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**Promoting Regional Cooperation in Reversing Land
Degradation in the ESCWA Region**

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Outline

- Introduction to main definitions and concepts;
- Challenges and opportunities for agriculture in West Asia;
- Promoting Regional Cooperation in Reversing Land Degradation in the ESCWA Region;
- Recommendations

Sustainable Development

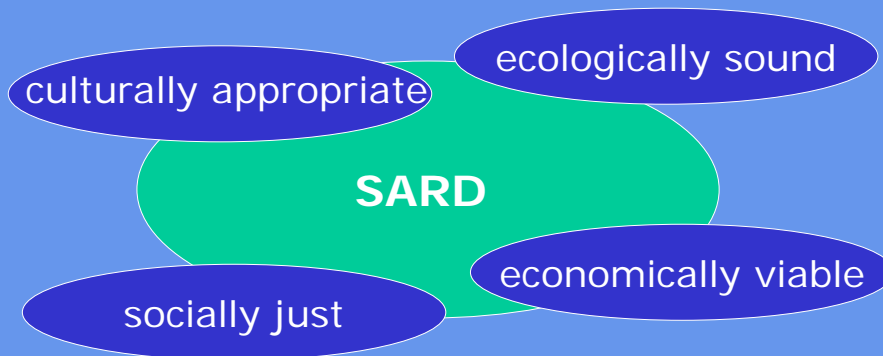
- The World Commission on Environment and Development defined Sustainable Development as “development that meets the needs for the present without compromising the ability of future generations to meet their own needs”.

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- A number of working rules or policies are essential if such development is to be achieved, such as:
 - Equity
 - Resilience
 - Efficiency
- Sustainable Agriculture and Rural Development (SARD) is intended to increase food production in a sustainable way and enhance *food security*.

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What is SARD?



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According to the UN Convention on Desertification

- “Desertification” means land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities;
- “Combating Desertification” includes activities which are part of the integrated development of land in arid, semi-arid and dry sub-humid areas for sustainable development which are aimed at:
 - (i) Prevention and/or reduction of land degradation;
 - (ii) Rehabilitation of partly degraded land; and
 - (iii) Reclamation of desertified land.

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- “Land Degradation” means reduction or loss, in arid, semi-arid and dry sub-humid areas, of the biological or economic productivity and complexity of rainfed cropland, irrigated cropland, or range, pasture, forest and woodlands resulting from land uses or from a process or combination of processes, including processes arising from human activities and habitation patterns, such as:
 - (i) Soil erosion caused by wind and/or water;
 - (ii) Deterioration of the physical, chemical and biological or economic properties of soil; and
 - (iii) Long-term loss of natural vegetation.

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What is land degradation ?



water erosion



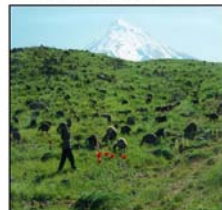
salinization



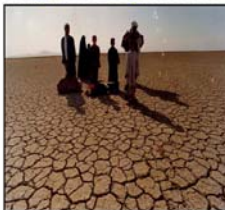
rangeland degradation



sand dune encroachment



loss of biodiversity



outmigration

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Challenges and Opportunities for Agriculture in West Asia

Challenges:

- The relative importance of agriculture in the West Asia region and its contribution to the national economy has gradually declined over the years.
- The absence of proactive policies to encourage the efficient and sustainable use of both land and water resources has resulted in a reduction of agricultural productivity and competitiveness, an increase in water scarcity and the degradation of natural resources.
- Water scarcity: West Asia is a water scarce region (Figure 1).
- Land scarcity: West Asia has limited fertile land subject to different levels of degradation and with the exception of Iraq, the Syrian Arab Republic, Saudi Arabia and Lebanon, it is also a land scarce region (Figure 2).

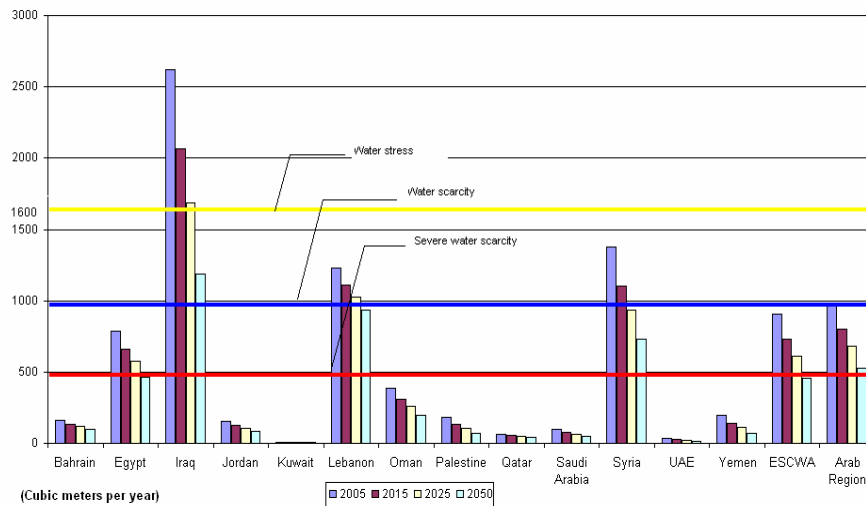
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Water Scarcity

- As per the rule of thumb developed by water analysts, countries with fresh water resources of 1,000 to 1,600 cubic meters per capita per year face water stress, with major problems occurring in drought years.
- When the annual internal renewable water resources are less than 1,000 cubic meters per capita per annum, then these countries are considered water scarce. Below this threshold (500 cubic meters per capita per annum), water availability is considered a severe constraint on socioeconomic development and environmental quality.
- By the above yardstick, West Asia is a water scarce region. Figure 1, reflects on per capita water availability in the countries of West Asia .

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Figure 1: Per Capita Water Availability in the West Asia Region



Source: ESCWA based on FAOSTAT (2007), AQUASTAT (2007), ESCWA (2007) and United Nations Population Division (2006)

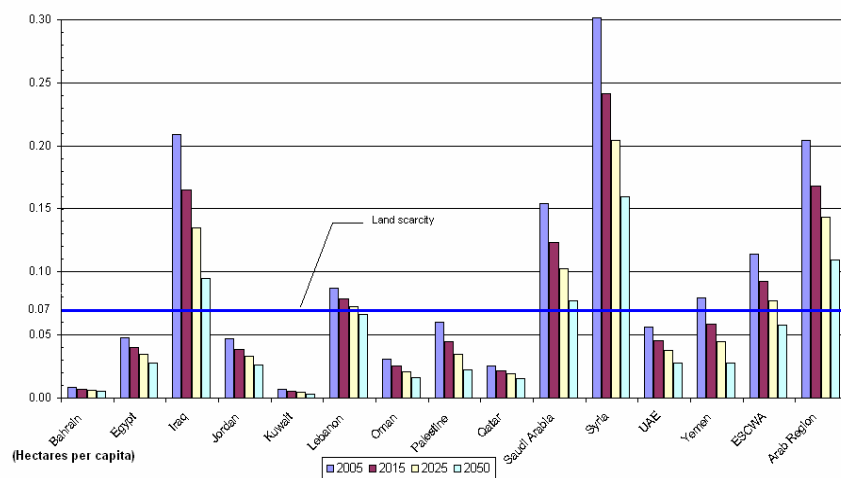
Land Scarcity

- The region also has limited fertile land subject to different levels of degradation (figures, 2, 3 and 4).

- If one applies the conservative benchmark of land scarcity set at 0.07 hectares of arable land per capita (Engelman and LeRoy, 1995), only Iraq, the Syrian Arab Republic and Saudi Arabia and Lebanon will not be classified as land scarce countries.

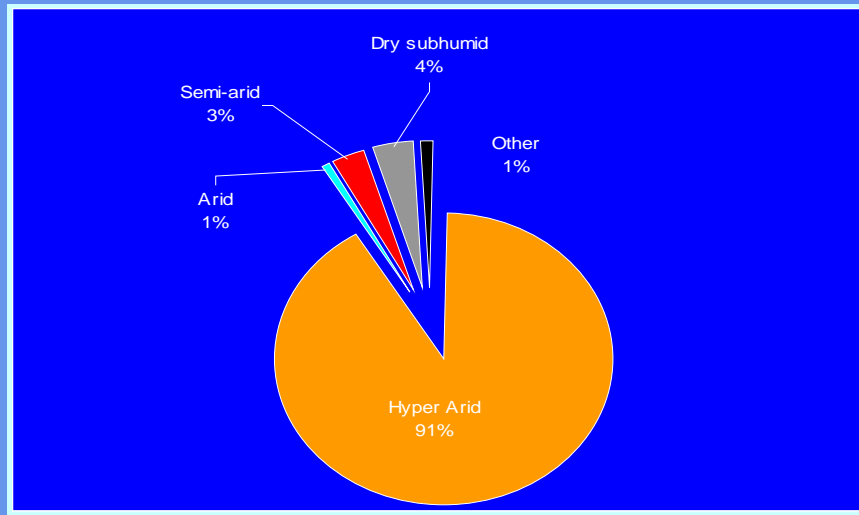
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Figure 2: Per Capita Cultivated Land Availability in the West Asia Region



Source: ESCWA based on FAOSTAT (2007) and United Nations Population Division (2006)

Figure 3: Dryland Areas in the ESCWA Region



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Figure 4: Land Degradation in the ESCWA Region

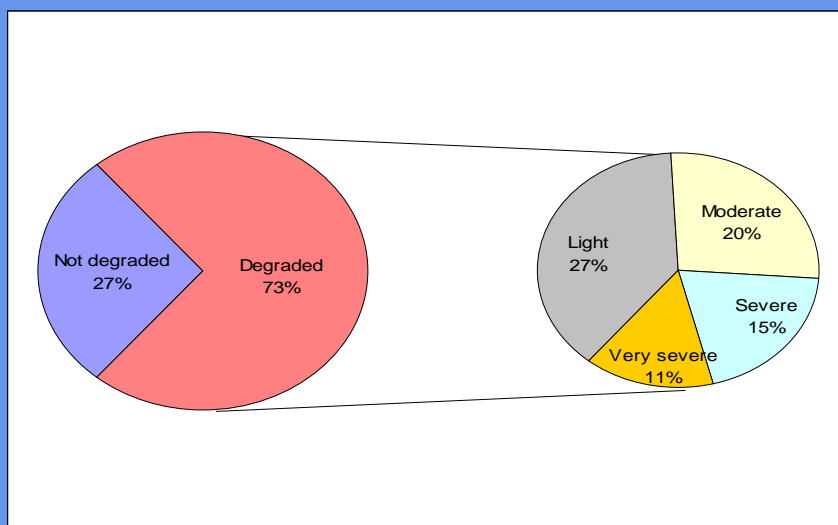
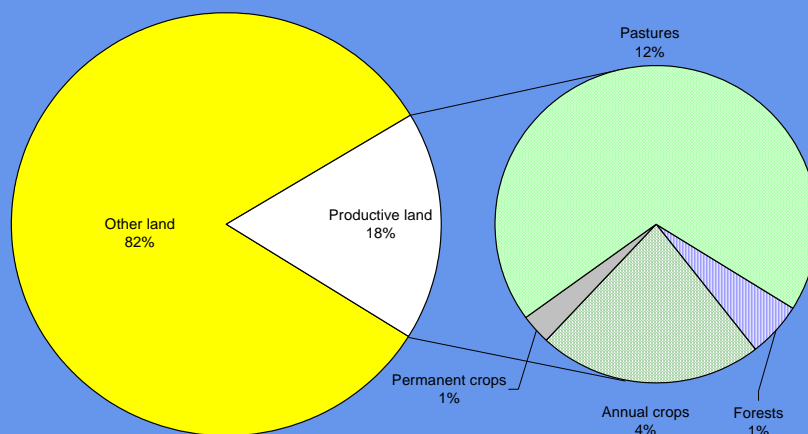
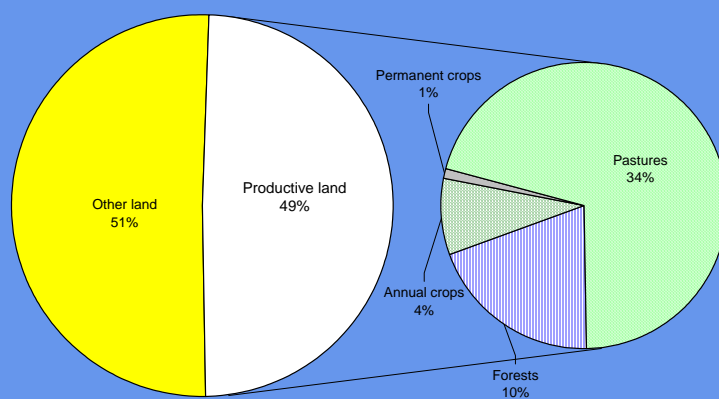


Figure 5: Land Use in the West Asia Region

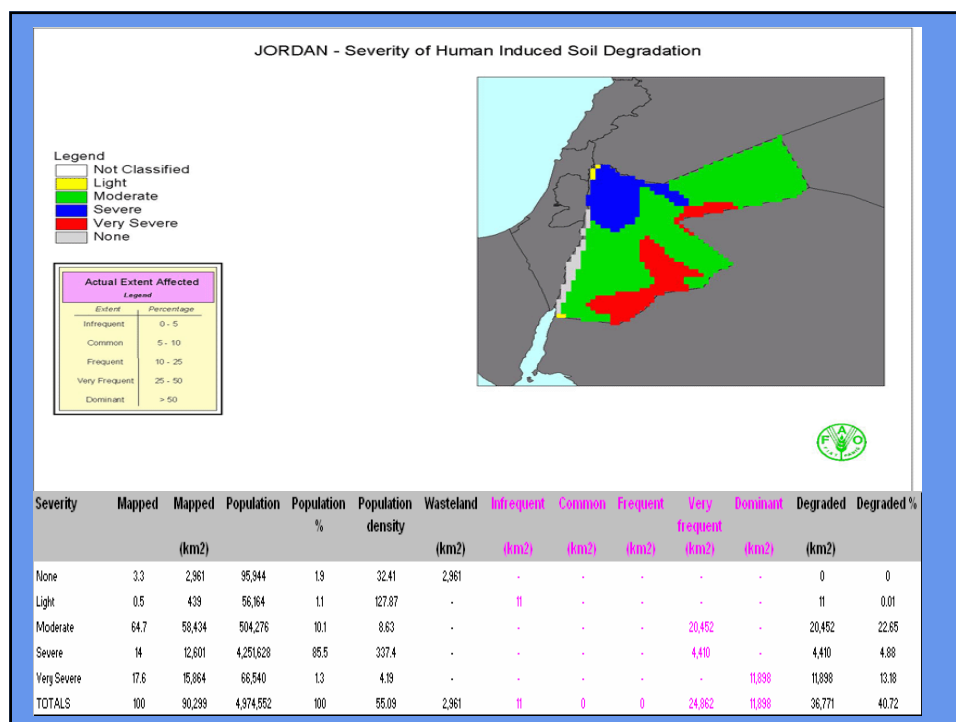
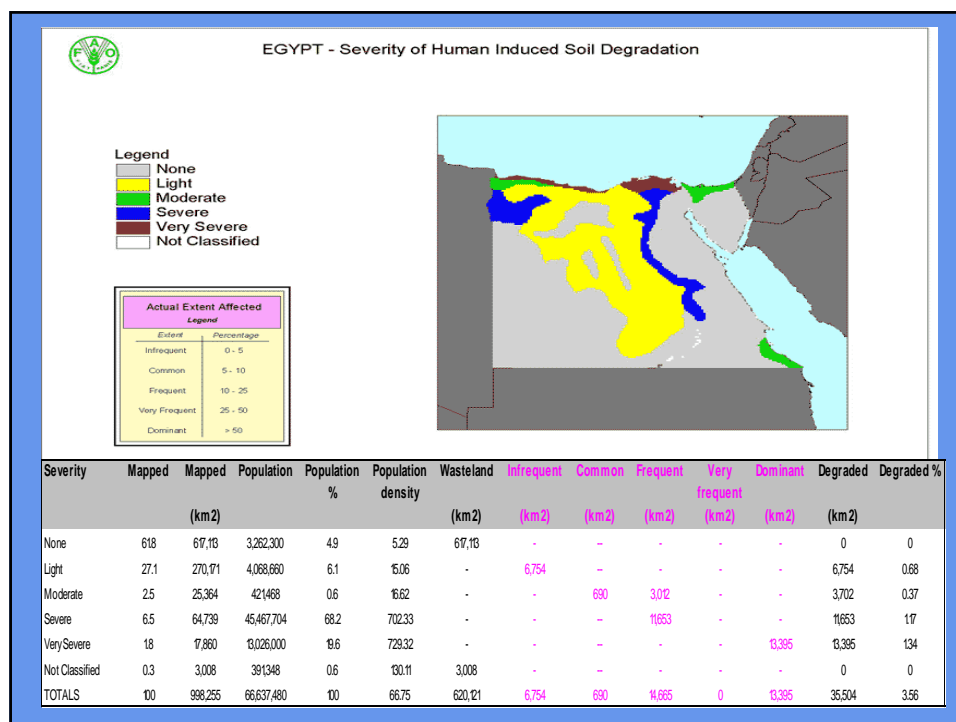


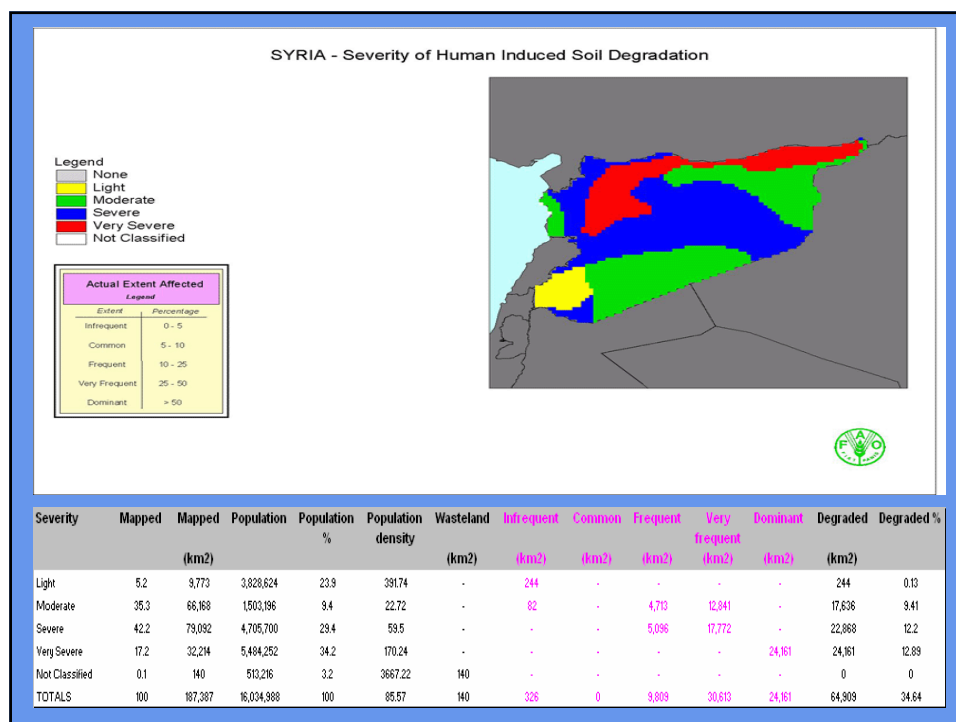
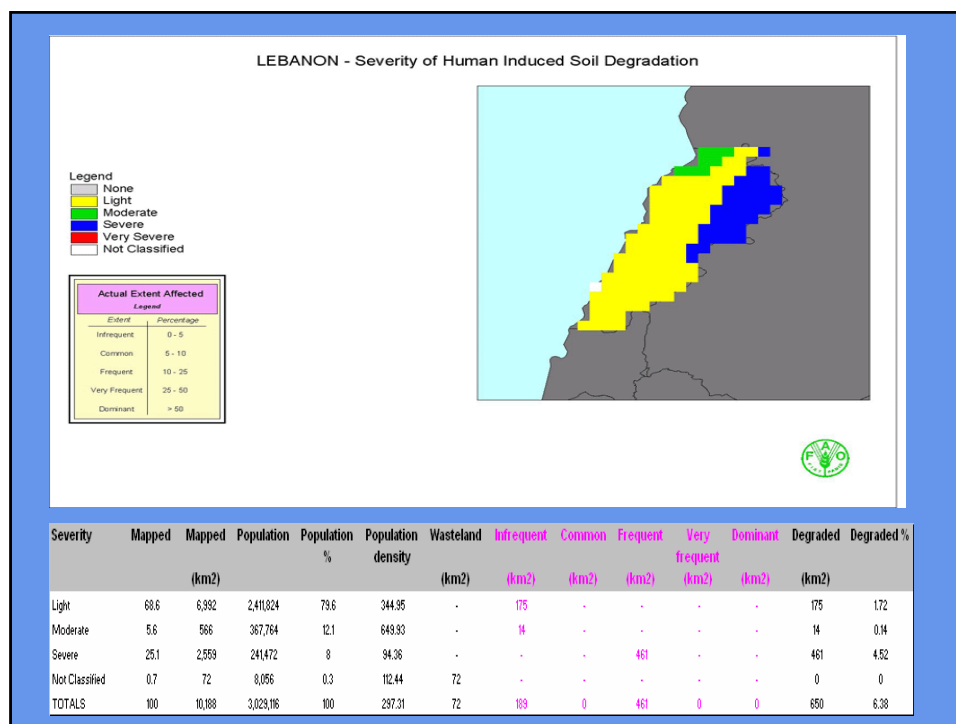
Source: ESCWA based on FAOSTAT (2007)

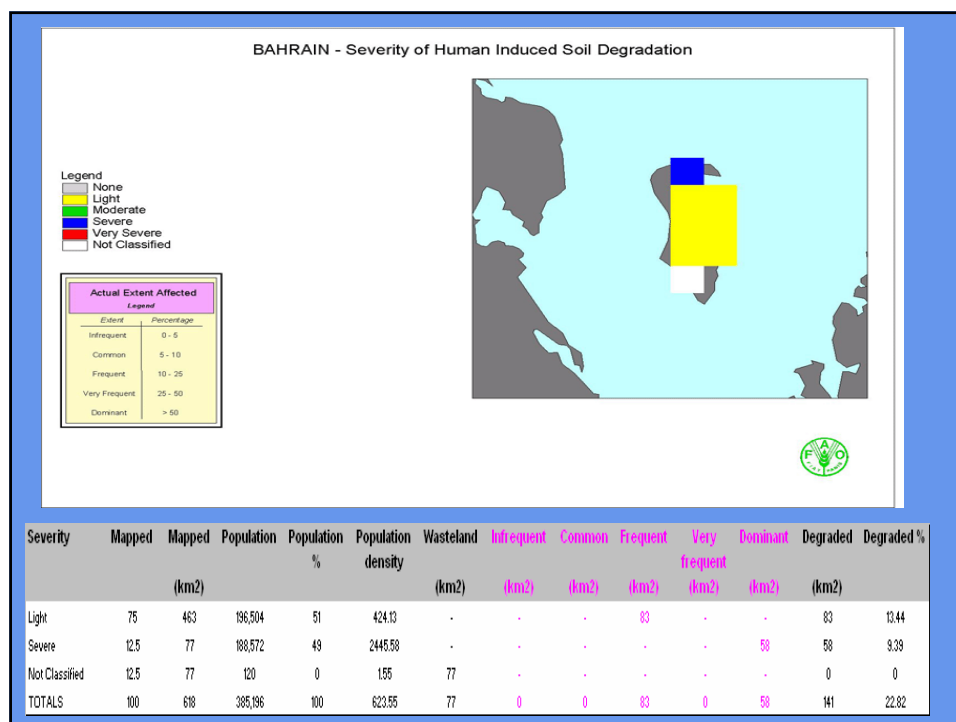
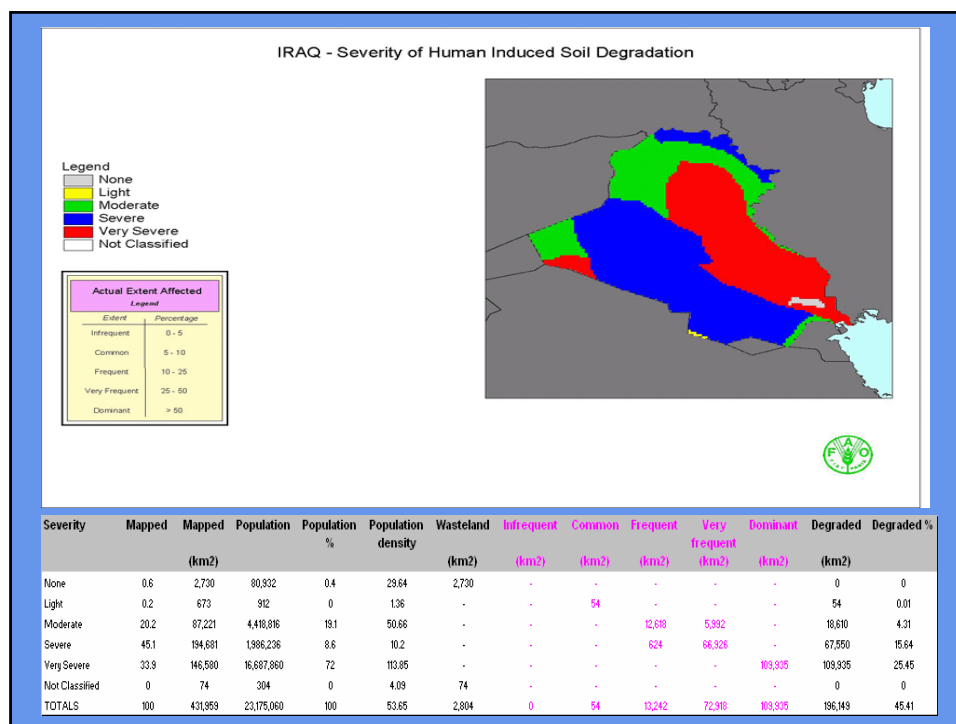
Figure 6: Land Use in the Arab Region

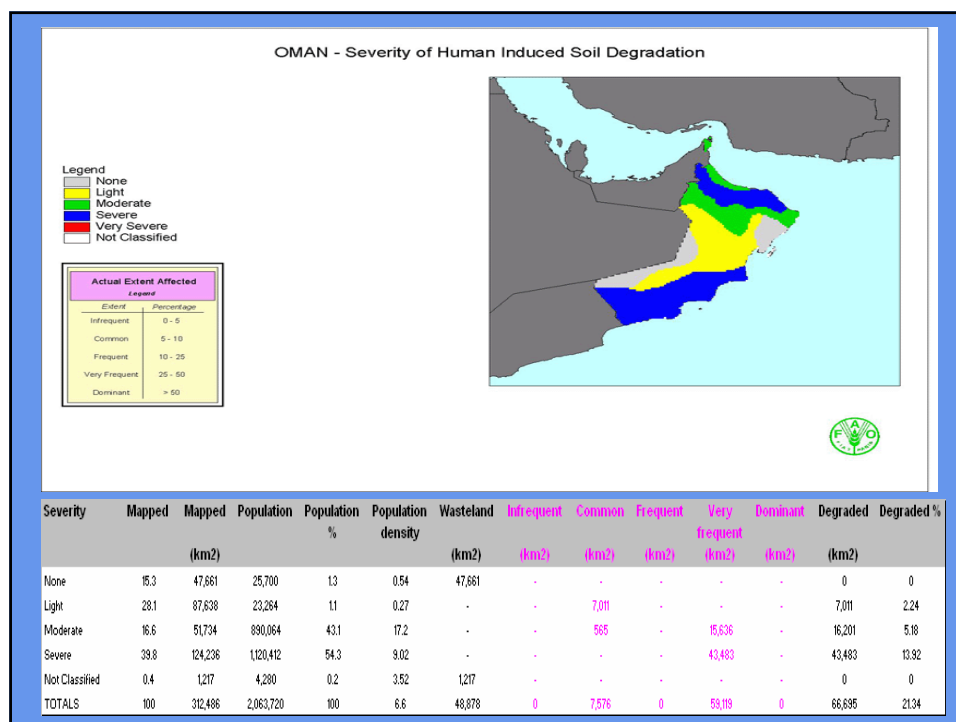
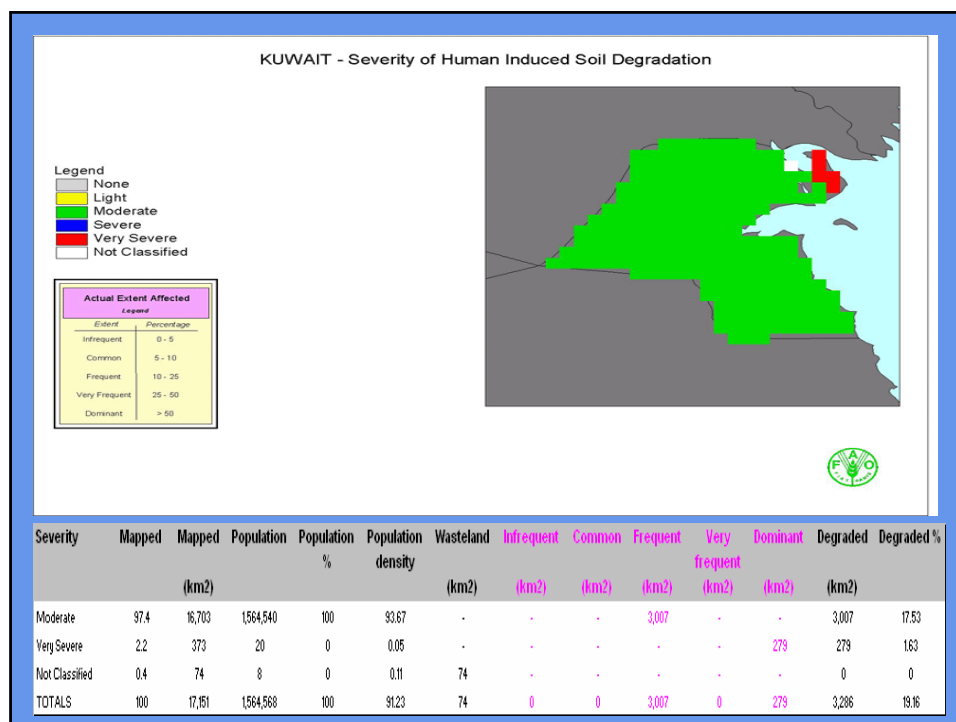


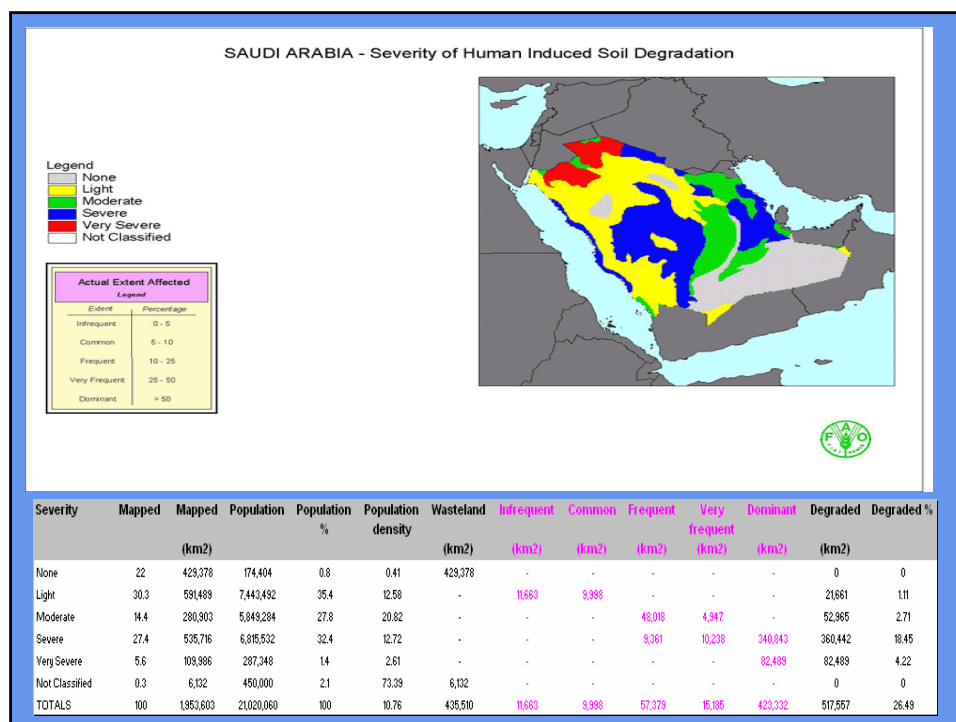
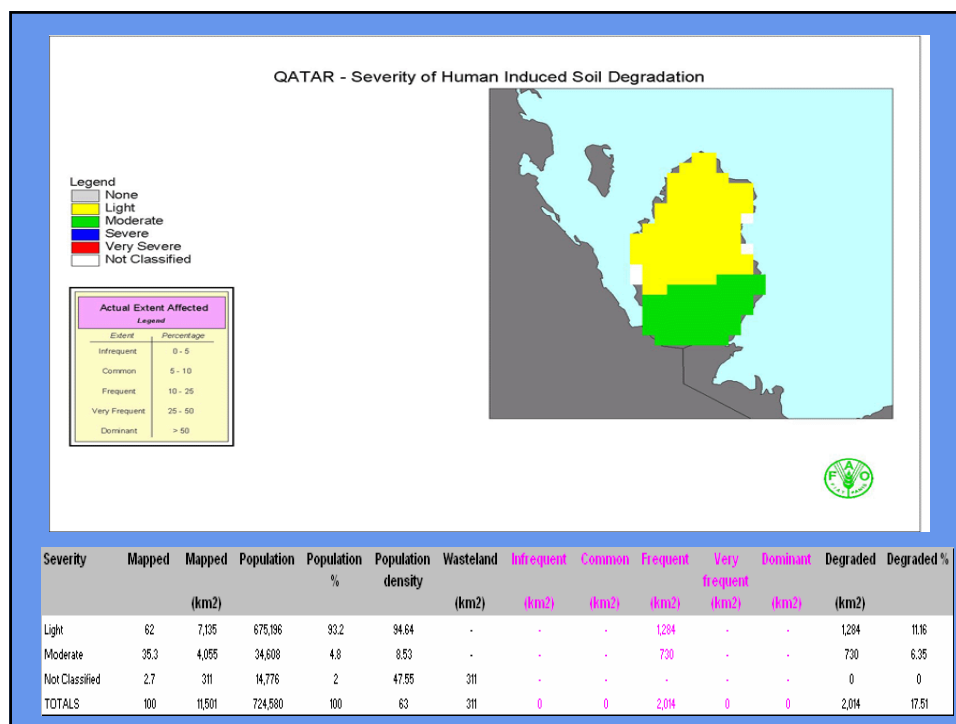
Source: ESCWA based on FAOSTAT (2007) and FAO-Global Forest Resources Assessment (2005)

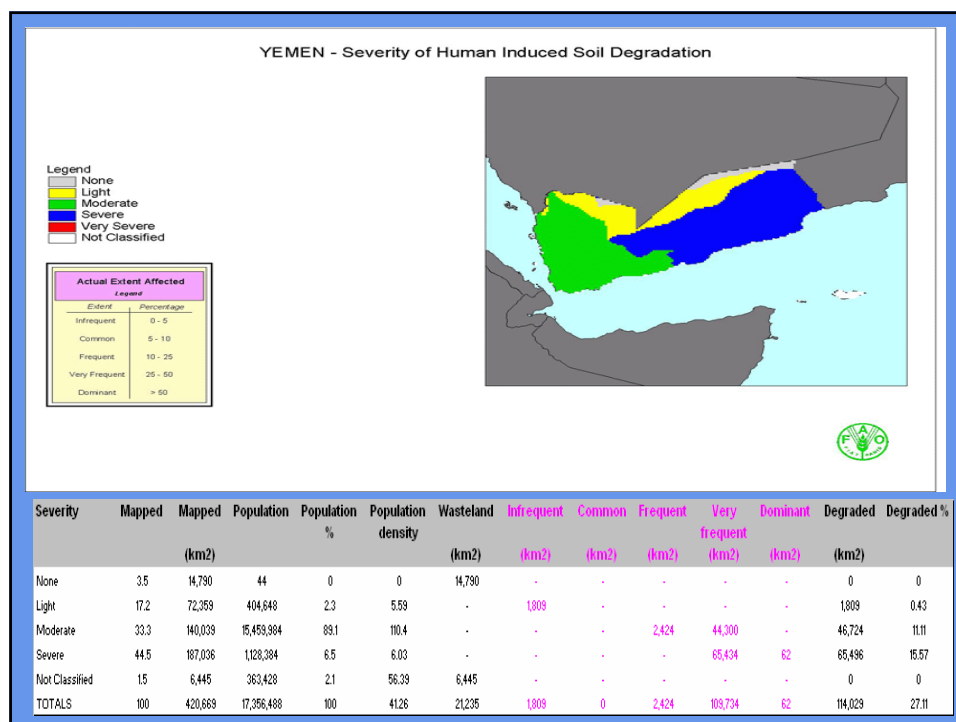
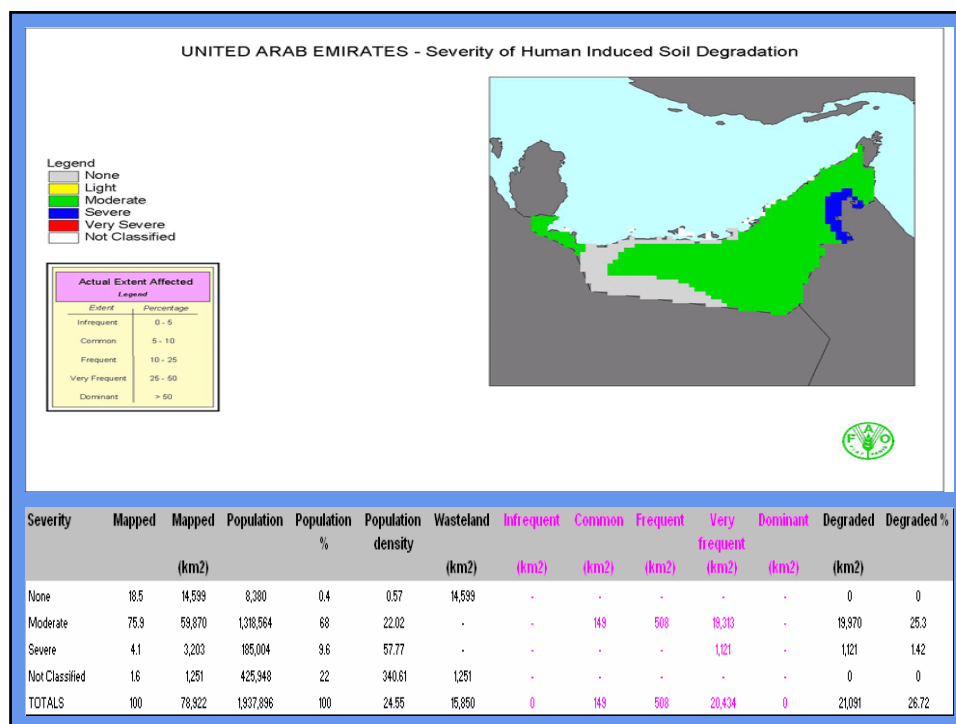


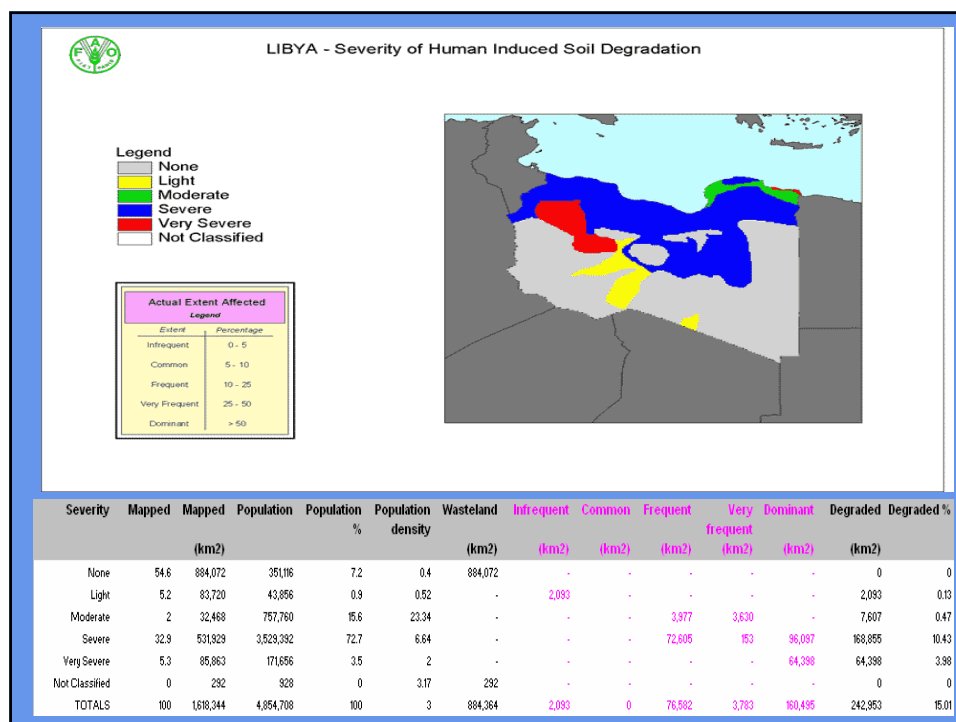
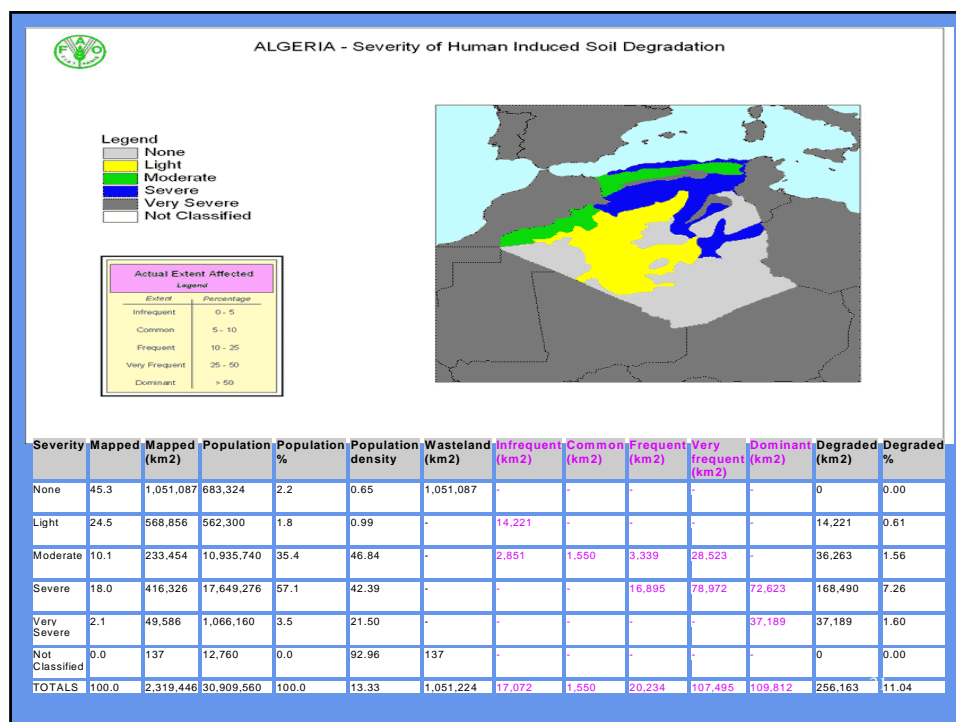


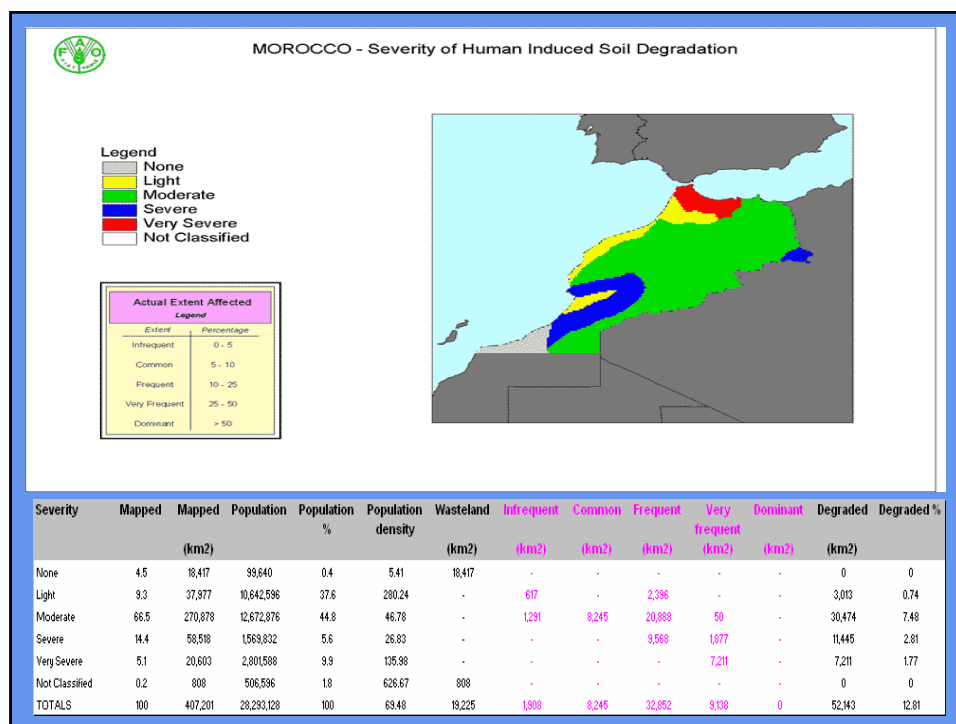












Severity of Human Induced Soil Degradation

Country	Percentage of Degraded Land
Egypt	3.6
Jordan	40.7
Lebanon	6.4
Syria	34.6
Iraq	45.4
Bahrain	22.8
Kuwait	19.2
Oman	21.3
Qatar	17.5
Saudi Arabia	26.5
United Arab Emirates	26.7
Yemen	27.1

Source: GLASOD Survey, 1980s
by UNEP and ISRIC

Opportunities

- Agriculture plays an important role in reducing poverty and in supporting rural livelihoods, through:
 - Food security,
 - Employment-creating and income-generating activities.
- Forty four per cent of population still lives in rural areas and in one way or the other depends on agriculture, and 24 per cent of the total labor force in the region is employed in agriculture.
- A robust and efficient agriculture benefiting from better sustainable practices could provide impetus to supporting sustainable livelihoods in rural areas, and to the development of rural communities, thus improving food security, contributing to employment and to the alleviation of rural poverty.

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Promoting Regional Cooperation in Reversing Land Degradation in the ESCWA Region

- The Arab region has limited fertile land that is subject to different levels of degradation. With few exceptions, it is also considered a land scarce region.
- The degradation of agricultural land in the region to a large extent is caused by human induced factors, but the effects of natural factors such as, low and erratic rainfall and droughts are also significant.

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- Pressures on the resource base due to high population growth rates, rapid urbanization, and lack of land use plans further aggravate the situation for agriculture in the region.
- Furthermore, unsustainable cultivation practices, over-cultivation of marginal lands, overexploitation of water and land resources, and insufficient support given to the integrated management of land and water resources in agriculture are also negatively affecting the productivity of agriculture.

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- The degradation of natural resources (land, water, biological diversity) is endangering the livelihoods of the poor, particularly in rural areas, where there is more reliance on such resources.
- The loss of livelihoods and natural resources leads poor farmers to adopt non-sustainable survival strategies that further deteriorate their resources base.
- Increasing poverty, also limits the range of available options with regard to the sustainable management of these finite resources.

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- There is a strong correlation between population growth, land degradation, food insecurity and poverty.
- As such, promoting the sustainable use and management of the region's limited natural resources in agriculture is a great challenge that requires immediate consideration.

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- Despite some efforts exerted to assess and combat land degradation and desertification at local, national and regional levels, the achievements are limited thus far; as a result, land degradation and desertification continue to intensify in the region.
- Furthermore, land degradation and desertification transcend political borders and one needs to take into consideration the regional impact of such occurrences.
- Responding to the complex and interconnected challenges of sustainable development also requires increased regional cooperation, but the actual regional cooperation on tackling the impacts of land degradation is still limited in scope.

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- As such, setting up of regional cooperation mechanisms, and enhancing coordination of efforts on combating land degradation are crucial so that national efforts remain in harmony with regional initiatives.
- The promotion of inter-and intra-country cooperation and coordination in the region as well as that of regional and international organizations is essential to combat land degradation and desertification.

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Status of Regional Cooperation on Land Degradation

- The Regional activities so far undertaken have focused on partnerships in internationally-funded projects and programs.
- Various countries in the Region have participated in those activities within the Framework of UNCCD, but there is no sustainable interactive cooperation commitments in relevant projects across borders.

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- Actual Regional cooperation projects on land degradation are still quite lacking, irregular and inefficient. This is why success stories for combating desertification, as recorded for some countries, are limited.
- Several projects were however initiated in the Mashrek, Maghreb and Arab Gulf Cooperating Countries (GCC) countries.
- Regional organizations like the Arab Center for the Studies of Arid zone and Drylands (ACSAD), the Economic and Social Commission for Western Asia (ESCWA), the International Fund for Agricultural Development (IFAD), the International Center for Agriculture Research in Dry Areas (ICARDA), and the Arab Organization for Agricultural Development (AOAD) have played a crucial role in the success of some projects on desertification control.

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- Several UN organizations and programs have given support to launching those projects, among which to name a few:
 - ESCWA: several activities focused on land degradation including training workshops and assessment of methodologies,
 - FAO: several Regional workshops including that on promoting the LADA program (Land Degradation Assessment in Dry Areas), the Mediterranean Action Program-Participatory Action Plan (MAP-PAP) with United Nations Environmental program (UNEP),
 - UNDP: the Drylands Development Center initiative on Drought Preparedness and Mitigation,
 - UNCCD, and the UN Framework Convention on Climate Change (UNFCCC).

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- Some projects serve only one country, but their results could be shared with other countries which have similar geo-environmental conditions.
- A noticeable cooperation track is observed, among some Arab countries through coordination among their remote sensing centers. The application of remote sensing is an effective tool for monitoring land degradation at a large scale covering different facets of land within short-time intervals.

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- In this regard, ACSAD has been playing a vital role in encouraging several Arab countries to work together, such as in the Arab Desertification Monitoring and Assessment Network (ADMA) network for monitoring land degradation.
- Also, during the past few years a series of workshops and activities have been organized by ACSAD, ESCWA, UNESCO together with other concerned Regional or international agencies on topics related to land degradation.
- Several Arab countries have participated in those activities reflecting their stand and interest in cooperation.

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- Another Regional initiative started in 2003 is the Regional Euro-Mediterranean Programme for the Environment (REMEPE) program formed by the European Union getting all Mediterranean countries together to monitor environmental degradation especially in the coastal areas.
- A regional cooperation meeting was held by FAO and the Mediterranean Priority Action Program, and it focused on their experience in combating land degradation in Mediterranean coastal areas.

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- The Coastal Area Management Program (CAMP) proved quite valuable as a cooperation platform because the Arab countries engaged in the CAMP exchanged their expertise and developed several areas of interaction.
- In 2006, UNDP called for the formation of a Regional network through a meeting of experts held in Syria, to cooperate in reducing the impacts of desertification, drought and other problems affecting the land and the community.

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- The Global Mechanism of UNCCD is encouraging and supporting Regional programs.
- This applies to the recent agreement formalized with the Spanish Government to finance a south-south cooperation on fighting desertification.
- Also in this regard lies the SolArid program where south-south cooperation is believed to be an effective tool for mobilizing resources in response to specific needs shared by neighboring countries, notably in the Saharan Region (Sahel and Sahara).
- This provides a strategic opportunity to jointly face the common problems of land degradation and drought.
- SolArid aims at establishing a permanent network to exchange experiences and other partner facilities.

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- Similarly, the GM is proposing another program for the Arab Gulf Cooperating Council (GCC) and neighboring countries called SALAM: Sustainable Arid Land Management Partnership.
- The Program will address the socio-economic status and environmental conditions of those countries, reflecting on their different development trajectories, building on their momentum and forging a strong partnership in pursuit of a common vision on reversing the trends of land degradation.

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- Several regional projects covering several countries from the Mediterranean region like Resmanmed, and Medcoastland have focused on improving the monitoring of land degradation and the management of scarce water resources.
- The Medcoastland project (2003-2007) joined partners from the Mediterranean and ESCWA region like Egypt, Syria, Lebanon, Palestine and Jordan. It aimed at promoting regional cooperation to mitigate and reverse land degradation through participatory income generating activities, appropriate legislations and dissemination of data on successful stories.
- Major cooperation took place between Lebanon and Syria in the EC-supported Project ‘CoLD’ on coastal land degradation and monitoring.

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- Models like the Sustainable Strategies for Irrigation in Salt-Prone Mediterranean Areas (SALTMED) were developed as decision support tools for the management of saline water to irrigate different crops based on soil, water and market related considerations.
- There is a need for regional cooperation among ESCWA countries in such issues like the balancing of water supplies and demands, exploiting the potential of water conservation measures and re-use to meet new demands and developing new water supplies as well.

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- There are several challenges facing Arab countries that yet have to be resolved if cooperation on reversing land degradation is to be successful.
- They relate to how the different Arab countries approach the problem at hand, how do they administer and manage problems of this scale, as well as what are their technical capabilities and know-how .
- Lessons learned from the impact of land degradation are not adequately disseminated. The proper dissemination of these lessons will contribute to the design of focused and coherent intervention strategies to prevent Land Degradation.

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Enhancing Regional Cooperation on Combating Land Degradation

- The existing status of regional cooperation could be enhanced through:
 - Partnership in programs directed at land degradation mitigation,
 - Adopting common monitoring and assessments methodologies,
 - Exchange of data, information, and local expertise;
 - Interaction through special focus networks, and sharing an early warning system.

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- Regional cooperation should consider institutions, databases, training, monitoring, networking and exchange, which would support the National Action Plans to Combat Desertification (NAPs).
- Aspects that are inherently significant in addressing the communities at large, affecting their well being, their socio-economic status and living should also be given importance when considering regional cooperation.

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- The preceding calls for establishing a Regional Steering Committee (RSC) that will help in planning and early warning efforts which, with the help of technical expertise, should review current methodologies, data sources and problems relating to the different impacts of land degradation.
- A significant theme is the economic cost of land degradation, and the cost/benefit analysis of a Regional Early Warning System.
- The RSC should be an efficient mechanism to help countries in the Region develop and implement appropriate strategies to face the problem. This is an urgent matter because the cost of remedial actions will increase with time.

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Cooperation by Countries

- Any cooperation to mitigate land degradation at the country level must be based on root causes and common pressures, considering, when possible, the geographical location and the management of shared resources.
- Management projects should consider local conditions, define national and regional stakeholders and indigenous skills in determining resource degradation, elaborate draft management plans and monitor the indicators of land degradation and land recovery.

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- Management of rangeland degradation must occupy a primary place in the national and regional policies to combat desertification in the ESCWA Region.
- Reduced pasture area yields a shift from the mobile grazing system to static grazing thus deteriorating the soils of drylands in the ESCWA region and exposing them to wind and water erosion.
- In this regard, cooperation between the remote sensing centers and the MoA of Iraq, Jordan, Syria and Lebanon using remote sensing data and GIS can provide powerful tools for assessing grazing lands productivity and monitoring the Normalized Difference Vegetation Index (NDVI) and herds movements.

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- An exemplary cooperation program was undertaken between Lebanon, Jordan, Syria and Egypt under the umbrella of BGR and ACSAD where a flood risk management system in el-Qaa area in Lebanon was developed.
- The program demonstrated how the successful experiences previously adopted in Syria and Jordan could be applied with positive results in controlling land degradation in the study area.

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- Management of rangeland degradation must occupy a primary place in the national and regional policies and mobilization plans to combat desertification in the ESCWA Region.
- The importance of cooperation between governments rises from the fact that the dominant form of grazing in the Arab region is the traditional nomadic herd movement on common and sometimes private lands.

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- Salinity problems might constitute a major topic of cooperation between Egypt, Syria, Jordan, Iraq, UAE and Yemen.
- Regional results showed severe salinity situations exist in these Arab countries given the steady increase in the extent of saline soils and the deterioration of water quality in the coastal aquifers due to excess pumping as a reaction to surface water scarcity.
- Shared water and forest resources between Lebanon, Syria and Jordan can represent a good ground for bilateral and multilateral cooperation

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- In Syria, the Badia development project rehabilitated 3 million ha of pasture lands, while the development of Jabal Al-Hoss consisted of poverty eradication by extending the cultivated lands through rock removal from bare eroded lands, water harvesting, cultivation of fodder crops and increase in the productivity of cultivable lands.
- The improvement of agricultural productivity in arid and semi-arid zones of Jordan (JAZPP) project improved land productivity at small drainage catchments, through the development of tested, economically viable and socially accepted technical packages, which included small-scale water harvesting.

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- An institutional unit dedicated to following up on the activities in combating desertification and sustainable land management has yet to be established.
- The West Asian countries are developing preliminary proposals for several networks to implement the UNCCD, including a Network on Drought Preparedness and Mitigation of the Effects of Drought as part of the Sub-Regional Action Programme (SRAP) to Combat Desertification and Drought in Western Asia.
- With active support from ACSAD these activities cover a Thematic Network on Water Management in Lebanon and Jordan and another thematic Network on Vegetation Cover in Syria and Yemen.

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- Two major activities are underway: the Inventory Studies on Water Resources in West Asia and the Pilot Areas Project.
- A document presenting a framework for the selection of representative pilot project sites in the different member countries of the UNCCD Sub Regional Action Program (SRAP) has been finalized.
- The West Asian countries have developed their own SRAPs to strengthen cooperation at sub-regional level.

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Cooperation by Regional Institutions

- Enhancing Regional cooperation on reversing land degradation should take place at three levels, Local Institutions, Country and Region.
- The four basic challenges facing cooperation on combating land degradation relate to the following features:
 1. Administrative,
 2. Managerial,
 3. Technical, and
 4. Know-how.

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- The first feature shall focus on enhancing capabilities for government institutions to collaborate and coordinate their activities better than before.
- Proper approaches to land degradation require integration of inter-sectoral needs and inputs. This will require assessment of the relevant policies and regulations of the countries currently enforced.

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- The second feature to consider is financing as it is a significant issue for any institution.
- Coordinated efforts shall secure both funding and cost effectiveness.
- There is a value added, when the financing is co-shared. Institutions that are ready to commit themselves by contributing fund to the budget of the proposed program/project, will stand better chances of securing external funds.
- Institutional regional cooperation will be effective only with proper planning. Thus, providing needed information, ensuring participation of relevant stakeholders, and integration of implementation regulatory mechanisms for the Region, policies and strategies, should be assessed within a context.

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- The third feature to work on for enhancing institutional cooperation is the technical side.
- Roles vary according to the nature of the institutions, some will play an executive role, some an implementation role, and some may take other roles.
- The Region should be linked to a functional common network (with local and Regional nodes or focal points) that will quickly ensure information outreach.
- This requires the presence of a Regional land degradation monitoring system whose operation, standards, values and indices are agreed upon.

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- The last major feature in enhancing Regional institutional cooperation must consider the general level of knowledge.
- There are several gaps of relevant know-how on land degradation in the areas such as the level and extent of environmental awareness, and capacity building both at levels of government agencies and the public at large.
- Training and awareness campaigns within a common land degradation program at regional level can be very effective in enabling different communities to exchange experience.
- Diffusion of the know-how on land degradation could be the most crucial of the four basic aspects for an effective regional cooperation to be sustainable in the long run.

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Recommendations

Recommendations for countries:

- (1) Countries shall support regional cooperation and the formation of a Regional Steering Committee on land degradation (RSC – LD);
- (2) Countries who shall benefit and gain new knowledge through integrated programs or projects on regional cooperation in reversing land degradation will be able to share and exchange such knowledge with concerned institutions within and among other countries;
- (3) Countries shall invest to construct standardized database, prepare hazard maps and share them with cooperating partners;
- (4) Countries shall take necessary steps to build local capacity for forecasting, predicting and early warning on various causes of land degradation.

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Recommendations for regional institutions

- (1) Representatives of the countries and Regional/International institutions shall be requested to form a Regional Steering Committee on land degradation (RSC – LD);
- (2) The secretariats of RSC could be structured to function as follows:
 - To have a directing Board of selected Ministers (rotating) and high-ranking representatives of Regional/International institutions would choose a rotating chair. The RSC will set a strategy of work, guide Regional cooperation activities on land degradation, secure international support and ensure sustainability.
 - The Secretariat of the RSC shall also follow up on logistics, necessary operations, plus the initiation and maintenance of a Regional Land Degradation Network (RLDN).
 - Within each country, a National Land Degradation Committee with representatives from selective Ministries (Agriculture – as focal point- Environment, Water, Municipalities, Social Work, Planning, and Public Works and land use) and relevant important research centers shall be formed

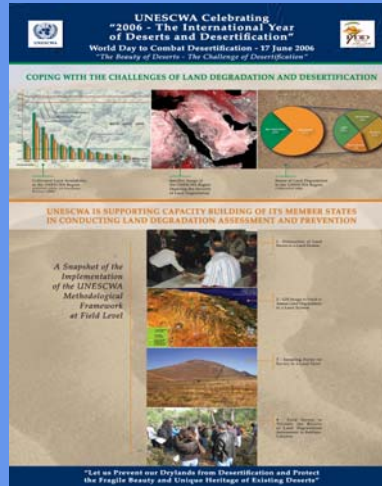
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- (3) A Regional Land Degradation Program (RLDP) with long, medium and short-term goals shall be designed with the objectives to implement the above “Recommendations for Countries”, and promote regional cooperation, and the designer(s) of the program will exert efforts to:

- Secure Regional Land Degradation Fund for the Program
- Prepare a set of Guidelines for studying, mitigating, monitoring and assessing land degradation causes, and ensuring standardization of approaches and data
- Implement regional projects that identify causes of land degradation, focusing on themes according to priorities of the region, within a timeframe that will serve the objectives of RLDP
- Design a public awareness campaign in the region about the causes of Land Degradation and availability of remedial measures
- Agree on a set of performance and achievement indicators, tied to the time frame of the RLDP, to monitor and evaluate any positive impact resulting from the Regional cooperation.

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Let us have a glance at the Poster: UNESCWA Celebrating “2006-The International Year of Desserts and Desertification”, and let us work together to confront the challenge of land degradation and desertification in this Region.



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- In this context, ESCWA has prepared a draft project proposal on “Promoting Regional Cooperation in Reversing Land Degradation in the ESCWA Region”.
- It is already circulated for your views and comments, and we are extending a sincere invitation to all representative of Member States, Regional and International Organizations present here to agree on modalities of cooperation and cooperate with us in the implementation of this project as active partners.
- One of the excellent modalities of Regional Cooperation currently in operation is the active cooperation among LAS-ESCWA-UNEP/ROWA which is supporting Sustainable Development in the Arab Region. We could build on the strength of this cooperation to widen its scope and enlarge its membership to achieve the sustainable development goals in the Region.

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Thank You

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