

COCOON planting technology as a model to enable the growing of trees in arid conditions in West Bank and Gaza Strip

In partnership with

MENAQUA LAND RESTORATION MQ and land life company



الدد جان العمل الزراعين معالم المحلم

UAWC's History

UAWC was established in 1986, in response to the Israeli violations against the Palestinian people, especially small scale farmers, who lacked the main sources of life due to the Israeli control of the Palestinian natural resources.



اتداد لجان العمل الزراعين

UAWC's Vision

A resilient Palestinian farmer on his/her land empowered through social justice; struggling effectively for his/her national and democratic rights within a free and food secured Palestinian society.





UAWC's Mission

Effectively contributing towards empowering farmers and their families, and enhancing their resilience on their land within a developmental public and voluntary framework.



اتحد لجنة العمل الزراعي الحد ال

Direct and Indirect Beneficiaries Groups



ل UAWC إتحاد لجان العمل الزراعي

يد اخان العمل الزراغين

UAWC's Working fields

In Land Development:

1.Land Reclamation and rehabilitation

2. Agricultural roads

- 3.Water Resource Management
- In building farmers' capacities:
- 1. Trainings targeting the farmers.
- 2.Empowerment of impoverished families
- 3. Women's cooperatives

- UAWC's Advocacy and Legal Activities
- Olive Harvest Campaign
- 1. Land Day
- 2. World Environment Day
- 3. International Women's Day
- 4. World Water Day
- 5. International Day of Peasants and Farmers
- 6. Legal Follow ups
- Emergency Relief projects
- Pioneering Projects :Local Seed Bank, Demonstration sheep farms, Hydroponic Units, Pastoral Reserves, Solar Energy

إتحاد لجان العمل الزراعي

UAWC



Pilot COCOON planting technology



INTRODUCTION:

- The Palestinian Territory suffers from fluctuating rainfall and low rainfall. This resulted in a decline in the cultivation of rainfed fruit trees throughout the Palestinian territories as a result of the scarcity of rainwater and the lack of access to waterrelated natural resources for supplementary irrigation.
- All of this has led to a general deterioration in the Palestinian territories and the expansion of the desert tide in large areas of the land. Nevertheless, the Palestinian farmers are struggling to cultivate these lands using traditional methods of harvesting water to provide water from the rainwater to be used to irrigate these planted trees.



The need for Palestinian farmers to support low-cost irrigation technologies supports the growth of planted crops, Increase the success rate of tree planting and reduces the cost of purchasing water to irrigate these trees.

UAWC

إتحاد لجان العمل الزراعي

Needs/Problems

West Bank:

- low rainfall.
- declines in the Dead Sea area to less than 100 mm.
- lack of access to water-related natural resources
- Israeli occupation

Gaza Strip:

 On an average annual basis, the area receives about 300 mm of precipitation.

حاد لحان العمل

- lack of access to water-related natural resources.
- Cost of Water.
- high salinity of the water.
- Israeli occupation.



خارطية

Goals/Objectives

The main objectives are:

- To implement a pilot for the planting of trees Palestine using the Cocoon technology.
- To replant olive and other trees on degraded Palestinian lands.
- To support the communities by creating jobs and income generating activities.
- To interest universities to conduct scientific research, for further roll-out.
- To raise awareness about environmental protection.



Procedures/Scope of Work:

- The scope of this pilot is planting 200 trees, olive and almond trees, on the West Bank and 300 olive trees in Gaza Strip.
- The 420 trees planted with the COCOON technology in West Bank and divided over two locations: Wad Al-Reem, Saeer municipality and Wad Ben Saleh, Daheriya municipality.
- The 300 (olive) trees that planted with the COCOON technology in Gaza Strip planted on the Training & Agricultural research Center of UAWC in Gaza, Khan Younes municipality.





implemented

Planting trees using the cocoon planting Technology:

- The farmers Planted 5 donum of olive trees (120 seedling) in Wad Ben Saleh(Daheriya) using the cocoon planting Technology on 13/3/2017.
- While the other location in Wad Al-Reem (Saeer) was planted with donum of olive and almond trees (300 seedling ,100 olive, 200 almond) in using the cocoon planting Technology on 14/3/2017.

implemented

The 300 trees (olive and almond) planting with the COCOON technology in Gaza Strip divided over tow location: the Training & Agricultural research Center of UAWC in Gaza, Khan Younes municipality, and land of the farmer abd elqader Hamdouna in Biet Lahia on 14/3/2017.





RESULTS:

Survival rates of seedling planted in west bank and Gaza strip:

Site	seedling	# of seedling planted	# of seedling survival	# of seedling died	signs of thirst
Wad Al-Reem	olive	100	92	8	70
	almond	200	184	16	140
Wad Ben Saleh	olive	120	111	9	84
	olive	100	92	8	70
Khan Younes	almond	50	46	4	35
Biet Lahia	olive	100	92	8	70
	almond	50	46	4	35
TOTAL		720	663	57	504
%			0.92	0.08	0.7

RESULTS:

Several field visits were carried out for the sites of the demonstration and observed:

- Access of water from the cocoons during the first three months after planting (15/6/2017)
- > 92% from the trees planted are survival.
- Approximately 8% of the trees planted have died.

تحاد لجان العمل الزراعي



Increase the survival rates of seedling planted comparing the traditional planted.

- The Cocoon technology is a low cost, water efficient, biodegradable technology that enables the sustainable and scalable plantings of trees.
- ➤reducing costs and water use in comparison to traditional practices.

reduce the suffering of irrigation by the water hose or traditional irrigation systems used.

اتحاد لحان العمل الزراعي

Recommendation:

Working to support the largest number of farmers who wish to cultivate their lands with fruit trees using COCOON planting technology.



إتحاد لجان العمل الزراعي

