



IR₂MA

Large Scale Irrigation Management Tools for Sustainable Water Management in Rural Areas and Protection of Receiving Aquatic Ecosystems

2nd management meeting Bari, ITALY 14/3/2019





Thank you Dionysia!

We would like to thank our JS officer, Mrs. Tamvaki for the commitment and attention she gave to our project!

We wish her all the best for her next professional step.



Framework

IR2MA

Start: 10/12/2017 (in order to include the period of the optimization procedure)

End: 30/03/2020

Duration (months): 27,68

Total final budget: **901.477,98 €** (54% GR, 46% IT)



Framework

Priority axis (PA): 2 Integrated Environmental Management

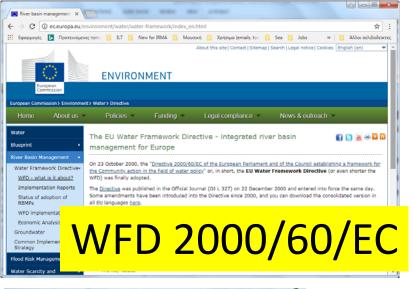
Thematic objectives (TO)/ Priorities: 06-Preserving and protecting the environment and promoting resource efficiency

Investment Priority: 6f-Promoting innovative technologies to improve environmental protection and resource efficiency in the waste sector, water sector and with regard to soil, or to reduce air pollution

Specific Objective (SO): 2.3 Developing and testing of innovative technologies / tools to reduce marine and air pollution



The project concept in a glance







central systems





data & management



protection



Consortium

- 1. UNIVERSITY OF IOANNINA Research Committee (Uol, PB1/LB Lead Partner)
- 2. **REGION of EPIRUS** (ROE, PB2)
- 3. ISTITUTO SCIENZE DELLE PRODUZIONI ALIMENTARI (ISPA/CNR, PB3)
- **4. ISTITUTO AGRONOMICO MEDITERRANEO BARI** (<u>IAMB</u>, PB4)
- **5. CONSORZIO PER LA BONIFICA DELLA CAPITANATA (CBC**, PB5)
- **6. REGION OF PUGLIA (ROP**, associate partner)





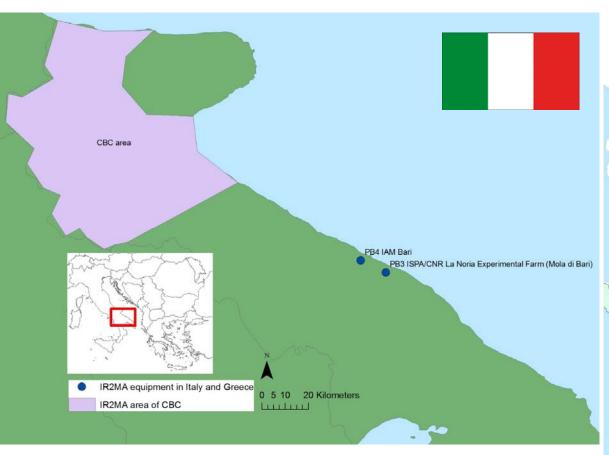








Map



The size of implementation areas on the maps is indicative and not accurate





Project outputs

- 1. extension of the network of knowledge and expertise exchange
- 2. improvement of the DSS for irrigation-drainage recommendations of Arta plain, extension of agrometeorological system to major plains of the Region of Epirus
- 3. help desk and support services for their use
- 4. mapping, infrastructure registration and web-presence of participatory irrigation-drainage systems in Epirus
- 5. development of a pilot flood alarm system for the drainage system of the plain of Arta



Project outputs

- 6. fine tuning of the DSS that is in operation in the area of Capitanata
- 7. monitor water flow characteristics (in both qualitative and quantitative terms) in selected participatory irrigation—drainage systems
- 8. development and testing of DSS tools for irrigation scheduling using conventional and non-conventional waters
- 9. evaluation of crop response to irrigation with treated waste water and possible environmental implications
- 10.events, informative material and demonstration sites



Expected results

- 1. facilitate the implementation of WFD 2000/60/EC
- 2. improve water usage and thus relief pressure on freshwater consumption
- 3. contribute to improved drainage control: reduction of contamination of receiving aquatic bodies, contribution to reduction of flood damage
- 4. benefit end-users from reduced water and energy costs that arise from inefficient irrigation management



Work packages

WP	TITLE
1	Management costs
2	Information and publicity
3	Mainstreaming efficient irrigation and drainage practices
4	Cooperation with Water and Land Reclamation Organisations and Environmental Agencies
5	Demonstration activities and applied research
6	Activities outside of eligible area



Indicators

Output Indicators

Code	Title	Measurement unit	Target
00521	Number of supported cross border	No	1
	cooperation structures and networks in the		
	field of environmental technologies		

Result Indicators

Code	Title	Measurement unit	Target
R0505	Level of capacity of regional and local	%	10
	authorities and public utilities operators to		
	integrate environmental friendly processes and		
	technologies in their operations with special		
	attention to the coastal and maritime zones		



WP1 Management





WP1 Management costs 10/12/2017 - 30/03/2020

Del.	Deliverable title
D1.1.1	Preparation activities
D1.1.2	Project management activities
D1.2.1	Preparation activities
D1.2.2	Project management activities
D1.3.1	Preparation activities
D1.3.2	Project management activities
D1.4.1	Preparation activities
D1.4.2	Project management activities
D1.5.1	Preparation activities
D1.5.2	Project management activities



Progress

- 1. Proposal submission
- 2. Optimization process
- 3. Application form and Justification of budget
 - 3 versions in order to include budget alterations & change of LB
- 4. Subsidy Contract and Partnership agreement
 - 2 versions in order to include change of LB

- 5. Anagraphic forms
 - 2 versions
- 6. Milestones
 - 2 versions
- 7. Procurements' Plan
 - 2 versions
- 8. Kickoff meeting
- 9. Progress reports
 - 2 reports
- 10. Modification request



Timetable

- 1. APPLICATION FORM (v3, page 5): WP's table with dates
- 2. Milestones (v1/2/2019): things to be done up to Jan-19 to Mar-19 column, things to be done up to Sept 2019
- 3. Procurement plan (v1/2/2019): estimations regarding starting dates of tenders, dates of signing the contract and contracts durations

Dates to be kept, revisions to be considered, <u>probable project</u> application period extension



Progress reports

- 1. 1st progress report (up to 31/10/2018): submitted
- 2. 2nd progress report (up to 31/12/2018): submitted

Organisation of text fields preparation (template)
Combination with management meetings



1st modification request

1. 1st modification request (31/1/2019): approved March 2019

New JoB and AF in progress



Financial state

	Expenditures	Expenditures	Expenditures	Expenditures	Expenditures Non-	
Partners	•	•	•		•	
	declared	declared	Declared	Certified	Eligible	
		(1st-2nd PRs) -				
	(1st-2nd PRs) -	Verified	(according to			
	Paid out	(31.12.2018)	MIS)	(according to MIS)	(acoording to MIS)	
Uol	15.522,53	0,00	0,00	0,00	0,00	
RoE	0,00	0,00	0,00	0,00	0,00	
CNR-ISPA	23.433,75	9.496,75	23.433,75	9485,45 (13924,75 is approved 27.02.2019 not certified)	23,92	
IAMB	27.790,22	28.294,12	28.294,22	14.904,82	0,00	13389,40 is approved (05.02.2019) not certified yet
СВС	28.608,59	0,00	28.608,59	28.608,59 (Approved 05/03/2019)	0,00	•
TOTAL	95.355,09	37.790,87	80.336,56	14.904,82	23,92	



3rd management meeting

- Puglia, ITALY
- Organizer: PB5 (CBC)
- Period
 - Proposal: end of 7/2019 (combination with 3rd progress report)



WP2 Information and publicity WP6 Activities outside of eligible area





WP2, Deliverables 01/04/2018 to 30/03/2020

Del.	Deliverable title
D2.1.1	Communication strategy and web site
D2.1.2	Helpdesk
D2.1.3	Technical reports and dissemination events
D2.1.4	Traveling for information and publicity
D2.2.1	Project dissemination material
D2.3.1	Guides, technical notes and publications
D2.3.2	Dissemination events
D2.3.3	Participation in third parties events within the progr. area
D2.4.1	Guides, technical notes and publications
D2.4.2	Dissemination events
D2.4.3	Participation in third parties events within the progr. area
D2.4.4	Guidebook for performance of large scale participatory systems
D2.5.1	Dissemination events
D2.5.2	Participation in third parties events within the progr. area

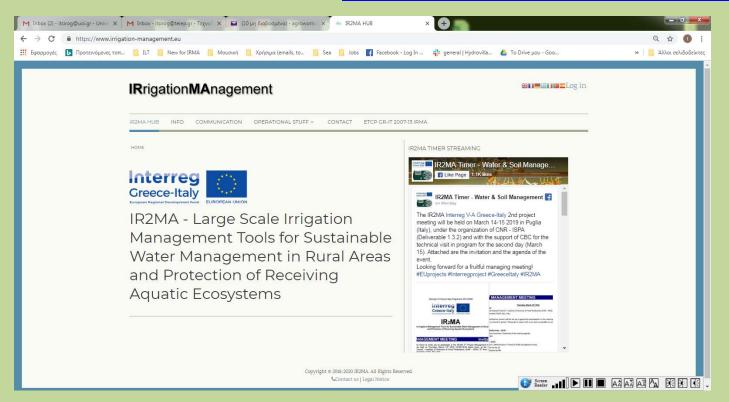


WP2 Progress

- The communication plan has been completed
- The web site and the FB page are fully operational
- Technical reports have already been published
- Dissemination activities (helpdesk (PB1), organization of and participation in events (PB3 and PB4) and promotional leaflets (PB4)) have already been implemented.



IR2MA website https://www.irrigation-management.eu/



Check operational stuff menu (<u>use PB1/LB as sample</u>) and send us relevant lists

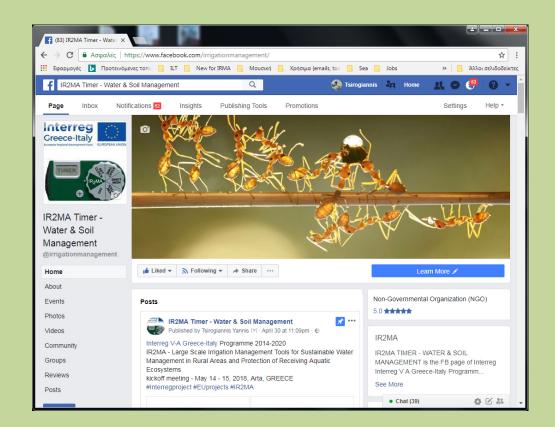


IR2MA Timer / Facebook group

Appropriate hashtags and tags have to be used in all posts

- #Interregproject #EUprojects #IR2MA
- @interregreeceitaly@irrigationmanagement

More active participation!





WP6, Deliverables 01/05/2018 to 30/03/2020

Del.	Deliverable title
D6.1.1	International networking
D6.3.1	International networking
D6.4.1	International networking

- Participation at Irrigation show 2018
- Abstracts for participation in international conferences have been submitted by PB1, PB3 and PB4.



WP3, WP4, WP5 Implementation topics





WP3

01/05/201829/02/2020

Del.	Deliverable title
D3.1.1	Repository
D3.1.2	Water quantity and quality audit
D3.1.3	Update of audit protocol and audits
D3.1.4	DSS adaption and extension
D3.1.5	Traveling for mainstreaming efficient practices
D3.2.1	Audit equipment
D3.2.2	DSS adaption and extension
D3.2.2	Audits
D3.3.1	Repository
D3.3.2	Update of audit protocol
D3.3.3	Audit support
D3.3.4	DSS adaption and extension
D3.4.1	Soil and water quantity and quality audits
D3.5.1	Soil and water quantity and quality audits
D3.5.2	Satellite images
D3.5.3	Data analysis



WP3 progress

- PB1 and PB4 begun the update of audit protocols and performed a number of audits in irrigation systems
- PB1 prepared a plan regarding DSS adaption and extension and started its implementation
- PB2 finalized the technical specification for the equipment
- PB3 improved the repository, based on scientific literature on the topics of irrigation management.
- PB4 created a data collection template, applied it and outlined a report for an irrigation scheme (joint activity of PB4 and PB5).



WP3 progress

- PB4 updated audit protocols and performed a number of audits in cooperation with PB3 and PB5
- PB5 finalised the technical specifications regarding the satellite images that are needed.
- PB5 processed field and climatic data and compared measured consumption with irrigation requirements calculated by its DSS.



WP4

01/05/201829/02/2020

Del.	Deliverable title
D4.1.1	Participatory systems mapping
D4.1.2	Participatory systems current state report
D4.1.3	Web presence of participatory systems
D4.1.4	Participatory systems operation support
D4.1.5	Traveling for cooperation activities
D4.2.1	GIS data handling
D4.2.2	Rain harvesting systems
D4.4.1	Participatory systems performance
D4.4.2	Results presentation
D4.5.1	Efficiency analysis of participatory systems



WP4 progress

- PB1 started mapping participatory irrigation systems and the registration of their current state.
- PB4 performed the literature review for management models, prepared their implementation and started the mapping of irrigation schemes.
- PB4 in collaboration with PB5 elaborated results from the audits carried in the study area.



WP4 progress

 PB5 carried out efficiency analysis of irrigation network in irrigated districts with IAMB (PB4) support



WP5

01/05/2018 31/01/2020

Del.	Deliverable title
D5.1.1	Usage of recycled water
D5.1.2	Aquifers salinisation
D5.1.3	Traveling for demonstration and applied research
D5.3.1	Software tools for data representation and analysis.
D5.3.1	Scientific equipment, spare parts and consumables
D5.3.2	Supply of recycled water
D5.3.3	Improvement of irrigation scheduling tools for open field crops
D5.3.4	Improvement of irrigation scheduling tools for undercover crops
D5.4.1	Water-energy-food (WEF) nexus
D5.4.2	Recycled water DSS development
D5.4.3	Recycled water DSS evaluation
D5.5.1	Demonstration of applied research results



WP5 progress

- PB1 prepared analytical plan for the experiments regarding usage of recycled water for irrigation and begun the literature review regarding aquifers salinization
- PB3 prepared analytical plan for the activities that concern irrigation scheduling tools for open field crops and undercover crops.
- PB3 performed research activity on the use of sensors for precision irrigation
- PB4 prepared first draft for the report that concerns waterenergy-food nexus (WEF) using Life Cycle Assessment (LCA).



Next steps

Scheduled action for the next 6 months

Presentations by partners

Discussion

March 2019









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