



Project co-financed by the European
Regional Development Fund

MED Greenhouses
**“Green Growth through the capitalization of innovative
Greenhouses”**

Joint Report of Consultations

***Agricultural Research Institute
(PP7)***

Project Details:

Programme: **Interreg MED 2014-2020**

Priority Axis: **1. Promoting Mediterranean innovation capacities to develop smart and sustainable growth**

Objective: **1.1. To increase transnational activity of innovative clusters and networks of key sectors of the MED area**

Project Title: **Green Growth through the capitalization of innovative Greenhouses**

Project Acronym: **MED Greenhouses**

Reference No: **3082**

Lead Partner: **University of Thessaly**

Total Budget: **1,171,400 €**

Time Frame: **01/02/2018 - 31.12.2019**

Deliverable Details

WP: 3

Activity: 3.2

Deliverable Title: 3.2.5 - Consultations

Responsible Partner: Agricultural Research Institute (PP7)

Involved Partners: ALL

Date & Place of delivery: 23/12/2019

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Introduction

This deliverable **3.2.5 - Consultations** is undertaken in the context of the Activity 3.2 "Transferring knowledge".

This Activity aims to transfer the capitalised knowledge in MED regions. Among others, 3 consultations will be organized in every country with the participation of Policy makers and stakeholders of the greenhouse/ agriculture sector.

The conclusions and the key points of the events will be included in this joint report which will be elaborated by PP7 with the contribution of all the partners.

1. Albania

1.1 Consultation 1 - Berat (July 3rd, 2019)

1.1.1 Participants List –Agenda/Invitation



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Regional Council of Berat

*Invitation for participation in the Consultation
«Innovative measures for sustainable agriculture-
Obstacles & Needs» and in the SEMINAR for the use
of Innovative Geothermal Greenhouses in the
context of the Interreg MED Greenhouses project.*

Wednesday 3 July 2019 Hotel Gega, Berat / 11:00 - 15:00
Thursday 4 July 2019 Samaticë, Ura Vajgurore / 11:00 - 15:00
Friday 5 July 2019 Kozare, Kuçovë / 11:00 - 15:00



Figure 1 – Invitation of Consultations Albania

Agenda



Regional Council of Berat

11:00-11:15 *Registration*
11:15 – 11:30 *Welcome speech*
11:30 – 11:45 *Presentation of the MED Greenhouses project*
11:45-12:15 *Open discussion for innovative measures of sustainable agriculture*
12:15 – 12:45 *Open discussion for obstacles & needs of agriculture sector*
12:45 – 13:30 *Lunch & coffee break*

13:30 – 14:00 *Presentation of Innovative Geothermal Greenhouses (benefits, operation, cost, technology specs, installation, construction)*
14:00 – 14:30 *Presentation of project's e-learning platform*
14:30 – 15:00 *Open Discussion / questions*



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Figure 2 – Agenda of Consultations Albania

Attendance sheet

Date & Place: HOTEL GEGA, BERAT, 03.07.2019

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




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Figure 3 – Participants list 1st Consultation Albania

1.1.2 Minutes

Minutes – 1st Consultation, July 3rd, 2019, Hotel Gega, Berat, Albania

The Regional Council of Berat, in collaboration with Living Prospects Ltd – the contracting company for the external expertise – organized the first Consultation “Innovative measures for sustainable agriculture- Obstacles & Needs” and the Seminar for the use of Innovative Geothermal Greenhouses in the context of the Interreg MED Greenhouses project.

The consultation was organized at the venue of Hotel Gega, in Berat. There were around 30 participants including greenhouse farmers, agriculture specialists and heads of regional directorates related to the field of agriculture, greenhouses and food safety. The registration process started at 11:00.

According to the agenda, representatives of the Regional Council of Berat, welcomed all the participants. Mr. Evis Plaku – communication manager of the project – welcomed the participants and informed them about the purpose, objective, and expected results of the consultation and seminar. Then, Mr. Fatlli Adilaj – Chairman of the Regional Council of Berat – delivered the welcome speech by highlighting the importance of the MED Greenhouses project and launching the invitation to all participants to engage actively in the activities of the project.

The consultation meeting was followed by an overall presentation of the MED Greenhouses project, its main objectives and expected results, especially in the context of the Berat region. Participants were informed about the main objective of the project which is to stimulate environmental awareness on issues related to energy & water efficiency & sustainable production, contributing to Green Growth & promoting sustainable development. Key objectives were presented, such as:

- **Improve eco-innovation** capacities of public & private actors in the greenhouse/agriculture sector through stronger **transnational cooperation, knowledge transfer & better networks** between research bodies, businesses, public authorities & civil societies.
- **Improve** the existing innovation framework conditions on the **MED agricultural** sector.
- **Strengthen & empower** innovation clusters & networks in the field of **agriculture/greenhouse production**.

Between 11:30 and 12:15, participants were actively discussing issues related to the overall presentation of the project by providing their valuable input and feedback, alongside with discussions regarding *innovative measures for sustainable development and obstacles & needs of the agriculture sector*.

Representatives of the regional directorate of agriculture and food safety after highlighting the importance of the project in creating a network of bodies and interested parties in the field of agriculture, mentioned that they are very open to collaborate with the Regional Council in order to gather input and formally redirect the issued raised by the farmers to higher authorities such as the Ministry of Agriculture.

Farmers and specialists of the agriculture discussed actively. Several issues were raised for awareness and further actions, such as:

- Importance of creating a strong network of farmers, public institutions and national agencies and authorities in the field of agriculture in order to be able to discuss and implement policies that benefit all interested parties
- Difficulties faced by the farmers in constructing effective greenhouses due to the large costs of constructions and operations. Farmers noted that greenhouses are family-run businesses and as such they need support for other agencies as well
- The support required by farmers is three-fold
 - Better and faster information regarding all the policies and regulations in force in the field of agriculture and especially greenhouses
 - Financial support in forms of grants or low to no interest loans in order to make possible the construction of effective greenhouses
 - Transfer of knowledge in order to make use of new technologies to reduce costs of constructing, operating and maintaining greenhouses.

1.1.3 Photo Gallery



Figure 4 – Photos from the 1st Consultation Albania

1.1.4 Key points – Conclusions

Representatives of the regional directorate of agriculture and food safety stated the following key points:

- In the context of the project, it is important the creation of a network in the field of agriculture with the participation of key actors,

- They are very keen to collaborate with the Regional Council in order to gather input and formally redirect the issues raised by the farmers to higher authorities such as the Ministry of Agriculture.

Farmers and specialists of the agriculture had identified the following key points that need to be addressed:







- Importance of creating a strong network of farmers, public institutions and national agencies and authorities in the field of agriculture in order to be able to discuss and implement policies that benefit all interested parties
- Difficulties faced by the farmers in constructing effective greenhouses due to the large costs of constructions and operations. Farmers noted that greenhouses are family-run businesses and as such they need support for other agencies as well
- The farmers need support for the following issues:
 - Better and faster information regarding all the policies and regulations in force in the field of agriculture and especially greenhouses
 - Financial support in forms of grants or low to no interest loans in order to make possible the construction of effective greenhouses
 - Transfer of knowledge in order to make use of new technologies to reduce costs of constructing, operating and maintaining greenhouses.

1.2 Consultation 2 - Samaticë, Ura Vajgurore, (July 4th, 2019)






1.2.1 Participants List - Agenda/Invitation

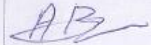




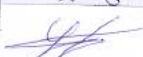
Attendance sheet

Date & Place: SAMATICË, URA VAJGURORË 04.07.2019

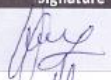





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Figure 5 – Participants list 2nd Consultation Albania

1.2.2 Minutes

The Regional Council of Berat, in collaboration with Living Prospects Ltd – the contracting company for the external expertise – organized the first Consultation “*Innovative measures for sustainable agriculture- Obstacles & Needs*” and the Seminar “*for the use of Innovative Geothermal Greenhouses*” in the context of the Interreg MED Greenhouses project.

The consultation was organized at a private venue in *Samaticë, Ura Vajgurore*, an area well known in the region for the development of agriculture and greenhouses. There were around 35 participants including greenhouse farmers and agriculture specialist. The registration process started at 11:00 (the participants list is attached).

According to the agenda, representatives of the Regional Council of Berat, welcomed all the participants. Mr. Evis Plaku – communication manager of the project – welcomed the participants and informed them about the purpose, objective, and expected results of the consultation and seminar. Then, Mr. Fatlli Adilaj – Chairman of the Regional Council of Berat – delivered the welcome speech by highlighting the importance of the MED Greenhouses project and launching the invitation to all participants to engage actively in the activities of the project.

The consultation meeting was followed by an overall presentation of the MED Greenhouses project, its main objectives and expected results, especially in the context of the Berat region. Participants were informed about the main objective of the project which is to stimulate environmental awareness on issues related to energy & water efficiency & sustainable production, contributing to Green Growth & promoting sustainable development. Key objectives were presented, such as:

- **Improve eco-innovation** capacities of public & private actors in the greenhouse/agriculture sector through stronger **transnational cooperation**,

knowledge transfer & better networks between research bodies, businesses, public authorities & civil societies.

- **Improve** the existing innovation framework conditions on the **MED agricultural** sector.
- **Strengthen & empower** innovation clusters & networks in the field of **agriculture/greenhouse production**.

Between 11:30 and 12:15, participants were actively discussing issues related to the overall presentation of the project by providing their valuable input and feedback, alongside with discussions regarding *innovative measures for sustainable development* and *obstacles & needs of the agriculture sector*.

Farmers and specialists of the agriculture discussed actively. Several issues were raised for awareness and further actions, such as:

- The need of farmers to have fast, reliable and useful information regarding policies and possibilities of developing greenhouses. They shared the concern of formal bodies that represent the farmer's best interest and bridge the gap between farmers and national institutions
- Difficulties faced by the farmers in constructing effective greenhouses due to the large costs of constructions and operations. Farmers noted that greenhouses are family-run businesses and as such they need support from other agencies as well.
- The need to identify and be able to pursue financial support from different projects and opportunities. Farmers strongly agree that efficient greenhouses are costly and they are in need of help from other agencies and institutions as well.

1.2.3 Photo Gallery





Figure 6 – Photos from the 2nd Consultation Albania

1.2.4 Key points - Conclusions

Farmers and specialists of the agriculture had discussed about several issues of the Agriculture/Greenhouse sector focusing on the need for awareness raising. Other key points that were highlighted were during the consultation were:

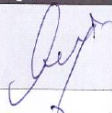


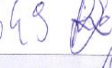
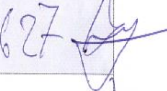
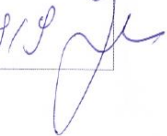
- The need of farmers to have fast, reliable and useful information regarding policies and possibilities of developing greenhouses. They shared the concern of formal bodies that represent the farmer's best interest and bridge the gap between farmers and national institutions.
- Difficulties faced by the farmers in constructing effective greenhouses due to the large costs of constructions and operations. Farmers noted that greenhouses are family-run businesses and as such they need support from other agencies as well.
- The need to identify and be able to pursue financial support from different projects and opportunities. Farmers strongly agree that efficient greenhouses are costly and they are in need of help from other agencies and institutions as well.

1.3 Consultation 3 - Kozare, Kuçovë (July 5th, 2019)

1.3.1 Participants List - Agenda/Invitation

Attendance sheet

Date & Place: KOZARE, KUÇOVË, 05.07.2019







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| | Jasani Mena | | | 0682572541 | |
| | Gujim Dorri | | | 0682537948 | |
| | Bekhami Binazetta | | | 0681881657 | |
| | Gujim Beksoni | | | 0692252981 | |
| | Pellumbaska Pinal | | | 0694255919 | |
| | Uir Hajdari | | | 0684074341 | |
| | Kadai Hujolaki | | | 06921.49.766 | |

| Organisation | Name | Position | Email | Phone number | Signature |
|--------------|----------|----------|-------|--------------|-----------|
| XHEVALDO | Dajdoli | | | 0698332670 | |
| Mitiboli | | | | 0693324266 | |
| Agim | Motta | | | 0697406547 | |
| Schul | Mullau | | | 0697419637 | |
| Hekuron | Bergesha | | | 0683625403 | |
| Elmas | Benzonja | | | 0683986839 | |

| Organisation | Name | Position | Email | Phone number | Signature |
|--------------|-------------|-------------|------------------|--------------|-----------|
| Ardjan | Tali | | | 06945.63342 | |
| | Zai Duka | former | | 0695349155 | |
| | Origor | Wice former | | 0692259519 | |
| | Resim Mera | | | 0682959441 | |
| | ROMEO MARRA | | | 0693297716 | |
| | XHEMAL | LATIGOZI | DEPTARIA BOZARJE | 0695675239 | |

| Organisation | Name | Position | Email | Phone number | Signature |
|--------------|----------------|----------|-------|--------------|---|
| Vibrant | Kangari | | | |  |
| Letter Aovai | Pellumbi Sulaj | | | 0692175415 |  |
| Asqer | Doksan | | | 0692132904 |  |
| Fotmir | Solaj | | | 0696918298 |  |
| Ruzi | Mile | | | 0682523092 |  |
| | | | | 0696534282 |  |

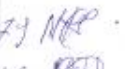

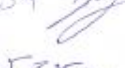
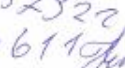

| MED Greenhouses | | | | | |
|-----------------|--------|----------|-------|--------------|--|
| Organisation | Name | Position | Email | Phone number | Signature |
| | Nezha | Hojdani | | 0685122177 |  |
| | Begim | Hojdani | | 0683072722 |  |
| | Atilio | Sulevari | | 0698870534 |  |
| | Roni | Mir | | 0692552522 |  |
| | Arjan | Marra | | 0682429611 |  |

Figure 7 – Participants list 3rd Consultation Albania

1.3.2 Minutes

Minutes – 3rd Consultation, July 5th, 2019, Kozare, Kuçovë, Albania

The Regional Council of Berat, in collaboration with Living Prospects Ltd – the contracting company for the external expertise – organized the first Consultation “Innovative measures for sustainable agriculture- Obstacles & Needs” and the Seminar for the use of Innovative Geothermal Greenhouses in the context of the Interreg MED Greenhouses project.

The consultation was organized at a private venue in Kozare, Kuçovë, an area well known for the qualitative farmers and greenhouses. There were around 40 participants including greenhouse farmers, agriculture specialists and representatives of the Regional Council. The registration process started at 11:00.

According to the agenda, representatives of the Regional Council of Berat, welcomed all the participants. Mr. Saimir Plaku – project manager of the project – welcomed the participants and informed them about the purpose, objective, and expected results of the consultation and seminar. Then, Mr. Fatlli Adilaj – Chairman of the Regional Council of Berat – delivered the welcome speech by highlighting the importance of the MED Greenhouses project and launching the invitation to all participants to engage actively in the activities of the project.

The consultation meeting was followed by an overall presentation of the MED Greenhouses project, its main objectives and expected results, especially in the context of the Berat region. Participants were informed about the main objective of the project which is to stimulate environmental awareness on issues related to energy & water efficiency & sustainable production, contributing to Green Growth & promoting sustainable development. Key objectives were presented, such as:

- **Improve eco-innovation** capacities of public & private actors in the greenhouse/agriculture sector through stronger **transnational cooperation, knowledge transfer & better networks** between research bodies, businesses, public authorities & civil societies.
- **Improve** the existing innovation framework conditions on the **MED agricultural** sector.
- **Strengthen & empower** innovation clusters & networks in the field of **agriculture/greenhouse production.**

Between 11:30 and 12:15, participants were actively discussing issues related to the overall presentation of the project by providing their valuable input and feedback, alongside with discussions regarding *innovative measures for sustainable development and obstacles & needs of the agriculture sector.*

Representatives of the regional directorate of agriculture and food safety after highlighting the importance of the project in creating a network of bodies and interested parties in the field of agriculture, mentioned that they are very open to collaborate with the Regional Council in order to gather input and formally redirect the issued raised by the farmers to higher authorities such as the Ministry of Agriculture.

Farmers and specialists of the agriculture discussed actively. Several issues were raised for awareness and further actions, such as:

- Importance of creating a strong network of farmers, public institutions and national agencies and authorities in the field of agriculture in order to be able to discuss and implement policies that benefit all interested parties
- Difficulties faced by the farmers in constructing effective greenhouses due to the large costs of constructions and operations. Farmers noted that greenhouses are family-run businesses and as such they need support for other agencies as well
- The support required by farmers is three-fold
 - Better and faster information regarding all the policies and regulations in force in the field of agriculture and especially greenhouses
 - Financial support in forms of grants or low to no interest loans in order to make possible the construction of effective greenhouses

- Transfer of knowledge in order to make use of new technologies to reduce costs of constructing, operating and maintaining greenhouses.

1.3.3 Photo Gallery



Figure 8 – Photos from the 3rd Consultation Albania

1.3.4 Key points - Conclusions

Representatives of the regional directorate of agriculture and food safety stated the following key points:

- In the context of the project, it is important the creation of a network in the field of agriculture with the participation of key actors,
- They are very keen to collaborate with the Regional Council in order to gather input and formally redirect the issues raised by the farmers to higher authorities such as the Ministry of Agriculture.

Farmers and specialists of the agriculture had focused on several issues such as the lack of awareness. In particular, they highlighted the following issues:

- Importance of creating a strong network of farmers, public institutions and national agencies and authorities in the field of agriculture in order to be able to discuss and implement policies that benefit all interested parties
- Difficulties faced by the farmers in constructing effective greenhouses due to the large costs of constructions and operations. Farmers noted that greenhouses are family-run businesses and as such they need support for other agencies as well
- The support required by farmers is three-fold
 - Better and faster information regarding all the policies and regulations in force in the field of agriculture and especially greenhouses
 - Financial support in forms of grants or low to no interest loans in order to make possible the construction of effective greenhouses
 - Transfer of knowledge in order to make use of new technologies to reduce costs of constructing, operating and maintaining greenhouses.

2. Cyprus

2.1 Consultation 1

2.1.1 Participants List –Agenda/Invitation







MED Greenhouses PROJECT

Workshop:

"Greenhouse Constructions and Greenhouse Environment Control"

27.11.2019

We carefully treat all data collected as confidential and strictly use it under the framework of MED Greenhouses project activities in compliance with the EU legal regulations and the Interreg MED Programme. All data collected and managed under the activities of the MED Greenhouses project, namely accounts, public subscribers, event registrations, is in strict compliance with the new Regulation (EU) 2016/679, General Data Protection Regulation. More info on our official website: <https://medgreenhouses.interreg-med.eu/>

Participants List

| Full Name | Organization | Phone | E-mail | Signature |
|-----------|--------------|-------|--------|-----------|
| | | | | |
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| | | | | |
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| Full Name | Organization | Phone | E-mail | Signature |
|--------------------------|--------------|-----------|----------------------------|---|
| Ανδρέας Μουρούς | | 99652624 | |  |
| Γεώργιος Γαλαξίας | | 99292651 | |  |
| Σάββας Σάββας | | 99605968 | |  |
| Αλέξανδρος Κουτσός | | 99677276 | |  |
| Αντρέας Ασίλης | | 224891005 | |  |
| Αγγελίος Αρτζόπουλος | | 99779665 | |  |
| Αγγελία Ιωάννης | | 99447230 | angeli.giannakou@gmail.com |  |
| Μανώλης Σουλίου (Μολίση) | | 99403780 | |  |
| Τάσος Βαρδαύης | ΜΑΘΟΕ | 99622486 | tvardauis19@gmail.com |  |
| Κωνσταντίνος ΣΑΜΑΡΑΣ | | 99454840 | |  |
| Αρρένος Αρρένης | | 99-447234 | angelitovalaevoy@gmail.com |  |
| | | | | |
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Figure 9 – Participants List 1st Consultation Cyprus



Project co-financed by the European Regional Development Fund



Agricultural Research Institute



Invitation for participation in the Consultation
«Innovative measures for sustainable agriculture-Obstacles & Needs» and in the SEMINAR for the use of Innovative Geothermal Greenhouses in the context of the Interreg MED Greenhouses project.

Thursday 28 November 2019 – at 19:00 (Community Center, Parekklesia, Limassol)

Partnership:



Agenda



Agricultural Research Institute



- 19:00- 19:15 Registration
- 19:15 – 19:30 Welcome speech
- 19:30 – 19:45 Presentation of the MED Greenhouses project
- 19:45-20:15 Open discussion for obstacles & needs of agriculture sector

- 20:15 – 20:30 Presentation of Innovative Geothermal Greenhouses (benefits, operation, cost, technology specs, installation, construction)
- 20:30 – 20:45 Presentation of project's e-learning platform
- 20:45 – 21: 00 Presentation of ATI-Cluster
- 21:00 – 21:15 Open Discussion / questions



Agricultural Research Institute



Contact Person: [Eleytherios Loizou](#)
Email: eloizou@anel.com.cy



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- Facebook: <https://el-gr.facebook.com/greenhouse.uth/>
- Twitter: <https://twitter.com/medgreenhouses>
- LinkedIn: <https://www.linkedin.com/groups/8772642/>



Figure 10 – Agenda/Invitation 1st Consultation Cyprus



2.1.2 Minutes

On the 28th of November 2019, at 19:00, the first Consultation was organized by the Agricultural Research Institute (PP7) in the context of the MED Greenhouses project. The event was held in the Community Center, in Parekklesia of Limassol, with the presence of several stakeholders of the agriculture sector. Ms Loukia Vasiliou and Mr Eleftherios Loizou (external colleague) of the PP7 met representatives of the Pancyprian Greenhouse Organization in the context of the back to back event (Workshop & Consultation) of the MED Greenhouses project.

An open discussion took place between the representatives of the PP7 and the Pancyprian Greenhouse Organization. Among others, the stakeholders and the representatives of the Agricultural Research Institute had a fruitful discussion about:

- The state of play in the greenhouse sector
- Obstacles & gaps in innovative greenhouse technologies
- Obstacles & missing links for Eco-Innovative investments
- The unfavourable existing framework for eco-innovative investments in the greenhouses/agricultural sector

2.1.3 Photo Gallery



Figure 11 – Photos from the 1st Consultation Cyprus

2.2 Consultation 2

2.2.1 Participants List - Agenda/Invitation








MED Greenhouses PROJECT

ARI 2nd Local Workshop, Nicosia, Latsia Municipal Premises, 57 Giannou Kranidioti, 2235 Latsia, Nicosia, 10/12/2019

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Participants List

| First Name | Last Name | Organization | Phone | E-mail | Signature |
|------------|-------------|--------------|-------|--------|---|
| Leberis | Loizou | ANEL | | |  |
| Elena | Andreou | | | |  |
| Pavlos | Georgiou | | | |  |
| Mikalis | Xiangou | | | |  |
| Andri | Myriantheas | | | |  |






| First Name | Last Name | Organization | Phone | E-mail | Signature |
|------------|------------|--------------|-------|--------|---|
| Panayiotis | Mamantouca | ANEL | | |  |
| Christos | Skoulas | | | |  |
| Andrea | Eudaxiou | | | |  |
| Cristina | Parlou | | | |  |
| | | | | | |
| | | | | | |
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Figure 12 – List of Participants 2nd consultation Cyprus



*Invitation for participation in the Consultation
 «**Innovative measures for sustainable agriculture-
 Obstacles & Needs**» and in the SEMINAR for the use
 of **Innovative Geothermal Greenhouses** in the
 context of the Interreg MED Greenhouses project.*

Tuesday 10 December 2019 – at 16:00 (Latsia Municipal Premises)
Monday 16 December 2019 – at 16:00 (Latsia Municipal Premises)

Partnership:



Agenda



- 16:00-16:15 Registration
- 16:15 – 16:30 Welcome speech
- 16:30 – 16:45 Presentation of the MED Greenhouses project
- 16:45-17:15 Open discussion for obstacles & needs of agriculture sector

- 17:15 – 17:30 Presentation of Innovative Geothermal Greenhouses (benefits, operation, cost, technology specs, installation, construction)
- 17:30 – 17:45 Presentation of project's e-learning platform
- 17:45 – 18:00 Presentation of ATI-Cluster
- 18:00 – 18:15 Open Discussion / questions





Contact Person: [Eleftherios Loizou](#)
Email: Eloizou@anel.com.cy



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 Twitter: <https://twitter.com/medgreenhouses>
 LinkedIn: <https://www.linkedin.com/groups/8772642/>



Figure 13 – Agenda/ Invitation 2nd consultation Cyprus

2.2.2 Minutes

A back to back event, a Consultation titled «Innovative measures for sustainable agriculture-Obstacles & Needs» and a seminar for the use of Innovative Geothermal Greenhouses were held at Latsia Municipal Premises (Nicosia) on the 10th and 16th of December 2019 at 16.00 am.

Mr Panagiotis Mountoukos and Mr Eleftherios Loisou (external experts) represent the Agricultural Research Institute in the consultations events with the stakeholders of the primary sector.

Among others, the stakeholders and the representatives of the Agricultural Research Institute had a fruitful discussion about:

- The state of play in the greenhouse sector
- Obstacles & gaps in innovative greenhouse technologies
- Obstacles & missing links for Eco-Innovative investments
- The unfavourable existing framework for eco-innovative investments in the greenhouses/agricultural sector

2.2.3 Photo Gallery



Figure 14 – Photos from the 2nd Consultation Cyprus

2.3 Consultation 3

2.3.1 Participants List - Agenda/Invitation



MED Greenhouses PROJECT

ARI 3rd Local Workshop, Nicosia, Latsia Municipal Premises, 57 Giannou Kranidioti, 2235 Latsia, Nicosia, 16/12/2019

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Participants List

| First Name | Last Name | Organization | Phone | E-mail | Signature |
|------------|-----------|--------------|-------|--------|-----------|
| Κατλίας | Συριδωνίη | | | | |
| Μαρία | Μαλλί | | | | |
| Γιάνα | Τυπέρη | | | | |
| Νευσίπης | Ναϊφό | ΑΝΕΑ | | | |
| Χαρίτος | Σάπρη | | | | |



| First Name | Last Name | Organization | Phone | E-mail | Signature |
|--------------|--------------|--------------|-------|--------|-----------|
| Τάσος | Αρσινόης | | | | |
| Νευσίπης | Γεωργιάδης | | | | |
| Αρσίνος | Κιζογιάννη | | | | |
| Γεώργιος | Μαυρογιάννης | | | | |
| Μάκης | Χαλδής | | | | |
| Χαμζογιάννης | Μαυρογιάννης | ΑΝΤΖ | | | |
| | | | | | |



Figure 15 – List of Participants 3rd consultation Cyprus



Invitation for participation in the Consultation
**«Innovative measures for sustainable agriculture-
 Obstacles & Needs» and in the SEMINAR for the use
 of Innovative Geothermal Greenhouses in the
 context of the Interreg MED Greenhouses project.**

Tuesday 10 December 2019 – at 16:00 (Latsia Municipal Premises)
Monday 16 December 2019 – at 16:00 (Latsia Municipal Premises)

Partnership:



Agenda



Agricultural Research Institute



- 16:00-16:15 Registration
- 16:15 – 16:30 Welcome speech
- 16:30 – 16:45 Presentation of the MED Greenhouses project
- 16:45-17:15 Open discussion for obstacles & needs of agriculture sector

- 17:15 – 17:30 Presentation of Innovative Geothermal Greenhouses (benefits, operation, cost, technology specs, installation, construction)
- 17:30 – 17:45 Presentation of project's e-learning platform
- 17:45 – 18:00 Presentation of ATI-Cluster
- 18:00 – 18:15 Open Discussion / questions





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Email: Eloizou@anel.com.cy



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Facebook: <https://el-gr.facebook.com/greenhouse.uth/>

Twitter: <https://twitter.com/medgreenhouses>

LinkedIn: <https://www.linkedin.com/groups/8772642/>



Figure 16 – Agenda/ Invitation 3rd consultation Cyprus

2.3.2 Minutes

A back to back event, a Consultation titled «Innovative measures for sustainable agriculture-Obstacles & Needs» and a seminar for the use of Innovative Geothermal Greenhouses were held at Latsia Municipal Premises (Nicosia) on the 10th and 16th of December 2019 at 16.00 am.

Mr Panagiotis Mountoukos and Mr Eleftherios Loizou (external experts) represent the Agricultural Research Institute in the consultations events with the stakeholders of the primary sector.

Among others, the stakeholders and the representatives of the Agricultural Research Institute had a fruitful discussion about:

- The state of play in the greenhouse sector
- Obstacles & gaps in innovative greenhouse technologies
- Obstacles & missing links for Eco-Innovative investments
- The unfavourable existing framework for eco-innovative investments in the greenhouses/agricultural sector



2.3.3 Photo Gallery



Figure 17 – Photos from the 3rd Consultation Cyprus

3. France

3.1 Consultation 1

During May and June 2018, SEMIDE, the French partner of MED greenhouses project, organized a first consultation with French actors from the agricultural sector in region du SUD. The consultation was organized in the form of different individual meetings. SEMIDE has reached different actors from different levels of interventions: decision makers, researchers, industries, associations, etc.

The individual meetings aimed at preparing a report on the state of play of greenhouses production in the region. During the first consultation, SEMIDE identified the most important thematic related to Greenhouses in the region (e.g.: bio industry, Geothermal energy and solar energy) that will be discussed during the 2nd and 3rd consultations.

3.1.1 Participants List –Agenda/Invitation

SEMIDE consulted “Région du SUD” (water and agriculture division) for the identification of the main actors in the region.

Some other actors have been identified with the help of the international office for water or through internet search. SEMIDE has built a database of contacts to be used during the project.

A concept note in the local language has been prepared in order to explain the need for collaboration to the contacted actors.

| Actor | Type | Person interviewed | Date |
|--|----------------------------|--------------------|------------|
| Région du SUD « Water and agriculture service » | Public | Véronique Esterni | 2018-05-15 |
| The regional chamber of agriculture PACA | Public | François Groelle | 2018-05-16 |
| INRA Sophia Antipolis / greenhouse and innovation unit | Public/ research institute | Christine Poncet | 2018-05-17 |
| Filclair | SME | Arnaud Thiery | 2018-05-29 |
| Pole Terralia | Public | Annabelle PAYEN | 2018-05-31 |
| CTIFL : CTIFL - | Public | Ariane Grisey | 2018-06-11 |

| | | | |
|--|-------------|------------------------|------------|
| Interprofessional Technical Center for Fruits and Vegetables | | | |
| BRGM | Public | Marc MOULIN | 2018-06-15 |
| Agribio06 | Association | Lison Postel | 2018-06-19 |
| ADEME | Public | CARDONA MAESTRO Astrid | 2018-06-28 |
| Mini green Power | SME | Pierre du baret | 2018-10-17 |
| Association Terre de lien | Association | Joel Guitard | 2018-10-17 |

Table 1 – Actors (France)

2 last interviews were made in October in the framework of Med-Agri trade show in Avignon.

3.1.2 Minutes

3 main thematic has been discussed with the consulted persons:

- Financial strategy in the region
- Innovation in greenhouses sector
- Possible collaboration

I- Financial strategy

Region du SUD encourages investment in the greenhouse sector through co-financing programs such as the [program launched in December 2017](#) which allows the investor in the greenhouse sector to benefit from a co-financing level of 40%.

However, the investment in the sector is very low. The projects submitted in the framework of greenhouses development are generally not accepted and give way to other projects relate to arable corps sector or agroecology.

The actors consulted also said that the greenhouses thematic is difficult to fund under national and even European calls of projects.

France, which was very advanced in research in this area, fell back in the rankings compared to other European countries, notably Spain.

However, projects dealing with energy and greenhouses attract more the funding bodies.

To increase the number of projects on greenhouses sector, the actors consulted have recourse to private funds (companies).

II- Innovation in the sector

- *The photovoltaic greenhouses* are in continually development in the region this technology allow energy and agriculture production in the same time. This is a mixed agricultural / energy development solution in a context of increased pressure on agricultural land.
- *Bioclimatic greenhouses* (project: Bioclimatic greenhouses set up in Region du SUD): Naturally heated by the free energy of the sun, greenhouses store heat and return it at night or during cloudy periods, eliminating the need for fossil fuel heating.
- *Cogeneration of energy*
Most greenhouse operators in Région du SUD use cogeneration energy: the implementation of a Cogeneration system (combined heat and power generation) reduces the operating costs of the installations compared to heating via a traditional gas boiler.
Tomato growers are increasingly choosing cogeneration to heat greenhouses. The average gain on the heating bill is between 4 and 6 € / m².
- *Light management*: In Région du SUD, the climate is Mediterranean so it is recommended to manage the naturally available light and use it for the lighting of the greenhouses: Creation of "Mediterranean type" of greenhouses.
- *Geothermal potential*: In the region of Aix en Provence there are several hot water deposits. In Gardanne also the geothermal energy is abundant but there is a need for political decisions to use it. The use of geothermal resources to heat and cool greenhouses is a high-profile theme that requires improvement in the Region du SUD.
- *Bio-industry*: Currently the bio-industry is very widespread. Nowadays the consumer demands a local product resulting from an agriculture that respects nature "Green aspect".
A market study of organic products is essential: assessment of market needs (supply / demand analysis)
- *Irrigation piloting*: there is a need for further development of efficient irrigation system in the greenhouse.

III- Possible collaborations

Possible collaboration for foreseen activities (next consultations and workshops) has been identified:

Collaboration with Terralia for the organization of a workshop / Collaboration with the Regional chamber of agriculture of region du SUD for the organization of a consultation.

3.1.3 Photo Gallery

The consultation was organized in form of individual meetings (8 by phone and 1 face to face with ADEME in Sophia Antipolis)

No photos taken.

3.1.4 Key points – Conclusions

From the interviews with the various actors we have concluded that it is difficult to convince policy makers to engage in innovation in the greenhouse sector.

In région du SUD the chambers of agriculture, are moving more towards the production of vines.

However, it should be noted that there is a growing interest of the General Councils of the Alpes Maritimes and Var as well as the communities of agglomeration, territorial planning unit to revitalize the agricultural sector: according to INRA the Pays de Grasse bought 3ha to build greenhouses that will be available to farmers.

Key points that will be developed in the 2nd and 3rd consultation:

- Interest in launching a cluster "Mediterranean greenhouses"
- Optimize energy costs and efficiency (geothermal, solar)
- Regional and local production: agro-industry and population
- Interest of territorial developers: agriculture / employment / welfare
- Revitalize funding channels
- Strengthen communication between farmers / manufacturers / researchers

3.2 Consultation 2

The second consultation was organized by SEMIDE in the framework of MED Agri trade fair on 17th of October 2018.

40 persons participated at the session, representing different actors from different organizations from national and regional levels (SME's, students, researchers, Chambers of Agriculture, public authorities...).

Flyer for session announcement



Figure 18 - Flyer distributed during the trade show – 2nd consultation France

3.2.1 Participants List - Agenda/Invitation

Agenda in local language (French)



Mercredi 17 Octobre 2018 matin au Salon MED AGRI à Avignon – Salle Camargue Hall A

« Atelier dans le cadre du projet **MED Greenhouses- Renforcer l'innovation dans la culture sous-serre méditerranéenne** »

Organisé par : Le SEMIDE « Système Euro-Méditerranéen d'Information sur les savoir-faire dans le Domaine de l'Eau »

Réservez votre badge gratuitement [en ligne](#)

L'atelier de consultation abordera les enjeux de la culture sous serre en région PACA, les axes d'innovation et leurs modalités de financement autour de la mise en œuvre d'un cluster méditerranéen. Il réunira, agriculteurs, équipementiers, chercheurs, acteurs publics.

Programme :

09h30-10h00 – Inscription

10h00-10h05 – Message de bienvenue SEMIDE *Mr. Eric Mino*

10h05-10h15 – Introduction : Projets Européens - Implication des agriculteurs dans des projets innovants Chambre régionale d'agriculture PACA *Mr. François Groell*

10h15-10h30 – Présentation du projet MED Greenhouses SEMIDE *Mr. Eric Mino / Mme. Maroua Oueslati*

10h30-11h00 – Tour de table

11h00 - 11h45 - Table ronde sur les principaux enjeux et les besoins du secteur d'agriculture sous-serres

- Enjeux de la culture sous serre en région PACA : compétitivité, complexité, rentabilité réduite, ... Chambre régionale d'agriculture PACA
- Besoins identifiés de l'agriculture sous serres en Région PACA
 - Géothermie : Présentation de L'atlas des potentialités géothermiques en région PACA - BRGM *Mr. Marc Moulin*
 - Exemples de serres innovantes - Filclair *Mr. Olivier Naudin*

11h45-12h30 - Table ronde sur les opportunités et les difficultés de financement :

- Financements disponibles (régionaux, nationaux, européens) pour l'installation d'une serre
 - Présentation du Fond chaleur- ADEME PACA *Mr. Jean-Pierre Harinck*
- Comment favoriser l'investissement dans l'innovation pour les serres
 - Révision des plans et complémentarité des financements Chambre régionale d'agriculture PACA
 - Diffusions de connaissances technologiques, projet structurants - Pôle Terralia *Mme. Anabelle Payen*

12h30-13h00 – Attentes vis-à-vis du projet MED-Greenhouses et prochaines étapes

- Actions du pôle Terralia dans le secteur des serres Pôle Terralia *Mme. Anabelle Payen*
- Prochaines actions de Med Greenhouses SEMIDE *Mr. Eric Mino / Mme. Maroua Oueslati*

Figure 19 - Agenda of the 2nd consultation France

38 persons has participated to the session + 2 from SEMIDE team



Liste des participants « Atelier dans le cadre du projet MED Greenhouses- Renforcer l'innovation dans la culture sous-serre en Méditerranée » 17-Octobre 2018 Avignon, France













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





| Nom Prénom | Organisme | Fonction | Email | Signature |
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12

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Figure 20 - List of participants 2nd consultation France

3.2.2 Minutes

Med Greenhouses in Med Agri tradeshow in Avignon 17 October 2018

SEMIDE has collaborated closely with the regional chamber of agriculture of PACA for the organization of the session on "Greenhouses innovation in the Mediterranean region".

SEMIDE opened the session with a presentation of SEMIDE'S activities in the Mediterranean region, afterward, Mr François Groell from the project Engineering Unit of the regional chamber of agriculture of PACA presented 2 Interreg Med projects where the chamber is implicated CAMARG and REINWASTE.

SEMIDE presented Med greenhouses project and explained some greenhouses innovation in the Mediterranean region.

After the presentation of the conclusions of the 1st consultation two roundtables have been organized:

- 1- The key issues and needs of the greenhouse agriculture sector
 - Challenges of greenhouse production in région du SUD: competitiveness, complexity, reduced profitability, a presentation was made by the regional Chamber of Agriculture
 - Geothermal energy: Presentation of the atlas of geothermal potential in region du SUD presented a work made by CTIFL-BRGM and ADEME this was presented by BRGM by Mr. Marc Moulin
 - Some examples of innovative greenhouses have been demonstrated by the greenhouse's constructor "Filclair" by Mr. Olivier Naudin

- 2- Round Table on Financing Opportunities and Difficulties: Available funding at regional, national and European levels for the installation of a greenhouse
 - In this context Jean Pierre Harinck from ADEME region du SUD presented the Heat Fund which is a national fund that encourage the uses of renewable energies.
 - Afterwards, the regional chamber of agriculture made a presentation on: fostering investment in innovation in greenhouses

During the meeting Mrs. Anabelle Payen from the agricultural pole in the region "Pole Terralia" presented the activities of the pole and explained the strategy of dissemination of technological knowledge of Terralia.

The last part of the meeting was dedicated to future actions of Med Greenhouses project (presentation by SEMIDE).

The meeting presentations are available on SEMIDE website: <http://www.semide.org/documents/meetings/events/atelier-renforcer-l-innovation-dans-la-culture-sous-serre-mediterrannee>

3.2.3 Photo Gallery





Figure 21 - Photos from 2nd Consultation France

3.2.4 Key points - Conclusions

- The lack of available funds from France Agri Mer together with the need to upgrade the greenhouses system led the regional chamber of agriculture of Region du SUD and the Chamber of Agriculture of bouche du Rhône to set up a program aiming to create a recovery plan for greenhouses production.
- According to a study made in 2016-2017 by the regional chamber of agriculture of region du SUD: The number of farmers having greenhouses, has decreased by -20% in the south of France between 2011 and 2016 (most shelters were built before the 2000s for market gardening and before 1990 for horticulture)
- The technical needs identified by greenhouse producers are: Development of mechanization and automation in greenhouses sector/ Optimizing climate, energy, fertilizers, water management and phytosanitary treatment/ integrated control / eco-label greenhouses / planification of training courses for the employee
- The economic needs identified by farmers are : Financial schemas specific to Greenhouses at the local level / loan guarantee schemas / comprehensive and adapted regional offer to project managers (modernization of tools) /

Ensure link with the market / dissemination of on existing arrangements and the recovery plan for greenhouses production

- According to the "[Study of geothermal potential in the Provence-Alpes-Côte d'Azur region](#)" made by the BRGM in 2013, the PACA region has 1,211,852,521 MWh / year of available energy, of which 66,724,446 MWh / year represents the potential of mobilizable energy.
- The use of photovoltaic panels in greenhouses is increasing in the region, there is a major economic interest for the farmer (greenhouse returns to zero euro) photovoltaic panel manufacturers follow a different economic model, they take in charge of the construction of the greenhouses and maintenance for a period of 30 years. The installation of photovoltaic panels on greenhouses acts on the luminosity which decreases from 50% to 30% in the most developed cases, it is necessary to apply a specific culture line to guarantee a good production.
- In the framework of climate change, production in greenhouses is no longer encouraged in the region by some actors (association, chamber of agriculture ...), but from the point of view of the farmer the greenhouse remains an insurance, it represents a climate shelter for its crops that guarantees sustainable production.
- There is a need for the modification and update of the existing financial channels: it is necessary to change the existing channels and separate them. Currently they are all related to the device PA3 of France Agrimer from a financial and technical point of view while the priorities are different at national and regional levels



3.3 Consultation 3

The 3rd consultation was organized on 2 July 2019 on Nice with representative from the civil society and the Youth community. The meeting was held with an international association who belong to the world economic forum "[Global shapers – NICE hub](#)".










SEMIDE meet the global shapers and presented Med Greenhouses project, it was an occasion for the shapers to express their opinion about the greenhouses in Région du SUD and in the Mediterranean region, the local agricultural production and how to reduce the carbon footprint in this sector.

3.3.1 Participants List

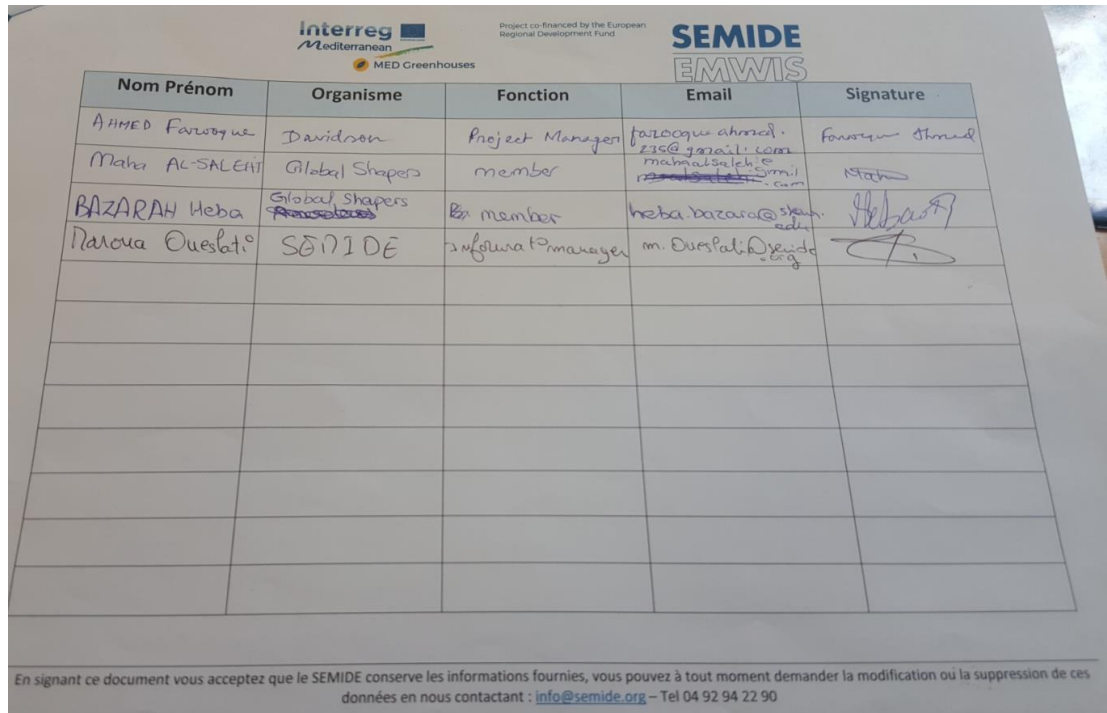
13 participants were present during the meeting.

Liste des participants « Atelier dans le cadre du projet MED Greenhouses- Renforcer l'innovation dans la culture sous- serre en Méditerranée » 02/07 Nice, France

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Figure 22 - List of participants 3rd consultation France

3.3.2 Minutes

MED-Greenhouses: consultation with civil society and youth community
02-07-2019-Nice

- Introduction: SEMIDE- Project EU+ MED-Greenhouses project
- SEMIDE stated the meeting with short presentation of SEMIDE activities and European projects in water and agriculture sectors.
- Then, SEMIDE presented MED Greenhouses project and explained the aim of the consultation.
- Akshay Shetty the hub curator has explained the role of global Shapers community and the activities of nice hub with a highlight on the environmental actions: Waste recycling – awareness campaigns on waste and energy- sustainable development.
- Global shapers community is a network of young people driving dialogue, action and change available in 156 countries in the world:
- <https://www.globalshapers.org/>

- SEMIDE explained the role of the civil society in the project and the need for its opinion to convince policy makers and to manage agriculture production and to act on the commercialization of the products.
- SEMIDE gave general information about the greenhouses sector in France and in the region: The French area dedicated to greenhouses production represents about 10,000 ha, 2/3 of which is devoted to vegetable crops and 1/3 to ornamental products. In Région du SUD 3100 ha of Greenhouses. In Région du SUD, while the greenhouse grew by 7% between 1988 and 2000, it lost 13% over the last ten years.

Then a debate was launched on different topics:

- Agricultural territories and urbanization
- Local production: would you be ready to buy agricultural products in season only (no tomatoes in winter for example)
- Do you think that greenhouses can be a solution for climate change adaptation
- Would you be willing to buy products irrigated with treated waste-water

3.3.3 Photo Gallery





Figure 23 - Photos from 3rd consultation France

3.3.4 Key points - Conclusions

- Local production is encouraged by consumers even when the prices of the products are high, the consumer is willing to pay to have a good quality.

- Big questions about the price of products: why products that are imported are cheaper while there is an important cost of transport?
- Consumers are suspicious when buying products from other countries outside Europe: The origin of the product affects the behavior of the consumer.
- Greenhouses production is encouraged to ensure year-round production, but water and energy saving methods must be applied especially nowadays in order to meet the criteria of the sustainable development.
 - The use of treated wastewater in greenhouses is not totally rejected by consumers, but there is a need for raising awareness about water scarcity among the citizens before applying such methods.
 - Demand management strategy at the national level is needed in order to ensure an efficient production and to maximize the profit of the farmer

3 consultations were made with different actors: policy makers, farmers, researchers and civil society at the national and regional levels.

Those Fruitful events, were the occasion to discuss multiple thematic related to greenhouses sector and to listen to different point of view.

In total 64 persons have been consulted by SEMIDE.

4. Greece

4.1 Consultation 1 - (12-10-2018 - Volos)

4.1.1 Participants List –Agenda/Invitation

Before the consultation

Organizing a consultation requires significant planning. We had to choose a suitable place for the event that could host our guests/stakeholders with the appropriate location and the date as well, so that most attendees can participate.

Based on that, the Consultation of MED Greenhouses project was organized on 12 October 2018 in the premises of University of Thessaly (Dept. of Agriculture, Crop Production and Rural Environment) in Volos. The venue is accessible for all, including people with special mobility needs. After that, project posters were prepared and mounted on poster boards in the exhibition hall of university with open access to everyone and announcements at media.



Διαβούλευση για το έργο “MED Greenhouses”
 με τους ιδρυνόντες του έργου και τους αρμόδιους φορείς

ΠΑΡΑΣΚΕΥΗ 12 ΟΚΤΩΒΡΙΟΥ 2018 ΣΤΙΣ 09:30

ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΙΑΣ
 ΤΜΗΜΑ ΓΕΩΠΟΝΙΑΣ
 ΦΥΤΙΚΗΣ ΠΑΡΑΓΩΓΗΣ ΚΑΙ ΑΓΡΟΤΙΚΟΥ ΠΕΡΙΒΑΛΟΝΤΟΣ
 ΟΔΟΣ ΦΥΤΟΚΟΥ | Ν. ΙΩΝΙΑ | ΒΟΛΟΣ

ΠΡΟΓΡΑΜΜΑ

- 09:30-10:00 ΕΓΓΡΑΦΗ
- 10:00-10:20 ΟΜΙΛΙΑ ΤΟΥ ΑΝΑΠΛΗΡΩΤΗ ΚΑΘΗΓΗΤΗ ΝΙΚΟΛΑΟΥ ΚΑΤΣΟΥΔΑ ΣΥΝΤΟΝΙΣΤΗ ΤΟΥ MED GREENHOUSES ΓΙΑ ΤΟ Π.Θ.
- 10:20-10:40 ΟΜΙΛΙΑ ΤΟΥ ΔΡ. ΔΑΡΔΑΝΑΡΟΥ ΠΑΠΑΧΑΤΖΗ, ΠΡΟΚΕΦΑΛΗΣ ΕΡΕΥΝΑ ΤΟΥ MED GREENHOUSES ΓΙΑ ΤΟ ΤΕΙ ΘΕΣΣΑΛΙΑΣ
- 10:40-11:00 ΠΑΡΟΥΣΙΑΣΗ ΝΕΩΝ ΤΕΧΝΟΛΟΓΙΩΝ ΑΠΟ ΕΡΕΥΝΗΤΕΣ ΤΟΥ ΧΡΟΥ ΤΩΝ ΘΕΡΜΟΚΗΠΩΝ
- 11:00-11:15 ΔΕΛΑΦΙΤΜΑ ΓΙΑ ΚΑΦΕ
- 11:15-12:00 ΣΥΖΗΤΗΣΗ ΣΤΡΟΓΓΥΛΗΣ ΤΡΑΠΕΖΗΣ - PANEL DISCUSSION

Συνεργάτες

T.E.I. of Thessaly, Hellenic Republic Region of Thessaly, Molise, SEMIDE EMWIS, CEBAS-CSIC, Agricultural Research Institute

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Project Consultation at Volos

PROJECT CONSULTATION AT VOLOS

12/10/2018



[Medgreenhouses-interreg-Med](#)

17/10/2018

Διαβούλευση για τις νέες τεχνολογίες θερμοκηπίων στην Γεωπονική Σχολή του Πανεπιστημίου Θεσσαλίας - e-thessalia.gr



[] Τοπικά

Διαβούλευση για τις νέες τεχνολογίες θερμοκηπίων στην Γεωπονική Σχολή του Πανεπιστημίου Θεσσαλίας

10 Οκτωβρίου 2018, 13:27



Η πρώτη διαβούλευση του έργου MED Greenhouses το οποίο υλοποιείται στο πλαίσιο των έργων InterregMED 2014-2020, θα πραγματοποιηθεί την Παρασκευή 12 Οκτωβρίου και ώρα 09:30 στο κεντρικό αμφιθέατρο της Σχολής Γεωπονικών Επιστημών του Πανεπιστημίου Θεσσαλίας, στο Φυτόκο.

Πρόγραμμα Διαβούλευσης

- 09:30-10:00 Εγγραφή
- 10:00-10:20 Παρουσίαση του έργου MED Greenhouses από τον Συντονιστή του έργου, Καθηγητή κ. Αλέξανδρο Παπακατζί, Τ.Ε.Ι. Θεσσαλίας.
- 10:20-10:40 Τεχνολογίες ελέγχου και διαχείρισης θερμοκηπίων, Αναπληρωτής Καθηγητής Νικόλαος Κατσούλας, Επιστημονικό Υπεύθυνος του έργου MED Greenhouses για το Πανεπιστήμιο Θεσσαλίας
- 10:40-11:00 Παρουσίαση Νέων Τεχνολογιών στα θερμοκήπια από εταιρίες του χώρου των θερμοκηπίων
- 11:00-11:15 Διάλειμμα για καφέ
- 11:15-12:00 Συζήτηση Στρογγυλής Τραπέζης – Panel Discussion με αντικείμενο τα προβλήματα και τις προοπτικές εφαρμογής των νέων τεχνολογιών στα θερμοκήπια

<https://e-thessalia.gr/diavoulysi-gia-tis-nes-technologies-thermokepion-stin-geoponiki-scholi-toy-paneπιστημιου-thessalias/#>

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e-thessalia.gr

17/10/2018

Διαβούλευση για το έργο MED Greenhouses - TheNewspaper.gr



TheNewspaper.gr logo and navigation elements.

ΤΟΠΙΚΕΣ ΕΙΔΗΣΕΙΣ



ΤΥΡΟΚΟΜΕΙΟ
Σεραφωβίγιο Μαγνησίας
ΚΑΤΑΣΤΗΜΑΤΑ
Κεντρικό: Πολυμήρη 15, Βόλος | Υποκ/μα: Γ. Λάδρου 41Ε, Βόλος
www.karakanas.gr

www.antallaktikaonline.gr

5 Οκτωβρίου 2018

Διαβούλευση για το έργο MED Greenhouses



Σας ανακοινώνουμε την πρώτη διαβούλευση του έργου MED Greenhouses το οποίο υλοποιείται στο πλαίσιο του Προγράμματος Interreg MED 2014-2020, που θα πραγματοποιηθεί

την Παρασκευή 12 Οκτωβρίου και ώρα 09:30 στο κεντρικό αμφιθέατρο της Σχολής Γεωπονικών Επιστημών του Πανεπιστημίου Θεσσαλίας, στο Φυτόκο.

ΑΘΛΗΤΙΚΑ



Ρεκόρ συμμετοχών και... ταχύτητας από τον ΣΔ Βόλου στον Διεθνή Νυχτερινό Ημιμαραθώνιο Θεσσαλονίκης

ΑΘΛΗΤΙΚΑ

https://www.thenewspaper.gr/2018/10/05/%CE%B4%CE%B9%CE%B1%CE%B2%CE%BF%CF%8D%CE%BB%CE%B5%CF%85%CF%83%... 1/11

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17/10/2018 Διαβούλευση για το έργο MED Greenhouses από το Πανεπιστήμιο Θεσσαλίας – Thessalikipress.gr | Η εβδομαδιαία εφημερίδα της ...



ΦΟΙΤΗΤΙΚΟΣ ΟΔΗΓΟΣ

Διαβούλευση για το έργο MED Greenhouses από το Πανεπιστήμιο Θεσσαλίας

October 9, 2018, 6:59 am 97



Interreg
Mediterranean
MED Greenhouses

Project co-financed by the European
Regional Development Fund

*Green Growth through the capitalization of
Innovative Greenhouses*

“Πράσινη ανάπτυξη μέσω της κεφαλαιοποίησης
καινοτόμων θερμοκηπίων”

Διαβούλευση για το έργο “MED Greenhouses”
με τους ιδύνοντες του έργου και τους αρμόδιους φορείς

ΠΑΡΑΣΚΕΥΗ 12 ΟΚΤΩΒΡΙΟΥ
2018 ΣΤΙΣ 09:30

ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΙΑΣ
ΤΜΗΜΑ ΓΕΩΠΟΝΙΑΣ
ΦΥΤΙΚΗΣ ΠΑΡΑΓΩΓΗΣ ΚΑΙ ΑΓΡΟΤΙΚΟΥ ΠΕΡΙΒΑΛΛΟΝΤΟΣ
ΟΔΟΣ ΦΥΤΟΚΟΥ | Ν. ΙΩΝΙΑ | ΒΟΛΟΣ

Συνεργάτες



Σας ανακοινώνουμε την πρώτη διαβούλευση του έργου MED Greenhouses το οποίο υλοποιείται στο πλαίσιο του Προγράμματος Interreg MED 2014-2020, που θα πραγματοποιηθεί την **Παρασκευή 12 Οκτωβρίου** και **ώρα 09:30** στο κεντρικό αμφιθέατρο της Σχολής Γεωπονικών Επιστημών του Πανεπιστημίου Θεσσαλίας, στο Φυτόκο.

ΠΡΟΓΡΑΜΜΑ ΔΙΑΒΟΥΛΕΥΣΗΣ

- **09:30–10:00** Εγγραφή
- **10:00–10:20** Παρουσίαση του έργου MED Greenhouses από τον Συντονιστή του έργου, Καθηγητή κ. Αλέξανδρο Παπαχατζή, Τ.Ε.Ι. Θεσσαλίας
- **10:20–10:40** Τεχνολογίες ελέγχου και διαχείρισης θερμοκηπίων, Αναπληρωτής Καθηγητής Νικόλαος Κατσούλας, Επιστημονικά Υπεύθυνος του έργου MED Greenhouses για το Πανεπιστήμιο Θεσσαλίας
- **10:40–11:00** Παρουσίαση Νέων Τεχνολογιών στα θερμοκήπια από εταιρίες του χώρου των θερμοκηπίων
- **11:00–11:15** Διάλειμμα για καφέ

<https://thessalikipress.gr/2018/10/09/%CE%B4%CE%B9%CE%B1%CE%B2%CE%BF%CF%8D%CE%BB%CE%B5%CF%85%CF%83%CE%B7...> 1/2

Thessalikipress.gr

17/10/2018

Διαβούλευση: «Τεχνολογίες Θερμοκηπίων-Προβλήματα Εφαρμογής και Προοπτικές»



Το Πανεπιστήμιο Ακαδημαϊκά Φοιτητές Διοίκηση Έρευνα Υπηρεσίες Χρηστών

αναζήτηση...

Αρχική > Ανακοινώσεις > Διαβούλευση: «Τεχνολογίες Θερμοκηπίων-Προβλήματα Εφαρμογής και Προοπτικές»

Συντομεύσεις

Διαβούλευση: «Τεχνολογίες Θερμοκηπίων-Προβλήματα Εφαρμογής και Προοπτικές»

Διαβούλευση: «Τεχνολογίες Θερμοκηπίων-Προβλήματα Εφαρμογής και Προοπτικές»

Διαβούλευση με θέμα: «Τεχνολογίες θερμοκηπίων-προβλήματα εφαρμογής και προοπτικές»
Την Παρασκευή 12 Οκτωβρίου και ώρα 09:30 στο κεντρικό αμφιθέατρο της Σχολής Γεωπονικών Επιστημών του Πανεπιστημίου Θεσσαλίας, στο Φυτόκο θα πραγματοποιηθεί διαβούλευση μεταξύ φορέων που σχετίζονται με τον τομέα των θερμοκηπίων στην Ελλάδα. Η διαβούλευση θα γίνει στο πλαίσιο του έργου MED Greenhouses, το οποίο υλοποιείται από το Πανεπιστήμιο Θεσσαλίας στο πλαίσιο των έργων InterregMED 2014-2020 και θα αφορά τα εμπόδια εφαρμογής των νέων τεχνολογιών στα θερμοκήπια.

Δείτε το πρόγραμμα της διαβούλευσης [εδώ](#).
Δείτε περισσότερα για το έργο MED Greenhouses [εδώ](#)



επιτελικό παραλιακό συγκρότημα



Κτηνιατρική Σχολή, Καρδίτσα



Μονή Πάου



Πανεπιστήμιο Θεσσαλίας
Αργοναυτών και Φιλελλήνων, 38221 Βόλος, 24210-74000
info@uth.gr
Για χρήση με Internet Explorer, απαιτείται έκδοση 9 ή νεότερη.

<http://www.uth.gr/genannounce/4395-20181009-diabouleusi>

1/1

<http://www.uth.gr/genannounce>



Agricultural Research Institute



17/10/2018

Εκδήλωση για τεχνολογίες ελέγχου των θερμοκηπίων - Magnesia News

Εκδήλωση για τεχνολογίες ελέγχου των θερμοκηπίων

Δημοσιεύθηκε 12/10/2018 09:21 Τροποποιήθηκε 09:44



1
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Ξεκινά σήμερα Παρασκευή 12 Οκτωβρίου και ώρα 09:30 στο κεντρικό αμφιθέατρο της Σχολής Γεωπονικών Επιστημών του Πανεπιστημίου Θεσσαλίας, στο Φυτόκο, η πρώτη διαβούλευση του έργου MEDGreenhouses το οποίο υλοποιείται στο πλαίσιο του Προγράμματος InterregMED 2014-2020.

Στις 10 το πρωί θα γίνει παρουσίαση του του έργου MEDGreenhouses από τον Συντονιστή του έργου, Καθηγητή κ. Αλέξανδρο Παπακατζή, Τ.Ε.Ι. Θεσσαλίας, ενώ στις 10.40 ο αναπλ. Καθηγητής Νικόλαος Κατσούλας, Επιστημονικά Υπεύθυνος του έργου MED Greenhouses για το Πανεπιστήμιο Θεσσαλίας θα αναφερθεί στις τεχνολογίες ελέγχου και διαχείρισης θερμοκηπίων.

Στις 10.40 θα γίνει παρουσίαση Νέων Τεχνολογιών στα θερμοκήπια από εταιρίες του χώρου των θερμοκηπίων και στις 11.50 θα ακολουθήσει συζήτηση στρογγυλής τραπέζης με αντικείμενο τα προβλήματα και τις προοπτικές εφαρμογής των νέων τεχνολογιών στα θερμοκήπια.

Χρησιμοποιούμε cookies για να σας παρέχουμε μια βέλτιστη εμπειρία χρήσης. Αν συνεχίσετε να χρησιμοποιείτε τον ιστότοπο, θα θεωρήσουμε ότι αποδέχεστε την Πολιτική Απορρήτου και Cookies του ιστότοπου μας.

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ΜΑΓΝΗΣΙΑ (THESSALIA/CONTENT/ΜΑΓΝΗΣΙΑ)

Εκδήλωση στη Γεωπονική για τις τεχνολογίες ελέγχου θερμοκηπίων

Πέμπτη 04 Οκτωβρίου, 2018



(media/k2/item/c/attachment/7050e92ee6bcb0a741499b50eeef403_XL.jpg)

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(https://issuu.com/karekikidismedia/docs/h_epomeni_mera_sth_magnisia_sth_el)

Εκάνε την Παρασκευή 12 Οκτωβρίου και ώρα 09:30 στο κεντρικό αμφιθέατρο της Σχολής Γεωπονικών Επιστημών του Πανεπιστημίου Θεσσαλίας, στο Φυτόκο, η πρώτη διαβούλευση του έργου MEDGreenhouses το οποίο υλοποιείται στο πλαίσιο του Προγράμματος InterregMED 2014-2020.



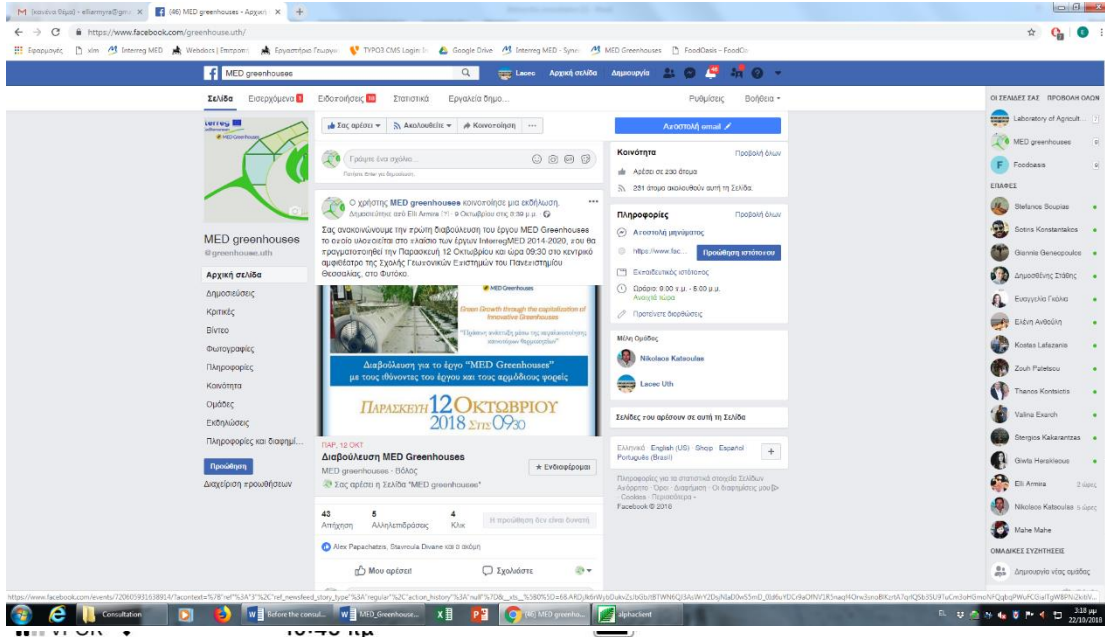
Αίθουσα Σύνταξης (Thessalia/author/800-αιθουσα-συνταξη)

η

Διαβάστε ολόκληρο το άρθρο... (<https://magnesianews.gr/magnisia/ekdilosi-sti-geoponiki-gia-tis-technologies-elegchou-thermokipion.html>)

VILLAGE-VOICE

Invitation at Social Pages (Facebook and twitter)



Tweet

Interreg Mediterranean MED Greenhouses @medgreenhouses

It is our pleasure to announce that the Department of Agriculture, Crop Production and Rural Environment of the University of Thessaly will be hosting the next Consultation on the MED greenhouses project on October 12, 2018 in Volos, Greece. 😊

Μετάφραση Tweet



Προσθήκη άλλου Tweet



Invitation by e-mail

The invitations were sent to the participants 3 weeks before the event, including the agenda, and one week after, they received a reminder e-mail about the date of the Consultation. The invitations were sent to local authorities, representatives from Enterprises, Academia, Governmental and NGO, local farmers and students.

Invitation text:

Dear Mrs. /Mr.,

The University of Thessaly, within the framework of the MED Greenhouses programme, which is being implemented as part of the Interreg MED 2014-2020 project, invites you to the first consultation of the project, which will take place on Friday, October 12, at 9.30 am at the Central Conference Room of the School of Agricultural Sciences of the University of Thessaly, at Fytoko. Please find the programme's schedule attached. It will be a great honor for us if you attend the event.

Yours sincerely,

Scientific coordinator of the project for the University of Thessaly

Nikolaos Katsoulas

Associate professor



Agricultural Research Institute





Green Growth through the capitalization of Innovative Greenhouses

“Πράσινη ανάπτυξη μέσω της κεφαλαιοποίησης καινοτόμων θερμοκηπίων”

Consultation on the project “MED Greenhouses” with the project leaders and the stakeholders

FRIDAY 12 OCTOBER
2018 AT 09:30

UNIVERSITY OF THESSALY
DEPARTMENT OF AGRICULTURE
CROP PRODUCTION AND RURAL ENVIRONMENT
FYTOKOY STR. | N.IONIA | VOLOS

Project Partners



Figure 24 - Invitations – Announcements 1st consultation Greece

Programme

09:30-10:00 Registration

10:00-10:20 Presentation of the project MED Greenhouses by the Project Coordinator, Professor Alexandros Papachatzis, TEI Thessaly

10:20-10:40 Greenhouse Control and Management Technologies,

Scientific coordinator of the MED Greenhouses project for the University of Thessaly, Associate Professor Nikolaos Katsoulas

10:40-11:00 Presentation of New Technologies by companies in the greenhouse

11:00-11:10 Presentation of Horizontal Actions in the context of the Interreg MED

Horizontal projects of the Green Growth community, by the

Dynamic vision CEO, Mr. Dimitrios Kokosioulis

11:10-11:25 Coffee Break

11:25-12:00 Round Table Discussion - Panel Discussion

Upon arrival at the venue, our guests completed the Attendance sheet for their registration and were given the flyer about MED Greenhouses project and related project material (pen, notepad, folder, bag). A warm place offering beverage and coffee to participants was created at the conference hall, with benches where guests could rest before the beginning of consultation, during the break (according to the agenda) and after the Consultation. Additionally, during the Consultation, a short questionnaire was shared, related to the topics of the agenda.

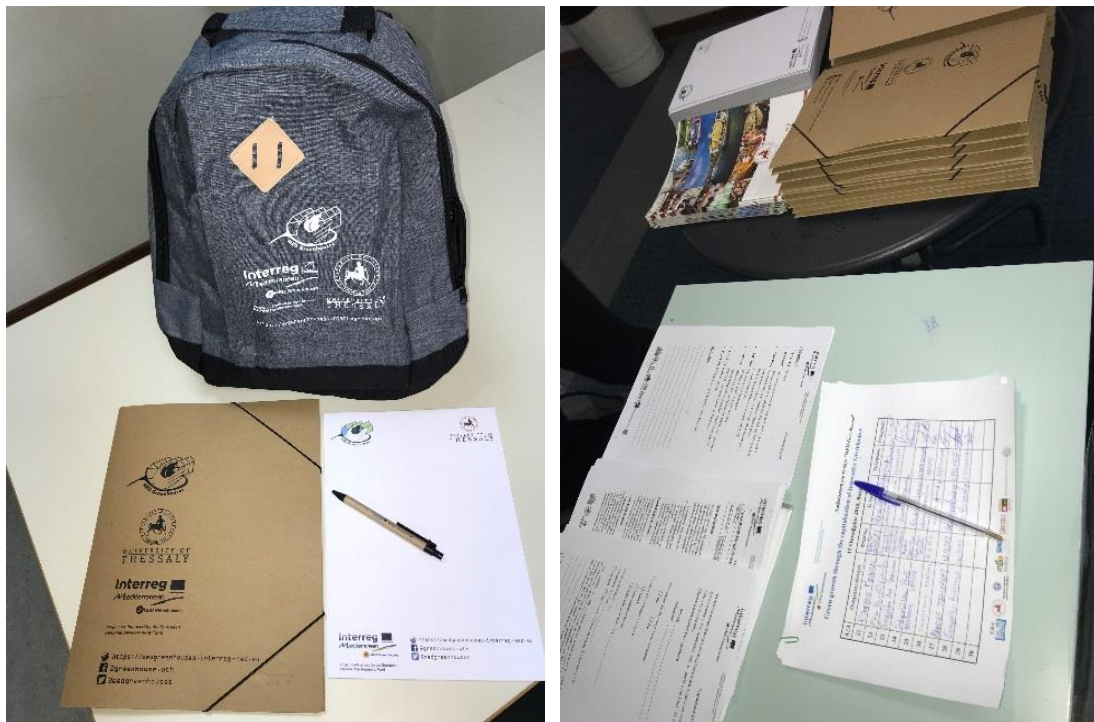


Figure 25 - Promotional material 1st consultation Greece

MED Greenhouses

“Green Growth through the capitalization of innovative Greenhouses”

Brief description:

The project will capitalize results of other EU successful projects by promoting, disseminating & transferring innovative Greenhouses in the MED area, minimizing water & energy demand. The project will stimulate environmental awareness on issues related to energy & water efficiency & sustainable production, contributing to Green Growth & promoting sustainable development.

Objectives:

- **Improve eco-innovation** capacities of public & private actors in the greenhouse/agriculture sector through stronger **transnational cooperation, knowledge transfer & better networks** between research bodies, businesses, public authorities & civil societies.
- **Improve** the existing innovation framework conditions on the **MED agricultural** sector.
- **Strengthen & empower** innovation clusters & networks in the field of **agriculture/greenhouse production**.

Project Main Results:

1. **Develop, promote & integrate policy Recommendations** (favouring cooperation between actors of the 4helix) in local & regional planning in order to **boost eco-innovative greenhouses at transnational level**.
2. **Establish an Agricultural Innovative Cluster in the MED area** creating synergies & cooperation mechanisms between the actors of the 4helix of the agricultural/greenhouse sector.
3. **Increase the capacity building** of the members (actors of the 4helix) of the innovative cluster **through knowledge transfer, training courses (seminars, webinars), training platform**.

Partnership:

8 Partners: Technological Education Institute of Thessaly – Lead Partner (TEI of Thess), University of Thessaly (UTH), Region of Thessaly, Molise toward 2000, Euro-Mediterranean Water Information System Technical Unit (SEMIDE), Spanish National Research Council (CEBAS-CSIC), Regional Council of Berat (RCB), Agricultural Research Institute (ARI).

2 Associated Partners: Riegos y Tecnologia S.L (RITEC), Regione Molise

6 countries: Greece, Italy, France, Spain, Albania, Cyprus

Project Budget: 1.171.400,00 €

Project Duration: 18 Months (01/02/2018-31/07/2019)





Project co-financed by the European Regional Development Fund

Παρασκευή 12 Οκτωβρίου 2018

Θα το εκτιμούσαμε ιδιαίτερα, αν αφιερώνατε ελάχιστο χρόνο για να συμπληρώσετε το ερωτηματολόγιο που ακολουθεί, από το οποίο πιστεύουμε ότι θα αντλήσουμε πολύτιμες πληροφορίες.

Παρακαλώ συμπληρώστε ό που χρειάζεται.

ΦΟΡΕΑΣ _____

ΟΝΟΜ/ΜΟ _____

• Είστε παραγωγός θερμοκηπιακών προϊόντων;

Ναι Όχι

• Αν ναι, τι είδους θερμοκήπιο έχετε;


Τούνελ
 Τροποποιημένο τοξωτό
 Αμφίρρικτο με κάλυψη από _____

• Εξοπλισμός θερμοκηπίου:

• Θέρμανση με καύση _____
 αερισμός υγρασία τεχνητή ομίχλη θερμοκουρτίνα

• Ποια θεωρείτε ότι είναι τα σημαντικότερα προβλήματα με τα οποία έρχονται αντιμέτωποι οι παραγωγοί θερμοκηπιακών προϊόντων σήμερα (π.χ. υψηλό κόστος ενέργειας για θέρμανση και λειτουργία θερμοκηπίου, υψηλές απαιτήσεις σε καλής ποιότητας νερό, ανάγκη για χρήση φυτοπροστατευτικών, υψηλό κόστος εργασίας, έλλειψη εξειδικευμένου προσωπικού, έλλειψη τεχνογνωσίας, εμπορεία προϊόντων, ...);




 Project co-financed by the European Regional Development Fund

Παρασκευή 12 Οκτωβρίου 2018

• Ποιες είναι οι βασικές ανάγκες του τομέα των θερμοκηπίων στην περιοχή σας;

• Σύμφωνα με αυτά που γνωρίζετε, ποια πιστεύετε ότι είναι τα βασικά εμπόδια για την εφαρμογή καινοτόμων τεχνολογιών στα θερμοκήπια της περιοχής σας;

• Τι χρειάζεται να γίνει κατά την άποψή σας για να ξεπεραστούν τα παραπάνω εμπόδια;

Παρακαλώ απαντήστε στις ερωτήσεις χρησιμοποιώντας την κλίμακα από 1 έως 5

1: ΚΑΚΗ | 2: ΜΕΤΡΙΑ | 3: ΚΑΛΗ | 4: ΠΟΛΥ ΚΑΛΗ | 5: ΕΞΑΙΡΕΤΙΚΗ

| | ΕΡΩΤΗΣΕΙΣ | ΒΑΘΜΟΣ |
|----------|---|--------|
| 1 | Πώς κρίνετε την οργάνωση και την υποστήριξη πριν και κατά τη διάρκεια της διαβούλευσης; | |
| 2 | Πώς κρίνετε το παρεχόμενο υλικό για τη διαβούλευση; | |
| 3 | Πώς σας φάνηκε η θεματολογία της διαβούλευσης; | |
| 4 | Πόσο σημαντική θεωρείτε τη διαβούλευση; | |



Figure 26 – Questionnaires 1st consultation Greece

After the consultation

Διαβούλευση για το έργο “MED Greenhouses”

Green growth through the capitalization of Innovative Greenhouses

12 Οκτωβρίου 2018, Βόλος

| A/A | Όνοματεπώνυμο | Φορέας | E-mail | Τηλέφωνο | Υπογραφή |
|-----|-----------------------|--------|----------------------------------|-----------|----------|
| 1 | Καζόγλου Νίκος | TNG | n.kalogiaridis@phitos.gr | | |
| 2 | ΠΑΠΑΓΙΑΝΝΗΣ Γ. | TNG | soliabologos@gmail.com | | |
| 3 | Φολίγχα Σοφία | | | | |
| 4 | Γεφύριου Ραβάνθια | | katgerini@phitos.gr | | |
| 5 | Πάσχου Μαρία | | maricpas282@gmail.com | | |
| 6 | Μανώλα Ελένη | | elenamanoles@gmail.com | | |
| 7 | Λιβερισίου Ελένη | | elenilive9@yahoo.com | | |
| 8 | Τζέτζη ή Αρσενιάδα | | nikosarsenias@gmail.com | | |
| 9 | Παπαγιαννίδου Φωτεινή | | foτειni.papagianniidou@gmail.com | 695650150 | |
| 10 | Τσατζίδης Γεώργιος | | Geotatzidis@gmail.com | | |



Διαβούλευση για το έργο "MED Greenhouses"

Project co-financed by the European Regional Development Fund



| A/A | Όνοματεπώνυμο | Φορέας | E-mail | Τηλέφωνο | Υπογραφή |
|-----|---------------------------|----------------|-------------------------------|------------|----------|
| 11 | Αθανάσιος Μορίσ | | as.moriss@gmail.com | 6980359796 | |
| 12 | Ελευθερία Αγγελίκη | Π.Ο | elaggeliki@gmail.com | 6936723858 | |
| 13 | Κοκκοσιώδης Δημήτρης | Dynamic Vision | d.kokkosidis@dynamicvision.gr | 6932114248 | |
| 14 | Καρέδης Αλέξανδρος | Π.Ο | al.karedis@karedis.gr | 6934432877 | A4 |
| 15 | Παπαδημιτρίου Αθανάσιος | Κατασκευαστική | athanasip1973@gmail.com | 6976220908 | |
| 16 | Βουλιώδης Χαράλαμπος | Π.Ο | linavoul99@gmail.com | 6987595368 | |
| 17 | Μηλιόπουλος Νικόλαος | Π.Ο | nikimeliopoulos99@gmail.com | 6948548165 | |
| 18 | Αγγελική Παπακωνσταντίνου | ΤΕΙ/Θ | papachristi@teithe.gr | 6945305320 | |
| 19 | Σταυρούδης Αλέξανδρος | ΤΕΙ/Θ | stavroudis@teithe.gr | 6985629274 | |
| 20 | Βασιλείου Τερέζα | Π.Ο | tsiount@teithe.gr | 6987775520 | |



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Διαβούλευση για το έργο "MED Greenhouses"

Green growth through the capitalization of Innovative Greenhouses

12 Οκτωβρίου 2018, Βόλος

| A/A | Ονοματεπώνυμο | Φορέας | E-mail | Τηλέφωνο | Υπογραφή |
|-----|---------------------------|-----------------------------|-------------------------------|------------|-------------|
| 21 | ΕΥΑΓΓΕΛΟΣ ΜΠΑΛΑΣ | ΝΕΡΥ ΕΡΕΥΝΗ ΣΕΡΒΙΣ | balas@nery.gr nery@nery.gr | 6944223337 | [Signature] |
| 22 | Μίτζη Παπαδημοσίου | Νοτιοανατολική Θεσσαλίας | miatzi@nathess.com | 2413506239 | [Signature] |
| 23 | Ευαγγελία Ανα Παπαϊωάννου | ΑΓΡΟ ΤΟΥ-ΤΥ | evangelia@nathess.com | | [Signature] |
| 24 | Σοφία Δοδ. | Παρασκευά Μεταβί. | tsolodod@nathess.com | 6972292180 | [Signature] |
| 25 | ΒΑΝΙΑΚΕ ΕΛΑΤΕΙΝΕΣ | Α.Σ.Π.Ο. | evanaki@nathess.com | 697690333 | [Signature] |
| 26 | Γκουγκουλιού | Α.Σ.Π.Ο. | ast11@nathess.com | 6972505498 | [Signature] |
| 27 | ΜΑΡΙΑ ΤΑΧΤΑΡΑΚΗ | ΙΔΙΩΤΗΣ | maria@nathess.com | 6972119137 | [Signature] |
| 28 | Εργαστήριο Ανόργανο | ΙΔΙΩΤΗΣ | sykoni@nathess.com | 6945955158 | [Signature] |
| 29 | Τσίπρος Δημόκας | ΙΔΙΩΤΗΣ | tsipros@nathess.com | 6945955158 | [Signature] |
| 30 | ΒΑΣΙΛΗΣ ΧΑΤΖΗΠΕΤΡΑΚΗΣ | Μαγνησία ΕΚΤ | maghisia@nathess.com | 6978007901 | [Signature] |



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MED Greenhouses

Διαβούλευση για το έργο "MED Greenhouses"






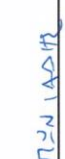
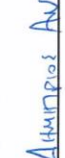



Green growth through the capitalization of Innovative Greenhouses

12 Οκτωβρίου 2018, Βόλος

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Green growth through the capitalization of Innovative Greenhouses

12 Οκτωβρίου 2018, Βόλος

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Project co-financed by the European Regional Development Fund
Διαβούλευση για το έργο "MED Greenhouses"
Green growth through the capitalization of Innovative Greenhouses
12 Οκτωβρίου 2018, Βόλος






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| 56 | | | | | |
| 57 | | | | | |
| 58 | | | | | |
| 59 | | | | | |
| 60 | | | | | |



Figure 27 - List of Participants 1st consultation Greece

4.1.2 Minutes

The first consultation of the MED Greenhouses project, was organized on Friday 12 October 2018 in the premises of University of Thessaly. The event took place at the central amphitheater of the School of Agricultural Sciences of the University of Thessaly, in Fytoko, under the auspices of the Laboratory of Agricultural Constructions and Environmental Control (Director of Prof. Nikolaos Katsoulas), of the Department of Agricultural Production and Rural Environment.

According to the agenda, at 10:00, Prof. Dr. Nikolaos Katsoulas, project coordinator from University of Thessaly, welcomed the project partners and all the participants. In his speech he presented the modern technologies and innovations in the greenhouse sector, highlighting the use of geothermal energy. As far as the greenhouse area in Greece is concerned, the country lags behind that of neighboring and other Mediterranean countries (e.g. Turkey, Spain), while at country level the greatest concentration of greenhouse units / businesses is observed in Crete and the Peloponnesus. Mr. Katsoulas explained the reasons why a greenhouse crop is more efficient than the open field (stable quantity and quality of harvest, efficient use of natural resources, less environmental burden, almost no dependence on weather conditions, longer growing season, etc.). He also referred to the differences between the "greenhouse" from the "innovative" greenhouse and the need to adapt the technologies to the needs of the producer, the cooperation between the actors and the dissemination of knowledge.

Afterwards, project Coordinator Prof. Alexandros Papachatzis from TEI of Thessaly presented the MED Greenhouses project, its objectives and the expected results in all participating countries. He referred to the previous projects that were used through MED Greenhouses, such as the LIFE + Adapt2Change project, which implemented the TEI of Thessaly and the University of Thessaly, where 2 innovative geothermal greenhouses (in Greece and Cyprus) were created. Finally, Mr. Papachatzis mentioned that the ultimate goal of the MED Greenhouse Project is the energy self-contained Mediterranean greenhouse.

Around 10:40, Mrs. Mata Papadimopoulou, representative of the Region of Thessaly talked about the role of the Region in the MED Greenhouses project and the development of the greenhouses in the region of Thessaly in general. Financial instruments were mentioned (Rural Development Program, NSRF, Development Law), as well as the problems that they present and the participation premises.

Mr. Stroggylis, representative of the construction company AGROTECHNIKI EPE, one of the largest greenhouse companies in Greece, talked about investments in the covered crops sector, financing needs and national deficits (e.g. bank loans). At present, in Greece, there are innovative greenhouses using geothermal energy, such as the 185-acre greenhouse in Erasmio of Xanthi, while in several areas, mainly in

Macedonia and Thrace, similar geothermal fields are utilized in greenhouse cultures, saving natural resources and protecting the environment.

The next presentation was given by Mr. Kadoglou from Plastics Thrace. Mr. Kadoglou presented new products used in innovative greenhouses such as soil cover materials.

The next presentation was given by the representative of the Green Growth Community of the Program, INTERREG MED, Mr. Kokosioulis. His presentation included the actions that have to be followed for reclaiming the results and the synergies of the INTERREG MED Green Development projects.

Between 11:00-11:15 p.m. a coffee break took place at the conference hall of the University of Thessaly.

At 11:15 there was a roundtable discussion, attended by Mr. Alexandros Papachatzis (TEI of Thessaly), Gardenia Growers Group, Apostolos Stroggylis (AGROTECHNIKI LTD), Theodoros Sdroulias (Journalist, representative of the Civil Society) and Mrs. Mata Papadimopoulou (Region of Thessaly). The 5 participant representatives of four-stranded operators addressed questions from the coordinator of the debate on the problems faced by the greenhouse sector and were asked for their placement.

4.1.3 Photo Gallery







Figure 28 - Photos from 1st consultation Greece

4.1.4 Key points – Conclusions

- ❖ The geothermal energy may significantly reduce the heating cost in the greenhouse. It is an environmental friendly methodology for heating the greenhouse with low CO2 emissions
- ❖ There are a few innovative geothermal greenhouses developed recently in Greece that are based on low enthalpy geothermal fields, especially in North Greece
- ❖ The geothermal greenhouses are based on self-contained energy and accordingly they are characterized as more sustainable compared to the classical ones
- ❖ There is a high need for more financial instruments for the development of innovative greenhouses since the cost of greenhouse construction is very high and farmers have low capacities.
- ❖ Several new technologies are available for implementation in greenhouses like irrigation and fertigation scheduling systems, decision support systems for energy and climate management in greenhouses and systems for labor management
- ❖ Cooperation between different stakeholders and key actors is absolutely necessary for the development of innovative greenhouses in Greece.

The conclusions of the Round Table Discussion were as follows:

- 1) The lack of financing tools, especially in terms of bank lending, does not allow the sector to grow in Greece, as opposed to abroad, e.g. Central and Northern Europe, where low-interest loans favor the investor.
- 2) Specialized personnel working in greenhouses do not have the appropriate education/experience (e.g. with postgraduate programs in hydroponics).
- 3) Greek producers/farmers/young entrepreneurs do not have the entrepreneurial mindset / initiative to invest in new technologies in greenhouses.
- 4) The development of investments in innovative greenhouses is a matter of concern for the Civil Society, which supports the effort to revitalize rural areas and the multiplier benefits of investing in local communities (new jobs, income for young people, developing a culture of entrepreneurship and cooperation).
- 5) In the future, networking, interconnection, cooperation between four-stranded carriers will play an important role in order to be informed about technologies, tools, funding and start-ups for new investments.

| QUESTIONS | | 1 | 2 | 3 | 4 | 5 | Average |
|-----------|---|---|---|---|---|----|---------|
| 1 | How satisfied are you with the organizing and support before and during the consultation? | - | | 3 | 7 | 16 | 4,5 |
| 2 | How satisfied are you with the material provided for the | - | | 4 | 2 | 20 | 4,8 |

| | | | | | | | |
|----------|---|---|--|----------|----------|-----------|------------|
| | consultation? | | | | | | |
| 3 | How satisfied are you with the topic of the consultation? | - | | 1 | 6 | 19 | 4,7 |
| 4 | How important do you consider consultation? | - | | - | 6 | 20 | 4,8 |

Table 2 - Questionnaires' results 1st consultation Greece

We recognize the importance of a consultation which aims at the management process that involves and develops Greenhouse farmers and businesses specialized in Agro-food and Greenhouse industry, policy makers-unions of Agricultural cooperatives, Research Technologies Institutes.

The provided material and the topic of the Consultation help to improve eco-innovation capacities of public and private actors in the Greenhouse/agriculture sector and support regulations, policies and enabling legal and regulatory environments that will encourage economic policies conducive to sustainable agriculture.

4.2 Consultation 2 - (24-02-2019) in Larissa, at TEI of Thessaly premises

A back to back event, a Consultation titled «Innovative measures for sustainable agriculture-Obstacles & Needs» and a seminar for the use of Innovative Geothermal Greenhouses were held at the premises of TEI of Thessaly (Larissa) on the 24th of February 2019 at 11.00 am.

4.2.1 Participants List - Agenda/Invitation

Home > News & Events > Events > Consultation | Larissa, TEI of Thessaly

CONSULTATION | LARISSA, TEI OF THESSALY

24/02/2019

A Consultation titled «Innovative measures for sustainable agriculture-Obstacles & Needs» and a seminar for the use of Innovative Geothermal Greenhouses in the context of the Interreg MED Greenhouses project will be held at the premises of TEI of Thessaly (Larissa) on the 24th of February 2019 at 11.00am.

You can take a look at the invitation and the agenda of the event in english and in greek.
You can register here.

IMPORTANT NOTE
The registrations' deadline is the 22nd of February 2019.

Agenda

- 11:00-11:15 Registration
- 11:15 – 11:30 Welcome speech
- 11:30 – 11:45 Presentation of the MED Greenhouses project
- 11:45-12:15 Open discussion for innovative measures of sustainable agriculture
- 12:15 – 12:45 Open discussion for obstacles & needs of agriculture sector
- 12:45 – 13:30 Lunch & coffee break
- 13:30 – 14:00 Presentation of Innovative Geothermal Greenhouses (benefits, operation, cost, technology specs, installation, construction)
- 14:00 – 14:30 Presentation of project's e-learning platform
- 14:30 – 15:00 Open Discussion / questions
- 15:00 – 15:30 Guided visit to the MED Greenhouses

Invitation for participation in the Consultation «Innovative measures for sustainable agriculture-Obstacles & Needs» and in the SEMINAR for the use of Innovative Geothermal Greenhouses in the context of the Interreg MED Greenhouses project.

Sunday 24 February 2019 – at 11:00 a.m.

TEI of Thessaly – Department of Agricultural Engineering Technologists - Laboratory of Horticulture & Soil Resources

Εταίρος Έργου:

Interreg Mediterranean MED Greenhouses

Project co-financed by the European Regional Development Fund

TEI of Thessaly

HELLENIC REPUBLIC REGION OF THESSALY

SEMIDE EMWIS

CEBAS-CSIC

Agricultural Research Institute

Figure 29 – Agenda & invitation of 2nd consultation Greece

4.2.2 Minutes

On Sunday 24th of February 2019, Prof. Alexandros Papachatzis from the University of Thessaly (Project Coordinator of the MED Greenhouses project), organized a back to back event including a Consultation with stakeholders of the agricultural sector with the topic "Innovative measures for sustainable agriculture- Obstacles & Needs" as

well as a Training Seminar / Workshop for "the Use of Innovative Geothermal Greenhouses" in the context of the MED Greenhouses project.

The consultation was organised at 11:15 with the participation of farmers, the Agricultural Cooperative of Fruit and Vegetable Producers of Volos, representatives of policy makers (from the Region of Thessaly), owners of agronomic shops, representatives of SMEs of the sector such as the fertilizer company "Phyto-nutrition ABEE" and students of the University.

The discussion was launched by Mr. Filippidis, who presented through the e-learning platform of the MED Greenhouses project, the activities and objectives, the expected results of the project, the involved countries and the contribution of the MED Greenhouses project in Green Growth. The last one will be achieved through the promotion of the Eco-innovative greenhouse technologies. In particular, he mentioned that the MED Greenhouses project is implemented in the context of the Interreg MED 2014-2020 program and will capitalize on the results of the LIFE+ project "Adapt2change", promoting and disseminating the innovative "Geothermal Greenhouses" in Mediterranean region, contributing to sustainable agricultural production and Circular Economy.

Then Prof. Papachatzis presented the problems and the needs of the agricultural sector at institutional, economic and technological level, as they were identified during a consultation that took part in Volos in October 2018. This presentation triggered an open dialogue among the participants, exchanging views on the current situation as well as about the changes that need to be undertaken for the promotion of "eco-innovative" technologies and investments in greenhouse production.

Prof. Papachatzis then presented the technology of Innovative "Geothermal Greenhouses", which can be an important tool for tackling "Climate Change" and the needs of the agricultural sector in terms of energy consumption, increased water consumption and increased use of fertilizers. Innovative Greenhouses, using "shallow geothermal" energy, can achieve significant results such as 67% reduction in energy consumption, 75% water savings, 46% less CO₂ emissions and 30% less fertilizer use. Finally, Mr. Papachatzis organised a guided tour of the MED Greenhouses infrastructures for the guests, presenting their innovative functions, such as remote control and monitoring of the cultivation via mobile phone.

4.2.3 Photo Gallery



Figure 30 - Photos from 2nd consultation Greece

4.2.4 Key points – Conclusions

Several participants including farmers and representatives of agricultural associations express their interest and the need of the establishment of agricultural cluster which will promote an innovative and a sustainable production model in agricultural sector. In this context, they were very keen to participate as members to the ATI-cluster which will be created during MED Greenhouses project.

5. Italy

5.1 Consultation 1 - GAL Molise verso il 2000 in Campobasso, Italy

5.1.1 Participants List –Agenda/Invitation

Announcements

Before the consultation

Organizing a consultation requires significant planning. We had to choose a suitable place for the event that could host our guests/stakeholders with the appropriate location and the date as well, so that most attendees can participate.

Based on that, the Consultation of MED Greenhouses project was organized on 11 June 2018 in the GAL Molise verso il 2000 head office in Campobasso. The venue is accessible for all, including people with special mobility needs. After that, project posters were prepared and mounted on poster boards in the exhibition hall with open access to everyone and announcements at media.

**Illustrazione del Progetto MED "Greenhouses"
Consultazione con i decisori politici e
i portatori d'interesse del settore serricolo**

**Lunedì 11 Giugno
alle ore 15.30**

GAL MOLISE VERSO IL 2000
Via Monsignor Bologna c/o Incubatore Sociale Campobasso

Programma

| | |
|---------------|---|
| 15:30 | Registrazione partecipanti |
| 16:00 - 16:20 | Saluti istituzionali e presentazione del progetto - <i>Paolo Manuele</i> (Presidente GAL Molise Verso il 2000) - <i>Adolfo Colagiovanni</i> (Project Manager MED-Greenhouses) |
| 16:20 - 16:40 | Canali di finanziamento e politiche regionali per la promozione di serre innovative - <i>Pierluigi Milone</i> (Regione Molise) |
| 16:40 - 17:00 | Eco-serra a emissione zero - <i>Carmine Nardone</i> (Futuridea) |
| 17:00 - 17:20 | Crea il tuo orto, una buona pratica in Molise - Naturavicina - <i>Donato D'Itri</i> (Diba Bio Innovative Bio Farm Società Agricola a.r.l.) |
| 17:20 - 18:20 | Tavola rotonda: Stato dell'arte e prospettive nel settore serricolo. Ostacoli alla promozione di investimenti in serre innovative |
| 18:20 - 18:30 | Il valore aggiunto del progetto MED-Greenhouses: attività e risultati attesi |

La partecipazione all'evento è diritto ai professionisti Agronomi e Forestali all'acquisizione del CFP secondo il regolamento CONAF in vigore sulla Formazione Professionale Continua

Spettimo organizzativa:
Molise Verso il 2000 Srl
Via Monsignor Bologna 15 - 86100 Campobasso
Tel 0874 694508
mail: segreteria@moliseversoil2000.it

5 giugno 2018 | MED Greenhouses, Notizie

Si informa che il Molise Verso il 2000 srl, nell'ambito delle azioni previste dal Progetto MED "Greenhouses", organizza, **lunedì 11 giugno 2018, ore 15:30**, presso la sede operativa, in via Monsignor Bologna 15/17 - c/o Incubatore Sociale – Campobasso, un incontro per illustrare il **Progetto MED "Greenhouses"** – **"Consultazione con i decisori politici e i portatori d'interesse del settore serricolo"**.

Il progetto ha l'obiettivo di capitalizzare i risultati del progetto LIFE + "Adapt2change" attraverso la promozione, disseminazione e trasferimento di innovazioni atte a ridurre l'utilizzo di acqua e di energia nel settore serricolo nell'area del mediterraneo. Il progetto avrà come obiettivo la sensibilizzazione su tematiche ambientali relative all'efficienza energetica, efficienza idrica e a produzioni sostenibili atte a contribuire alla "Green Growth" e promuovere lo sviluppo sostenibile.

E' possibile iscriversi all'evento, di seguito il link creato per la registrazione:
<http://www.123formbuilder.com/form-3786628/Event-Registration-Form>

"La partecipazione all'evento da' diritto ai professionisti Agronomi e Forestali all'acquisizione dei CFP secondo il regolamento CONAF in vigore sulla

Logos: C4ET, Erasmus+, BACCHUS SME, TERRITORI in una giusta, IL Diario DELLE Idee, incontra

<http://www.moliseversoil2000.it/category/progetti-in-corso/med/>

Gal Molise ha aggiunto un evento.
5 giugno 2018 ·

Si informa che il Molise Verso il 2000 srl, nell'ambito delle azioni previste dal Progetto MED "Greenhouses", organizza, lunedì 11 giugno 2018, ore 15:30, presso la sede operativa, in via Monsignor Bologna 15/17 - c/o Incubatore Sociale – Campobasso, un incontro per illustrare il Progetto MED "Greenhouses" - "Consultazione con i decisori politici e i portatori d'interesse del settore serricolo".
Il progetto ha l'obiettivo di capitalizzare i risultati del progetto LIFE + "Ada... Altro...

Consultazione con i decisori politici e i portatori d'interesse del settore serricolo

Lunedì 11 Giugno
alle ore 15.30

GAL MOLISE VERSO IL 2000
Via Monsignor Bologna c/o Incubatore Sociale Campobasso

Programma

| | |
|---------------|---|
| 15:30 | Registrazione partecipanti |
| 16:00 - 16:20 | Saluti istituzionali e presentazione del progetto - Paolo Maresca (Presidente GAL Molise Verso il 2000) - Adolfo Colagiovanni (Project Manager MED-Greenhouses) |
| 16:20 - 16:40 | Canali di finanziamento e politiche regionali per la promozione di serre innovative - Pierluigi Milone (Regione Molise) |

LUN. 11 GIU 2018
Med Greenhouses - Consultazione con i portatori d'interesse

Roberto, Ciccio e 3 amici

Figure 31 – Announcements 1st consultation Italy

Invitations

The invitations were sent to the participants 4 weeks before the event, including the agenda, and one week after and three weeks after, they received a reminder e-mail about the date of the Consultation. The invitations were sent to Regional public authority, local authorities, and representatives from Enterprises, Academia, Governmental and NGO, Business support organization, Sectoral agency, local farmers and students.

Invitation text:

Dear Mrs/Mr,

The GAL Molise verso il 2000, within the framework of the MED Greenhouses programme, which is being implemented as part of the Interreg MED 2014-2020 project, invites you to the first consultation of the project, which will take place on June, 11, at 15.30 pm at the GAL Molise verso il 2000 head office, at Campobasso.

Please find the programme's schedule attached. It will be a great honor for us if you attend the event.

Gal Molise verso il 2000

Paolo Manuele

Attached file:

MED Greenhouses

“Green Growth through the capitalization of innovative Greenhouses”

Brief description:

The project will capitalize results of other EU successful projects by promoting, disseminating & transferring innovative Greenhouses in the MED area, minimizing water & energy demand. The project will stimulate environmental awareness on issues related to energy & water efficiency & sustainable production, contributing to Green Growth & promoting sustainable development.

Objectives:

- **Improve eco-innovation** capacities of public & private actors in the greenhouse/agriculture sector through stronger **transnational cooperation, knowledge transfer & better networks** between research bodies, businesses, public authorities & civil societies.
- **Improve** the existing innovation framework conditions on the **MED agricultural** sector.
- **Strengthen & empower** innovation clusters & networks in the field of **agriculture/greenhouse production**.

Project Main Results:

1. **Develop, promote & integrate policy Recommendations** (favoring cooperation between actors of the 4helix) in local & regional planning in order to **boost eco-innovative greenhouses at transnational level**.
2. **Establish an Agricultural Innovative Cluster in the MED area** creating synergies & cooperation mechanisms between the actors of the 4helix of the agricultural/greenhouse sector.

3. **Increase the capacity building** of the members (actors of the 4helix) of the innovative cluster **through knowledge transfer, training courses (seminars, webinars), training platform.**

Partnership:

8 Partners: Technological Education Institute of Thessaly – Lead Partner (TEI of Thess), University of Thessaly (UTH), Region of Thessaly, Molise toward 2000, Euro-Mediterranean Water Information System Technical Unit (SEMIDE), Spanish National Research Council (CEBAS-CSIC), Regional Council of Berat (RCB), Agricultural Research Institute (ARI).

2 Associated Partners: Riegos y Tecnologia S.L (RITEC), Regione Molise

6 countries: Greece, Italy, France, Spain, Albania, Cyprus

Project Duration: 18 Months (01/02/2018-31/07/2019)

Programme

15:30 - Registration

16:00 - 16:20 – Institutional greetings and presentation of the project by the President of Gal Molise verso il 2000 Paolo Manuele

Presentation of the MED Greenhouses project by the Project manager Adolfo Fabrizio Colagiovanni

16:20-16:40 - Funding channels and regional policies for the promotion of innovative greenhouses by Regional authority of Molise Region Pierluigi Milone.

16:40-17:00 - Zero-emission eco-greenhouse by Futuridea Carmine Nardone

17:00-17:20 - create your vegetable garden by Donato D'Itri, Naturavicina

17:20-18:30 Round Table Discussion - Panel Discussion

Registration

Upon arrival at the venue, our guests completed the Attendance sheet for their registration

Participants list



Green Growth through the capitalization of innovative Greenhouses
"Crescita verde sostenibile attraverso la capitalizzazione delle innovazioni nel settore sericolo"



Illustrazione del Progetto MED "Greenhouses" Consultazione con i decisori politici e i portatori d'interesse del settore sericolo

Lunedì 11 giugno 2018 sede operativa del GAL Molise Verso il 2000 - Campobasso

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| MASSIMO AULITA | COOP SOCIALE SI PUO' FARE | PRESIDENTE | 372 514151 | si.puo.fare@si.puo.fare.it | [Firma] |



Green Growth through the capitalization of innovative Greenhouses
"Crescita verde sostenibile attraverso la capitalizzazione delle innovazioni nel settore sericolo"



Illustrazione del Progetto MED "Greenhouses" Consultazione con i decisori politici e i portatori d'interesse del settore sericolo

Lunedì 11 giugno 2018 sede operativa del GAL Molise Verso il 2000 - Campobasso

| Nome e Cognome | Ente, associazione, impresa ect.. | Qualifica | recapiti telefonici | e-mail | Firma |
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Agricultural Research Institute





Green Growth through the capitalization of innovative Greenhouses
"Crescita verde sostenibile attraverso la capitalizzazione delle innovazioni nel settore agricolo"



Illustrazione del Progetto MED "Greenhouses" Consultazione con i decisori politici e i portatori d'interesse del settore agricolo

Lunedì 11 giugno 2018 sede operativa del GAL Molise Verso il 2000 - Campobasso

| Nome e Cognome | Ente, associazione, impresa ect.. | Qualifica | recapiti telefonici | e-mail | Firma |
|---------------------|-----------------------------------|-------------------|---------------------|---------------------------|-------------|
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| BARICCI FRANCESCO | ITRONDIFORD SIDA SIO | | 328 8596937 | francesco@itrondiford.com | [Signature] |
| BARICCI ANTONIO | " | | " | " | [Signature] |
| D'ALICE DONATO | " | INGEGNERE | " | " | [Signature] |
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Green Growth through the capitalization of innovative Greenhouses
"Crescita verde sostenibile attraverso la capitalizzazione delle innovazioni nel settore agricolo"



Illustrazione del Progetto MED "Greenhouses" Consultazione con i decisori politici e i portatori d'interesse del settore agricolo


Lunedì 11 giugno 2018 sede operativa del GAL Molise Verso il 2000 - Campobasso

| Nome e Cognome | Ente, associazione, impresa ect.. | Qualifica | recapiti telefonici | e-mail | Firma |
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| ROBERTO D'ANTONIO | CIAC MOLISE 2000 | | 3291104394 | roberto@ciac.molise.it | [Signature] |
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| VIGORE DRESTE | DOT. AGR. | PROFESSIONISTA | 3181523764 | dretevigore@unimol.it | [Signature] |
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Agricultural Research Institute




Green Growth through the capitalization of Innovative Greenhouses
"Crescita verde sostenibile attraverso la capitalizzazione delle innovazioni nel settore serricolo"




Illustrazione del Progetto MED "Greenhouses" Consultazione con i decisori politici e i portatori d'interesse del settore serricolo

Lunedì 11 giugno 2018 sede operativa del GAL Molise Verso il 2000 - Campobasso

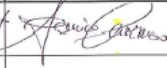

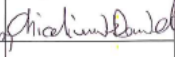
| Nome e Cognome | Ente, associazione, impresa ect.. | Qualifica | recapiti telefonici | e-mail | Firma |
|------------------|-----------------------------------|------------------------|---|-------------------------|---|
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| DANIELA CHIODINI | COOP. MORELIA | COLLABORATORE |  | coop.morelia@emv.it |  |
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Figure 32 - List of Participants 1st consultation Italy

5.1.2 Minutes

The first consultation of the MED Greenhouses project, was organized on 11 June 2018 in the GAL Molise verso il 2000 head office in Campobasso. The event took place at the head center of GAL, in Campobasso.

According to the agenda, at 16:00, Paolo Manuele, president of GAL Molise verso il 2000, welcomed the project partners and all the participants. Adolfo Fabrizio Colagiovanni, project manager of GAL Molise verso il 2000 presented the MED greenhouses project, its objectives and the expected results.

At 16:20, Pierluigi Milone representative of the Molise Region talked about the role of the Region in the of the greenhouses sector in general. Financial instruments were mentioned, as well as the problems that they present and the participation premises

At 16:40 Carmine Nardone, representative of the Futuridea, association for useful and sustainable innovation presented an innovative greenhouses with Zero-emission. The eco-greenhouse it uses an innovative system of photovoltaic panels able to ensure energy and guarantee an effective penetration of light.

At 17:00 Donato D'Itri owner of Naturavicina "Create your vegetable garden". The idea of allowing remote monitoring and purchase of products grown in greenhouses through the use of IoT, smartphones, remote management of crops.

17:20-18:2 Round Table Discussion - Panel Discussion

5.1.3 Photo Gallery



Figure 33 - Photos from 1st consultation Italy

5.1.4 Key points – Conclusions

The conclusions of the Round Table Discussion were as follows:

- 1) The lack of financing tools, does not allow the sector to grow in Italy.
- 2) Specialized personnel working in greenhouses do not have the appropriate education/experience on new technologies in greenhouses.
- 3) The development of investments in innovative greenhouses is a matter of concern for the Civil Society, which supports the effort to revitalize rural areas and the multiplier benefits of investing in local communities (new jobs, income for young people, developing a culture of entrepreneurship and cooperation).

4) The products grown in Italy are sometimes not competitive with those imported and disincentive the creation of greenhouses, very expensive especially from the energy point of view

5.3 Consultation 2 - GAL Molise verso il 2000 in Campobasso, Italy

5.3.1 Participants List - Agenda/Invitation

Announcements

Before the consultation

Organizing a consultation requires significant planning. We had to choose a suitable place for the event that could host our guests/stakeholders with the appropriate location and the date as well, so that most attendees can participate.

Based on that, the Consultation of MED Greenhouses project was organized on 30 January 2019 in the GAL Molise verso il 2000 head office in Campobasso. The venue is accessible for all, including people with special mobility needs. After that, project posters were prepared and mounted on poster boards in the exhibition hall with open access to everyone and announcements at media.



Progetto MED "Greenhouses"
2° Incontro con i decisori politici e i portatori d'interesse del settore serricolo

Mercoledì 30 Gennaio
alle ore 17.00

GAL MOLISE VERSO IL 2000
 Via Monsignor Bologna c/o Incubatore Sociale Campobasso

Programma
 17:00 - 17:10 Registrazione partecipanti
 17:15 - 17:30 Saluti istituzionali e presentazione risultati e attività programmate del progetto
 - Paolo Manuele - Presidente GAL Molise Verso il 2000
 - Adolfo Colagiovanni - Project Manager MED-Greenhouses
 17:30 - 19:00 Tavola rotonda
 - Breve presentazione dei partecipanti
 - Stato dell'arte e prospettive nel settore serricolo
 - Ostacoli alla promozione di investimenti in serre innovative

Segreteria organizzativa
 Molise Verso il 2000 Srl
 Via Monsignor Bologna 15 - 86100 Campobasso
 segreteria@moliseversoil2000.it - Tel 0874 484508



<http://www.moliseversoil2000.it/category/progetti-in-corso/med/>



Figure 34 – Announcements 2nd consultation Italy

Invitations

The invitations were sent to the participants 4 weeks before the event, including the agenda, one week after and three weeks after, they received a reminder e-mail about the date of the Consultation. The invitations were sent to Regional public authority, local authorities, and representatives from Enterprises, Academia, Governmental and NGO, Business support organization, Sectoral agency, local farmers.

Invitation text:



Dear Mrs/Mr,

The GAL Molise verso il 2000, within the framework of the MED Greenhouses programme, which is being implemented as part of the Interreg MED 2014-2020 project, invites you to the second consultation of the project, which will take place on January, 30, at 17.00 pm at the GAL Molise verso il 2000 head office, at Campobasso. Please find the programme's schedule attached. It will be a great honor for us if you attend the event.

Gal Molise verso il 2000

Paolo Manuele

Attached file:

MED Greenhouses

“Green Growth through the capitalization of innovative Greenhouses”

Brief description:

The project will capitalize results of other EU successful projects by promoting, disseminating & transferring innovative Greenhouses in the MED area, minimizing water & energy demand. The project will stimulate environmental awareness on issues related to energy & water efficiency & sustainable production, contributing to Green Growth & promoting sustainable development.

Objectives:

- **Improve eco-innovation** capacities of public & private actors in the greenhouse/agriculture sector through stronger **transnational cooperation, knowledge transfer & better networks** between research bodies, businesses, public authorities & civil societies.
- **Improve** the existing innovation framework conditions on the **MED agricultural** sector.
- **Strengthen & empower** innovation clusters & networks in the field of **agriculture/greenhouse production**.

Project Main Results:

4. **Develop, promote & integrate policy Recommendations** (favoring cooperation between actors of the 4helix) in local & regional planning in order to **boost eco-innovative greenhouses at transnational level**.
5. **Establish an Agricultural Innovative Cluster in the MED area** creating synergies & cooperation mechanisms between the actors of the 4helix of the agricultural/greenhouse sector.
6. **Increase the capacity building** of the members (actors of the 4helix) of the innovative cluster **through knowledge transfer, training courses (seminars, webinars), training platform**.

Partnership:

8 Partners: Technological Education Institute of Thessaly – Lead Partner (TEI of Thess), University of Thessaly (UTH), Region of Thessaly, Molise toward 2000, Euro-Mediterranean Water Information System Technical Unit (SEMIDE), Spanish National Research Council (CEBAS-CSIC), Regional Council of Berat (RCB), Agricultural Research Institute (ARI).

2 Associated Partners: Riegos y Tecnologia S.L (RITEC), Regione Molise

6 countries: Greece, Italy, France, Spain, Albania, Cyprus

Project Duration: 18 Months (01/02/2018-31/07/2019)



Programme

17:00 - Registration

17:15 - 17:30 – Institutional greetings and presentation of the project

by the President of Gal Molise verso il 2000, Paolo Manuele

- Presentation of the MED Greenhouses project by the Project manager Adolfo Fabrizio Colagiovanni

17:30-19:00 - Round Table Discussion - Panel Discussion

- state of the art of the greenhouse sector

19:00-19:15 the added value of the MED project, expected results and stakeholder involvement



Green Growth through the capitalization of innovative Greenhouses
 "Crescita verde sostenibile attraverso la capitalizzazione delle innovazioni nel settore **serricolo**"

Il progetto ha l'obiettivo di capitalizzare altri progetti europei di successo attraverso la promozione, disseminazione e trasferimento di innovazioni atte a ridurre l'utilizzo di acqua e di energia nel settore **serricolo** nell'area del mediterraneo. Il progetto avrà come obiettivo la sensibilizzazione su tematiche ambientali relative all'efficienza energetica, efficienza idrica e a produzioni sostenibili atte a contribuire alla "Green Growth" e promuovere lo sviluppo sostenibile.

Obiettivi

- Implementare le capacità eco-innovative degli attori pubblici e privati nel settore della **serricoltura**/agricoltura attraverso una forte cooperazione transazionale, il trasferimento di conoscenze e l'implementazione di reti tra enti di ricerca, attività economiche, enti pubblici e società civile.
- Migliorare le condizioni delle strutture innovative esistenti nel settore agricolo del **mediterraneo**.
- Rafforzare i cluster ed i network innovativi nel settore agricolo/**serricolo**.

Risultati attesi

1. Sviluppare, promuovere ed integrare delle strategie politiche (favorire la cooperazione tra attori di 4 **hells**) in piani locali e regionali con la finalità di promuovere l'eco-innovazione nel settore **serricolo** a livello transazionale.
2. Creare un cluster innovativo nel settore agricolo nell'area del mediterraneo creando sinergie e meccanismi di cooperazione tra gli attori del 4 **hells** del settore agricolo/**serricolo**.
3. **Incrementare** la "capacity building" dei membri (attori delle 4 **hells**) dei cluster innovativi attraverso il trasferimento di conoscenze, corsi di formazione (seminari, **webinars**), piattaforme di apprendimento

Partner:
 8 Partners: Technological Education Institute of Thessaly – Lead Partner (TEI of Thess), University of Thessaly (UTH), Region of Thessaly, Molise toward 2000, Euro-Mediterranean Water Information System Technical Unit (SEMIDE), Spanish National Research Council (CEBAS-CSIC), Regional Council of Beira (RCB), Agricultural Research Institute (ARI).
 2 Partners associati: Risesc y Tecnologia S.L (RUTEK), Regione Molise
 6 nazioni: Greece, Italy, France, Spain, Albania, Cyprus
 Durata del progetto: 18 Mesi (01/02/2018-31/07/2019)

Green Growth through the capitalization of innovative Greenhouses
 Incontro con i decisori politici e i portatori d'interesse del settore **serricolo**

30 Gennaio 2019
 ore 17:00
 sede GAL MOLISE VERSO IL 2000
 Via **Mons**, Bologna c/o Incubatore Sociale Campobasso

17:00 – 17:15 Registrazione partecipanti

17:15 – 17:30 – Saluti istituzionali e presentazione del progetto
 Paolo Manuele (Pres. GAL MOLISE VERSO IL 2000)
 Adolfo Colagiovanni (Project Manager MED-Greenhouses)

17:30 – 19:00 - Tavola rotonda

- Breve presentazione dei partecipanti
- Stato dell'arte e prospettive nel settore **serricolo**.
- Ostacoli alla promozione di investimenti in serre innovative

19:00-19:15 – Il valore aggiunto del progetto MED-Greenhouses: attività e risultati attesi, coinvolgimento degli stakeholder


Figure 35 – Programme 2nd consultation Italy

Registration

Upon arrival at the venue, our guests completed the Attendance sheet for their registration.

Participants list

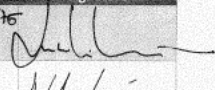
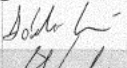
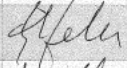
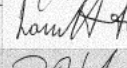
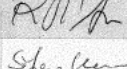
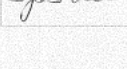






Project co-financed by the European
Regional Development Fund

Attendance sheet

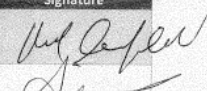
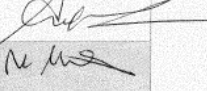

Date & Place: 30/01/2019, CARPOZASSO

| Organisation | Name | Position | Email | Phone number | Signature |
|------------------------------------|--|---------------------------|-----------------------------|--------------------|---|
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| SOZA GRILIA SRL | ANTONIO IANNETTA | TITOLARE | antonio.iannetta@soza.it | 335-7731357 |  |
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Project co-financed by the European
Regional Development Fund

| Organisation | Name | Position | Email | Phone number | Signature |
|-----------------------------|-------------------|------------|-------------------------|--------------|---|
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| CIA Molise | ALBERTO COPPINI | AGRONOMO | a.coppini@cia.it | 3937750780 |  |
| GAC MOLISE VERSIONE 2000 | PAOLO TANUCCI | PRESIDENTE | paolomanuelli@gmail.com | 3207470125 |  |
| | | | | | |
| | | | | | |




Figure 36 - List of Participants 2nd consultation Italy

5.3.2 Minutes

The second consultation of the MED Greenhouses project, was organized on 30 January 2019 in the GAL Molise verso il 2000 head office in Campobasso. The event took place at the head center of GAL, in Campobasso.

According to the agenda, at 17:00, Paolo Manuele, president of GAL Molise verso il 2000, welcomed the project partners and all the participants. Adolfo Fabrizio Colagiovanni, project manager of GAL Molise verso il 2000 presented the MED greenhouses project, its objectives and the expected results.

At 17:30 Round Table Discussion - Panel Discussion

Paolo Manuele, president of GAL Molise towards 2000, opened the meeting emphasizing the importance of understanding supply chains, improve the efficiency systems models and develop guidelines that can be applied to make a practical implication for innovation in greenhouse sector.

Tommaso Giagnacovo, farmer and representative of Coldiretti Molise (Farmers' Federation). Giagnacovo stressed the need to reduce costs to be competitive with international markets (very efficient), to increase revenues. He considered useful the activities of the MED project both for existing companies and for new companies.

Donato Campolieti, farmer and representative of CIA Molise (Farmers' Federation). The interested branch is the nursery one. Other supply chains are scarce or completely absent. In Molise region there is some greenhouse for first fruits or late products (in particular winter ones). Nurseries need nurseries, in Molise there are already realities with innovative greenhouses for energy saving and irrigation water recovery (photovoltaic panels)

5.3.3 Photo Gallery





Figure 37 - Photos from 2nd consultation Italy

5.3.4 Key points – Conclusions

The conclusions of the Round Table Discussion were as follows:

- 1) There are no specific research strategies for the greenhouse, from construction to systems of energy, conservation and cultivation
- 2) Lack of policy for knowledge transfer and measures to enable stakeholders to evaluate the effectiveness of innovations
- 3) In the future, networking, interconnection, cooperation between four-stranded carriers will play an important role in order to be informed about technologies, tools, funding and start-ups for new investments.

5.4 Consultation 3 - GAL Molise verso il 2000 in Campobasso, Italy

5.4.1 Participants List - Agenda/Invitation

Announcements

Before the consultation

Organizing a consultation requires significant planning. We had to choose a suitable place for the event that could host our guests/stakeholders with the appropriate location and the date as well, so that most attendees can participate.

Based on that, the Consultation of MED Greenhouses project was organized on 11 March 2019 in the GAL Molise verso il 2000 head office in Campobasso. The venue is accessible for all, including people with special mobility needs. After that, project posters were prepared and mounted on poster boards in the exhibition hall with open access to everyone and announcements at media.

MED Greenhouses
Mean Growth through the capitalization of innovative Greenhouses

MED Greenhouses
"Crescita verde sostenibile attraverso la capitalizzazione delle innovazioni nel settore serricolo"

Progetto MED "Greenhouses"
3° Incontro con i decisori politici e i portatori d'interesse del settore serricolo

Lunedì 11 Marzo
2019 alle ore 15.30

GAL MOLISE VERSO IL 2000
Via Monsignor Bologna c/o Incubatore Sociale Campobasso

Programma

15:30 - 15:45 Registrazione partecipanti

17:15 - 17:30 Saluti istituzionali e presentazione del progetto
- *Paolo Manuele* - Presidente GAL Molise Verso il 2000
- *Adolfo Colagianni* - Project Manager MED-Greenhouses

17:30 - 19:00 Tavola rotonda
- Stato dell'arte, prospettive e ostacoli nella promozione di investimenti in serre innovative;
- Individuazione delle principali innovazioni e problematiche nella gestione: agronomica, energetica e di soluzioni costruttive;
- Organizzazione degli eventi MED Greenhouses workshop e webinar.

SEMIDE
CEBAS-CSIC
GAL Molise
Interreg
Mediterranean
MED Greenhouses



<http://www.moliseversoil2000.it/category/progetti-in-corso/med/>



Figure 38 - Announcements 3rd consultation Italy

Invitations

The invitations were sent to the participants 4 weeks before the event, including the agenda, one week after and three weeks after, they received a reminder e-mail about the date of the Consultation. The invitations were sent to Regional public authority, local authorities, and representatives from Enterprises, Academia, Governmental and NGO, Business support organization, Sectoral agency, local farmers.

Invitation text:



Dear Mrs/Mr,

The GAL Molise verso il 2000, within the framework of the MED Greenhouses programme, which is being implemented as part of the Interreg MED 2014-2020 project, invites you to the third consultation of the project, which will take place on 2019 March, 11, at 17.00 pm at the GAL Molise verso il 2000 head office, at Campobasso.

Please find the programme's schedule attached. It will be a great honor for us if you attend the event.

Gal Molise verso il 2000

Paolo Manuele

Attached file:

MED Greenhouses

“Green Growth through the capitalization of innovative Greenhouses”

Brief description:

The project will capitalize results of other EU successful projects by promoting, disseminating & transferring innovative Greenhouses in the MED area, minimizing water & energy demand. The project will stimulate environmental awareness on issues related to energy & water efficiency & sustainable production, contributing to Green Growth & promoting sustainable development.

Objectives:

- **Improve eco-innovation** capacities of public & private actors in the greenhouse/agriculture sector through stronger **transnational cooperation, knowledge transfer & better networks** between research bodies, businesses, public authorities & civil societies.
- **Improve** the existing innovation framework conditions on the **MED agricultural** sector.
- **Strengthen & empower** innovation clusters & networks in the field of **agriculture/greenhouse production**.

Project Main Results:

7. **Develop, promote & integrate policy Recommendations** (favoring cooperation between actors of the 4helix) in local & regional planning in order to **boost eco-innovative greenhouses at transnational level**.
8. **Establish an Agricultural Innovative Cluster in the MED area** creating synergies & cooperation mechanisms between the actors of the 4helix of the agricultural/greenhouse sector.
9. **Increase the capacity building** of the members (actors of the 4helix) of the innovative cluster **through knowledge transfer, training courses (seminars, webinars), training platform**.

Partnership:

8 Partners: Technological Education Institute of Thessaly – Lead Partner (TEI of Thess), University of Thessaly (UTH), Region of Thessaly, Molise toward 2000, Euro-Mediterranean Water Information System Technical Unit (SEMIDE), Spanish National Research Council (CEBAS-CSIC), Regional Council of Berat (RCB), Agricultural Research Institute (ARI).

2 Associated Partners: Riegos y Tecnologia S.L (RITEC), Regione Molise

6 countries: Greece, Italy, France, Spain, Albania, Cyprus

Project Budget: 1.171.400,00 €

Project Duration: 18 Months (01/02/2018-31/07/2019)



Programme

15:30 - Registration

15:45 - 16:00 – Institutional greetings and presentation of the project by the President of Gal Molise verso il 2000, Paolo Manuele

Presentation of the MED Greenhouses project by the Project manager Adolfo Fabrizio Colagiovanni

16:30-18:00 - Round Table Discussion - Panel Discussion

- state of the art of the greenhouse sector
- identification of the main innovations and problems in agronomic, energy management and construction solutions
- Organization of MED workshop and Webinar




Figure 39 – Programme 3rd consultation Italy

Registration

Upon arrival at the venue, our guests completed the Attendance sheet for their registration.

Participants List

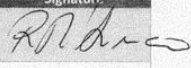
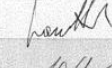
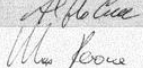
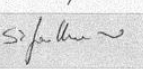






 Project co-financed by the European Regional Development Fund

Attendance sheet

Date & Place: Campobasso, 11th of March 2019

| Organisation | Name | Position | Email | Phone number | Signature |
|--------------------------|----------------------|-------------|----------------------------------|--------------|---|
| GAL Molise verso il 2000 | D'AMICO ROBERTO | EU project | robertamio@ctd.unimol.it | 439329114379 |  |
| SOLAGRIA SNC | IAMMETTA ANTONIO | TITOLARE | antonio.iammetta@solagri.it | 335-7731357 |  |
| ARSARP | Cocchiarella ALFREDO | FUNZIONARIO | alfredo.cocchiarella@virgilio.it | 3283813876 |  |
| UNITOL | PERONE CLAUDIO | BORSISTA | claudio.perone@gmail.com | 3203780560 |  |
| AGRONOMO | STEFANO MARINO | RICERCATORE | stefano.marino@gmail.com | 3205662659 |  |
| ARSARP | SALVATORE CIOCCA | FUNZIONARIO | S.ciocca@ar3amcb.it ar3arp.it | 328344568 |  |




Figure 40 - List of Participants 3rd consultation Italy

5.4.2 Minutes

The third consultation of the MED Greenhouses project, was organized on 11 March 2019 in the GAL Molise verso il 2000 head office in Campobasso. The event took place at the head center of GAL, in Campobasso.

According to the agenda, at 15:45, Paolo Manuele, president of GAL Molise verso il 2000, welcomed the project partners and all the participants. Adolfo Fabrizio Colagiovanni, project manager of GAL Molise verso il 2000 presented the MED greenhouses project, its objectives and the expected results.

At 16:00 - Round Table Discussion - Panel Discussion

Paolo Manuele, president of GAL Molise towards 2000, opened the meeting emphasizing the importance of understanding supply chains, improve the efficiency systems models and develop guidelines that can be applied to make a practical implication for innovation in greenhouse sector.

Alfredo Cocchiarella and Salvatore Ciocca, representative of the Regional agency for agricultural development stressed the state of the art in the Molise Region, the need to improve knowledge and financial instruments for improving innovation in the

agriculture sector. The needs of experimental sites for testing innovative greenhouses from an agronomic, energetic appoint of view.

Claudio Perone, engineer at University of Molise, stressed the need of improving knowledge and transfer know-how for the introduction of new ventilation systems, heating systems, robotization, use of probes, sensor and IoT.

Roberto D'Amico stressed the financing opportunity for the construction, energy management and innovation in the greenhouses sector

5.4.3 Photo Gallery

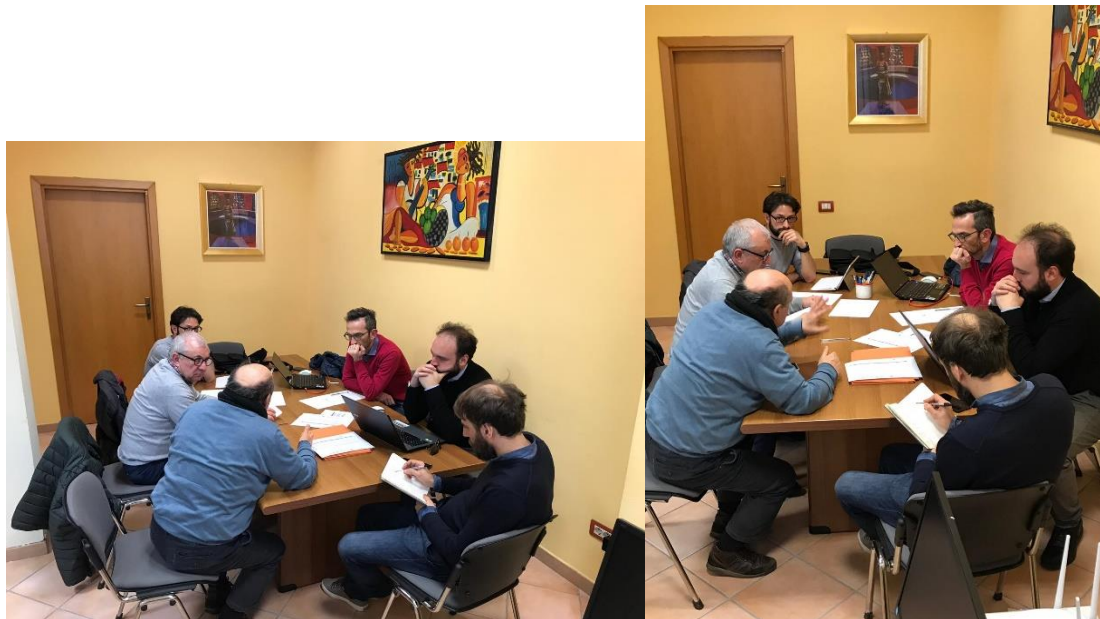


Figure 41 - Photos from 3rd consultation Italy

5.4.4 Key points – Conclusions

The conclusions of the Round Table Discussion were as follows:

- *Greenhouse production is usually based on small-size farms (less than 1 ha), often family-run, with a lack of specialized personnel (staff only laborers), finding non-impacting investments to create a production area.*
- *Identify direct investment - € 30-50,000 for booster the greenhouses sector, most of the funding channels are not dedicated to the “innovative greenhouse sector”. The main financial models are more general and inclusive (i.e. innovation financial model). Furthermore, the main obstacle in the proposal presentation is represented by the difficulty in writing the application and the uncertainty of the approval*

- *Lack of training, knowledge and farmers aggregation for booster greenhouses sector.*

6. Spain

6.1 Consultation 1

6.1.1 Participants List –Agenda/Invitation

Invitations -Announcements

Before the consultation

Organizing a consultation requires significant planning. We had to choose a suitable place for the event that could host our guests/stakeholders with the appropriate location and the date as well, so that most attendees can participate.

Based on that, the Consultation of MED Greenhouses project was organized on 18th December 2018 in the premises of the Farmer's Cooperative SOLTIR, in Murcia. The venue is accessible for all, including people with special mobility needs. After that, project posters were prepared and mounted on poster boards in the exhibition hall of university with open access to everyone and announcements at media.

Martes 18 de Diciembre

MED Greenhouses
Crecimiento ecológico a través de la capitalización de invernaderos innovadores

PROGRAMA

| | | |
|-------|-------|---|
| 9:30 | 10:00 | Bienvenida y presentación del proyecto MED greenhouses Juan José Álvarez Caballero, Director del CEBAS-CSIC |
| 10:00 | 10:30 | Posibilidad de diversificación de los drenajes de invernadero a bajo coste con invernaderos de madera Cecilia Díaz García (UPCT) y Juan José Martínez Sánchez, Director de la Cátedra Agrícola Sostenible (UPCT) |
| 10:30 | 11:00 | Nuevas técnicas de cultivo en invernadero Vicente Martínez, CEBAS-CSIC |
| 11:00 | 11:30 | Pausa – café |
| 11:30 | 12:00 | Tecnologías para la medición directa del consumo de agua y nutrientes en cultivos bajo invernadero Isabel Abizgueta, RITEC |
| 12:00 | 12:30 | Optimización del uso de agua mediante desalación en sistemas del cultivo. Proyectos RIDEOST, SEARRIBOST y LIFE-DESEACROP. Dolán Cheligo, UPCT |
| 12:30 | 13:30 | Menú redondo participativa – Retos de futuro en el sector del invernadero |
| 13:30 | | Aperitivo |

1,17 M €
Presupuesto del proyecto

0,99 M €
ERDF / IPA

18 Meses
Duración del proyecto

OBJETIVOS:

- Mejorar las capacidades de eco-innovación de entidades públicas y privadas en el sector invernadero / agropecuario a través de una cooperación transnacional más fuerte, transferencia de conocimientos y la mejora de redes entre organismos de investigación, empresas, autoridades públicas y sociedades civiles.
- Mejorar el marco de innovación existente en el sector agrícola MED.
- Fortalecer y potenciar los grupos y redes de innovación en el campo de la agricultura / producción en invernadero.

PRINCIPALES RESULTADOS DEL PROYECTO:

- Desarrollar, promover e integrar recomendaciones políticas (favoreciendo la cooperación entre los actores del 4heix) en la planificación local y regional para impulsar la innovación ecológica de los invernaderos a nivel transnacional.
- Establecer un grupo innovador agrícola en el área MED, creando sinergias y mecanismos de cooperación entre los actores del 4heix del sector agropecuario / invernadero.
- Incrementar el desarrollo de capacidades de los miembros (actores del 4heix) del clúster innovador a través de la transferencia de conocimientos, cursos de formación (seminarios, webinars), plataformas de formación.

Socios del Proyecto MED Greenhouses

Empresa Asociada

Entidades Colaboradoras

Interreg Mediterranean
MED Greenhouses
Tel. +34 968 39 62 00
<https://medgreenhouses.interreg-med.eu>
Proyecto co-financiado por el Fondo Europeo de Desarrollo Regional

CaixaBank

Soltir
Innovación por el Desarrollo Rural

Inscripción gratuita:
fpedrero@cebas.csic.es

Dirección del evento:
SOLTIR
Autovía San Javier-Murcia, Km. 22
30592 San Cayetano - Murcia (España)
Tel. +34 968 334 800

Figure 42 – Announcement 1st consultation Spain




 Project co-financed by the European Regional Development Fund


Programa

Martes 18 de Diciembre

| | | |
|-------|-------|--|
| 9:30 | 10:00 | Bienvenida y presentación del proyecto MED greenhouses Juan José Alarcón, Director del CEBAS-CSIC |
| 10:00 | 10:30 | Posibilidad de desnitrificación de los drenajes de invernadero a bajo coste con biorreactores de madera Juan José Martínez Sánchez, Director de la Cátedra Agricultura Sostenible (UPCT) |
| 10:30 | 11:00 | Nuevos sistemas de cultivo en invernadero Vicente Martínez, CEBAS-CSIC |
| 11:30 | 12:00 | Tecnologías para la medición directa del consumo de agua y nutrientes en cultivos bajo invernadero Isabel Abrisqueta, RITEC |
| 12:00 | 12:30 | Optimización del uso de agua marina desalinizada en sistemas del cultivo. Proyectos RIDESOST, SEARRISOST y LIFE-DESEACROP. José Maestre, UPCT |
| 12:30 | 13:30 | Mesa redonda participativa – Retos de futuro en el sector del invernadero |
| 13:30 | | Aperitivo |

Socios del proyecto MED Greenhouses
Empresa Asociada









Entidades colaboradoras




Figure 43 – Program 1st consultation Spain

Participants List



MED Greenhouses PROJECT
"Green Growth through the capitalization of innovative Greenhouses"
 18st Diciembre, 2018
 Organizado: CEBAS-CSIC Murcia (Spain)
 Lugar: Soltir
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MED Greenhouses PROJECT
"Green Growth through the capitalization of innovative Greenhouses"
 18st Diciembre, 2018
 Organizado: CEBAS-CSIC Murcia (Spain)
 Lugar: Soltir
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| José Paredes | Soltir | |
| Ángel García Ip. | Soltir | |
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| M ^a Dolores Helene Gono | Proexport | muelding@proexport.es |

MED Greenhouses PROJECT
"Green Growth through the capitalization of innovative Greenhouses"
 18th Diciembre, 2018
 Organizado: CEBAS-CSIC Murcia (Spain)
 Lugar: Soltir
LISTA DE ASISTENTES

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Figure 44 - List of Participants 1st consultation Spain

6.1.2 Minutes

The first consultation of the MED Greenhouses project in Murcia, was organized on 18th December 2018 in the premises of the Cooperative SOLTIR <http://www.soltir.com/>.

Soltir is a young company, located in the South-Eastern of Spain. It has marketed and distributed fruits and vegetables since 2002. These products are brought by our farmer partners, many of them produce their product under greenhouse.

Soltir is in charge of providing its products to the final consumer guaranteeing the production, manipulation and distribution processes.

Their facilities take up 58,000 square meters, 14,000 of them are destined to receive our partner's products and distribute them throughout Spain and other European markets.



According to the scheduled agenda, Prof Juan Jose Alarcón presented the project Medgreenhouses, objectives and activities, and afterwards it introduced the speakers. On the first place, Juan José Martínez Sánchez, Director of the Sustainable Agriculture Chair (University of Cartagena -UPCT) discussed about "Possibility of denitrification of greenhouse drains at low cost with wooden bioreactors". Afterwards, Dr. Vicente Martínez, from the department of nutrition and protected crops of CEBAS-CSIC give his speech about "New greenhouse cultivation systems", where he explained the results of the project LIFE DRAINUSE and project HIDROLEAF, both of them related to protected cultivation of crops.

Around 11:30, Ms. Isabel Abrisqueta from the company RITEC, spoke about "Technologies for direct measurement of water and nutrient consumption in greenhouse crops", related to the results on greenhouse of the project SMARTWATER using especial balances for measuring demand in crop culture. The next presentation was given by José Mestre from University of Cartagena UPCT, on "Optimization of the use of desalinated seawater in crop systems. RIDESOST, SEARRISOST and LIFE-DESEACROP projects".

Finally, a Participatory round table took place discussing about "Future challenges in the greenhouse sector", moderated by Francisco Pedrero Salcedo from CEBAS CSIC and with the participation of farmers, the regional government and greenhouse technological companies.

6.1.3 Photo Gallery



Figure 45 - Photos from 1st consultation Spain

6.1.4 Key points – Conclusions

The main key points discussed during the debate were as follows:

QUESTION 1: Which are the current trends you see?

- Pablo de Novagric, says that the tendency is to make greenhouses of greater height, to have more volume of air and that what allows to reproduce more easily any growing condition that is necessary to optimize agricultural activity.

- Juan Miguel Morales de Rufepa, emphasizes above all that the management of water that allows cultivation in the greenhouse is better than in open cultivation. The quality of the plastic also influences a lot, as well as the design of more compact plantations.

- Vicente Martínez from Cebas highlights the automated control that allows the technified greenhouse and that the future of greenhouses is also marked by the application of ICT technologies and new LED lighting techniques. It also highlights increasing the number of plants per m².

. Agricola Galindo, as an entrepreneur, emphasizes that the consumer must be approached to the type of agriculture that is being done today, and that has changed. It is requested that European institutions come to the field to verify the safety and quality with which it is produced in Murcia. Highlights the gap between public administration and the company, which is the one that has to implement all these technologies. The consumer also has to be aligned and that is the one that demands all this technology, since the agricultural entrepreneur will have the incentive to implement it.

He agrees that all this type of infrastructure is necessary

- The Office of technological transfer of the Region of Murcia (CARM), emphasizes that although in Murcia a lot of R&D is done, it is not transferred to the sector, but is mainly destined to the export (of the technology). Therefore, one of the objectives of the Ministry for 2019 is that transfer to farmers in Murcia. CARM offers to be the channel for dissemination, information and transfer. For this there are 12 demonstration centers, dependent on the Ministry, to also carry out training, information and demonstration activities.

QUESTION 2. What are the main obstacles facing the greenhouse production sector?

- Agricola Galindo, highlights the lack of water and on the other hand the entry of products from third countries. Farmers face many protocols demanded by customers in Nordic countries, which are the ones that ask for more excellence. That investment effort is not reflected in an effective communication to society and the consumer does not have enough information about this. Regarding water, Murcia faces a global market and those markets do not understand if there

is water or not, so the obstacle of this area is much greater. Finally, the generational change in agriculture is very late and can affect the loss of roots in the territory and the interest of continuing this activity of the generations that happen to the agricultural entrepreneur.

Yes they agree to invest in modernization.

Regarding energy consumption, the legal uncertainty in Spain regarding the cogeneration of solar energy and that has caused a brake stands out.

Regarding the use of desalinated water, the most important problem is boron, so it suggests that from the origin of the desalination plant itself, it should be reduced to a minimum.

- Rufepa again highlights the lack of water, as the main obstacle. This implies that in addition to having top-level greenhouses in design and technology, making additional investments such as reservoirs, reservoir coverage, optimization of available water management and having all the resources.

- Novagric, points out that the lack of interest in investing in technology in Murcia is perhaps due to this late generational change.

- CARM highlights the financing that is being put through operational groups and that will continue to advance.

- Vicente Martínez de CEBAS, believes that in the sector there has been a significant change at the generational level and that has been noted in reducing the obstacles to implement the technology. Farmer training is very important so that the results are implemented effectively. On the other hand, it emphasizes that there are more and more aid for collaboration between private companies and research centers, which contributes to reducing barriers to the implementation of research results.

QUESTION 3. Is there specific financing for eco-innovation?

- The Region of Murcia representatives respond that it is not specifically, but it is included in the measures of the operational groups and in the measures of innovation in general of the rural development plan.

The results of consultation number 1 in SOLTIR regard mainly the present demands and challenges of agriculture in the Region of Murcia and are summarized as follows:

- Tendency to make greenhouses of greater height, to have more volume of air and that what allows to reproduce more easily any growing condition that is necessary to optimize agricultural activity.
- The quality of the plastic a lot the final results of production under greenhouses as well as the design of more compact plantations.

- Automated control that allows the technified greenhouse and that the future of greenhouses is also marked by the application of ICT technologies and new LED lighting techniques. It also highlights increasing the number of plants per m².
- There is a technological gap between public administration and the farmers and production companies, so knowledge transfer is a clear key point to be promoted.
- The consumer has to be aligned with the knowledge about technology, because it is the one that demands all this technology, since the agricultural entrepreneur will have the incentive to implement it.
- Regarding specific financing from the Regional or National Government for eco-innovation, there is not at the moment, but it is included in the measures of the operational groups and in the measures of innovation in general of the rural development plan of the Region of Murcia.

6.2 Consultation 2

6.2.1 Participants List - Agenda/Invitation

Invitations -Announcements

Before the consultation

The second Consultation of MED Greenhouses project was organized on 4th June 2019 in the premises of the Technological Center TECNOVA, in Almería. Almería is the province in Spain with the biggest extension of greenhouses with more than 30,000 Ha. TECNOVA is the Technological Center of the Auxiliary, Postharvest and Fruit and Vegetable Packaging Industry, made up of more than 120 companies in the sector. It works around R + D + i, training, promotion and internationalization offering direct and quality services, adapted to the needs of the sector in a responsible, dynamic and reliable way, always seeking the continuous improvement of companies.

Invitation by e-mail The Regional Ministry of Agriculture sent an email of invitation to their mailing list of farmers and other stakeholders.

De: **PORTILLO MUÑOZ, JOSE MANUEL** <josem.portillo@carm.es>
Date: jue., 30 may. 2019 a las 10:02
Subject: Invernaderos innovadores
To: informe-semanal-agrario@listas.carm.es <informe-semanal-agrario@listas.carm.es>

El CEBAS de Murcia, ha organizado una jornada técnica sobre innovación en invernaderos en el marco del proyecto europeo INTERREG MEDGREENHOUSES, que tendrá lugar en el Centro Tecnológico TECNOVA.

Le rogamos que pueda hacer difusión de esta jornada, muchas gracias.

Reciba un cordial saludo



José Manuel Portillo Muñoz

Consejería de Agua, Agricultura, Ganadería y Pesca

de la Región de Murcia

Plaza Juan XXIII s/n. 30008 Murcia. Desp. A 2.01

Telf. 968366296

Figure 46 – Invitation 2nd consultation Spain

Poster

Martes 4 de junio

**MED Greenhouses
Green Growth through
the capitalization of innovative
Greenhouses**

| PROGRAMA | | | |
|---------------|--|----------------------|-------------------------------|
| 9:30-9:45 | Bienvenida y presentación de MED-Greenhouses | Juan José Alarcón | CEBAS-CSIC |
| 09:45 - 10:15 | Nuevos desarrollos para la toma de decisiones en el riego sin suelo | Luis Miguel Peragrin | RITEC |
| 10:15 - 10:45 | Modelo Integral Microbioma en el cultivo bajo invernadero. Residuos de campo | Manuel Pérez Escobar | SYMBORG |
| 10:45 - 11:15 | Aplicación de agrobotiles en los invernaderos | Antonio Álvarez | UAL |
| 11:15 - 11:45 | Plausa-café | | |
| 11:45-12:15 | IoT aplicada al invernadero | Eduardo Pardo | Tecnova |
| 12:15-12:45 | Tendencias en materiales de cubierta para invernaderos | Juan José Magán | Estación experimental Cajamar |
| 12:45-13:15 | Retos de futuro en el sector del invernadero | Juan Parño | Novedades Agrícolas |
| 13:15 - 14:00 | Discusión general-preguntas | | |
| 14:00 | Aperitivo | | |

1,17 M €
Presupuesto del proyecto

0,99 M €
ERDF / IPA

18 Meses
Duración del proyecto

OBJETIVOS:

- Mejorar las capacidades de eco-innovación de entidades públicas y privadas en el sector invernadero / agropecuario a través de una cooperación transnacional más fuerte, transferencia de conocimientos y la mejora de redes entre organismos de investigación, empresas, autoridades públicas y sociedades civiles.
- Mejorar el marco de innovación existente en el sector agrícola MED.
- Fortalecer y potenciar los grupos y redes de innovación en el campo de la agricultura / producción en invernadero.

PRINCIPALES RESULTADOS DEL PROYECTO:

1. Desarrollar, promover e integrar recomendaciones políticas (favoreciendo la cooperación entre los actores del 4helix) en la planificación local y regional para impulsar la innovación ecológica de los invernaderos a nivel transnacional.
2. Establecer un grupo innovador agrícola en el área MED, creando sinergias y mecanismos de cooperación entre los actores del 4helix del sector agropecuario / invernadero.
3. Incrementar el desarrollo de capacidades de los miembros (actores del 4helix) del clúster innovador a través de la transferencia de conocimientos, cursos de formación (seminarios, webinars), plataforma de formación.

Socios del Proyecto MED Greenhouses

Empresa Asociada



Entidades Colaboradoras

Interreg
Mediterranean
MED Greenhouses
Tel. +34 968 39 62 00
<https://medgroenhouses.interreg-med.eu>
Proyecto co-financiado por el
Fondo Europeo de Desarrollo Regional



Inscripción gratuita:
fpedrero@cebas.csic.es

Dirección del evento:
Centro Tecnológico
TECNOVA
Parque Tecnológico de Almería (PITA)
Avda. de la Innovación, 23. 04131 El Alquíón - Almería

Figure 47 - Poster- announcement 2nd consultation Spain

Programme





Workshop

MED-GRENGHOUSES “Green Growth through the capitalization of innovative Greenhouses”

Día : 4 Junio 2019

Localización: Centro Tecnológico Tecnova
 Parque Tecnológico de Almería (PITA)
 Avd. de la Innovación, 23. 04131 El Alquíán-Almería.

Programa

| Hora | Título | Ponente | Organización |
|---------------|---|----------------------|-------------------------------|
| 9:30-09:45 | Bienvenida y presentación de MED-Greenhouses | Juan José Alarcón | CEBAS-CSIC |
| 09:45 – 10:15 | IoT aplicada al invernadero | Eduardo Pardo | Tecnova |
| 10:15 – 10:45 | Modelo Integral Microbiano en el cultivo bajo invernadero. Resultados de campo. | Manuel Pérez Escobar | SYMBORG |
| 10:45 – 11:15 | Aplicación de agrotexiles en los invernaderos | Antonio Álvarez | UAL |
| 11:15 – 11:45 | Pausa-café | | |
| 11:45-12:15 | Nuevos desarrollos para la toma de decisions en el riego sin suelo | Luis Miguel Peregrín | RITEC |
| 12:15-12:45 | Tendencias en materiales de cubierta para invernaderos | Juan José Magán | Estación experimental Cajamar |
| 12:45-13:15 | Retos de futuro en el sector del invernadero | Juan Pardo | Novedades Agrícolas |
| 13:15 – 14:00 | Discusión general-preguntas | | |
| 14:00 | Aperitivo | | |

Figure 48 – Program 2nd consultation Spain

Participants List





MED-GREENHOUSES "Green Growth through the capitalization of innovative Greenhouses"

Localización: Centro Tecnológico Tecnova, Parque Tecnológico de Almería (PITA)

Día : 4 Junio 2019

Lista de Asistentes

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MED-GREENHOUSES "Green Growth through the capitalization of innovative Greenhouses"

Día : 4 Junio 2019
 Localización: Centro Tecnológico Technova, Parque Tecnológico de Almería (PTA)
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Figure 49 - List of Participants 2nd consultation Spain

6.2.2 Minutes

The second consultation and workshop has been organised by CEBAS CSIC, and starts with the introduction to the project to the audience and why this project could be of interest for an area like Almería, where there is the highest concentration of greenhouses in Spain.

Presentation of Eduardo Pardo (TECNOVA) "Internet of Things applied to greenhouses".

TECNOVA is a national technological center based in Almería. The ICT is facilitating a new revolution in agriculture. Nowadays, communication systems operating costs are more and lower, like Lora and other low cost sensors.

TECNOVA is participating at present in two innovative projects for monitoring and control of greenhouses, creating a prototype of sensor network Low Cost, using free hardware. The objective of this network will decrease the energy consumption notably.

Access to information is free, accessible on the internet and using different devices like smartphones or PC using the app developed by Tecnova.

Presentation of Manuel Pérez (SYMBORG) "Integral Microbial Model in greenhouse cultivation. Field Results"

The company SYMBORG starts their explanation about the interaction of micro-organisms and soil is a very innovative field of research in order to improve quality and productivity of crops. For example: symbiotic organisms; free-way organisms.

The MIM (Modelo Integral Microbiano) reaches an equilibrium in the rizzosfera. Symborg has developed a specific model that integrates with crops protocols used in greenhouses. Results allow a higher kg per m². Different essays has been taken in Tomato, Watermelon and Cucumber (10% higher), Pepper (15%).

A complete information can be seen on YouTube "MIM Rizosfera SYMBORG"

Presentation Universidad Almería – AGRO TEXTILES

Production losses caused by biotic agents in crops are difficult to assess. It is estimated that the damage caused by pests and diseases in all the crops of the planet reach 450,000 million euros per year. Aphid species, whiteflies and thrips are some of the most dangerous insect pests that damage crops worldwide. Anti-insect meshes are the most effective physical control method in intensive agricultural systems, representing a fundamental role in current Integrated Pest Control programs. These tissues prevent the contact of insects with crops and, consequently, reduce the

damage caused by them, either directly or indirectly. The advantages that derive from its use have both economic and environmental repercussions. The choice of the most appropriate textile should be made from the characteristic measures of insects whose contact with the crop is to be avoided. However, the most appropriate is not to work with average values of the body dimensions of insects, as is done today, but with frequency distributions of these dimensions, so that when referring to a mesh, percentages of exclusion according to population size distribution. The theoretical efficacy of anti-insect meshes is determined by comparing the characteristic measures of insect species that are intended to be excluded with the pore dimensions of meshes measured in orthogonal projection. There are hardly any works in which the morphological dimensions of the main species of insect pests are analysed and the computer tools used by manufacturers for the geometric characterization of agrotextiles are not very precise. In addition, this design criterion does not take into account the influence of other variables such as air speed, temperature and the sex ratio on textile efficiency. Nor is it analysed from the point of view of three-dimensionality, the real distance left by the spatial arrangement of the threads that make up the tissue and that determine an opening greater than that obtained in orthogonal projection. All these variables must be analysed for an adequate evaluation of the effectiveness of agrotextiles.

RITEC Presentation - New developments for decision making in soilless irrigation.

We are currently in the development phase where technology allows us to decide when to water, that is, when the plant needs it.

RITEC has developed a demand tray, connected with level sensors that activate irrigation. The level adjustment is critical to obtain an adequate response, avoiding contamination and loss of connectivity.

Other innovations of RITEC is the measurement of the water potential of the plant, lysimeters adapted to the greenhouse through a weighing system. It is a continuous monitoring of actual water consumption and is easily automatable.

Presentation by Juan José Magán - Las Palmerillas CAJAMAR - Trends in cover materials for greenhouses

Plastic materials:

Plastics are based on a polymer to which a series of additives that have a number of properties: antioxidants, glidants, UV absorbers and stabilizers, photoselectives, drip, thermal, etc. must be added.

One innovation carried out by CAJAMAR is plastic against-pests. The challenge is to fight against pest but not against bees, whose role is key for polinization

Another materials very innovative is light-plastics; anti-thermal plastics, heat-sensitive plastics (these plastics react to temperature and darken or recover transparency depending on the degree of temperature they reach)

Glass materials:

Glasses with anti-reflective coating, which allows an increase of even 8% in transmissivity compared to a normal glass. They also allow the reduction of NIR.

On the other hand it is working in diffuse glass, diffused light allows a better distribution of light in all the leaves, improving photosynthesis, compared to direct light.

Juan Pardo - AGRICOLAS NEWS - Future challenges in the greenhouse sector

Greenhouses must meet the challenges of new trends in organic farming, for this, they must be increasingly adaptable. Airtightness is the highest weight value, achieving reductions of 20-30% in pests and diseases in plants.

The greenhouse is a powerful climate control tool. Greenhouses are increasingly required to be taller and wider to accommodate the largest possible volume of air. This has been the subject of the Interconnect EVERGREEN project, where different models of dimensions have been tested, to improve the productivity of the greenhouse with less cost of structure and allowing the lengthening of the periods of cultivation, even without needing to stop cultivating in the summer time which is usual in the latitudes of Murcia and Almeria.

It stands out as new trends, the cultivation km0 and transport reduction to improve the carbon footprint, something that in our area is not significant but it is growing in the Netherlands and in Central Europe.

6.2.3 Photo Gallery





Figure 50 - Photos from 2nd consultation Spain

6.2.4 Key points - Conclusions

- Innovation in greenhouses can be observed from different points of view, regarding each and every part of the components of a greenhouse including the agronomic management of water and nutrients (screens, fertirrigation, hydroponics, textiles, etc.), **Information and Communication Technologies** are increasingly implemented in greenhouses or in the methodology to face new technological challenges in materials development of on-line monitoring.
- There is a strong trend in developing new software and hardware, trying to low **costs** of this kind of technologies in order to spread technology accessibility to a wider range of farmers and companies, especially for SME's and family own farms.
- Another innovation regards the adaptability to **market demands**, therefore, Greenhouses must meet the challenges of new trends in organic farming, for this, they must be increasingly adaptable. Quality standards for this kind of crops need of additional technological effort in pest control, agronomic management and greenhouse design.

The conclusions of the Round Table Discussion in were as follows:

- Many eco-innovations have been addressed in this workshop. However, cost is still an issue for the farmer. Therefore, are these eco-innovations easily implemented in the future?
- Innovation in greenhouses is increasingly present, however Almería has a different "less innovative" and cheap style of greenhouse, different from the trend in the world that is multitunnel. For example, Mexico. There, all innovations are now implemented. However, Almería is very old, where climate control is very difficult. 80% of greenhouses are not technified.
- One of the farmers, remarks that most young people are not interested in technology but only in commercialization, and therefore, not adding value to the product.
- Farmers need more technical training in order to have more knowledge for taking the best investment decisions.