Meeting the Challenges of Sustainable Land Management in the ESCWA Region

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Role of Agriculture

Opportunities
• Reducing poverty
• Supporting Sustainable Rural Livelihoods,
• Improving Food Security, Employment-creating &
• Income-generating Activities.

Constraints
• Absence of Enabling & Proactive Policies
• Relative Decline in Total GDP
• Inefficient & Unsustainable Use of Land and Water Resources
• Low Productivity & Increasing degradation of natural resources
• Water scarcity & Land scarcity: (Figure 1) & (Figure 2).

Figure 1: Per Capita Water Availability
Figure 2: Per Capita Available Cultivated Land


Figure 3: Dry Land Areas

Dry subhumid 4%
Semi-arid 3%
Arid 1%
Other 1%
Hyper Arid 91%
Figure 4: Land Degradation

Pathways in Drylands

Downward spiral leading to desertification

Political and economic instability

Overgrazing and expansion of cropped areas

Reduced vegetation cover

Increased soil erosion

Climatological factors
  - Climate change
  - Drought

Large-scale expansion of irrigation

Salinization

Reduced biological productivity

Political stability and economic prosperity

Improved crop and livestock production

Smaller-scale irrigation of high-value crops

Low salinization risk

Increased biological productivity

Soil, water, range conservation and improved technology

Reduced soil erosion

Source: Millennium Ecosystem Assessment

Approach to avoid desertification

Human factors

Demographic

Economic

Socio-cultural

Science and technology

Poverty, emigration, and reduced human well-being

Improved human well-being
Linkages and Feedback Loops Among Desertification, Global Climate Change, and Biodiversity Loss

What is land degradation?

- Water erosion
- Salinization
- Rangeland degradation
- Sand dune encroachment
- Loss of biodiversity
- Outmigration
The Cycle of Processes Leading to and Perpetuating Land Degradation

Breaking the Vicious Cycle

- Sustainable Livelihoods Approach (SLA)
- Sustainable Land Management (SLM)
- Sustainable Agriculture
- Eco-agriculture
- Conservation Agriculture
- Organic Agriculture
- Precision Agriculture
Important Definitions (GM)

**Land Degradation:** reduction or loss of the biological or economic productivity and complexity of the land

**Desertification:** land degradation in arid, semi-arid and sub-humid areas resulting from various factors including climatic variations and human activities, in specific, the complex interactions among physical, biological, political, social, cultural and economic factors

**Sustainable land management:** managing the land without damaging ecological processes or reducing biological diversity

**Combating Desertification:** sustainable land management in areas affected by drought and desertification

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**Definition of SLM**

Sustainable land management can be defined as: conservation and utilization of land resources such as soils, water, animals and plants to meet the material, aesthetic and spiritual needs of humankind today, while ensuring the future productive potential of these resources, as well as the maintenance of their environmental functions.
Definition of SLM

The Global Environment Facility (GEF) defines sustainable land management (SLM) as “the use of land resources (soils, forests, rangelands, water, animals and plants) for the production of goods to meet human needs while assuring the long-term productive potential”.

Challenges in Assessing Impacts of SLM Programs

- Multiple goals, & Difficult to Measure
- Complex Impact Pathways – Direct and Indirect, Feedback Effects
- Adaptation, Changes in Interventions
- Confounding Factors
- Scale Issues, Network Effects, Spillovers
- Lagged Effects
- Attribution Problem
- External Validity
Conceptual Framework for Research on Strategies for SLM

**Government Policies, Institutions, Programs**

**Causal/Conditioning Factors**
- Agricultural potential
- Population density
- Market access
- Access to programs, services, and info
- Local institutions, organizations, culture
- Household endowments

**Livelihood Strategies**
- Subsistence food prod
- Cash crop production
- Livestock production
- Non-farm activities

**Natural Resource Management**
- Collective mgmt
- Private mgmt

**Outcomes**
- Productivity
- Household welfare
- Natural resource degradation or improvement
Drivers for Change

Capacity Development

**Capacity** is defined as the ability of individuals, institutions and systems to perform functions, solve problems, and set and achieve objectives in a sustainable manner. **Capacity development** is thereby the process through which the abilities to do so are obtained, strengthened, adapted and maintained over time.
Capacities for Creating the Enabling Environment for SLM

• Setting and implementing SLM policies require more than making an explicit decision about land use patterns or methods.

• In many cases, the effectiveness of SLM policies will be determined by other, broader factors.

• The importance of integrating SLM principles in non land-related policies, programmes and projects has been recognized for some time now.

• In the case of countries where an SLM plan already exists, it is likely to have been developed as a stand-alone policy or programme;

Capacities for Creating the Enabling Environment for SLM (Cont’d)

• Therefore its integration in broader country frameworks, including poverty reduction strategies, is advised.

• This integration – commonly referred to as mainstreaming – maximizes the impact of SLM interventions by removing structural obstacles, helps facilitate the mobilization of domestic and international resources, and ensures the long-term sustainability of policy decisions.
Mainstreaming SLM

• The capacity to mainstream SLM principles into broader frameworks depends mostly on the creation of processes within governments that allow for policies to be revised and changed if necessary.

• This in turns depends on established interdepartmental communication mechanisms, as well as on solid policy analysis capacity to determine which frameworks are likely to have an impact on SLM.

Mainstreaming SLM

• The success of SLM is contingent on its mainstreaming into the policy and institutional frameworks

• The SLM also needs to be mainstreamed within the strategic programming frameworks of the development partners and their country-based missions
Generating Enabling Condition For SLM

Five important enabling drivers are needed to generate enabling conditions for sustainable land management (SLM):

- Policy
- Legislative and Regulatory
- Institutions
- Planning and Budgeting
- Mainstreaming

Technical Capacities for SLM

*Sustainable land management is a process that involves policy mechanisms supported by appropriate technology and technical expertise.*

*Scientific and technical knowledge and capacity intervenes at various points throughout the process, from stocktaking to implementing sound projects and programmes.*
Levels of Capacity Systemic Approach

Enabling environment (policies, legislation, power relations, social norms)

Organizational level (internal policies, arrangements, procedures, frameworks)

Individual level (experience, knowledge, technical skills)

Capacity Development Process

Step 1: Engage stakeholders on capacity development
Step 2: Assess capacity assets and needs
Step 3: Formulate a capacity development response
Step 4: Implement a capacity development response
Step 5: Evaluate capacity development
Indicators in Capacity Development Process

From Technical Cooperation
To Capacity Development

Supply Driven

Technical Cooperation

Demand Driven

Capacity Development

Input-based

Outcome-based

(Transformative)

Human Development
Millennium Declaration
MDCs
IFAD is supporting Mainstreaming of Sustainable Land Management (SLM) in Jordan

**Strategy:**
- Enabling policy, regulatory & incentive frameworks that govern natural resource use,
- Promote integrated land-use planning
- Mainstream sustainable land management in national planning frameworks,
- Improving application and replication of sustainable land and water management practices, through
- capacity-building, awareness, coordination & monitoring.

- Lebanon and Syrian Arab Republic are promoting SLM on a limited scale
- Egypt is promoting Organic Farming
Sustainable Arid Land Management (SALAM): A Partnership Programme for the Gulf and Neighboring Arab States

• The Global Mechanism of the UNCCD (GM) is seeking to develop a multi-country programme that brings the six Gulf Cooperation Council (GCC) countries together with Jordan, Lebanon, Syria, Yemen & the Palestinian Authority in a partnership for promoting Sustainable Land Management (SLM) practices to facilitate improved livelihoods and ecological services.

• The programme will be designed and implemented following a participatory approach involving a wide range of national, regional and international stakeholders.

SALAM Goals

• Promote sustainable land management practices and strengthen technical and financial cooperation between the GCC Countries, neighboring Arab States and development cooperation partners under the framework of a strategic partnership to support sustainable development trends in the region.

• The programme consists of three components:

1. A component tailored to the GCC countries to respond to their specific requirements with regard to technical, knowledge and other needs related to pursuing SLM.

2. A component designed in response to the needs of the neighboring Arab States with regard to access to technical and financial support for adoption of SLM.

3. A component on establishing a multi-country forum for SLM bringing together the countries, development cooperation partners, research institutes and the private sector.
SALAM Specific Objectives

1. Promote networking and exchange of state-of-the-art-knowledge on sustainable land management through the establishment of a regular forum of thematic expert consultations.

2. Implement in member countries innovative strategies and initiatives emanating from the thematic expert consultation process.

- The programme will be implemented over a five-year period, focusing on sharing state-of-the-art-knowledge on SLM and on pioneering initiatives at national level as a means of mobilizing financing for UNCCD implementation.

SALAM Anticipated Outcomes

- The anticipated outcomes will relate to the adoption of international norms and best practices governing SLM by the GCC and the neighboring Arab States.

- The programme seeks to enhance enabling policy, legislative, institutional and incentive frameworks, as well as the approach to land-use planning, by establishing a cycle of expert thematic consultation forums within the region under the SALAM Partnership Platform (SPP).

- It is expected that specific bilateral or multilateral partnerships will be created between the countries of the region and international partners, in order to undertake specific SLM-related activities. These partnerships will centre on technical support, advocacy, financing or any other relevant combination agreed upon.
## Land Challenges and Constraints

- High population growth rate:
- Lacking institutional coordination and synergy among major conventions
- Exchanging expertise and knowledge on arid soil reclamation, organic farming and desertification
  - Undermines efforts to enhance economic and social development
  - Presents heavy burden on food security, rural development, services and infrastructure
- Lacking appropriate mechanism to ensure effective legislations
- Upgrading of services
- Initiating awareness raising campaigns
- Adopting participatory approaches

## LAND: Actions

- Enhancing sustainable land management practices
- Enforcing socially just policy and land use plans
- Preventing land degradation
- Promoting land conservation measures
- Cooperating in exchanging expertise & information sharing on sustainable land use practices
- Promoting socially just land tenure systems
Land: Proposed Policies

- Ensuring socially just land tenure systems and designing realistic enforceable land use plans;
- Enhancing sustainable land management practices and protecting land from degradation;
- Increasing the use of non-conventional water resources to decrease over-dependency on conventional water resources;
- Improving knowledge on natural resources and soils in arid and semi-arid areas and enhancing consumption efficiency;
- Supporting existing scientific research institutions to make better use of remote sensing and geographic information systems (GIS) techniques in establishing accurate and updated databases;
- Preventing land degradation and designating green belts and protected areas for agricultural activities;
- Promoting scientific research in natural resources protection in order to achieve sustainable development;
- Enhancing the role of the private sector and civil societies in implementing sustainable development programmes and applying integrated policies to eradicate poverty;
- Reforming the property system to eliminate communal ownership of pasturelands and forests in order to ensure their sustainable development.
Land: Proposed Measures

• Reviewing current demographic policies and their negative impacts on the distribution of agricultural lands, the size of farm holdings and rural productivity;

• Mobilizing and supporting partnerships among national institutions, the private sector, civil society organizations and Arab parliamentarians on issues relating to land use;

• Encouraging cooperation among Arab countries on the exchange of expertise and information on land use-related issues;

• Developing a general framework and plan for the integrated management of surface and groundwater resources, both at the sectoral and national levels, while ensuring the equitable distribution of water resources;

Land: Proposed Measures (cont’d)

• Raising awareness and investments in water resources conservation;

• Integrating the production systems of arid and semi-arid areas with those of marginal agricultural areas;

• Using scientific techniques in conducting field surveys, basic research and preparing land-use maps;

• Continuing to closely monitor the status of land degradation through the use of appropriate technologies and scientific methods.
Sustainable Agriculture and Rural Development (SARD) is intended to increase food production in a sustainable way and enhance food security.

The main tools of SARD are policy and agrarian reform, participation, income diversification, land conservation and improved management of inputs.
What is SARD?

- Ecologically sound
- Culturally appropriate
- Socially just
- Economically viable

Land Related Actions

- Sustainable land management practices are essential to maintain the social, economic and environmental functions of land for sustaining livelihoods and supporting food security.
- Land management and planning capacities need to be improved
- Facilitate equitable access to land and sustainable patterns of land use.
Land Related Actions

• Land management and planning need to take an integrated approach that takes into consideration the important ecosystem functions land provides.

• Sustainable land management and soil monitoring and protection play an important role in mitigating and adapting to climate change, as do forests.

• Improved land tenure security can facilitate farmers’ and rural communities’ investments in sustainable land management practices.

Land Related Actions

• Addressing land access and security of tenure rights of women and indigenous peoples deserves special attention.

• Provision of more secure land tenure and livelihoods in the pastoral livestock sector, together with research into effective stock breeding and management of pasture lands, would help support sustainable use and management of rangelands.
Land Related Actions

• The landless poor, including agricultural workers, are especially vulnerable to food and economic insecurity, thus measures are needed to provide them with diversified and stable sources of income and, where possible, access to land.

General Recommendation

• Land plays a crucial role for achieving poverty eradication, food security and sustainable development.

• Sustainable land management provides multiple benefits, such as sustaining agricultural productivity and food security, providing ecosystem services, sequestering carbon and regulating climate.

• Land policies need to promote sustainable land management, effective administration, integrated planning and equitable land access

• Promote sustainable and integrated land planning and land management practices.
**General Recommendation**

- Reduce land degradation and rehabilitate degraded land
- Manage water and land resources in an integrated manner
- Establish clear and secure land tenure, particularly for women, indigenous peoples and other vulnerable groups
- Develop and implement equitable access to land systems

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**General Recommendation**

- Enabling Proactive & Coherent Policies
- National & Regional SLM Initiatives
- Long Term Capacity-building Programme on SLM
- Improving the Links between Research & Extension
- Promoting Regional Cooperation
- Knowledge & Information Sharing
- Documenting Best Practices & Success Stories
General Recommendations

- Strategies for Integrated management of Land & Water resources
- Proactive Land Use Plans & Land Tenure Policies
- Viable Sustainable Livelihoods Alternatives
- Stakeholders Focused Agricultural Institutions
- Enhanced Strategic Communication for SLM
- Enhanced Participatory Capacity-building

Thank You