

1. Comment 4-1

The Varamin plain is located in south east of Tehran; In the playa of Iran's central kavir deserts. The area is about 130000ha and its situation is 35°29'25" (N). 51°28'42" (E). Its climate includes both arid and semi-arid zones. The maximum temperature of the area is 44°C, during the summer and its annual range is 24°C. The annual rainfall is 150 mm and annual evaporation is 2400mm. Due to being an agricultural area, the utilization of water and soil resources is increasing, the soil is being destroyed and desertification is created. In order to study the desertification process of the plain based on land use, research was carried out two factors, water and soil were studied separately in each working group, Soil factors, such as salinity and alkalinity, and water factors, such as increasing or decreasing underground water level and underground water quality were evaluated. Based on the above-mentioned parameters, the desertification situation of the plain was evaluated. The results showed that in the south and southwestern parts of the plain the amount of desertification is increasing due to the high level of the underground water as well as decreasing water and soil quality. In the northern parts, desertification risk is threatening the plain due to the falling of the underground water table and decreasing water quality.

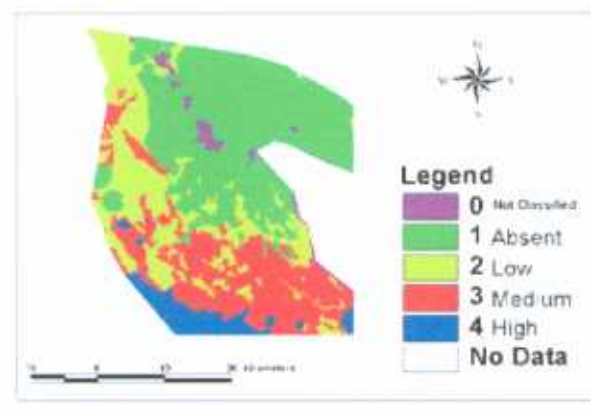


Figure 4.1.1. ESA Index

The map of ESA index (fig 4.1.1) shows that in the central part of plain and along the northeastern it, there isn't any risk of desertification. But in the southwestern and in the limited area in southeastern the risk of desertification is high. And in the others part of plain, the risk of desertification is low to high. The results show that from the total area of plain about 58,134 ha is in the Absent class, 33,578 ha is in the low class, 31,665 ha is in the medium class and about 7,812 ha is in the high class and about 2,859 ha is not classified, because these places are city, Village or water body.

With attention to the above results, although in 1 class the risk of desertification is low but the management in these lands is very necessary and important, because these lands

are generally of rangeland and also agricultural (the fallow is the most) and may be in affect of mismanagement, change to medium class. And in the south of plain that are medium to high classes, generally have drainage problems and also salinization; therefore we should be restrain of desertification speed with the soil improvement and others planning in these lands.

1.1. Ramsar Convention-wetlands

The Convention was adopted in 1971 in Iran, in the city of Ramsar. It came into force in 1975 and 131 countries already join the Convention and some other are in the process. Ramsar is the only global environmental treaty dealing with a specific ecosystem and the mission of the Convention is " the conservation and wise use of Wetlands by national action and international cooperation as a means to achieving sustainable development throughout the world." Some of the main activities of the Convention are the development of National Wetlands Policy and inventories of Wetlands. The Convention deals with all wetlands issues from surface water to groundwater (salty, freshwater, etc). Wetlands and flood control was mentioned in the initial Convention. Nevertheless this has not been a priority until very recently. For the Strategic Work Plan 2003-2008, this topic is included. The Ramsar Convention Bodies are the Conference of the Contracting Parties, the Standing Committee (regional representatives of Ramsar's six regions), the Scientific and Technical Review Panel and the Ramsar Bureau (Secretariat), in Gland, Switzerland. Main partners for the implementation of policies are the non-governmental organizations *IUCN-World Conservation Union, Wetlands International, World Wide Fund for Nature*

1.2. The Ramsar Convention on Wetland Preservation and disaster reduction

Among the many values and functions of wetlands some of the most important involve flood reduction, coastal protection, mitigation of climate change and desertification effects. These considerations are at the heart of the Convention's guidance on management planning for wetlands. In addition to the revised management planning guidelines currently under development for adoption by the Conference of the Parties, additional guidance is also being developed on integrated coastal zone management which stresses these values very strongly. Ramsar, the *World Wide Fund for Nature (WWF)*, and the Niger Basin Authority are presently working on a project financed by the *Global Environment Facility (GEF)* to designate wetlands throughout the Niger River Basin as Ramsar sites and develop management plans for them which will help to mitigate the effects of seasonal climate variations. A similar initiative also financed by GEF is currently underway with Ramsar, WWF, and the Lake Chad Basin Commission to bring the entire basin under a cooperative management plan following Ramsar guidelines. Similarly, Ramsar staff is working with local officials and NGOs on a number of projects in Europe to develop sound management regimes for transboundary wetlands such as the Neretva River delta, the trilateral Prespa Park, the Danube Delta and the Dyje Morava floodplain. Although the main purpose of these activities is sustainable use of resources, all have a component that is relevant to disaster prevention. *Source: Ramsar Secretariat, and G. Bergkamp, B.Orlando, IUCN RAMSAR secretariat and G. Bergkamp, B.t Orlando, IUCN, 1999*