area in Turkey reached a total number of 2689 and 5,629,880 ha. This figure is equal to country’s 6% area out of 77.5 M ha land. The global average according to World Bank’s 2014 data is varied from 10 to 15% (Figure 4) (http://data.worldbank.org/indicator/ER.LND.PTLD.ZS/countries/1W?display=default). Thus, it is believed that the area of protected sites in Turkey based on country’s ecological properties should be increased to 7.7 M ha or more than 10 M ha. Thus, the integrated watershed management which was elaborately undertaken by GDCDE is essential to achieve action objective. National Afforestation Campaign was initiated at basin scale with MFWA’s proposal and publication of Dry Areas Afforestation Guideline along with Erosion Circular are positive steps for the action objective. Thus MFWA and MEU joint work is needed for increasing number and area of protected sites.
Figure 4. The protected sites percentage of country’s (K. Dietrich. 2012. https://commons.wikimedia.org/wiki/File:Protected_areas_by_percentage_per_country.png)

The objective action is in a positive trend but needs more financial support. The action plan is in conformity with UNCCD’s strategic objectives of environment, and operational objective of policy and awareness.

**Action 49: Requiring EIA for the Use of Productive Arable Lands for Non-Agricultural Purposes**

Within the scope of the action Soil and Land Use law was passed and put into force in 2005. Thus EIA reports mentioned about use of agricultural lands for non-agricultural purposes. When viewed from this aspect action objective is fulfilled. However as mentioned in action 27 review, the scientific qualities of EIA are questionable and are several of these are in dispute. With the new regulations on EIA law, better EIA reports will be produced on the subject matter. Thus EIA law should be reorganized to meet this action objective properly.

The action plan is in conformity with UNCCD’s strategic objectives of environment, and operational objective of policy and awareness.
**Action 50: Integrating Water Quality Protection Programs with the Soil Erosion Conservation Programs**

Within the action objectives, nitrate initiative issuing by law by MFAL, pollution determination studies by GEF and EU funded projects were reported. However these activities relation to erosion is not clear. Because water quality preservation starts at upstream, thus the activities within this action should be evaluated with forestation, forest management and terracing against erosion studies of MFWA. For protecting water quality the largest support was provided by National Afforestation Campaign. Another positive development was the presence of Watershed Protection Action Plan and its conducting with Water Management General Directorate. Therefore forestation of increasing irrigation pond banks, decreased tillage near ponds and reservoirs, obtaining yearlong vegetation cover around water sources should be maintained and monitored by MFAL and MFWA. Moreover agricultural and forestry studies effect on erosion in the mountainous regions namely Eastern Anatolia, Inner Aegean and Mediterranean, Black Sea of the country are not well documented. Also, development of sinkholes in Central Anatolia should be studied by MENR to mitigate land resource loses. It cannot be said that action achieved its objective.

The action plan is in conformity with UNCCD's strategic objectives of environment, and operational objective of policy, awareness and science and technology.


This action, namely reduction of greenhouse gases, one of the crucial actions of 2005-2013 NAPCD, necessitates quite precise study and planning among all stakeholders with their effective participation. Turkey made one if her major step by adopting Kyoto Protocol in TBMM's session on 5th of February 2009. Thus all activities aiming to reduce greenhouse gases will aid to achieve Action 51's objective. The MFAL's direct seedling, MFWA's afforestation projects can be evaluated under this action. However, there is no tax support to low greenhouse gas emitting vehicles and equipment. In MEU’s Integrated Environment Permission: MEU’s staff support guideline only comprises CO2 sequestration in geological pools. Although tax advantages are publicized in many countries Turkey still do not promote these activities. Low greenhouse gas emitting crop production guideline should be published and disseminated by MFAL along with internal training courses.
to ministry staff. MEU and municipalities should increase their support to green building constructions. This action's objective continuously requires activities thus it cannot be evaluated as objective achieved.

The action plan is in conformity with UNCCD's strategic objectives of environment; mobilize resources to support implementation, and operational objective of policy, awareness and science and technology.

**Action 52: Improvement of Productivity, Health, Education and Nourishment Conditions of Poor People and Facilitating Their Access to Employment and Resource Opportunities**

Action objective is in accordance with UNCCD's strategic objective of improving the living conditions of affected populations. Establishment of Development Agencies and these institutions support to low income population in urban areas are considered as positive steps. İŞKUR, MFAL, MFWA, ME, MH and MD had taken positive steps by establishing training and health centers. ORKÖY Projects achieved significant milestones by providing solar heating and electricity panels and providing low interest rate loans. In 10th Development Plan under Regional Development and Regional Competition Ability title, financing low income population was mentioned. Other rural development projects that should be mentioned are Murat, Çoruh and Anadolu Watershed Projects. New income generation were established within these projects. However, increasing production alone is not effective on desertification unless environmental friendly investments will be undertaken. Thus, encouraging regional development agencies to include natural resource management trainings to their investment plans will be an appropriate approach for combatting desertification.

The action objective seems attained however for extending this action more financial support is required from government. The action plan is in conformity with UNCCD's strategic objectives of environment, population and mobilizes resources to support implementation, and operational objective of policy and science and technology.

**Action 53: Integrating Environmental Issues into Regional and Urban Planning Process**

The objective of the action overlaps action 36, 37, 38, 40, 44, 46 and 47.
**Action 54: Improvement of Socioeconomic Conditions of Forest Villagers, Alleviating Their Pressure on Forest Resources And By Means Of This, Ensuring Better Protection of Forest**

With ORKÖY projects significant steps were taken in accordance with action objectives. However, animal husbandry and horticultural activities should not be listed in this activity because large ruminants’ food and field demand for grazing and horticultural purposes will create pressure to forest areas. These may cause illegal uses in forest zone. If husbandry is an option, the carrying capacity of graze lands should be precisely determined (head/ha). MFAL should support production non-wood forest products such as mushrooms, medical and aromatic plants. MD and MCT should increase training and financial support for handicraft to target population. In 10th Development Plan, leveraging new income generating and production based supporting tools for decreasing forest villages development problems due to their locations, has been mentioned. Along with production support overcoming marketing issues will be obtained by establishment of cooperatives or producer unions. But investments for development should not create any pressure on natural resources in forest zones.

The action plan is in conformity with UNCCD’s strategic objectives of environment, population and mobilizes resources to support implementation, and operational objective of policy and science and technology.

**Action 55: Increasing and Supporting Investments in Small Scale Irrigation Projects**

The MFAL’s technical and financial (long term bank loans) support to drip and sprinkle irrigation significantly increased in recent years. Expanding the irrigation networks (ponds, irrigation channels, pressurized systems) by SHW create opportunity to benefit from irrigation by large number of population. However efficient water use is still a big issue. Irrigation during day time at high temperatures and excess water use are still problems in intensive agricultural production regions of the country (Çukurova, Harran, Söke, Ergene, and Konya Closed Basin) (Figure 5). Thus, MFAL and SWH along with water user associations should increase their monitoring and measurement activities at field. The 10th Development Plan seek to increase modern irrigation systems that save water from 20% to 25% at field scale, irrigation network from 62% to 68% and irrigation efficiency from 42% to 50% via SHW irrigation investments. So, water clock installation to field and/or providing
sufficient water according to crop requirement are suggested. The objective of the action is significantly met by the support of MFAL during 2005-2013.

The action plan is in conformity with UNCCD’s strategic objectives of environment; mobilize resources to support implementation, and operational objective of policy and science and technology.

Figure 5. The water flow in Lower Seyhan Drainage Channel (August, 2014)

**Action 56: Institutionalizing The Cooperation between Ministries, Professional Unions and NGOs for the mitigation of desertification**

In accordance with action’s objective, GDCDE established within MFWA in 2011, seriously and scientifically undertook activities. GDCDE particularly organized workshops, conferences and training courses with MEU, MFAL, MD, ME and NGOs. GDCDE along with national activities works coordinately with MFA in Central Asia, Africa and UNCCD’s Annex 4 North Mediterranean countries. Number of activities on desertification, biodiversity and climate change organized by universities and NGOs significantly increased and GDCDE actively participated to these organizations. In 10th Development Plan, desertification was referenced under Climate Change and Environment title which brought desertification issues to country’s agenda. Thus, objective of Action 56 is successfully full filled.
The action plan is in conformity with UNCCD’s strategic objectives of increasing global benefit and mobilizes resources to support implementation, and operational objective of policy and capacity building.

**Action 57: Ensuring Integrated and Watershed-Based Activities Between State Hydraulic Affairs, General Directorate of Rural Services, General Directorate of Afforestation and Erosion Control and the MEF**

This action actually corresponds to the Action 22 objectives and partnership between MFWA and MFAL continues with an increasing trend at watershed scale. The achieved synergy between ministries can be seen by joint activities on training and meetings. Following 2005, the structural 2005 changes in MFAW and MFAL and newly established departments in these ministries lead studies under watershed approach. Particularly establishment of Water Management General Directorate and preparation of Watershed Management Plan lead support for achieving the objective of the action. The action’s objectives are mainly achieved during 2005-2013 period of NAPCD.

The action plan is in conformity with UNCCD’s strategic objectives of environment, mobilization to support implementation, and operational objective of policy and capacity building.

**Action 58: Providing Financial and Technical Support and Incentives to Agricultural and Forestry Research Institutions**

In compatible with action objective MFWA and MFAL’s research institutions budget revealed an increasing trend. Thus our opinion is quite positive on realization of action objective. However, we recommend institutions to increase their activities in eastern and southeastern Anatolia regions.

The action plan is in conformity with UNCCD’s strategic objectives of mobilization to support implementation, and operational objective of policy and financing.
Action 59: Taking Necessary Measures to Prevent the Use of Manure as a Fuel and Encouraging the Use of Manure as Fertilizer

Within ORKÖY project, installation of solar heating and electricity systems in forest villages decreased the pressure on the use of animal manure as fuel. The organic fertilizer regulation no 28956 of MFAL promulgated in Official Gazette shifted animal manure to a high value added fertilizer form also decreased the use of animal manure as a fuel. Also the increasing demands to organic agriculture in the country positively affect the use of animal manure within the scope of action aim. However, the lack of sufficient facilities which convert animal manure to organic fertilizer seems not enough for decreasing the use of animal manure as fuel. Also, the parameters that are required for processing animal manure as an organic fertilizer by regulation 28956 of MFAL needs to be reviewed since small scale enterprises cannot meet some of the parameters required for the number of microorganism present in animal manure without high expenses. Moreover, Agriculture Credit Cooperatives support and promotion of animal manure containing fertilizer seem an appropriate action for increasing use of animal manure. In addition to these increasing demands to animals manure will positively affect animal husbandry. Action’s objectives are mostly realized by actions undertaken during 2005-2013.

The action plan is in conformity with UNCCD’s strategic objective of environment, and operational objective of policy.

Action 60: Development of Bio-Resources-Based Energies

The changes in technical regulation on obligatory mixing of biofuels to diesel and gasoline of MD’s was entered into force with its promulgated in Official Gazette on 27.9.2011 with reference no of 28067. Similar to this the use of national biodiesel product in gasoline and diesel fuels became compulsory. These actions are important for increasing biofuel use. In addition to these actions, MFAL already increased the level of subsidy on oil crops. However, oil crops high water and fertilizer demand should be bear in mind. Also, Turkey is still an importing country for edible oils. Action’s objectives are mostly realized during 2005-2013.

The action plan is in conformity with UNCCD’s strategic objective of environment, and operational objectives of policy science and technology.
**Action 61: Technology Transfer, Novel Technologies and Utilization of Renewable Energy Resources**

Within the action objective MENR, MD enacted laws that eased obtaining license for renewable energy production. Especially the number facilities and amount of energy produced by wind and solar power plants is in an increasing trend. However the renewable energy production in country’s total energy production is about 5% according to MENR (Figure 6). In Turkey’s National Action Plan on renewable Energy Production it was aimed to increase this figure up to 22% by the year 2023. Thus, the country’s aim to increase its renewable energy production is promising. However, during the selection of wind and solar energy power plant construction, ecological values should be precisely taken into account. Particularly, precise studies should be undertaken on biodiversity at planned areas because covering vast amount of area with solar energy collectors may create serious threat to biodiversity. Serious steps are undertaken within the action objective and when 2023 objectives are realized, Turkey will achieve world averages.

The action plan is in conformity with UNCCD’s environment, policy along science and technology objectives.

Action 62: Creation of Public Awareness and Pressure on Combating Desertification

With the establishment of GDCDE in 2011, significant and positive changes occurred in Turkey on combatting desertification issues. MFWA, ME, MFAL and NGOs participated to activities on desertification either jointly or individual organizations that bring desertification to country’s agenda. Activities were undertaken with the participation of the all segments of the society. Turkey actively took roles in UNCCD’s Annex 4 North Mediterranean Countries region, central Asia and Africa. The major indicator of these activities will Turkey’s hosting to Cop 12 to be held in Ankara in 2015. Action objective is successfully achieved during 2005-2013.

Beside this, annual celebration of World Forestry Day on 21st of March, Combatting Desertification on 17th of June, Erosion Week in November and World Soil Day on 5th of December with increased number or participant revealed the awareness of the society on desertification.

The action’s objective is in conformity with UNCCD’s mobilizing resources in strategic objectives, and policy, advocacy, awareness and education along with capacity building objectives of operation.

Action 63: Ensuring Integrated Work of Education and Extension Institutions Serving For Rural Areas, Research Institutions and Universities

The action which seems not as active as other action of the NAPCD 2005-2013 was mostly carried out by universities. The wide logistical potential of ME was not properly mobilized. The activities undertaken by universities did not penetrate to wide segments of the society. This may be most probably due to lack of funding of activities on desertification training. NGOs did not employ enough activity in rural areas at primary and high school level. Research institutions mainly focused on project on crop production and productivity by neglecting desertification and land degradation. Moreover, eastern and southeastern part of the country, activities on this subject matter is almost none. Thus, MFAL and MFWA need to actively cooperate with ME for providing active training on site with audio visual material.

The action’s objective is in conformity with UNCCD’s mobilizing resources in strategic objectives, and policy, advocacy, awareness and education along with capacity building objectives of operation.
National Action Plan of Combating Desertification covers year of 2005-2013 and consists of 63 actions. Many actions were started in short term as a law, regulation and project. The fundamental of actions is coordination between organizations. This operation is carried out by GDCDE. Some actions were started and concluded in 2005. The actions had been prepared to mitigate and stop desertification. Problems are briefly given in problem tree (Figure 7). Modified from Kosmas et al. (1999) using key indicators of desertification at the Environmentally Sensitive Areas (ESAs).

Actions should be proposed according to major titles of desertification otherwise several actions may overlap and may not meet both Turkey’s and UNCCD’s objectives. Moreover, measuring and assessing the success of an action is the main indicator for performance. This requires continuous data flow from related agencies both in government and public level. Presenting of the actions in the forms of main title and subtitle will facilitate the integrity of inter-actions. For instance, the subtitles of social, economy, agriculture, forestry, water, soil, protection, improvement could be used.

**Figure 7. The problem tree of desertification**
3.1 FORESTRY ACTIONS

Turkish National Action Plan of Combating Desertification (NAPCD) covers period of 2005-2013. NAPCD consists of 63 actions and also 43 of them are directly related with forestry. If these actions are gathered under 7 titles, it is seen that the actions comprises fragile topics like reduction of poverty, food security, adaptation to climate change, sustainable land management, awareness building, capacity building and rural development which were put forward by UNCCD, FAO, UNDP and UNEP. The actions were supported by regulations, laws and circulars. Project supports were made by Ministry of Forestry and Water Affairs and Ministry of Food, Agriculture and Livestock and other governmental organizations, and these supports are continuing. However, some actions overlaid, especially numbered 1, 9, 25, 26, 29, 36, 42, 45, 47, 54, 56, 57 and 62nd actions have common targets. Compiling of these actions under one umbrella will help the users to make easier practices. In addition, water consumption in combatting desertification is arranged by the agricultural and forestry activities, so it is thought that MFWA must take part or be more effective in the actions numbered 20, 32, 40, 44, 50 and 55 (Figure 8).

Figure 8. Classification of actions related to forestry in NAPCD of Turkey from 2005 to 2013
The large parts of the actions are carried out with the responsibility of MFWA and MFAL. But these two ministries cannot allocate enough staff and budget because of their intensive workload. So the actions were carried out in cooperation with universities and research centers. But this is not enough and more project and practices related with desertification, drought and land degradation must be studied in the harmony with actions by the ÜSKİM, TEKNOPARK and TEKNOKENT in universities. Another deficiency in the action practicing is only to present the digital data, no measuring the performance success about the actions. Zero net land degradation, land degradation neutrality, desertification, adaptability to drought and rural development must be given more importance, because UNCCD (2012) and FAO (2013) are attracting the attention to these topics. Another important matter was that the actions and activities were not being distributed in balance. Southeast and East of Anatolia have no enough actions and activity in the plan about combating desertification. So, it is thought that multidimensional researches about combating desertification must be implemented in cooperation with regional universities and NGOs.

3.2 AGRICULTURAL ACTIONS

Turkish National Action Plan of Combating Desertification (NAPCD) covers period of 2005-2013. NAPCD consists of 63 actions and also 28 of them are directly related with agriculture. If these actions are gathered under 5 titles, it is seen that the actions comprises fragile topics like reduction of poverty, food security, sustainable land management, awareness and capacity building which were put forward by UNCCD, FAO, UNDP and UNEP (Figure 8). The actions were supported by regulations, laws and circulars. Project supports were made by MFWA and MFAL and other governmental organizations, and these supports are continuing. However, some actions overlaid, especially numbered 4, 11, 14, 16, 23, 31, 41, 39, 51 and 59th actions have common targets (Figure 9). Compiling of these actions under one umbrella will help the users to make easier understanding and put them into practice. In addition, water consumption in combatting desertification is arranged by the agricultural and forestry activities, so it is thought that MFAL must take part or be more effective in the actions numbered 20, 33 and 36.

The large parts of the actions are carried out with the responsibility of MFWA and MFAL. But these two ministries cannot allocate enough staff and budget because
of their intensive workload. So the actions were carried out in cooperation with universities and research centers. But this is not enough and more project and practices related with desertification, drought and land degradation must be studied in conformity with actions by the ÜSKİM, TEKNOPARK and TEKNOKENT in universities. Another deficiency in the action practicing is only to present the digital data, no measuring the performance success about the actions. Zero net land degradation, land degradation neutrality, desertification, adaptability to drought and rural development must be given more importance, because UNCCD (2012) and FAO (2013) are attracting the attention to these topics. Another important matter was that the actions and activities were not being distributed in balance. Southeast and East of Anatolia have no enough actions and activity in the plan about combating desertification. Also empowering women is not mentioned in 2005-2013 NAPCD of Turkey which one of the major deficiency. So, it is thought that multidimensional researches about combating desertification must be implemented in cooperation with regional universities and NGOs.

Figure 9. Classification of agricultural actions in NAPCD of Turkey from 2005 to 2013.
4.1 DESERTIFICATION PROBLEMS AND SOLUTIONS IN FORESTRY AND AGRICULTURAL FIELDS OVERLAP WITH NAPCD

In National Action Plan of Combating Desertification (NAPCD), whichever of agricultural and forestry policies and practices that creates desertification were explained in the schedule of problem tree (Figure 7).

After that, some proposals were made about the present implementations and their solutions in solution tree (Figure 10). The objective tree leads to the development of a framework of a management plan. The said plan comprises phases of developments until an ultimate goal is reached in the sustainable natural and cultural resource management.
Figure 10. The solution tree of desertification

- Preserving cultural and Natural Resource Base
  - Sustainable Land use
    - Improved management quality
    - Use of biological warfare, organic fertilizers
    - Development of indigenous crop belts of olives, carobs, pistachio - rainfed agriculture, And ancient land use practices.
    - Preservation of and restoration of karstic features and ancient wall-terraces
    - Development of natural-cultural reserve areas
  - Preserved Heritage
    - Conservation and restoration of archaeological super and infrastructures eg roads, cisterns, olive and wine pools, aqueducts and water channels
    - Determination and conservation of raw material sites, furnaces of ceramics and bricks together with their technologies
    - Database of cultural objects
  - Sustainable Water Use
    - Restoration of Climate factors
    - Prohibiting improper urbanisation and use of karstic rock materials - conserving water - for constructions
    - Preservation of hydrologic cycle by limiting greenhouses construction to suitable sites
    - Recycling waste disposals
    - Soil database
  - Sustainable Soil Use
    - Improvement of soil quality
    - Improvement of vegetation quality
    - Increasing soil organic matter by use of animal and green manures
    - Restoration of collapsed ancient wall-terraces for increasing erosion resistance and water retention
    - Reclamation of degraded Mediterranean vegetation esp. crops for agroforestry and rangeland development
    - Database on biodiversity and endemic plants
  - Increased Vegetation cover
    - Prohibiting overgrazing
The measures about preventing desertification were presented by the form of solution and objective tree. Figure of objective tree summarizes NAPCD activities. The actions in NAPCD were evaluated in the context of UNCCD's strategic and operational objectives, and were analyzed in the context of halting desertification.

However, although majority of the actions are in alignment with UNCCD’s strategic and operational objectives, the level of implementation was not at desired level during 2005-2013 period. This may be attributed to the insufficient experience and lack of sufficient sources for the first NAPCD period. But, the topics on desertification, erosion, forestry and agriculture cited in the 10th Development Plan of Turkey and along with ministries activities in recent years are promising steps of Turkey for its challenge to desertification.

4.2 2005 ÇÖLLEŞME İLE MÜCADELE EYLEM PLANININ YENİLENMESİ

The United Nations Convention to Combat Desertification signed by our country in Paris in 15.10.1994, has been approved on 11.02.1998 with law number 4340 and entered into force by publication on the Official Gazette of the 16th May 1998. According to the convention, country Parties have the responsibility to prepare their National Action Plans. “National Action Plan of Combating Desertification” was prepared in order to ensure coordination between institutions to combat in a more efficient way desertification, to meet convention liabilities, and to regularly monitor the realized activities, and it entered in force with circular published on the Official Gazette of the 09th March 2005 (2005/2).

In the framework of the convention, “United Nations Convention to Combat Desertification 10 Year Strategic Plan” including 2008-2018 years, was accepted at the 8th Conference of the Parties held in 2007 in Madrid. United Nations Convention to Combat Desertification (UNCCD) Secretariat requested to country Parties to align their National Action Plans with the 10 Years Strategic Plan.

Following this, “Alignment of Turkey’s National Action Plan with UNCCD 10-Years Strategy and Reporting Process” was started in partnership with Combatting Desertification and Erosion General Directorate and FAO in order to renew the action plan. The project was supported by Global Environment Facility (GEF).

Works were carried out in the framework of the project and the National Action Plan was prepared with the participation of all related institutions, agencies, NGOs
and universities and was updated together with Combating Desertification National Strategy which preparations started on 2012, to become a unique document untitled “Combating Desertification National Strategy and Action Plan”.

This document was presented to the High Planning Council and was approved by Ministry Council with decision number 2015/20 on 18.06.2015 in order to implement it in a more efficient way. Combating Desertification National Strategy (2015-2023) entered into force by publication in the Official Gazette of the 24th of July 2015 number 29424.

Strategy document and action plan were united to compose a unique document “Combating Desertification National Strategy and Action Plan”. In the said document, following items take place:

- 7 implementation targets,
- 23 outcomes
- 74 Actions
- 165 indicators.

Moreover, web based monitoring, assessment and report system was prepared and implemented to collect and report online in the most efficient way activities carried out by institutions/agencies in the framework of the action plan (http://cmusep.cem.gov.tr).

All institutions/agencies related taking place in the action plan is reporting in a regular basis their works via the system. The works carried out by our country are reported according to these data to UNCCD Secretariat and to TÜİK.
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