

Canaan Model for a Sustainable Crop Value Chain Approach in Palestine



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Presentation outline:

- ❑ Agriculture Context in oPt
- ❑ Canaan model
- ❑ Canaan Center for Organic Research & Extension (CORE)
- ❑ Success story: Defeating Almond seed wasp
- ❑ Learned lessons.



Agriculture in oPt.

Main Features and potentials: High diversity of agriculture systems and bio diversity

Palestine: A Biodiversity Hotspot

5 distinct climatic zones: unique Jordan Valley



Number of plant species in Palestine is much greater than many major countries in the world.

Country	Size	Number of plant species
Palestine	27,000	2785
UK	9 Times<	1750
Egypt	37 Times<	160

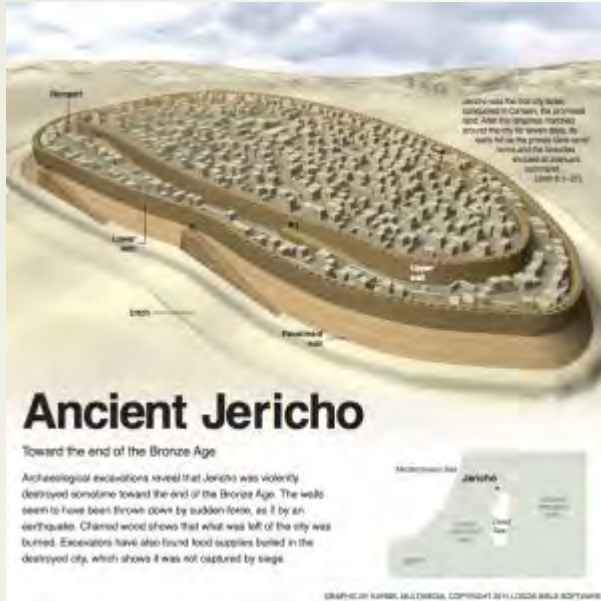
Agriculture in oPt.

Main Features and potentials: High diversity of agriculture systems and bio diversity



Agriculture in oPt

Main Features and potentials: Rich heritage of indigenous knowhow and sustainable practices



The oldest city in the world: first forms of urban life of the human kind



Battir: UNESCO Eco-cultural heritage, 4000



Origins of Agriculture 10,000 years ago

Agriculture in oPt

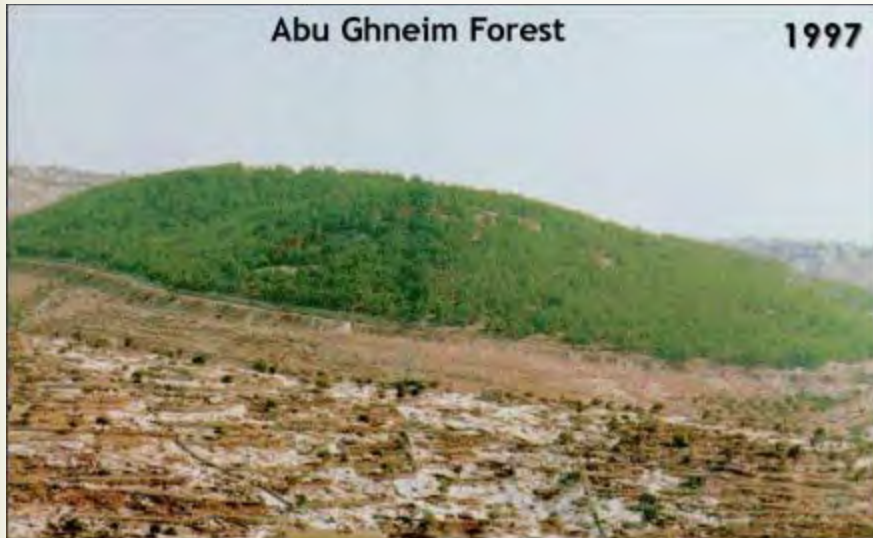
Main Features and potentials: High value local products with added values



Agriculture in oPt: Major challenges

1. Scarcity and restrictions of natural resources (land, water, biodiversity)

Israeli settlements in WB



Check points in WB

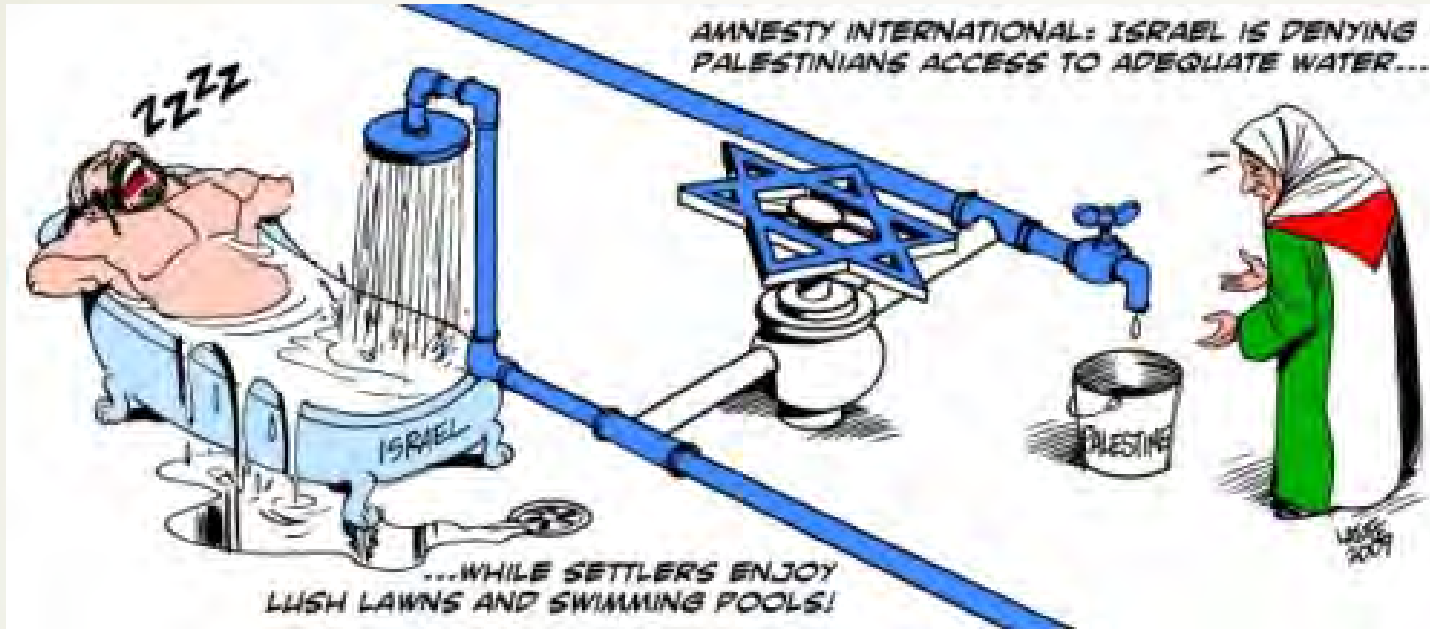


Separation wall in WB



Agriculture in oPt: Major challenges

1. Scarcity and restrictions of natural resources (land, water, biodiversity)



Israel control the entire water resources in oPt.
80%/settlers
20%/Palestinians

Centuries-old olive trees uprooted by Israeli soldiers in Bethlehem area 2015



Agriculture in oPt.: Major challenges

2. Land fragmentation and Small scale land properties



3. Lack of knowledge and no reliable research and extension



4. expensive agricultural inputs



Canaan model



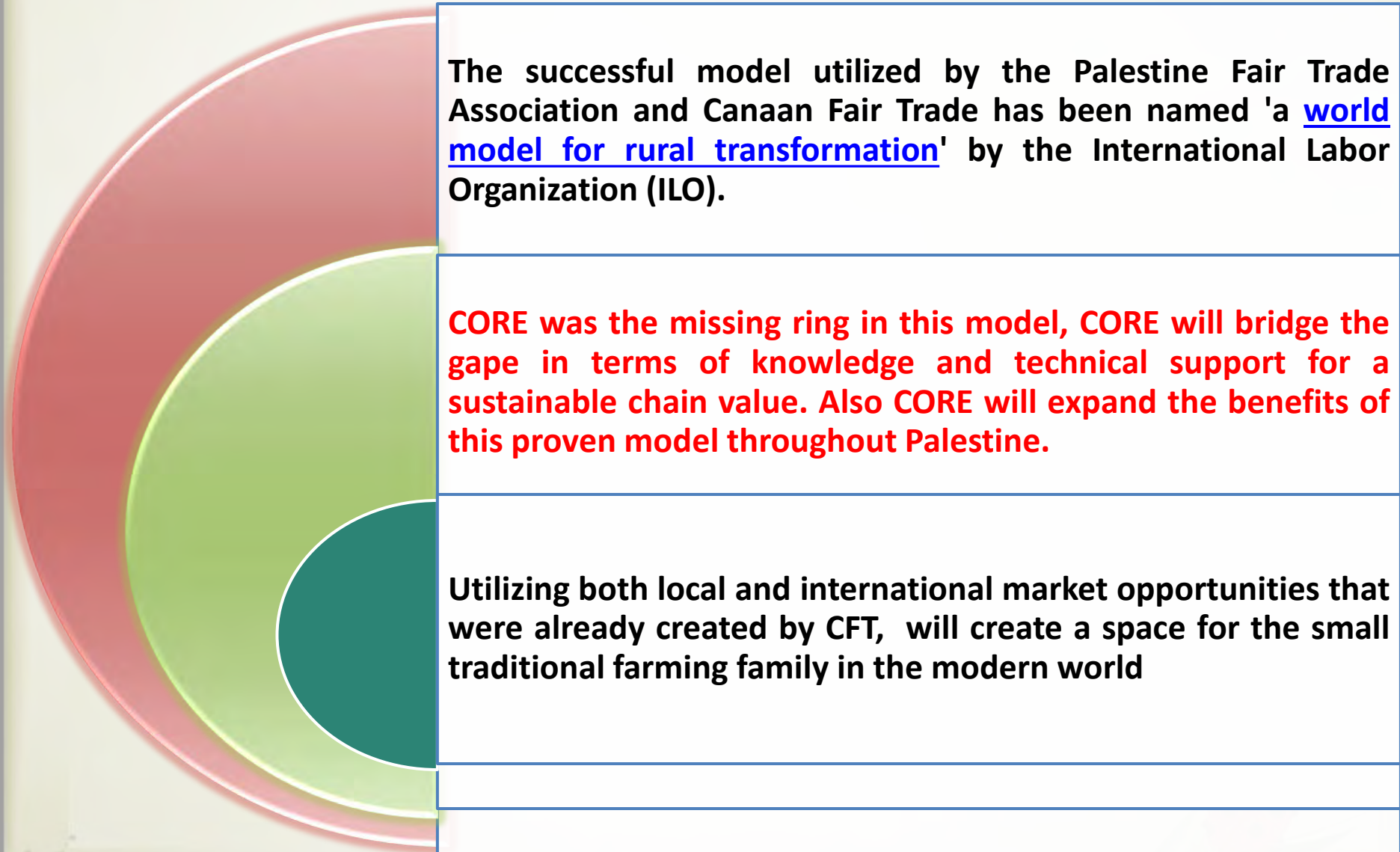
Canaan model: philosophy

The beauty of the land of Palestine stems from its rich, fertile, and diverse agriculture, and this has been for thousands of years, a social culture of farming that creatively lived with the land producing the best treasures out of the soil. Palestinian farmers lived in harmony with this ecosystem for thousands of years and continue to honor these traditions to this day.



Canaan model: what is it?

PFTA & CORE & CFT = Canaan Model

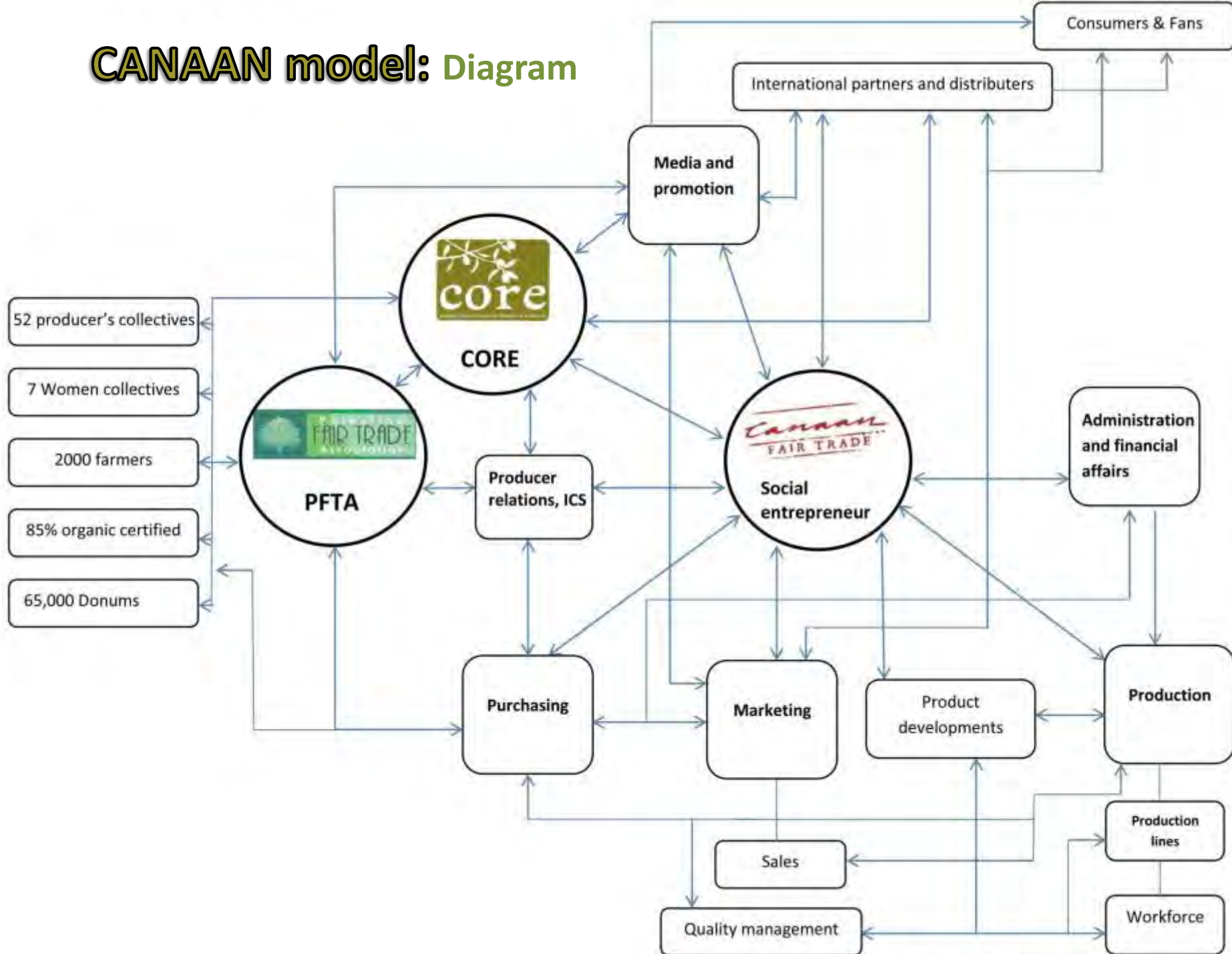


The successful model utilized by the Palestine Fair Trade Association and Canaan Fair Trade has been named 'a [world model for rural transformation](#)' by the International Labor Organization (ILO).

CORE was the missing ring in this model, CORE will bridge the gape in terms of knowledge and technical support for a sustainable chain value. Also CORE will expand the benefits of this proven model throughout Palestine.

Utilizing both local and international market opportunities that were already created by CFT, will create a space for the small traditional farming family in the modern world

CANAAN model: Diagram



CANAAN model: consolidated reality for sustainable development based on value chain approach



- Farmers 1700
- Co-ops 52
- Women co-ops 8
- Wild plants collectors
- 7 provinces
- 82,000 donums
- Organic certified 85%
- Social prim



- National Center
- Based in Jenin
- Promoting Agro-ecological farming
- Research
- Extension
- Training
- Products development
- Market development
- Partners & networks



- Social Based business
- niche markets: North America, Europe, Far East, Arab Gulf
- Strategic buyers
- Products preparation, packaging, branding
- Certification
- Promotion



From

Crop chain value

To





Why we need CORE?

Lack of applied agricultural research in ecological and organic farming can address the real needs and problems of the farmers

Lack of reliable and efficient agriculture extension & training programs, specially for organic farming

Increasing numbers of farmers and artisans who convert to organic farming

Increase interests and demands for organic products from international business and consumers



What is CORE!

Not-for-profit Company

Located among farmers
(Jenin is the richest
agri. area)

Not-for-profit Company

Value chain approach

Market oriented

Results driven



CORE's mission

Improving the livelihood of Palestinian small scale artisan farmers and their communities by promoting ecological and organic farming in Palestine through research & innovation - training and extension - sharing knowledge & cooperation.



Main Goals and Activities

Protect, preserve and support the sustainable agro-ecology of Palestine

Raise public awareness for sustainable agro-ecology products, their value to human health and the environment

Support organic farming production, processing, and marketing

Provide opportunities for global exchange of knowledge

Provide farmers with guidance and training on organic farming practices

Preserve and enhance indigenous plant varieties and animal races

Enhance food security and building resilience of local food resources

Minimize environmental pollution and promote public health



CORE Partnership



Al Najah national university



National agriculture research center (NARC)



Mediterranean Agronomic Institute of Bari (MAIB)



North Carolina State University



Palestine Fair Trade Association



Land of Canaan Foundation



Success story: Defeating Almond seed wasp

- In 2014 more than 60% of almond yield of has been damaged by the almond seed wasp
- Farmers start to uproot their almond orchards (1000 acre has ben uprooted)
- Framers had almost nothing knowledge about the problem



Problem assessment



Questioner about almond cultivation and almond seed wasp



Fram Form _Eurytoma Amygdali Monitoring Program

Farmer name: علي محمد عيسى Date: 13/1/2015 town: عنابا locality: استاد

Farm Description:
 topography: سهول مرتفع Surface area: 50 almond area: 50
 Trees age: 3 Cultivated almond varieties: الحمراء
 Other crops: توتون

Surrounding area description: سهول مرتفع بالبحر

Infection and severity:
 Last season: 70%
 Previous years: 30%

Timing and symptoms description: المرض يظهر في أواخر الصيف ومنتصف الخريف

Infection in the neighboring farms: لا يوجد

Insect description: عذبة

Agricultural practices used:
 Plowing: لا يوجد
 Fertilizing: لا يوجد
 Pruning: تقليم
 Irrigation: تري

Control methods implicated /efficiency?:
 Pesticide treatments: لا يوجد
 Applying other materials: لا يوجد
 Eliminating infected parts: لا يوجد
 Eradication and/or cultivating new varieties: لا يوجد

Notes and comments: المرض منتشر في المنطقة

Visited farmers to collec information and assessment

Research and Study (in farm by participatory approach)



Map show the distribution of demo fields in Jenin province in west bank



Wasp larva feeding on almond fruits



Traps in the demo fields

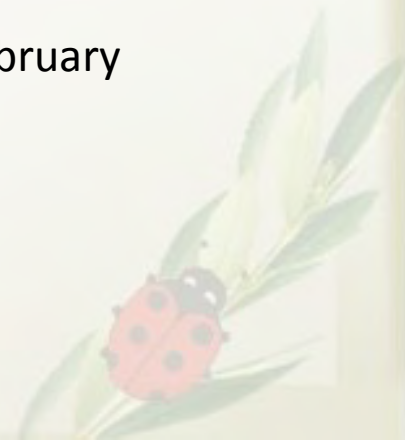
Identification of time and control method



Traps to monitoring the almond wasp



The wasp out in end of February and beginning of march



Recording results



In 2015 infection less than 8% while in past seasons more than 60%



Learned lessons:

- **Farmers eager for reliable knowledge**
- **Participatory approach makes farmers more active and willing to learn**
- **Approach and results enabled CORE to Build a trust relation with farmers in a record time**



A scenic landscape featuring a winding asphalt road that curves through vibrant green fields. The sky is filled with scattered, fluffy white clouds, and the sun is visible in the upper center, creating a bright, airy atmosphere. In the distance, a town or city is visible through a valley, with a body of water or a wide river in the background. The overall scene is peaceful and picturesque.

Thank you for listening