

CLUB OF BOLOGNA
*strategies for the development of agricultural
mechanisation*



34th Members' Meeting of the «Club of Bologna
Mechanisation and Technologies for New Farmers Needs
11-12 October 2025
Bari, Italy

Technologies and Mechanization to Enhance Value Chain in Developing Countries

Biagio Di Terlizzi (CIHEAM Bari) – diterlizzi@iamb.it

13 Member
Countries

 **1** General Secretariat
in Paris

4 Mediterranean
Agronomic Institutes

CIHEAM BARI - Italy
CIHEAM CHANIA - Greece
CIHEAM MONTPELLIER - France
CIHEAM ZARAGOZA - Spain



CIHEAM BARI: OUR GOAL

Promote the **SUSTAINABLE DEVELOPMENT** of **AGRICULTURE, FISHERIES** and **FOOD SYSTEMS**, thereby improving **FOOD SECURITY** and optimizing **ONE HEALTH** approach

OUR MISSION



EDUCATION &
TRAINING



APPLIED SCIENTIFIC
RESEARCH & INNOVATION



DEVELOPMENT AND SCIENTIFIC
COOPERATION



BARI

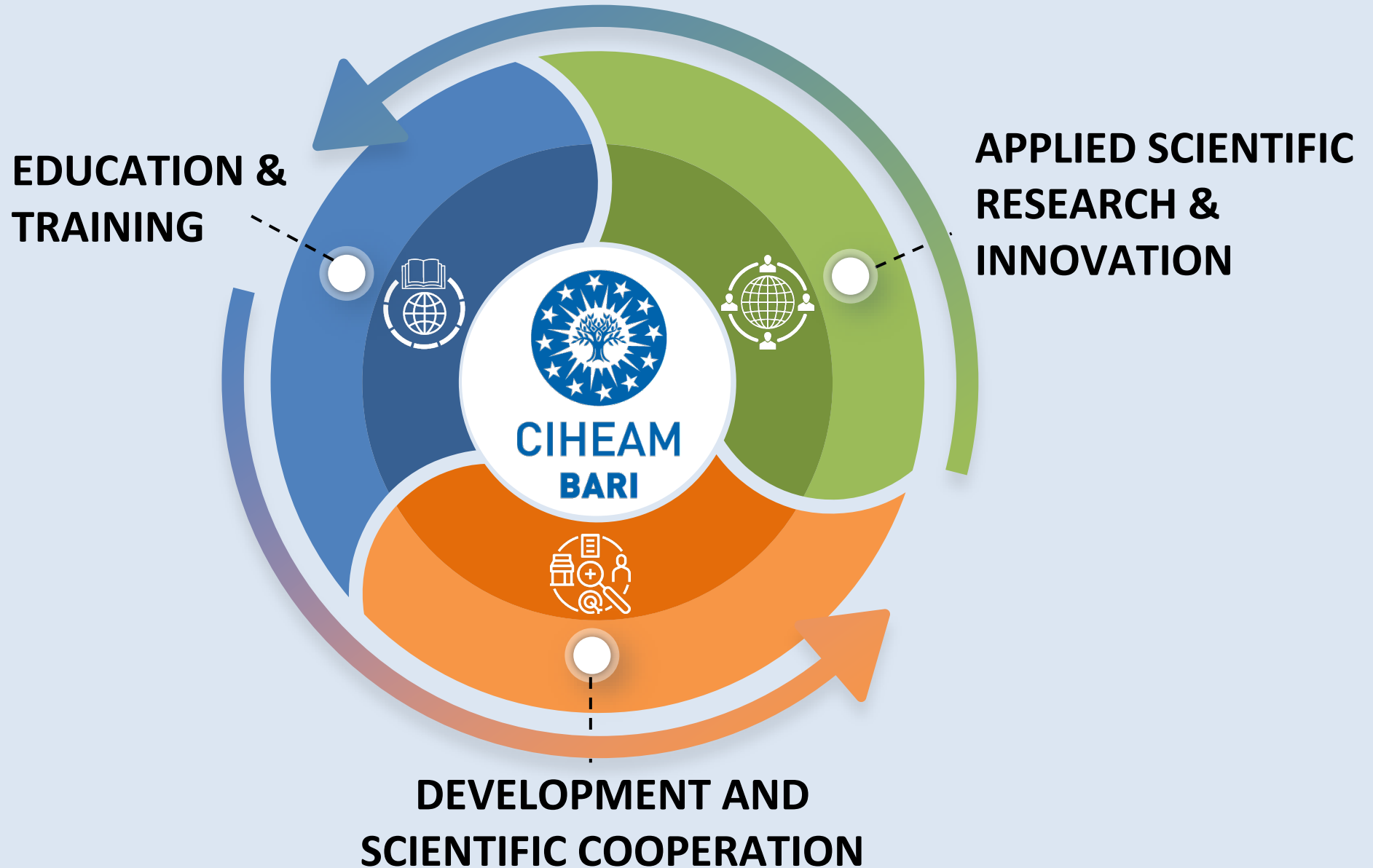


CIHEAM's OFFICES in ITALY

TRICASE



CIHEAM Bari – Our Mission



CIHEAM Bari – Our Mission

4 Quadruple education & training model



Master's programs

Young talented students



Advanced specialized courses

Officers from the public administration



TVET

Farmers, technicians



Open innovation model

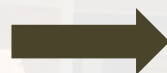
Start-ups, small enterprises

EDUCATION & TRAINING



Education and Training

more than **14,000**
STUDENTS & TRAINEES
since **1962**



from **+ 100** **COUNTRIES**



6

MASTER COURSES



- ☐ Sustainable Water and Land Management - 2 AY
- ☐ Integrated Pest Management – 2 AY
- ☐ Mediterranean Organic Agriculture – 2 AY
- ☐ Sustainable Agroecosystems and Resilience - 2AY
- ☐ Open Innovation & Youth Entrepreneurship – 1 AY
- ☐ Local food policy - 1 AY

2



**ADVANCED SPECIALIZED COURSES
for Ministerial Officials**

-  Precision Agriculture for the Mediterranean Region
-  **Sustainable Development of Coastal Communities**

150

STUDENTS



from

23

COUNTRIES



A.Y. 2024-2025

POST-GRADUATE EDUCATION

3.92 €
per **1 €** **SOCIAL IMPACT***
INVESTED

* PROFESSIONAL DEVELOPMENT,
NETWORKING, INTERCULTURALISM,
INNOVATION, CAPACITY & KNOWLEDGE
BUILDING

74%
CIHEAM Bari students
**ENTER THE LABOUR
MARKET STRAIGHT AWAY**

 **PRIVATE SECTOR**



60%

CIHEAM Bari students
since 1962
from **AFRICA**



31 ONGOING PROJECTS

- **Research and Innovation** (H2020, Horizon Europe-HE, PRIMA other EU funding)
- **Research for Development** (DESIRA).



19 NETWORKS



CIHEAM Bari is member of **15 NETWORKS**
and leader of 4 networks **4 NETWORKS**

573 MEMBERS

Active in the fields of:

- RESEARCH
- PARTICIPATORY APPROACHES AND STARTUPS
- FOOD SYSTEMS
- TRAINING

Thematic areas



**INTEGRATED RESOURCE MANAGEMENT
FOR SUSTAINABLE AGRI-ENVIRONMENTS**



**SUSTAINABLE TRANSFORMATION OF
AGRI-FOOD SYSTEMS**



HEALTHY AGROECOSYSTEMS



GREEN AND BLUE COMMUNITIES



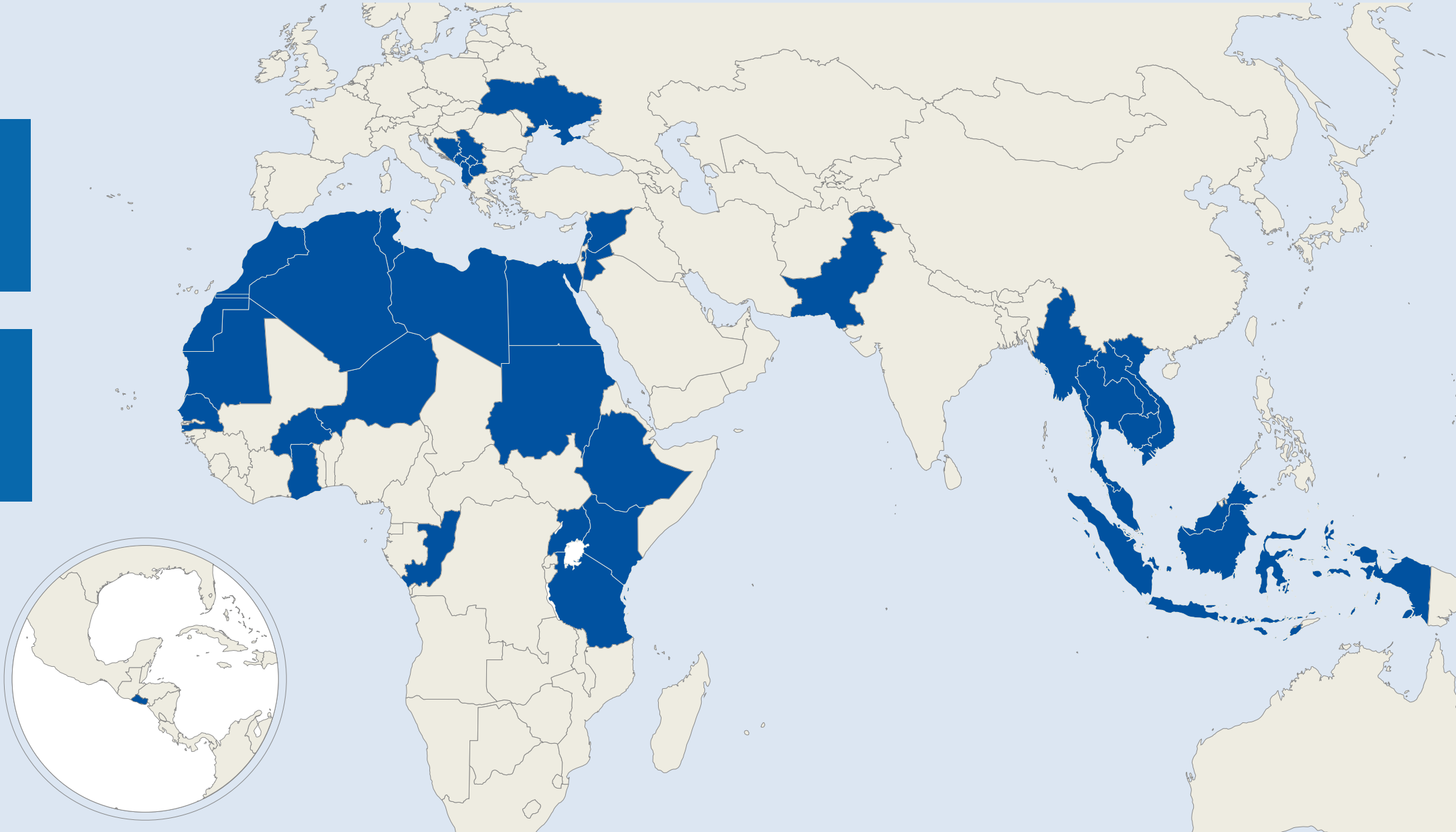
**INNOVATION AND KNOWLEDGE
TRANSFER**



International Cooperation

44
Projects

40
Countries



PRECISION AGRICULTURE IN THE MEDITERRANEAN REGION

3rd edition



BENEFICIARY COUNTRIES:

Albania, Bosnia and Herzegovina, Burkina Faso, Democratic Republic of Congo, Egypt, Ethiopia, Ghana, Jordan, Kenya, Kosovo, Lebanon, North Macedonia, Republic of the Congo, Senegal, Syria, Tanzania, Tunisia, and Uganda.

PARTICIPANTS:

18 FULL
SCHOLARSHIPS

DURATION:

8 WEEKS
8 September –
5 November 2025

LOCATION:



CIHEAM Bari
Italy



PROGRAMME:

Unit 1. Introduction: a multiscale and multisectoral approach

Unit 2. Measurement & interpretation of environmental data at territory and farm scale

Unit 3. Spatial and Temporal Decision Support Systems

Unit 4. Profitability: an economic approach

Unit 5. Project



EXAMPLES OF INTERNATIONAL COOPERATION INITIATIVES



LIBYA

- **EFEF PLUS**

Enhancing Farmer Entrepreneurship in the Municipalities of Sebha, Murzuq, Ubari and Ghat



EGYPT

- **SAMSIMIFA**

Sustainable Agricultural Mechanisation System Improvement in Minya and Fayoum Governorates



LEBANON

- **SEED LEBANON**

Strengthening certified seeds production



PAKISTAN,
KURDISTAN

- **OLIVECULTURE SCALE-UP**

Scaling Up OliveCulture Value Chain and Promoting Climate-Resilient Rural Development in Pakistan

- **KORES**

Rural empowerment of Kurdistan region through sustainable development of the olive oil valuechain

TANIT PROJECT

SUPPORTING THE ITALY TUNISIA STRATEGIC PARTNERSHIP ON FOOD SECURITY



TANIT WLR

Water Reuse, recovery and treatment of urban wastewater for agricultural irrigation to counter water scarcity and desertification



Land Rehabilitation, agricultural efficiency improvement and rehabilitation of lands affected by climate change

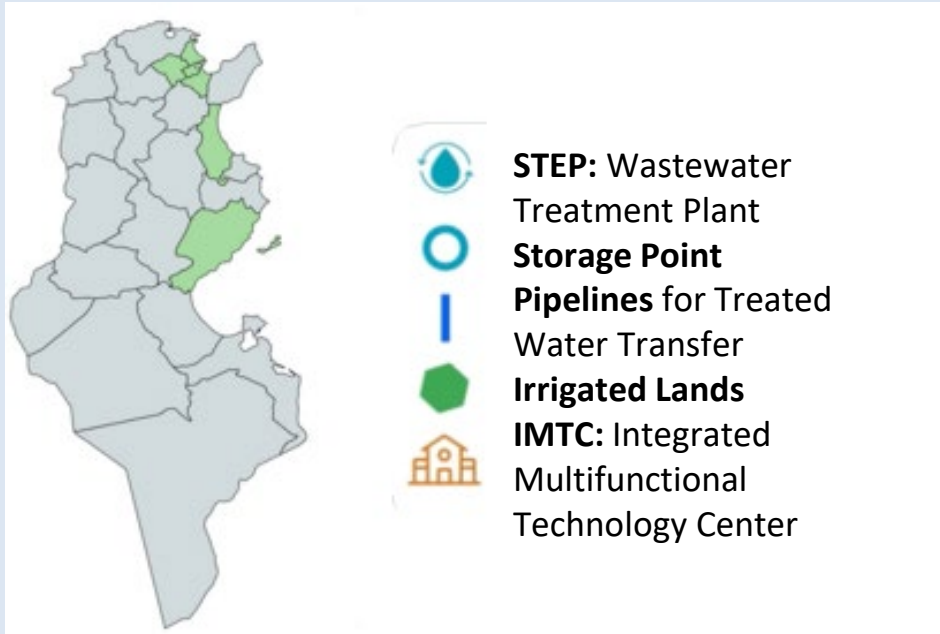
TANIT KT



Knowledge Transfer: creation of an Integrated Multifunctional Technology Center (IMTC) to support agricultural development and food security

TANIT PROJECT

SUPPORTING THE ITALY TUNISIA STRATEGIC PARTNERSHIP ON FOOD SECURITY



GRAND TUNIS

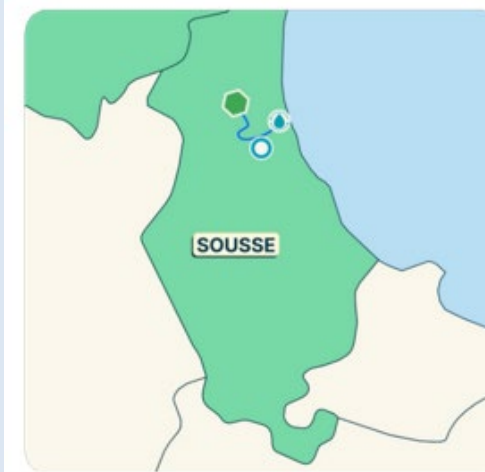
Ben Arous • Manouba • Tunis • Zaghouar

STEP El Attar (42 mln €)

→ 60.000 m³/giorno

STEP Sud Miliane (109 mln €)

→ 60.000 m³/giorno



SOUSSE

STEP Enfidha (5 mln €)

→ 6.000 m³/giorno



SFAX

STEP Sfax Sud

STEP Agareb (37 mln €)

→ 40.000 m³/giorno

On-field technologies for oliveculture

In the period 2005-2006, in the framework of the Italian cooperation project .

Technical Assistance for the Improvement of Olive Oil Quality in Syria.

Demonstrative trials to evaluate the effectiveness of hand-held machines to harvest the fruits of some of the main olive Syrian cultivars.

*The **harvesting yield** (percentage of olives harvested with respect to total production) was **96-97%** with manual harvesting and ranged from **92%** to **95%** with the machines.*

*With respect to manual harvesting, working productivity (kg of olives detached by one worker in one hour) increased about **3.5-4 times** with the cultivar **Zaity** and **4.5-5 times** with the cultivar **Sorani** using the **electric whipper** and **pneumatic comb**.*

Manual harvesting



Whipper



Comb





CIHEAM
BARI

“ Drops of water for a fair
transition from yellow to
green ”

THANK YOU



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