

**Members of the Egyptian Committee
on Combat of Desertification**

- E.O.S
- The Desert research centre (Egypt)
- EEAA Egyptian Environment Agency
- Faculty of Agriculture-Cairo University
- Ministry of Water Resources and Irrigation
- Ministry of Electricity and Energy

International Standardization & Combat of Desertification- O. El Meligy

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International Standardization & Combat of Desertification

Background: During the closing plenary of ISO/TC207 Madrid September 2005, E.O.S (The Egyptian Organization for standardization & Quality) raised the issue of combat of Desertification and the need for an environmental management standard to address the issue (Desertification) from international standardization perspective.

Egypt, Spain and China among many countries suffer from the Desertification phenomena, and anticipates that ISO/TC207 can contribute to combat of Desertification .



DESERTIFICATION

- Desertification is a worldwide problem directly affecting 250 million people and more than 4 billion hectares of land – one third of the Earth's surface area. In addition, desertification threatens the livelihoods of some one billion people who depend on land for most of their needs and are usually the world's poorest, in more than 100 countries.



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- Although the region most affected by desertification is Africa, where two thirds of the land is desert or drylands, the problem is not confined to this continent. More than 30 per cent of the land in the United States is affected by desertification. One quarter of Latin America and the Caribbean is deserts and drylands. In Spain, one fifth of the land is at risk of turning into deserts.



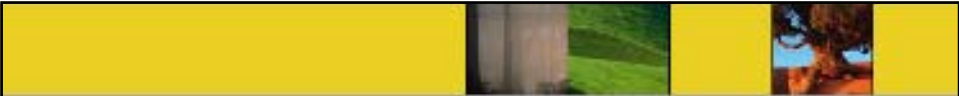
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- The growing severity of the threat in the northern hemisphere is also illustrated by severe droughts in the United States and water scarcity in southern Europe. In China, since the 1950s, sand drifts and expanding deserts have taken a toll of nearly 700,000 hectares of cultivated land, 2.35 million hectares of rangeland, and 6.4 million hectares of forests, woodlands and shrub lands. Worldwide, some 70 per cent of the 5.2 billion hectares of drylands used for agriculture are already degraded and threatened by desertification.



The Major causes of Desertification include

- - **CLIMATE CHANGE**
 - urbanization on the fertile cultivated land
 - poor water management due to the inefficiency of traditional irrigation system, inadequate drainage networks and over-abstracting of ground water with consequent sea water intrusion in the coastal areas.
 - Unsustainable agricultural practices especially under the intensive and frequent cultivation, which resulted in salinity, water-logging, depletion of soil fertility and excessive use of pesticides, fertilizers as well the inappropriate time and machines of tillage which led to problems of physical and chemical desertification, e.g. compaction, pollution ... etc.
 - Depletion of natural plant cover and conservation of range areas to other uses (tourist resorts, cultivation of field crops ... etc).



Desertification has a direct impact on land and other natural resources

which results in reduced agricultural productivity, loss of bio-diversity and vegetation cover, decline in ground water and availability of water in the affected areas.

It affects the economic growth of not only the affected regions but also the countries as a whole, their social and economic development.

Desertification and drought also impacts the sustainable development through their interrelationships with important social problems such as poverty, poor health and nutrition , lack of food security and those arising from these such as migration, social conflicts and unrest

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Photo



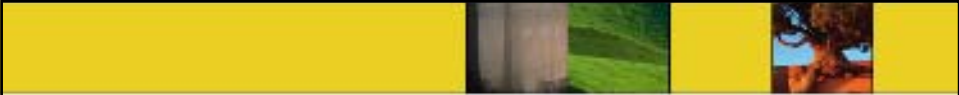
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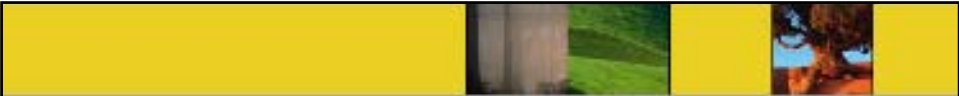
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- 1. Desertification and drought force people to leave their home in search of a better life. This problem appears to be most severe in Sub-Saharan Africa, the Sahel and the Horn of Africa. Some 60 million are estimated to eventually move from the decertified areas of Sub Saharan Africa towards North Africa and Europe by the year 2020.**

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- the impact of desertification on the environment is very serious, as it reduces the biological processes. Of special importance in this concern, is the exacerbating rate and amount of the emissions of greenhouse gases due to land degradation. Also, the release of organic carbon from the soil and biomass is vastly accentuated by desertification processes



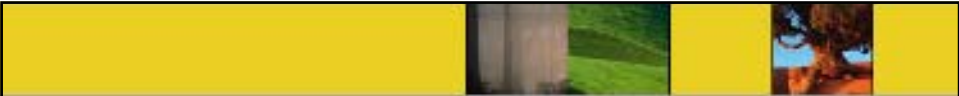
Globalization, Trade and supply chain

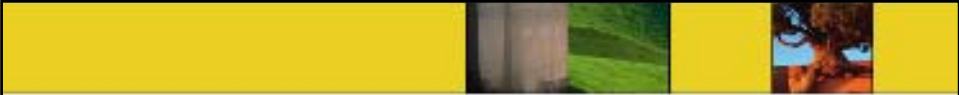
- The process of globalization both contributes to desertification and helps prevent it . Studies have shown that , in some cases , trade liberalization , economic reforms, and export – oriented production in drylands can promote desertification . In other cases , enlarged markets outside of the drylands also contribute t successful agricultural improvements.

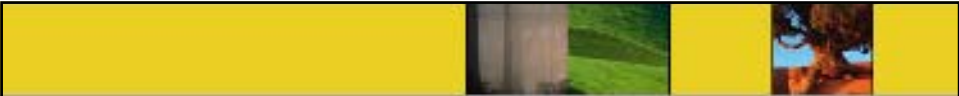


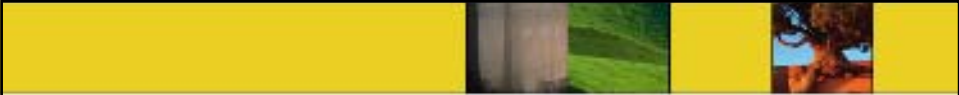
Egypt

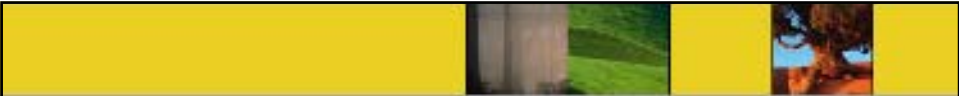
- **Egypt as located in the arid and hyper arid zones. It severely affected by various types and forms of desertification, the major consequences of desertification in Egypt include,**
 - **16% of the total cultivated lands were lost due to urbanization.**
 - **More than 30% of the irrigation farmlands are salt-affected.**

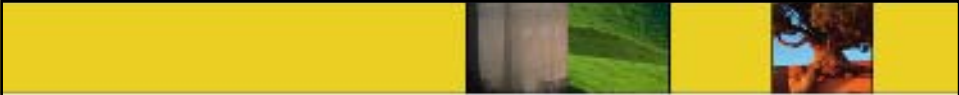
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- **Pollution as a result of excessive use of fertilizers and pesticides, the use of industrial and agricultural drainage water in irrigation and the lack of adequate sanitation in the rural areas, has led to serious impacts on public health and environmental risk. It is estimated that the burden of disease associated to pollution approaches 100 000 deaths per year.**
 - **Some 45% of the total range lands areas (4 million ha) are severely degraded.**
 - **Sand dunes cover about 16% of the total country area. About 5% of such dunes are active and seriously affected the cultivated lands in the vicinities of Nile Valley and delta and High Dam Lake.**

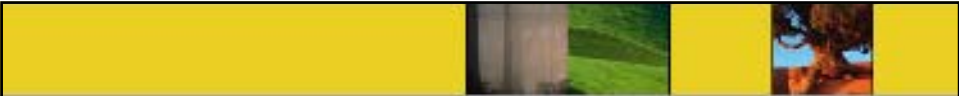
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- **Expenses attributable to sand encroachment on road, infrastructures and the adjacent agricultural land are estimated by several million Egyptian pounds per year.**

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- **Issues related to the capacities building including the decentralization, participation of local people, training, awareness, extension services ... etc.**
 - **Needs for national indicator system for evaluating and monitoring programmes and activities for combating desertification.**
 - **The absence of networking with sub regional, regional and international organization.**
 - **Issues related to strengthening the linkage between institution and policy makers.**

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- **The objective of this proposal is to establish International Standards on the subject of desertification in order to assess and quantify desertification measures , and that any negative consequences can be recognized early . Effective prevention of desertification requires management and policy approaches that promote sustainable resource use .**

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- **Prevention should be preferred to rehabilitation , which is difficult and costly . Establishing such International Standards will help to create " a culture of prevention " that promotes alternative livelihoods and conservation strategies can go a long way toward protecting drylands both when desertification is just beginning and when it is ongoing . Implementation of this project would also**

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- **. Implementation of this project would also help the governments and the people to change their attitude, and to cooperate hand in hand.**
 - **Even once land has been degraded, rehabilitation and restoration measures (the proposed International Standards) can help restore lost ecosystem services. The success of rehabilitation practices depends on the availability of human resources, funds, and infrastructures. It requires a combination of policies and technologies, and the close involvement of local communities through a proper system of communications.**

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- **Further, this proposal is also intended to satisfy the environmental legal requirements and their executive regulations.**



IN LINE WITH TC207 NEW STRATEGIC DIRECTION

- Cope with climate change
- Sustainability
- Prosperity
- Responsiveness to market



New Work Item Proposal

- Management of Combat of Desertification
PRINCIPLES, FUNDAMENTALS
& VOCABULARY



ISO TC 207

- ISO/TC207 can contribute to the International efforts of Combat of Desertification
- ISO Standards, Technical Specifications, Technical Reports and Brochures..can provide a wealth of Knowledge



ISO

- ISO unique Standards development process based on international consensus will help transfer of technologies and harmonize national and international practices and efforts
- ISO brand name and image, represents a motivation for recognition in sustainability and excellence

New Work Group

Looking forward to Establish

ISO/TC207/(SC)WG Combat of Desertification

INVOLVE International Organizations

.UNCCD

.FAO/desertification

.Research institutes



Our preliminary discussions raised the following items

- A. Fundamentals.
- B. Vocabulary
- C. Leadership and Organization
- D. Project management
- E. Communication & Information
- F. Reporting
- G. Culture, Awareness & Training
- H. Monitoring & Measurement





Possible guidance on:

- Soil Monitoring and classification
- Management and use of water (underground water)
- New Agricultural methods
- Reforestation



Road Map

- Search available material
- Prepare a seed document
- Establish a liaison forum
- Beijing Super workshop
- TC 207 plenary June 2007 ..resolution
- New Work item proposal
- Establish TC 207 / WGCOD





INTERNATIONAL EFFORTS

- UNITED NATIONS CCD
- FAO/Desertification
- Desert Research Institutes

Possible Partnership ??????



**Thank you for your kind
attention**