

# Greening MENA as a Security Game Changer

*A journey in innovation and cooperation*

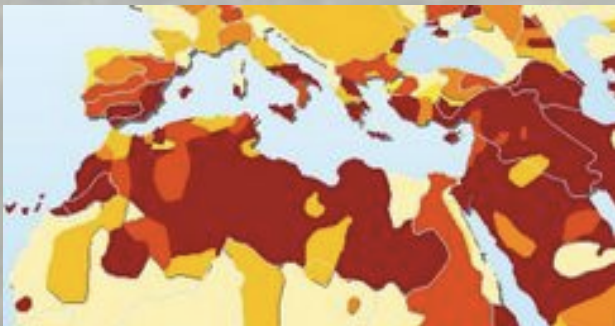
- water, food, jobs
- conflict mitigation
- creating large scale Carbon sinks

2016 / 04 / 15



## Security Game Changer

For MENA and for EUROPE



2015 + : Water stress in the MENA region

*5000 years ago Egypt was the  
Regional Granary*

*Who controls water  
has the power*



Pentagon: **Climate Change** is likely to act as a ‘thread multiplier’ in coming decades.

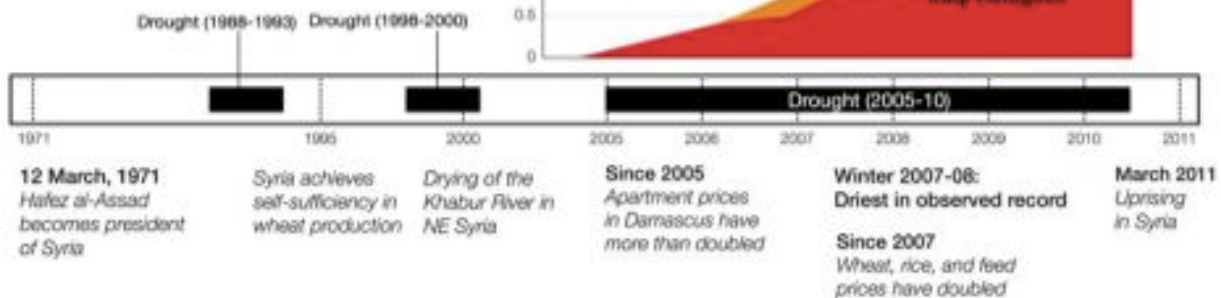
*“Turkey, Lebanon, Israel and Jordan may face an even more tenuous security situation in the coming decades.”*

Example Syria:

## Timeline of Events Prior to the 2011 Uprising

### 1970s-1990s

Agricultural policies promote production of staple crops, leading to increase in number of groundwater wells and use of inefficient and outdated irrigation methods



Source: <http://mashable.com/2015/03/02/global-warming-syria-civil-war/#04pnKSFi8kqF>



## China Löss Yan'an Plateau Before

*Proven technology: It can be done*

## China Löss Yan'an Plateau After



# Growing to a resilient position

## *Building Nature with Nature*

Restore micro-climate

... by catching water

... changing the watershed, planting trees,

... grow crops with minimal water need,

... using experiences of similar projects,

... adapted to local circumstances,

... and using local social possibilities.



## Building Nature with Nature: water

### Harvesting water from Fog

the simple way:



or this way:



or this way:



### Watch Fog Catchers examples on YouTube

*General:* Producing drinking water from fog: CloudFisher (7:01)



*Nepal:* Fog for your thirst (1:22),

*Eritrea:* Fog water project in Eritrea (9:13)

*Kenya:* Fog Collector Transforming Massai Water (3:13)



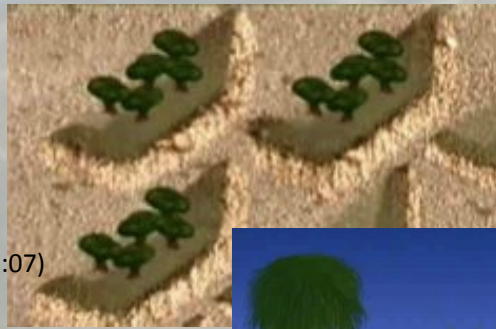
## Building Nature with Nature: rain, runoff water & watershed

### Harvesting water from Rainfall

#### Building dams in accidented terrains :

*Israel: Water harvesting in the Negev (5:32)*

*Mexico: Rain water Harvesting: Trincheras (8:07)*



#### Countour trenching/control torrential rainfall:

*General: The convenient solution – Naga Foundation (4:00)*

*Kenya: Meshanani (3:50) & Climate Engineering Naga (20:13)*



Making sure that all the rain falling  
in a certain area infiltrates the soil...



## Building Nature with Nature: Soil creation, Re-storing landscape, Permaculture



above: Dutch king at Löss-plateau

### Permaculture :

*General: Commonland - 4 returns from landscape restoration (4:00)*

*Jordan: Geoff Lawton: Soil Supporter - Permaculture Day 2015 (3:34)*

*China, Jordan: Green Gold – Documentary by John D. Liu (47:30)*

*Rwanda: Ecosystem restoration Rwanda (1:37)*

under: Geoff Lawton at Jordan



### or even Saltwater agriculture

Greening the desert:

Growing halophytes

(Salicornia)

with saltwater irrigation



<http://ceep.udel.edu>





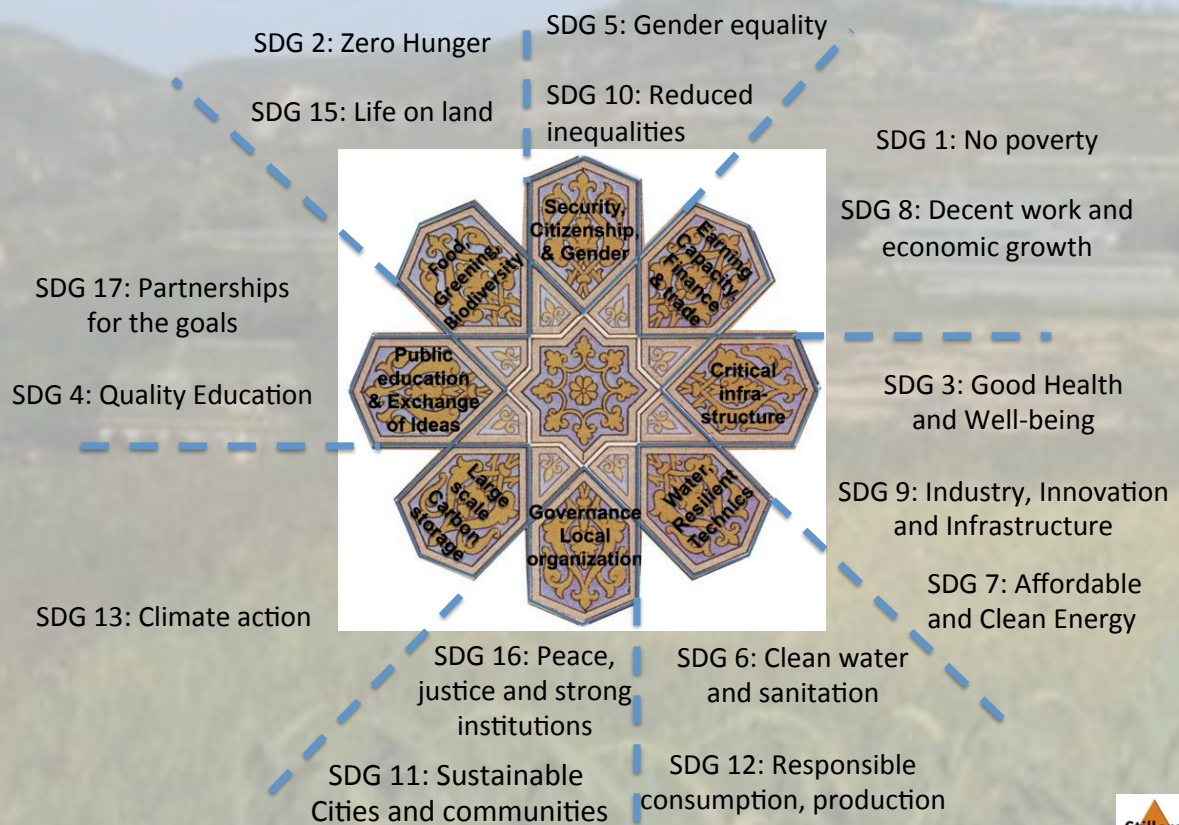
## Transition fields for Resilience

help all involved  
to connect  
to the  
bigger picture



Stillare

## Serving many Sustainable Development Goals



Stillare

# Initiators and Team members

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- Max van der Sleen: political economist, PME-expert

See website: [www.stillare.com/greeningmena.html](http://www.stillare.com/greeningmena.html)