

Policies and Methodologies for Fostering and Assessing the Deployment of Low-Carbon Technologies in the ETC and SEMED regions

**BUILDING CAPACITIES IN DEVELOPING APPROPRIATE GREEN TECHNOLOGIES FOR IMPROVING
THE LIVELIHOOD OF RURAL COMMUNITIES IN THE ESCWA REGION**

IEA-EBRD workshop

Economic And Social Commission For Western Asia

15 June 2015



UNITED NATIONS

الاستسقا

ESCWA

Table of Content

Introduction

- Rural areas in the Arab region

- Why rural development is important

Energy

- Renewable energy

- Challenges to RET dissemination

ESCWA project

- Objective

- Approach

- Methodology

- Activities

- Summing up

Introduction



Rural areas in the Arab region

Accounting for 43% of the Arab population, rural communities endure socio-economic marginalization brought about by poor infrastructure, high fertility rate, growing water scarcity and increasing aridity. 12% of the Arab population/40 million people (mostly living in rural areas) have no access to electricity; 90% of them live in Sudan and Yemen.

Appropriate renewable energy technology can play an important role in improving the livelihood of rural communities if adopted in a sustainable way.

Why rural development is important?

- Contributes to the national economy both directly and through the spillover effect,
- Enhances political stability by reducing grievances,
- Preserves the local rural communities and strengthens decentralized governance,
- Reduces the unsettling trend in rural areas and slows down the growing imbalance in urban-rural population distribution,
- Improves national food security.

Energy

output

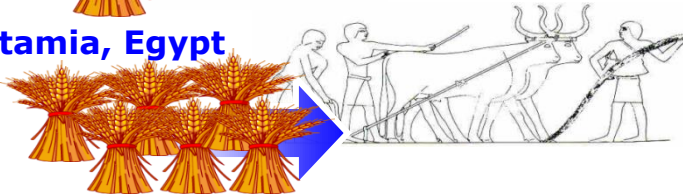


Energy "growing"

Energy "mining"

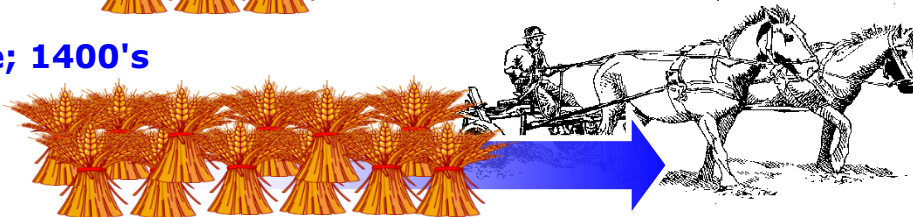
Mesopotamia, Egypt

output



Europe; 1400's

output



1 Barrel of Oil

~

25,000 Hrs

Human Labour



input


USA, Europe; 1900's

output



Renewable energy

- Most rural communities in low and middle income Arab countries still rely on biomass to meet their energy needs.
- There are a number of promising alternatives for increasing energy supplies even in very remote areas, ranging from more efficient use of traditional fuels to modern technologies based on renewable energy resources.
- Today, renewable energy resources are seen not merely as sources of energy for rural areas, but also as a means to address many other pressing needs, including:

- 
- ✓ **Enhanced infrastructure**
 - ✓ **Provide added value services**
 - ✓ **Create employment opportunities**
 - ✓ **Minimize financial and technical burden of energy procurement**
 - ✓ **Preserve the environment**

Challenges to RET dissemination

Failure of the emergence of a market-driven RET dissemination in most rural areas in the Arab region can be attributed to several factors, mainly:

- Rural communities lack information on RET applications,
- Dispersed nature of rural communities reduces market size,
- High upfront cost of many RET,
- Weak local technical capacity,
- Inadequate regulatory and institutional frameworks,
- Lack of low-income financing mechanisms,
- ~~Lack of support to the rural productive sectors.~~

Objective

The project aims to strengthen the capacity of countries in the Arab region to mainstream appropriate green technology initiatives in rural areas into national programmes and policies to enhance the livelihood and welfare of rural communities.

It is based on an approach that links RE to improving existing rural economic activities.

ESCWA Project Approach



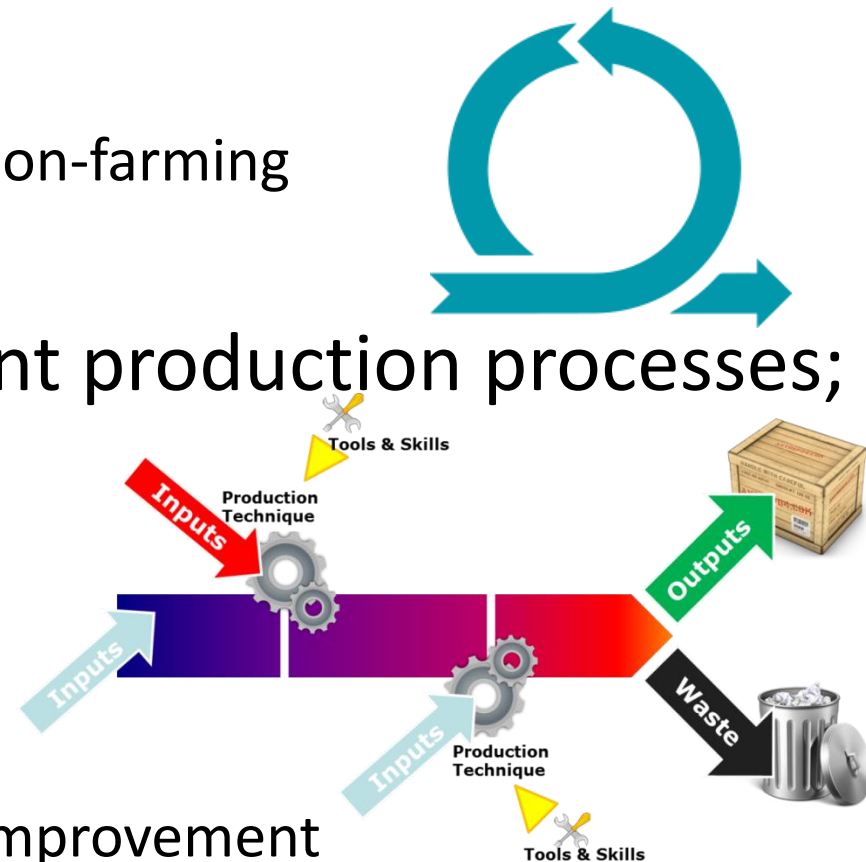
Market forces → Weak dissemination

Shift focus from RET supply chain to value chains in the rural productive sectors

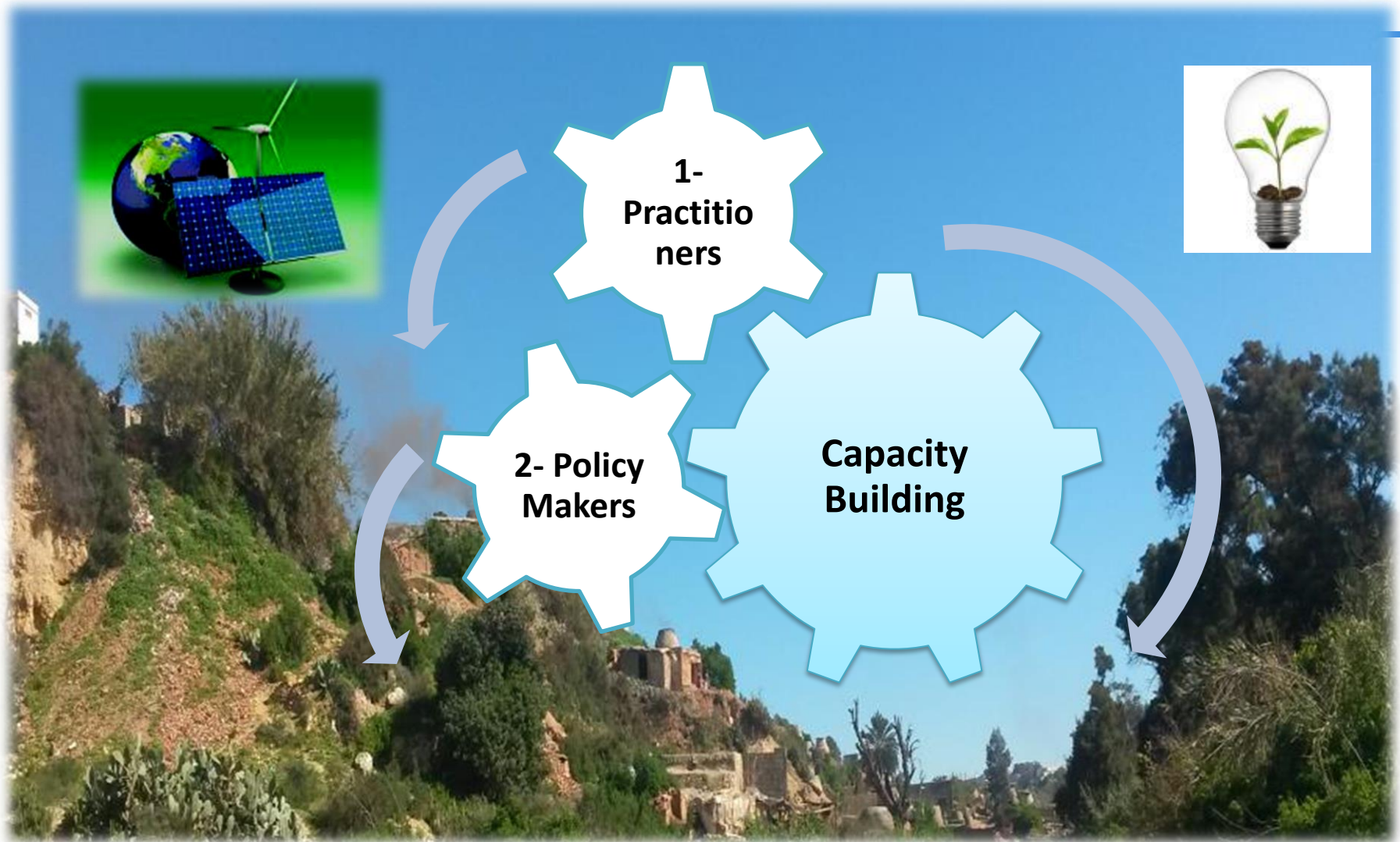
- **“Value Chains”**

Analyze value chains of farming and non-farming income generating activities;

- **Energy perspective: Current production processes;**
Search for potential productivity improvement, and identify processes that could be optimized using energy input. Assess appropriate RET needs to implement potential productivity improvement that can be financed affordably.



ESCWA project
Activities



Activities

- Development of a methodology for assessing appropriate RET need in rural productive sectors, and mapping of RET appropriate for the Arab region (Dec. 2014);
- Case studies from rural areas in four Arab countries: Jordan, Morocco, Sudan and Tunisia (Jan. 2015);
- Holding an expert group meeting to validate the methodology (Feb. 2015);
- Implementing 2-days workshops in Jordan (17-18 May), Sudan (8-9 June), Oman (14-15 June) and Morocco (27-28 July) to build capacity of public and private rural development practitioners and local energy experts on applying methodology;
- Study tour organized with WISE, Pune in India, on “Providing Energy Access through Renewable Energy in Rural Areas – Indian Experience”; stakeholders are energy sector policy makers from Jordan, Morocco, Oman and Sudan (Oct, 2015).

- Appropriate RET are tools for rural development,
- Very few energy experts are working in rural areas in the Arab region; in contrast we find many micro-finance (MF) institutions serving rural communities; MF practitioners and other rural development practitioners are ideal candidates to adopt the methodology;

THANK YOU FOR YOUR ATTENTION

Economic And Social Commission For Western Asia



UNITED NATIONS

الاسكوا
ESCWA

40
YEARS