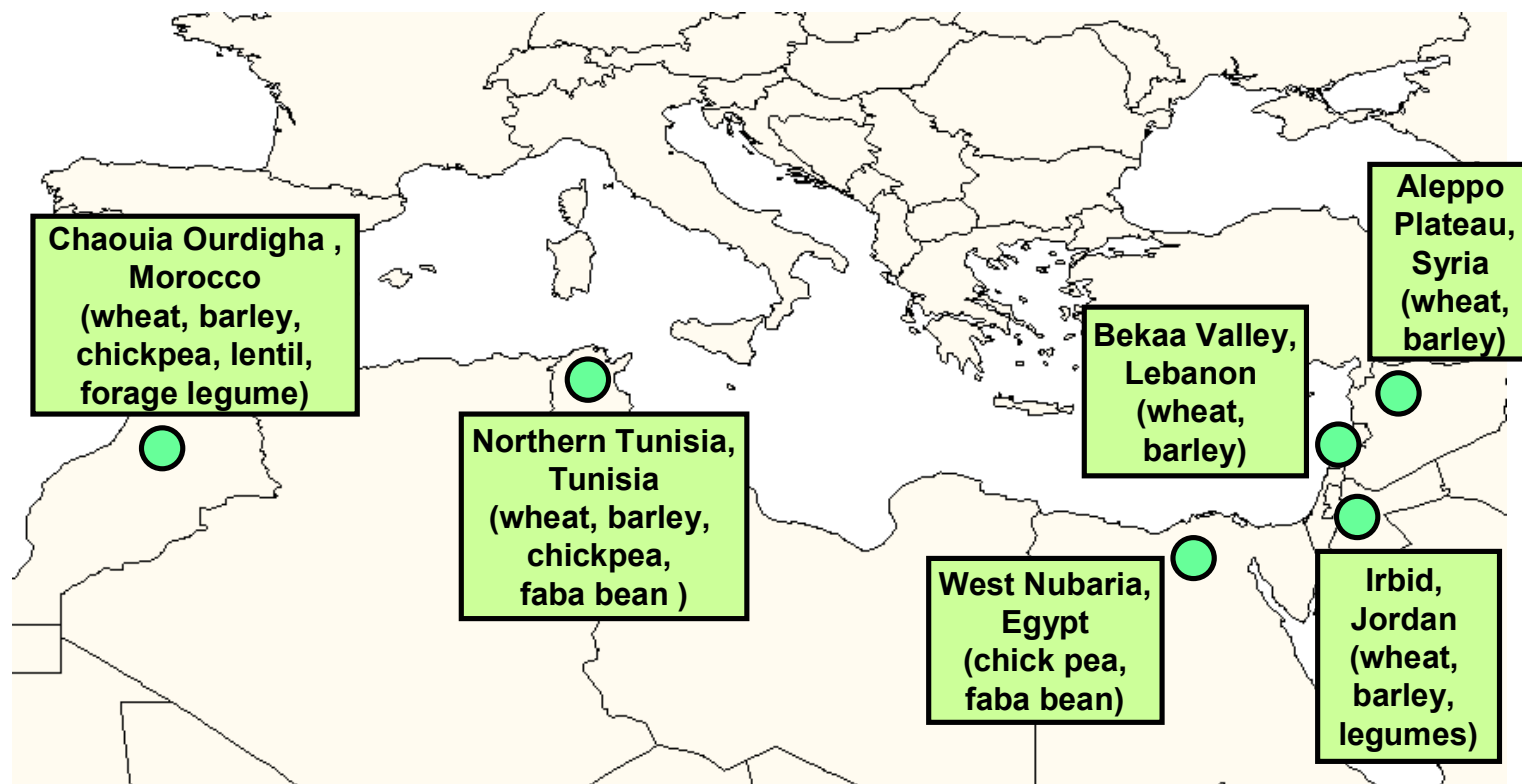


Adaptation to **C**limate Change of the **M**editerranean **A**gricultural **S**ystems **ACLIMAS**

- *Lot 2:* Water and climate change
- *Applicant:* **Centro Internazionale di Alti Studi Agronomici Mediterranei – Istituto Agronomico Mediterraneo di Bari (CIHEAM-IAMB), Italy**
- *Presented by:* Mladen Todorović, CIHEAM-IAMB

OVERALL OBJECTIVE: to bring a durable improvement in the agricultural water management and a broader economic development in target areas in the context of adaptation to climate change, increasing water scarcity, and desertification risk.

TARGET AREAS AND CROPS

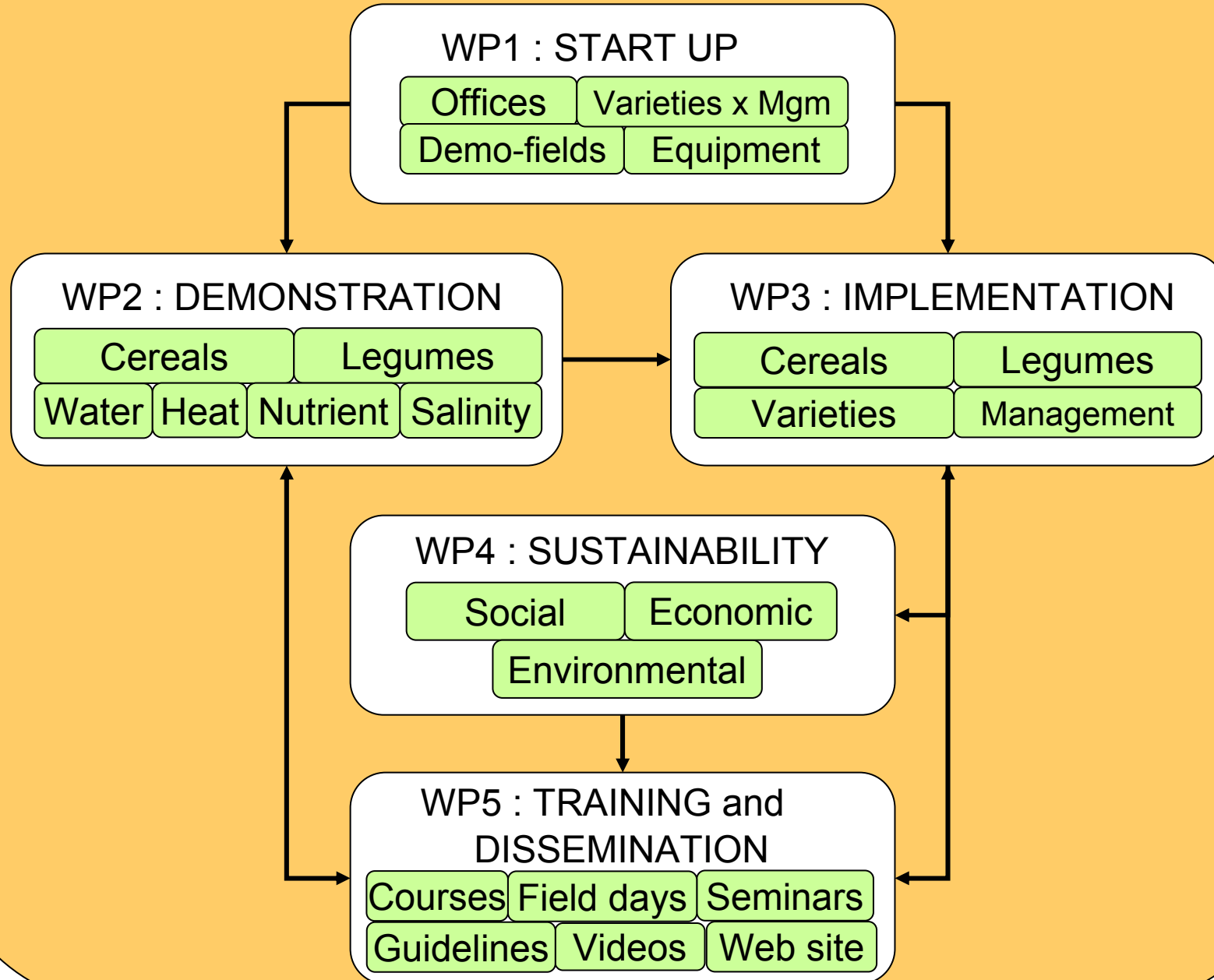


Specific Objectives

- To **improve** the **initial conditions** (local offices, stations, and demonstration fields) **for lasting promotion of sustainable agricultural practices** in target areas.
- To **demonstrate the applicability** for the selected combinations of **genotypes and water management practices** (including water harvesting and conservation tillage) at demonstration fields;
- To **adapt/stabilize agricultural production** through large scale **on-ground implementation** of the best performing genotypes and water harvesting/management practices;
- To **evaluate** the on-ground **sustainability** of the proposed adaptation measures considering the economic, social and environmental dimensions at farm level;
- To **train** local **farmers and growers** on the application and implementation of proposed management practices;
- To **disseminate** the **results** of the action through the thematic guidelines, brochures, field days, seminars, video material and a dedicated web page.

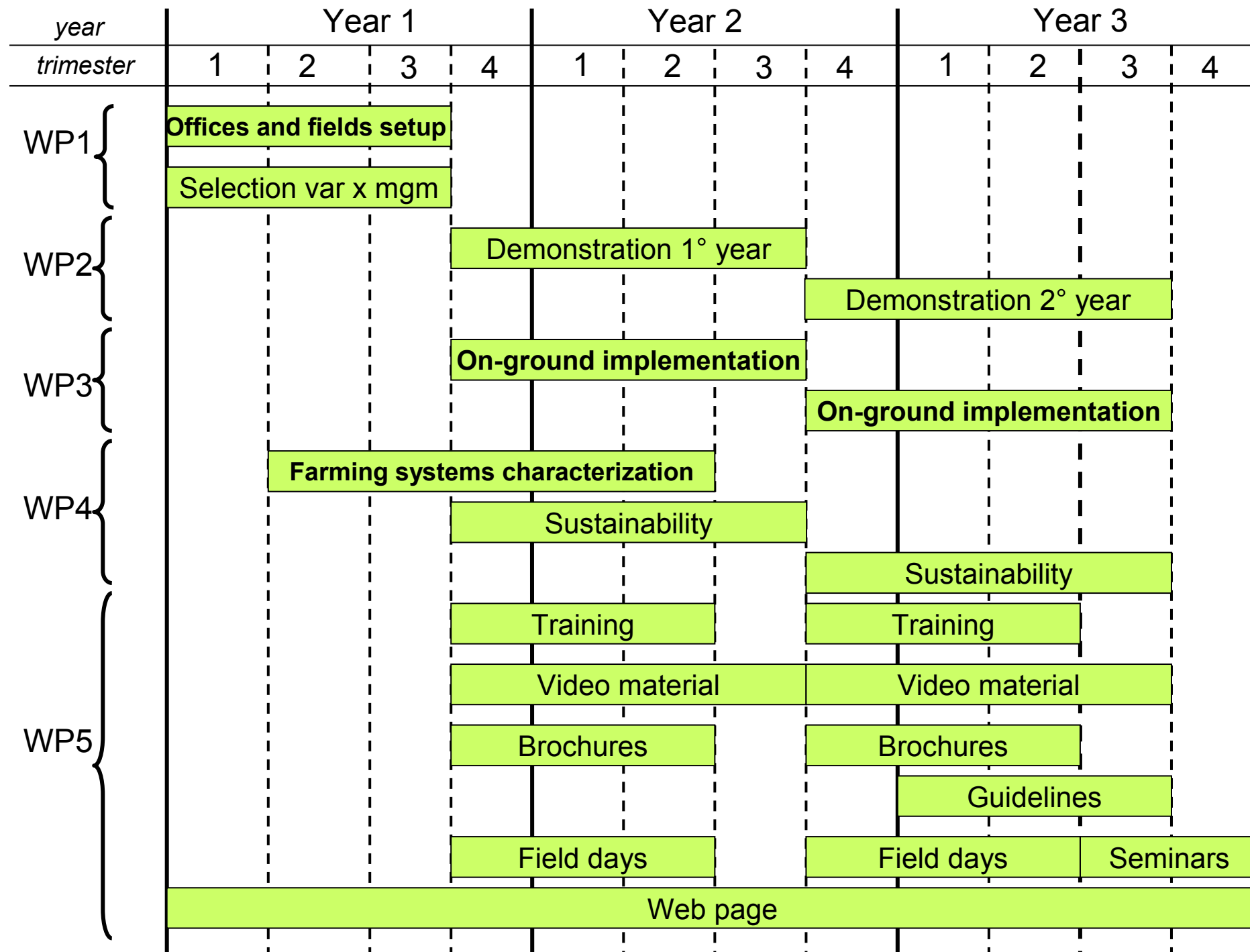
- **Target groups:**
 - Farmers, growers, breeders, policy makers, water/irrigation managers, local seed companies, agricultural advisers.
- **Final beneficiaries:**
 - All rural society, local farmers communities and associations, water user's associations, governments, environment
- **Estimated results:**
 - Improved water productivity in agriculture and more stable agricultural production
- **Main activities:**
 - Demonstration, replication, on-ground implementation, dissemination, training, sustainability evaluation.

PROJECT MANAGEMENT



Demonstration fields, crops and management

- Morocco – Sidi El Aydi Experimental Station of Institut National de la Recherche Agronomique of Settat (wheat, chickpea, faba bean); crop rotation, tillage practices, and nitrogen input
- Tunisia – Mornag station of the Institut National Agronomique de Tunisie (durum wheat – supplemental irrigation and precision sowing, barley – supplemental irrigation with saline water, chickpea – winter-spring sowing and faba bean – planting density)
- Egypt – Al-Esraa wa Al-Meraag Training and Extension Station of the Ministry of Agriculture, located in Entlak area in Nubaria (chickpea and faba bean); water (salinity) input and timely sowing
- Jordan – Maru Agricultural Research Station (wheat, barley) water harvesting, conservation tillage, timely sowing
- Lebanon – Lebanese Agricultural Research Institute (LARI), in Tal Amara (wheat and barley); supplemental irrigation, conservation tillage and timely sowing
- Syria – ICARDA experimental station in Aleppo (durum wheat and barley); water harvesting, supplemental irrigation, conservation tillage and timely sowing

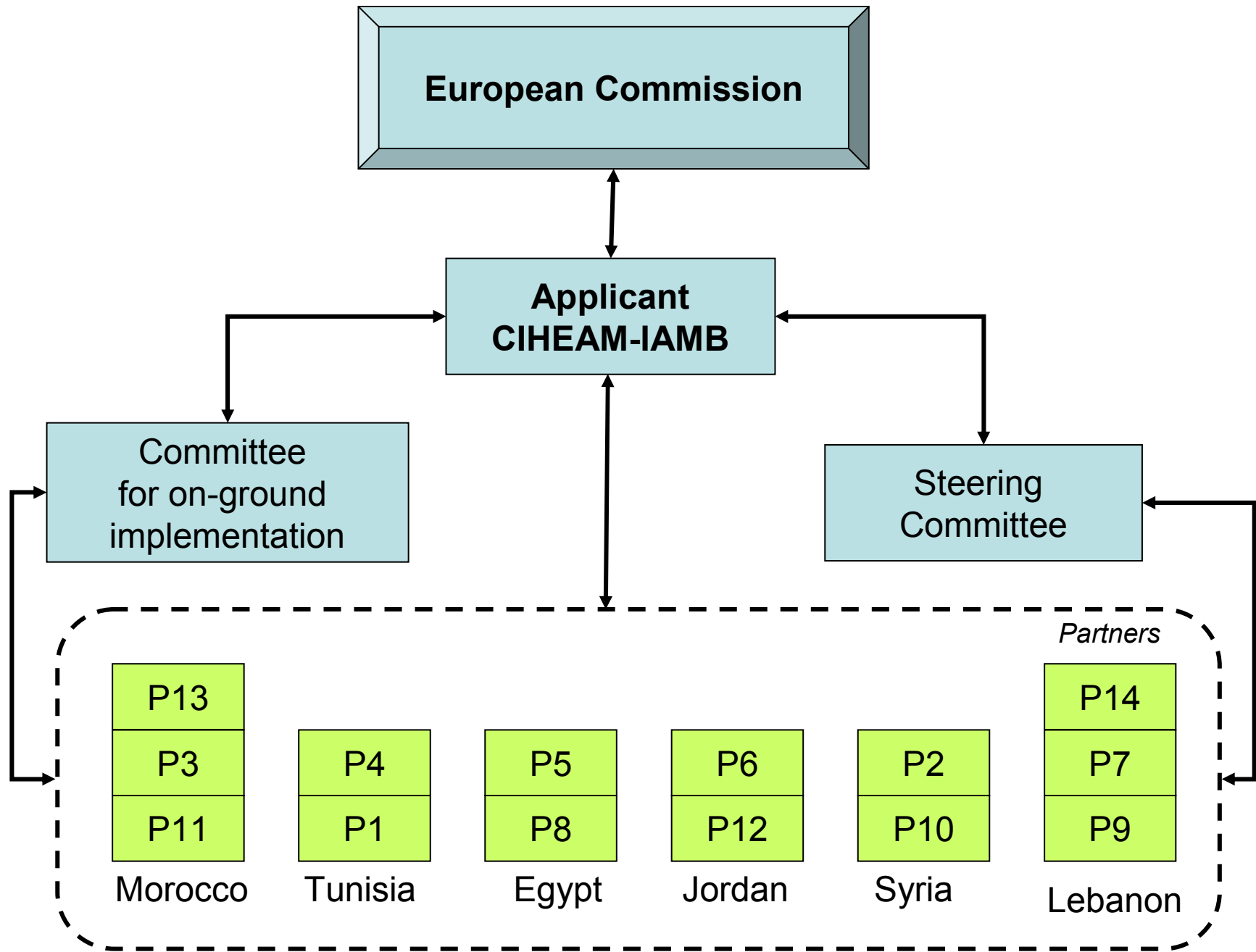


The expected direct outputs

- 6 demonstration fields with agro-meteorological stations, other equipment and Excel-based irrigation scheduling tool;
- 2 years of testing (at least 48 combinations of genotypes and water management practices);
- 24 training courses and 600 farmers, technicians and water managers trained;
- 60 field days with the participation of 1200 local stakeholders;
- 2 years on-ground implementation of the best performing varieties and water harvesting and management practices in a surface area of at least 240 ha with the involvement of at least 120 farmers;
- 2 guidelines, 24 brochures, 6 seminars, 180 minutes of video material, etc.
- Social and economic impact:
 - support of the local communities to market a quality durum wheat (in Lebanon and Morocco) and chick pea (in Morocco) products and
 - promotion of the women cooperatives for durum wheat transformation to several types of couscous on downstream value chain (in Morocco)

Partnership

- P2 International Center for Agricultural Research in the Dry Areas ([ICARDA](#))
- P3 Institut National de la Recherche Agronomique ([INRA](#)), Morocco
- P4 Institut National Agronomique de Tunisie ([INAT](#)), Tunisia
- P5 West Nubaria Rural Development Project ([WNRDP](#)), Egypt
- P6 National Center for Agricultural Research and Extension (NCARE), Jordan
- P7 Lebanese Agricultural Research Institute ([LARI](#)), Lebanon
- P8 Centro Euro-Mediterraneo per i Cambiamenti Climatici ([CMCC](#)), Italy
- P9 Consiglio Nazionale delle Ricerche - Istituto per i Sistemi Agricoli e Forestali del Mediterraneo ([CNR-ISAFOM](#)), Italy
- P10 Universitat de Barcelona ([UdB](#)), Spain
- P11 Universitat de Lleida ([UdL](#)), Spain
- P12 University of Nottingham ([UNOTT](#)), United Kingdom
- P13 Agriculture Environement et Developpement, pour l'Avenir ([AGENDA](#)), NGO, Morocco
- P14 Association of the Friends of Ibrahim AbdEl Al ([AFIAL](#)), NGO, Lebanon



Links with previous and on-going initiatives in the region

- ACLIMAS takes fully into **consideration** the results and recommendations of many **other projects and thematic networks** carried out in the Mediterranean and funded in the previous and **on-going EC initiatives** (FP6, FP7, ERA-WIDE, ENPI).
- The **applicant and the partners participated** (jointly) in WASAMED, DIMAS, EURO-MEDANET2, WatNitMed, ASBIMED, CIRCE, MELIA, GEWAMED, AQUASTRESS, WASSERMed, SUWARESA, OPTIMA, PERMED, SCENES, MEDPRO, OPTIWHEAT, MABDE IdWUE, MIRA-INCO NET...
- *ACLIMAS aims to capitalise on the experiences and some of the lessons learnt in those projects.*
- In order to both **create synergies and minimize duplication of activities**, a particular **link** will be created **with other SWIM projects** and ERA-WIDE and ENPI projects running in target countries and focussing on sustainable use of water resources in agriculture.

Risk analysis

- Overall risks are low because *the applicant and most of the involved institutions have strong experiences in*
 - *the Mediterranean region,*
 - *EC founded projects and*
 - *international and bilateral cooperation programs.*
- *Local partners*
 - represent *the leading Institutions in target areas,*
 - *have strong financial basis and*
 - *are well connected with national/regional governments, water users' and farmers' associations, and other stakeholders.*
- Direct operational risk related to the *willingness/interest* of local authorities, farmers and other stakeholders *to participate* in the programme is low because
 - Economic development strongly relies on agriculture (cereals and legumes)
 - CS are already affected by water, salinity and heat stress and land degradation – the proposed activities fit the farmers needs
 - Instability in agricultural production leads to poverty, land abandonment and desertification – the project objectives pursue the national strategies
- **Political instability in the region ...**

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Thank you