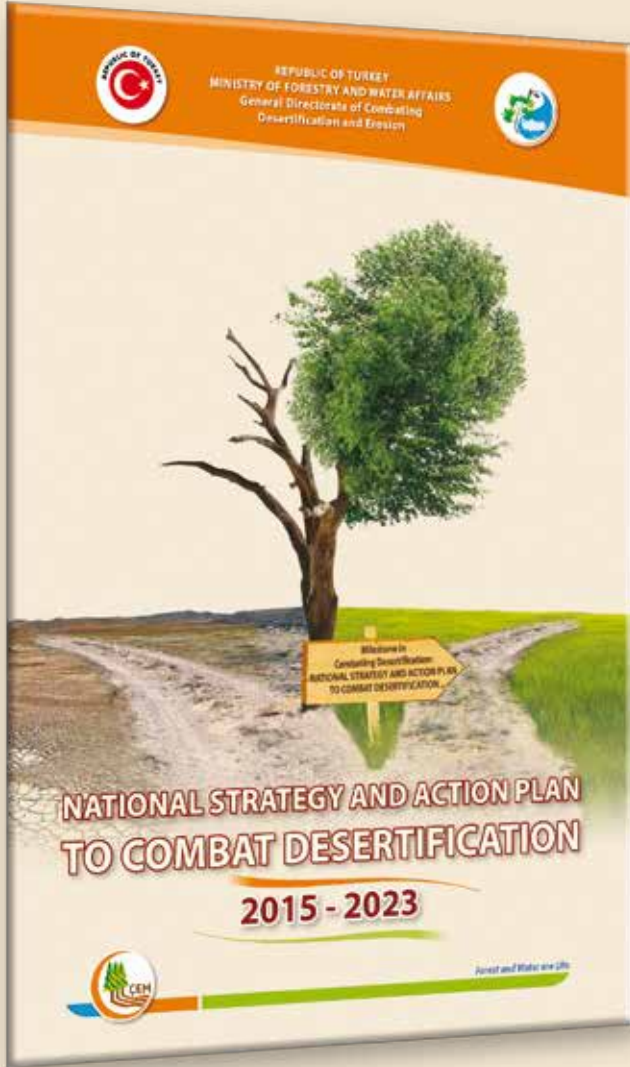




REPUBLIC OF TURKEY  
MINISTRY OF FORESTRY AND WATER AFFAIRS  
General Directorate of Combating Desertification and Erosion



# NATIONAL STRATEGY AND ACTION PLAN TO COMBAT DESERTIFICATION



Forest and Water are Life.





# NATIONAL STRATEGY AND ACTION PLAN TO COMBAT DESERTIFICATION

**T**his document outlines the key Strategy and Action Plan activities for combating desertification and land degradation in Turkey, for the period 2015 to 2023. It forms the underlying basis in how Turkey will ensure the effective implementation of planned practices and coordination between different institutions. The proposed strategy covers a ten-year period; however, the action plan developed is for implementation within the first five years.

Turkey is a signatory to the United Nations Convention to Combat desertification (UNCCD), and this document outlines how Turkey will implement the key strategic aims of the convention. This paper has been prepared with necessary contributions from related parties under the coordination of Directorate General of Combating Desertification and Erosion in the Ministry of Forestry and Water Affairs. The Directorate General is the main focal point in the implementation of the UNCCD within Turkey and is responsible for ensuring coordination and cooperation between related bodies.

This Strategy and Action Plan is prepared in the framework of Turkey's approach to comply and apply the 10-year strategy document implemented by the Secretariat of the UNCCD. In preparation of this document Turkey's obligations with respect to reporting needs during the preparation phase were taken into consideration. The Strategy and Action Plan covers the specific situation in Turkey and development of national targets. Further, its use encourages the spread of a positive attitude to overcome desertification in other countries affected by desertification and land degradation, especially within the region.

# Aim

Desertification and land degradation is a global issue affecting a population of more than a billion people living worldwide. Desertification and land degradation leads to serious food safety issues in the countries affected. In the face of this phenomenon, which is very effective especially in Africa in 20. century, world governments started to seek for solutions under the leadership of the United Nations. In 1992 at the Rio Summit, intergovernmental officials agreed on three conventions; to stop desertification, to limit activities that impact climate change and to reduce loss of biological diversity. The United Nations Convention on Desertification, Land Degradation and Drought was ratified in 1994 in Paris and was introduced in 1996. Turkey became a signatory to the convention in 1998.

In line with membership requirements, Turkey has undertaken to implement the requirements of the UNCCD convention. This is being done through the framework of the Turkish National Action Program to Combat Desertification, which commenced in 2005, and continues today. In line with changing conditions since then, the UNCCD Secretariat issued a "10-year strategy document" covering years 2008 - 2018, to facilitate member states in the implementation of national, regional and international strategies and action plans.





The UNCCD 10-year strategy was approved at the Eighth Conference of Parties in 2007. Member states are expected to harmonize their national and regional strategies within the context of this document.

In 2013, the Ministry of Forestry and Water Affairs, Directorate General of Combating Desertification and Erosion (ÇEM) embarked on establishment of a national strategy to be harmonized with the UNCCD's 10-Year strategy document. The national "Strategy to Combat Desertification in Turkey" was finalized in 2013, following a number of high level meetings conducted in accordance with the official opinions of Government and related institutions (See Chapter 3 for Strategy). Following development of the strategy document, it was agreed to develop an Action Plan, implemented through a project to ensure a participative approach. The Action plan was developed within the scope of an agreement between ÇEM and Food and Agriculture Organization of the United Nations (FAO) Sub-Regional Office for Central Asia (SEC). The project was implemented in early 2014, with funding provided by the Global Environment Fund (GEF). Besides producing the national action plan, the project also aimed to establish Turkey's reporting liabilities as a signatory to the UNCCD convention.



# Preparation Process

Certain basic principles were adopted during the preparation phase of the strategy and action plan; primarily to ensure full stakeholder participation. During the strategic planning process in 2013, and the action plan preparations in 2014, a series of meetings and workshops were organized, and several times opinions were received on early drafts. A number of representatives from various public bodies, academic institutions, NGOs and private sector organizations participated in the workshops.

During the strategy and action plan preparations any existing documents, such as previous and current strategy documents, action plans, council resolutions, development plans, and so on, have been reviewed; and former plans produced by other organizations were also taken into consideration during the action plan strategy development and preparation phases. Designated priorities were to: 1) Combine the practices to be implemented by institutions and organizations in the scope of combating desertification and land degradation during the strategy and action plan preparations. 2) gather them under a single authority portfolio; and 3) ensure active cooperation between institutions to drive successful implementation.



Finally the UNCCD 10-Year Strategy Document approach, and reporting liabilities of Turkey under the convention were taken into consideration during the whole course of this study, and the Turkish Strategy and Action Plan format was designed accordingly. It should be noted that this document is not simply a copy of the UNCCD strategy document.







## FIRST WORKSHOP ON STRATEGY AND ACTION PLAN 25-27 NOVEMBER 2013



This strategy and action plan defines and implements national targets for Turkey. Further, it aims to spread this approach over all countries under the influence of desertification and land degradation, and particularly those within the region.



It is equally important to ensure effective the targets preparation and efficient implementation of the Strategy and Action Plan to achieve preparation. This issue was evaluated fully during meetings with various institutions, organizations and experts during plan preparations; and includes recommendations on necessary monitoring and evaluation, financial structures, and coordination and cooperation needs, which are required for success.

With all the accumulated experience gained during the preparation phase, it is reasonable to claim that this Strategy and Action Plan is produced with the experience that Turkey have currently had. In the coming years, there is likely to be an increase in knowledge and experience, as well as empowerment, due to technological advancements and developments in the academy. With this accumulated experience it will be possible to ensure more efficient preparation, participation and revision of the Strategy and Action Plan in the future.

# SCOPE and PRIMARY MISSION

## SCOPE

(VISION)

Turkey, through this national strategy to combat desertification, will ensure the adverse effects of aridity, desertification and land degradation are mitigated against; and will rehabilitate degraded lands whilst balancing conservation, land improvement and use, in line with sustainable environmental and natural resource management practices; ensuring rural development and improving international cooperation.

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## PRIMARY MISSION

(MISSION)

Successful implementation of policies and programs aimed at mitigating the adverse effects of aridity and desertification, proactively rehabilitating degraded lands, contributing to rural development and improving local participation and international dialogue; by means of raising awareness, capacity building, technological advancement and resource allocation.

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# STRATEGIC OBJECTIVES

Strategic Objectives	Expected Outcomes	Indicators
<p><b>1.</b> Improving affected and likely to be affected ecosystem conditions.</p>	<p><b>1.1.</b> Land productivity in affected and likely to be affected lands, and other ecosystem products and services are improved with respect to sustainability and contribution to livelihoods</p> <p><b>1.2.</b> Reduced ecosystem vulnerability to climate change, aridity and extreme conditions</p>	<p><b>1.1. Reduction in the total area affected by desertification and aridity.</b></p> <p><b>1.2. Increase in explicit primary productivity in affected lands.</b></p>
<p><b>2.</b> Improving affected and likely to be affected population's living conditions.</p>	<p><b>2.1.</b> Improved livelihoods of affected rural population; improved revenues, social and ecologic living conditions through sustainable land management</p>	<p><b>2.1. Decreased number of persons adversely effected by desertification and aridity.</b></p> <p><b>2.2. Increased rate of people living above the poverty line in affected lands.</b></p> <p><b>2.3. Decreased rate of migration in local populations, from rural to urban areas.</b></p>
<p><b>3.</b> Ensure national and global benefit in conserving biological diversity and fighting climate change as well as in combating desertification.</p>	<p><b>3.1.</b> Efforts in the field of combating desertification contribute to mitigation of the impact of climate change and conservation of biological diversity as well as contributing to its sustainability.</p>	<p><b>3.1. Increased carbon supplies in affected lands.</b></p> <p><b>3.2. Increased area (in hectares) in forest, agricultural and aquatic ecosystems applying sustainable management practices.</b></p>

Strategic Objectives	Expected Outcomes	Indicators
<p><b>4.</b> Mobilize necessary resources to support the implementation of the UNCCD Convention by means of establishing an efficient partnership between national and international actors; in that regard, Turkey leading the bilateral, regional and global cooperation, sharing experiences and information with other parties.</p>	<p><b>4.1.</b> Necessary increases in financial, technical and technological resources; more efficient and effective use of resources for the domestic implementation of the UNCCD Convention in combating desertification in Turkey.</p> <p><b>4.2.</b> Necessary setting of political framework, cooperation and practices to ensure efficient contribution and participation of all related parties for the implementation of UNCCD Convention on Combating Desertification.</p> <p><b>4.3.</b> . Level of information, awareness and solidarity of different segments of society and economic groups on the mitigation of the impact of aridity and in combating desertification is increased.</p> <p><b>4.4.</b> Turkey's effectiveness and prestige increased in international institutions and decision making mechanisms.</p> <p><b>4.5.</b> Institutions to contribute to combating desertification on bilateral and/or regional level are established; efficiency of cooperation, projects and programs by Turkey in other regions and countries have been improved.</p>	<p><b>4.1. Increased number of national experts actively working in international Institutions and decision making bodies.</b></p> <p><b>4.2. Increased number of medium and large scale bilateral/regional/global technical cooperation projects, capacity building and implementation in coordination with Turkey</b></p> <p><b>4.3. Increased quality and quantity of existing data necessary to mitigate the impact of desertification and aridity.</b></p> <p><b>4.4. Increased variety and level of existing financial support and facilities to mitigate the impact of desertification and aridity.</b></p> <p><b>4.5. Ensure development policies and measures involve mitigation of the impact of desertification and aridity; and increased solution offers.</b></p>



# OPERATIONAL OBJECTIVES

Operational Objectives	Outputs
<p><b>1. Molding Public Opinion, Awareness Raising and Training</b></p> <p>Extend studies in combating desertification and land degradation as well as increasing support and contribution through influencing processes and actors.</p>	<p><b>1.1.</b> More frequent national media coverage on combating desertification and land degradation, and significant increase in number of groups reached.</p> <p><b>1.2.</b> Consumption and usage habits of related populations are reviewed, strategies identified and put in action, and training deliveries are done in order to reduce natural resource use habits that leads to desertification and land degradation.</p> <p><b>1.3.</b> All stakeholders efficiently involved in combating desertification and land degradation processes, and acting to defend against desertification.</p> <p><b>1.4.</b> Combating desertification and land degradation and mitigation of aridity included in higher education, formal and informal education programs.</p>
<p><b>2. National and International Coordination and Cooperation</b></p> <p>Ensure efficient communication, coordination and cooperation between related national and international organizations and institutions; through international organizations, NGOs and TİKA ensure efficient cooperation and collaboration with countries mitigating desertification and land degradation, starting from Africa, Middle East and underdeveloped countries.</p>	<p><b>2.1.</b> National legislation to coordinate international agreements prepared; efficient communication between existing national legislations and institutions ensured.</p> <p><b>2.2.</b> Partnership and cooperation agreements to combat desertification and land degradation signed with other countries and international organizations; national and international cooperation projects are planned and implemented with high level participation, cooperation and coordination.</p>

Operational Objectives	Outputs
<p><b>3. Political Framework</b></p> <p>Prepare the necessary political and legal setting to support combating desertification and land degradation.</p>	<p><b>3.1.</b> Methods, tools and financial resources to integrate combating desertification and land degradation strategy and action plan to national action plans and programs, national and regional development plans, spatial plans and sectoral investment decisions and programs are identified and mobilized.</p> <p><b>3.2.</b> Legal, financial and socio-economic challenges as well as overlapping and duplication in different laws and legislation about combating desertification and land degradation are identified and necessary legislative amendments are made; also legislation is harmonized in the framework of combating desertification and aridity.</p>
<p><b>4. Science and Technology, Monitoring and Evaluation</b></p> <p>Produce and share information and data by means of research, technology development, monitoring and evaluation activities on combating desertification and land degradation and mitigate impact of aridity at international, national and regional levels.</p>	<p><b>4.1.</b> A national Monitoring and Evaluation System, based on qualified data and in line with country specifications is developed.</p> <p><b>4.2.</b> Data and information about the interaction between desertification, aridity and climate change in affected areas are produced with respect to scientific and traditional information.</p> <p><b>4.3.</b> Risk analysis and management activities implemented at the national level.</p> <p><b>4.4.</b> Common and integrated R&amp;D and technological advancement projects and activities are conducted, coordinated, publicized and implemented.</p>



Operational Objectives	Outputs
<p><b>5. Administrative Structure and Institutional Capacity Building</b></p> <p>Identify necessary capacity building requirements to improve efficiency of public and non-public institutions, and implement the plan to fulfill those requirements.</p>	<p><b>5.1.</b> Capacity assessment of the current situation in Turkey in combating desertification and land degradation is complete, and respective action plans are put in to action.</p> <p><b>5.2.</b> Qualified human resources raised in combating desertification and land degradation.</p> <p><b>5.3.</b> Improved contribution and participation of NGOs such as unions, foundations and cooperatives as well as the private sector in combating desertification and land degradation processes and activities.</p>
<p><b>6. Finance</b></p> <p>Increase funds and efficiency and effectiveness of using these funds in combating desertification and land degradation; improve financial cooperation in technology transfer at the international level.</p>	<p><b>6.1.</b> Financial incentives (loans, grants) and technical assistance mechanisms are built and necessary fund raising ensured to prevent desertification and land degradation, mitigate aridity, rehabilitate effected lands and ensure relevant population development; to develop technology, and to implement and share best practices.</p> <p><b>6.2.</b> Necessary steps to allocate international funds for combating desertification and land degradation are identified, investment schemes and plans are developed to transfer funds to effected populations and ecosystems.</p>

Operational Objectives	Outputs
<p><b>7. Sustainable land management</b></p> <p>Identify integrated preservation measures and rehabilitation practices focused on climate change to preserve biological diversity and ecosystem services towards affected and likely to be affected zones and ecosystems; implement them through sustainable management mechanisms.</p>	<p><b>7.1.</b> Ecosystems, trends and lands affected by desertification and land degradation, and/or that are at risk and sensitive, are mapped and priority subjects are identified. (Note: Actions stated under 4.1. also contribute to this output).</p> <p><b>7.2.</b> Land use codes in areas affected from desertification and land degradation as well as potential desertification lands are identified, legal measures are taken to prevent inability of use.</p> <p><b>7.3.</b> Special approaches for affected zones are developed to decrease soil loss and erosion sensitivity of land (e.g. suitable cultivation and rehabilitation, irrigation, fight against soil and water contamination, organic farming and good farming practices, afforestation, techniques of rehabilitation of spoiled forest, methods and soil preservation strategies); and respective adjustments are made and implemented in plans and projects accordingly.</p> <p><b>7.4.</b> Amelioration practices in forest, steppe, pasture, wetland, coastal zone and other natural habitats in line with natural ecosystem structure.</p> <p><b>7.5.</b> Contributed to decreased emission through climate friendly agricultural practices and approaches to increase carbon sink capacity of habitats.</p> <p><b>7.6.</b> Preservation of ecosystem services and biological diversity approach integrated and practiced in management plans.</p>

All objectives and related outputs, actions and indicators were finalized by workshop 2th June 2014 in Ankara.





Table: Comparison of Strategic objectives in UNCCD 10 Year Strategy Document and Turkey's Combating Desertification National Strategy

United Nations Convention on Combating Desertification, 10 Year Strategy Document	Turkish National Strategy
1. Improving affected population's living conditions.	1. Improve living conditions of affected and likely to be affected populations.
2. Improving affected ecosystem's conditions.	2. Improve conditions of affected and likely to be affected ecosystem's
3. Ensure global benefit through effective implementation of the agreement.	3. Ensure national and global benefit in conserving biological diversity and fighting climate change as well as in combating desertification.
4. Mobilize resources by ensuring efficient partnership among actors for successful implementation of the agreement.	4. Mobilize necessary resources to support the implementation of the convention by means of establishing efficient partnerships between national and international actors; and in that regard, Turkey leading the bilateral, regional and global cooperation, sharing experiences and information with other parties.

Table: Comparison of the Operational objectives between the UNCCD 10-Year Strategy Document and the Combating Desertification National Strategy.

UNCCD 10 Year Strategy Document	National Strategy
1. Advocacy, awareness raising, training	1. Molding public opinion, Public awareness raising and Training
2. Political framework	2. National and International Coordination and Cooperation
3. Science and Technology	3. Political Framework
4. Capacity building	4. Science and Technology, Monitoring and Evaluation
5. Finance and technology	5. Administrative Structure and Institutional Capacity Building
	6. Funding
	7. Sustainable land management

# Coordination, Monitoring and Assessment of Combating Desertification Strategy and Action Plan

## 1. Coordination, Monitoring, Assessment and Reporting of Desertification and Combating Desertification Strategy and Action Plan

Desertification, land degradation and aridity are events experienced on a global scale which adversely affect the natural environment, the flora and fauna living in such environments, and human communities. It is very important to acquire information on the current status of desertification and land degradation, and gain an understanding of why it occurs, in order to reverse the adverse effects experienced and to extend the positive results obtained from efforts to apply best practices. For this reason, monitoring the efforts made and assessing their impacts are crucial.

### 1.1 Monitoring of Desertification

Turkey is a country that is likely to face desertification risk when issues such as its climate, topography, geology, hydrology, vegetation cover, presence of arable and non-arable land, characteristics of pasture and forest areas and the impact of population are taken into consideration. In the Global Desertification Vulnerability Map a significant portion of Turkey is displayed as vulnerable to desertification.

There are many monitoring-assessing systems related to desertification/land degradation and they are operated by plenty of institutions in Turkey.

With the scope of Development of Basin Monitoring and Assessment System Project carried out by ÇEM and TÜBİTAK, criteria and indicators for monitoring of desertification were determined, presented in the table below.

As part of the project, Turkey Desertification Model and Risk Map indicating distribution of the areas under the risk of desertification were developed.

A monitoring system which is capable of dynamic calculation and which can compare risk at different times was developed in order to keep Turkey Desertification Model and Risk Map up to date.



## Desertification Criteria and Indicators in Turkey

Category name (Criteria)	Number of Variables / Parameters / Indexes / Indicators
1. Climate	10
2. Water	3
3. Land	10
4. Vegetation cover and land use	2
5. Topography and geomorphology	6
6. Socio-economy	7
7. Management	10
<b>Total</b>	<b>48</b>

The status of desertification risk for Turkey will be livingly monitored, the type of measures and the areas where the measures should be taken will be determined, and protection policies will be developed with the system.

### 1.2 Monitoring of Strategy and Action Plan, National and International Reporting

Efforts undertaken nationally to combat desertification in Turkey are monitored by the General Directorate of Combating Desertification and Erosion (ÇEM) using an effective monitoring and assessment system. The basis for this monitoring is defined in the National Action Plan for Combating Desertification implemented in 2005, along with institutional responsibilities and liabilities to achieve the required aims. Information is requested annually by ÇEM.

#### 1.2.1 Monitoring of Strategy – Action Plan and Annual Assessment Reports

In the previous period ÇEM has prioritized monitoring of the National Action Program and now is prioritizing monitoring of the implementation success of this National Strategy and Action Plan for Combating Desertification and Land Degradation. Assessment reports received from institutions are analyzed and assessed by ÇEM and various reports produced for different purposes. The “Annual Assessment Report” is the primary report and is a summary of all sub-reports, and details the stage reached by the different institutions in relation to the efforts carried out within the scope of action plan.

### 1.2.2 PRAIS Reporting (Performance Review and Assessment of Implementation System)

According to the UNCCD in order to determine the current condition and likelihood of desertification, land degradation and drought, it is important to determine prioritized actions on a national and global scale and to effectively monitor and assess such actions.

The lack of monitoring-assessment in the convention was remedied in 10-Year Strategy Document and a specific section under the title "Performance Monitoring" was added. Accordingly, indicators for both strategic and operational objectives were specified and it is these indicators that comprise the basis of the PRAIS (Performance Review and Assessment of Implementation System) reporting system.

Turkey reports biannually (Table) via this system, as both an "affected" and "developed country".

**Table: PRAIS reporting periods**

Period reported	Reporting year
Reporting Period 2008-2009	2010
Reporting Period 2010-2011	2012
Reporting Period 2012-2013	2014
Reporting Period 2014-2015	2016
Reporting Period 2016-2017	2018

### 1.2.3 Internet Based Monitoring, Assessment and Reporting System (IDR)

The General Directorate of Combating Desertification and Erosion has developed and launched an Internet-based Monitoring, Assessment and Reporting System (IDR). It is used for the effective collection and reporting of information obtained from all institutions. Figure 1 shows which Ministries (including Directorates) and other institutions that have specific reporting responsibilities. The system is used as a basis for preparation of both PRAIS reporting requirements, but also other national reports, with output reports available to a large national and international stakeholders (Figure 2).

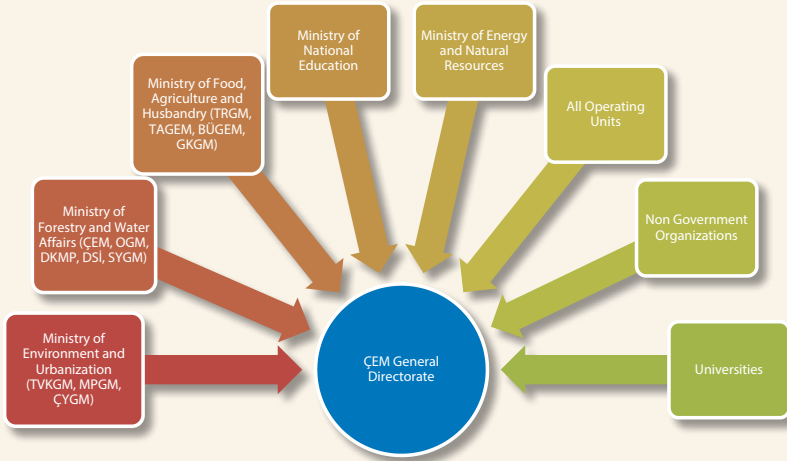


Figure 1: Institutions to provide data to Monitoring, Assessment and Reporting System



Figure 2: Institutions to benefit from Monitoring, Assessment and Reporting System



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