I. INTRODUCTION

1. TURKPA member countries are the states with rich natural resources and developed industries. As it’s known, certain environmental problems occur while utilization of natural resources and due to the unresolved environmental problems accumulated for many years the environment has excessively been polluted in member countries. Currently there are a number of environmental problems in TURKPA member countries that require urgent solution. One of most topical problems among these is soil erosion and salinization that is also called desertification.

2. International Conference on Environment and Development held in Rio de Janeiro in 1992 recommended the preparation of the United Nations Convention to Combat Desertification. The Convention was ready in 1994 and many countries of the world signed it. The Turkic-speaking countries in their policy have been attaching primary importance to combating desertification. All Turkic-speaking countries signed The United Nations Convention to Combat Desertification. The Convention on Desertification is to be implemented through regional and national action programmes. It promotes participation of national institutions, NGOs and the people whose joint activities could provide a long-term policy and sustainable development. The Convention could be considered as a basis of socioeconomic development and conservation of natural resources.

3. Kazakhstan, Kyrgyzstan and Turkey adopted their own National Action Programmes. The main purposes of the National and Regional Action Programmes are in particular: determining priorities of the countries related to desertification and drought; contributing to regional efforts; promoting cooperation among stakeholders; increasing public interest on desertification; integrating development plans and strategies at all levels; promoting
participation of all related institutions, civil society organizations and local people; allocating financial resources for implementing various activities in this field.

4. According to the United Nations sources, desertification and drought threaten an area on the earth of more than 4 billion hectares as well as 1.2 billion people living in 110 different countries. The geographical location, topography, climatic conditions, the long standing history, developing economies as well as dynamic population structures of the Turkic-speaking countries is the cause of the high magnitude sensitivity exerted on the issue of desertification and drought.

5. The Report contains brief information on national policies of the TURKPA member countries in combating desertification. The report is based on the data of the relevant Ministries of the member countries.

II. DEFINITIONS ON DESERTIFICATION

6. According to the definition of the UN Convention to Combat Desertification (hereinafter UNCCD), desertification is “degradation of lands in droughty, semiarid and dry sub-humid areas resulting from various factors, including climate change and man-caused factors”. Desertification is a destructive which becomes apparent mainly on arid lands; it includes degradation of land, water, plant and other resources together with demographic outburst and ecological stress. About 4 billion hectares or 1/3 of the earth’s land surface is threatened by desertification, over 250 million people are directly affected, and one billion people in over 100 countries are at risk. Twenty four billion tons of fertile soils disappear every year.

7. As the consequence of internationally increased concern on global land degradation, it was finally recognized that desertification is an important problem all around the world, in terms of economic, social and environmental aspects. In this regard, the United Nations started to take concrete measures dealing with threats and challenges of desertification. The first Conference on Environment, in Stockholm in 1972, was the turning point on this matter and was followed by the Conference on Desertification held in 1977. The “Action Plan to Combat Desertification” approved by the Conference was a pioneering and one of the most leading international initiatives on combating desertification and drought.

8. The Intergovernmental Negotiation Committee was established by the United Nations Environment and Development Conference (UNCED) in 1992 to prepare the Convention. The United Nations Convention to Combat Desertification was adopted on 17 June 1994. 17 June was therefore declared as the Day of Combating Desertification. The Convention was empowered on the 26th of December 1996 with 191 countries as parties of the Convention.

9. Causes of desertification: Most human activities that can lead to desertification are closely related to agricultural practices such as: overgrazing, which removes the vegetation cover that protects against erosion; overcultivation, which exhausts the soil; and deforestation, which destroys the trees that bind the land to the soil. Poor irrigation practices raise salinity, and sometimes dry the rivers that feed large lakes. The intensification of human activities brings an increased greenhouse effect, causing global warming. Drylands are likely to be especially vulnerable to effects of climate change.
DESERIFICATION IN TURKPA MEMBER COUNTRIES

AZERBAIJAN

10. The United Nations Convention to Combat Desertification was approved by the Republic of Azerbaijan on 24 April 1998. Desertification process in Azerbaijan occurs as a result of impact of natural, particularly, anthropogenic factors, mainly in the foothill, plain and lowland areas. Average annual amount of precipitation varies between 150-400 mm and evaporation is 3-4 times higher than the amount of precipitation in these areas. The climate refers to semi-desert and arid steppe nature.

11. Desertification process is more typical for Kur-Araz lowland (central part of Azerbaijan). Anthropogenic desertification process intensified as a result of increase of population, settlement of refugees and displaced people in the area, increase of demand for agriculture, as well as, livestock, extensive use of soil and vegetation due to the lack of natural gas and electricity in recent years. Desertification in Kur-Araz lowland is more intensive, especially, in Shirvan steppe. Researches in the area indicate that the causes creating direction and intensity of soil and vegetation desertification (or degradation) are associated with environmental conditions of the area (relief, vegetation, soil) and diversity of anthropogenic factors. In this regard, the territory can be divided into the following areas:

1. Degradation process of riparian (tugai) forests along the Kur River occurred as a result of the destruction of forests there, excessive pasturage of cattle and use of forest soils under agricultural plants. Desertification in this area goes on as dehydration, swamping and sometimes as salinization.

2. The major reasons causing desertification in irrigated areas in the lowland part of the region are associated with creation of collector-drainage network that do not meet modern requirements and irrigation works. Desertification process in this area occurs in the direction of soil salinization and swamping.

3. Desertification process in the foothills of the region is connected with the destruction of vegetation, excessive pasturage of cattle, non-compliance with agrotechnical rules. Desertification in this area occurs in the direction of degradation of vegetation, surface and ravine erosion, irrigation erosion in irrigation areas, sometimes salinization and with creation of landslide.

12. Project on "Management of joint and sustainable use of lands" was carried out with the support of the Global Environment Fund (GEF) and the United Nations Development Programme (UNDP) in 2006-2009. At the moment, within the framework of the project on "The sustainable management of land and forests in the Caucasus region" implementing by GEF and UNDP, sustainable management of land and forests are being carried on the analysis of legislation and relevant training.

13. National programs based on the principles of sustainable development, taking into account a range of activities including the restoration of eroded soils to be financed from the state budget, state programs on "Ecologically sustainable socio-economic development",...
"Restoration and expansion of the forests", to raise productivity through the development of advanced methods of farming, to strengthen protection of summer and winter pastures and hayfields, with the aim to increase the efficiency of their use and to ensure protection of biodiversity project on"Effective use of summer and winter pastures, hayfields and prevention of desertification" (2004-2010), with the aim to stimulate an increase in agricultural production and to improve food supply for the population at the expense of local production "Reliable supply of food for the population (2008-2015)"; "Socio-economic development of regions (2014-2018)" projects are being implemented in the country.

14. In accordance with "The 10-year Strategic Plan" of the United Nations Convention to Combat Desertification the National Action Plan (NAP) is being prepared and is expected to be adopted in 2015.

KAZAKHSTAN

15. Convention to Combat Desertification was ratified by the Law of the Republic of Kazakhstan “On ratification of the UN Convention to Combat Desertification” as of July 7, 1997. For Kazakhstan, the main territory of which is located in the area of water deficiency, desertification problem is very serious. Presently, two third of the country’s territory suffer from various extents of desertification.

16. The causes for desertification in Kazakhstan are both natural and anthropogenic. The main types of desertification in Kazakhstan, determined according to the criteria adopted by the UNCCD are: vegetation degradation; water and wind erosion; salinization and non-ulmification; chemical pollution of soil, subsoil and surface waters; man-caused interference with the hydrological and soil regimes.

17. One of the greatest challenges of this century is an ecological crisis at Aral Sea. Being located in the middle of the desert the sea used to create enabling climate and ecological conditions for the surrounding regions, regulate moisture at the vast territory adjacent to Aral and protect it the hot winds blowing from south deserts. The sea possessed high biological fertility, carried big fishery, hunting, transportation and recreational significance.

18. The government of Kazakhstan conducts various activities aimed at raising of public awareness and education on desertification. Mass media sector widely broadcasts different events dedicated to problems of desertification and drought.

19. Kazakhstan increased the share of financial support for civil society organizations (CSOs) through a small grants program of the UNDP / GEF. In 2012 and 2013 from the GEF-5 STAR topics "Land degradation" for SGP allocated 830.000 Doll. USA. From Y1997, GEF SGP in Kazakhstan supported 256 projects on total amount $4 300 000.

20. A number of Programmes are being implemented such as: 1) State Program on Environmental Monitoring and Assessment, reflects a common methodology for the assessment and monitoring of the condition of the land. 2) State Program to combat land desertification 2010-2015 takes into account a number of activities and the funding by state budget for the renovation-and prevention eroded land. 3) Sustainable land management in the face of climate
change includes the curricula of Knowledge Support Centers in North Kazakhstan areas. 4) State Program of Education Development of the Republic of Kazakhstan for 2011-2020 aimed at improving the competitiveness of education, human capital development by providing access to quality education for sustainable economic growth. 5) environmental education program for 2011-2015 on improving civil society norms and etiquette through the conservation of natural resource improve awareness of population of Kazakhstan. 6) Environmental Education Program for 2010 - 2016, forming in the minds of the population view of the world as an integral unity of earth, air, flora and fauna, human relationship and interdependence with the world.

21. In the policy framework Kazakhstan has launched a project with the financial support of UNDP Global Environment Facility called "Improvement of the National Action Plan to Combat Desertification, in accordance with the obligations of the Republic of Kazakhstan in the framework of the UN Convention to Combat Desertification." As well as created inter-ministerial consultative decision-making working group.

22. In the field of science, technology and knowledge the country has adopted a variety of scientific development MEP "Scientific basis of indicators of environmental conditions in the Republic of Kazakhstan"

23. Ecological Security Concept approved by order of the President of the Republic of Kazakhstan on 30 April 1996, considered the environmental priorities of the transitional period, in particular environmental problems of privatization, questions need to create a system of environmental legislation, state control and examination of economic mechanisms of environmental management, environmental monitoring.

KYRGYZSTAN

24. The Kyrgyz Republic acceded to the UNCCD in December 1997. The Convention was ratified by the Jogorku Kenesh (Parliament) of the Kyrgyz Republic in 1999. The National Action Plan (NAP) of Kyrgyz Republic was approved in December 2000. The NAP coverage is cross-sectoral – geo-strategic position of the country, socio-economic situation, factors and scales of desertification, priority activities, projects and programs, legislative frameworks, and a scheme of NAP implementation.

25. A National Center to Combat Desertification (NCCD) was set up within the Kyrgyz Research Institute for Irrigation of the Ministry of Agriculture, Water Resources and Processing Industry of Kyrgyz Republic. NCCD steered the NAP formulation, and is responsible under the NFP-CD for its implementation and generally for coordination of activities on combating desertification in the country.

26. The Kyrgyz Republic is divided into three geographical zones: (i) the low mountain and foothill zone ranges between 400-1200 meter above sea level (msl) dominated by irrigated agricultural lands and settlements; (ii) the moderate mountain zone between 1,200 and 2,600 msl comprising grasslands, and forests; and (iii) the high mountain above 2,600 msl comprising sub-alpine and alpine meadows, rocky outcrops and at higher elevations, year-round snow and glaciers (see table 2). The main land degradation processes at work in
Kyrgyzstan include soil erosion, salinization and swamping, chemical pollution, and destructive changes of vegetable covering. Each zone has problems of natural resource degradation conditioned by its geophysical and climatic characteristics which are compounded by excessive and inappropriate economic activity.

27. The main priority areas requiring urgent preventive measures to control land degradation in Kyrgyzstan are:
   • water erosion as a result of irrigation and precipitation on slope lands, salinization and swamping in lowlands – causing problems of management of crop lands;
   • overgrazing of pastures, declining fodder availability and deteriorating fodder quality – causing problems of management of pastoral lands;
   • felling down of forests for fuel and as a consequence, wind and water erosion, and landslides – causing problems of forest and upper watershed management.

28. In terms of program development, this implies identification of pilot projects focused on:
   • Rational use and protection of land resources. Special attention to be given to integrating land and water resources management in upper watershed.
   • Establishment of national and regional market intelligence information system in Central Asia for agricultural producers’ support, with easy access by farmers about prices and production, and information about available volumes of production in the main markets both inside the countries and between the countries, and in the world market.
   • Enhancement of the capacity of village communities for eco-tourism management in the Kyrgyz section of the Great Silk Road, which would generate resources for development and incentives for controlling land degradation.
   • Development of a system of monitoring (and inventory) of agricultural lands, pastures, and water use;
   • Reafforestation, protective afforestation, and alternatives to firewood in rural areas;
   • Internet connectivity of Kyrgyz rural periphery to information network for improvement of economic base, education and culture; and increase of rural population access to agroecological information through mass media.
   • Research and extension to test and promote application of modern methods of determination of the mode of crop irrigation, and prevent unproductive over-use of water, water logging and salinization of lands;
   • A regional program, with GEF financing, for sustainable management of mountain pastures in Central Asia.

TURKEY

29. Turkey acceded to the UNCCD in 31 August 1998. The Secretariat’s work at the national level, international contacts and the coordination is carried out by the General Directorate on Combating Erosion and Desertification (CED).

30. General Directorate on Combating Erosion and Desertification was established within the Ministry of Water and Forestry in 2011. The duties of the General Directorate; protection of land and development of natural resources, combat desertification and soil erosion, improvement and monitoring the implementation of plans and projects integrated avalanche, landslide and flood control, to provide support to these activities on a project basis, to
determine policies and strategies relating to these issues and operations, ensure cooperation and coordination among relevant institutions and organizations, planning at the national and regional level for the development of watersheds, to determine policies and strategies, to carry out research and development activities with universities and research-development institutions, to be engaged in activities such as education, publications and promotion etc.

31. Most desertification and erosion affected areas in Turkey are Konya Basin, Aras Basin and Igdir Regions. Erosion can be seen in each basin and each region. Risk maps are prepared in this perspective. In Turkey, erosion continues in 59% of agricultural lands, 64% of pasture and 54% of the forest lands.

32. In the context of combating desertification; criteria and indicators of desertification is being prepared and desertification process is expected to be followed by the Desertification Monitoring System Project. Institutions such as Food, Agriculture and Livestock Ministry, General Directorate of Forestry, TUBITAK, UNCCD, FAO, TICA, GEF, NGOs and the private sector can be listed as National and international project partners for combating desertification and erosion. Desertification monitoring is very important at this point. CED General Directorate is engaged in efforts to combat desertification and soil erosion by Ar–Ge and Model Projects. In addition, with the provincial organization and a strong corporate team, the General Directorate of Forestry takes on a very important function in the fight against erosion and many projects are being studied in conjunction with the General Directorate.

33. Experts expressed that there is not desert Turkey but there are areas entering into a process of desertification. Desertification is interested not only for Turkey, as well as for neighboring regions of Anatolia with concerns related to three continents. For this reason, CED General Directorate is developing to work on the projects with Africa and Asia. In this context; Niger-Turkey Friendship Forest Project in the framework of Desertification Land Degradation and Drought Fighting Capacity Development Project in Africa, Nursery Project in Palestine, and Watershed Rehabilitation Project in Kyrgyzstan is being continued. Experiences which Turkey possesses are shared with the least developed countries in Africa by Desertification Land Degradation and Drought Fighting Capacity Development Project.

34. Turkey's efforts to combat desertification and soil erosion are examined by experts in recent times and "Guide on Building Forests Resistant to Climate Change in Arid and Semi-Arid Areas" has been prepared. In this context, the National Strategy Document prepared to Combat Desertification and National Action Programme to Combat Desertification (NAPCD) was updated and launched in 2014. In addition, as the Land Degradation Assessment in Drylands (LADA) project reporting and dissemination of good practices is also important. Relations with the UNCCD secretariat and reports on 'Studies on Combating Desertification in Turkey', is important in terms of improving the capacity of the country, as well as improving the visibility of Turkey worldwide about these issues.

INTERNATIONAL COOPERATION OF TURKIC-SPEAKING STATES
35. Resolution of environmental problems requires collective approach, in particular partnerships among state, private and non-governmental sectors make easier to identify priority areas for joint measures on combating desertification. In this context, international cooperation and elaboration of international mechanisms of cooperation becomes crucial aspect.

36. The United Nations Convention to Combat Desertification, which has been in force since 1996, being the most important international convention, made the TURKPA member countries participants international and regional cooperation.

37. Azerbaijan is in the Appendix 5 (Central and Eastern Europe), Kazakhstan and Kyrgyzstan are in the Appendix 2 (Asia) of the Convention. International cooperation of these countries with the Convention regulated in accordance with these appendixes.

38. Turkey is in the Appendix 4 of the Convention, namely North Mediterranean Regional Implementation Appendix. International cooperation of Turkey with the Convention has been regulated in accordance with this appendix. Turkey has been participating into projects MEDRAP, MEDCOASTLAND and CLEMDES with other Mediterranean countries, Greece, Italy, Portugal, and Spain etc. Through this cooperation, Turkey enhances its national capacity, network, and experience of related institutions on the convention and desertification.

39. The FAO Subregional office for Central Asia (SEC) was officially established in August 2006, in Ankara, Turkey in order to serve Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkey, Turkmenistan and Uzbekistan with the support of Turkey’s Government.

40. Under the umbrella of the Conference on Interaction and Confidence-Building Measures in Asia (CICA), Turkey proposed to establish «the international training center as national contribution of Turkey to the CICA in Konya. Azerbaijan, Kazakhstan, Kyrgyzstan, Turkey and Uzbekistan are members of this Conference. This proposal adopted by the Fourth Meeting of the Ministers of Foreign Affairs of the Conference held in Kazakhstan at 12 September, 2012.

41. Turkey has expressed the desire to host the Conference of the Parties of the UN Convention on Combating desertification (UNCCD COP-12) to be held in 2015 at the 11th Conference of the Parties held in Windhoek, capital of Namibia on 16-27 September 2013 and the decision was adopted on Turkey to host the Conference. The 12th Conference of the Parties will be held in Ankara on October 12-24, 2015.

42. At 4 June 2014, the Ministry of Forests and Water Affaires of Turkey and FAO signed a new Memorandum of Understanding to support forestry issues including combating desertification. Within the umbrella of this agreement there are several projects. «Capacity Building for Sustainable Management of Mountain Watershed in Central Asia and the Caucasus» is one of them which the General Directorate of Combating Desertification and Erosion is the coordinator agency. TIKA is supporting this project both technically and financially. This project is being implemented in Turkey, Azerbaijan, Kyrgyzstan, Tajikistan and Uzbekistan.

43. Participation of TURKPA member countries to the meetings such as particularly Conferences of Parties (COP), Committee for Revision of Implementation of the Convention (CRIC), Regional Action Programme (RAP), and Sub-Regional Action Programme (SRAP) is important in terms of benefiting and exchange of experiences. Moreover, participation of all
related national institutions, universities, civil society organizations and interested experts should be promoted.

44. Several international visit, workshop and trainings were held among member countries. Azerbaijani experts made a visit to Turkey for supporting forestry issues, at present a delegation from Turkey is working on the territory of Kyrgyzstan, at the heart of Tian Shan-Khan Tengri Mountains, for the implementation of the plan prepared together with the experts from participated countries.

CONCLUSIONS

45. Cooperation of Turkic speaking states within the UN Convention to Combat Desertification should contribute to the efforts of TURKPA members to develop effective and result-oriented approach to the fight against desertification.

46. TURKPA member countries could strengthen their efforts in desertification control in the frame of sub-regional and joint action programmes. Desert Research Institute developed a proposal on Sub-regional Implementation Annex for Central Asia. This proposal was submitted to INCD (Intergovernmental Negotiating Committee on Desertification) in Geneva.

47. Sub-region of Central Asia could be considered as a part or Asian region. The sub-region includes five countries: Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan and Tadjikistan. The whole size of the area of the sub-region is 3.94 mln km2, population totals 53.79 mln

48. National and Regional Action Programmes aim at identifying factors which accelerate desertification, identifying priorities, setting out contribution to regional works, increasing public awareness on desertification matters, integrating development plans and strategies of countries, identifying responsible institutions and civil society organizations and allocating financial resources for desertification and drought related works.

49. Wide range of opportunities exists for Turkic-speaking states to mutually cooperate on this issue. Expansion of their interaction by holding of joint events and actions such as seminars or conferences would strengthen cooperation for the benefit of their people, as well as in the interest of the region.

50. In order to benefit from these mechanisms effectively, it is necessary to encourage partnerships with countries from European Union, Central Asia and Mediterranean. Especially, projects with the financial support of European Union may be implemented in order to explore huge experience of the EU in this field.

51. Member countries could determine concrete ways of cooperation with each other. Establishment of concrete mechanisms of combating desertification is of particular importance due to rapid solution of the problem. Similar challenges faced by the TURKPA member countries will urge them to increase their efforts and to advance framework of international cooperation.

52. Important role is reduced to individuals in combating desertification. Desert areas from North Africa to Central Asia are increasingly expanding and about 41 percent of the world's
territories becoming almost desert. Therefore, TÜRKPA member countries must seriously struggle on this subject in their own environment, country and the whole world, and manage their forest, water and food resources and use them wisely.

53. The participation of Turkic-speaking countries in the 12th Conference of the Parties of the UN Convention on Combating desertification, especially in Parliamentary Forum should be promoting effectively.

54. The platforms should be established and supported with the support of TIKA and similar organizations in order to ensure and promote the participation of non-governmental organizations and business community in combating desertification activities.

55. Taking into consideration the link between land and desertification, various activities should be carried out in the framework of the “2015 International Year of Land”.