Towards farms with zero carbon-, waste- and water-footprint. Roadmap for sustainable management strategies for Balkan agricultural sector

A preliminary assessment of sustainable agricultural practices in Cyprus

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7 partners from 5 countries
- Albania
- Bulgaria
- Cyprus
- FYROM
- Greece

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BalkanRoad main objectives:

- Develop strategies and methodologies for natural resources conservation, GHGs and waste generation reduction, increase recycling/reuse ratio in farm systems

- Develop a common Balkan protocol for the production of eco-labeled agricultural products
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Why focus on agriculture sector?
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The agriculture sector:
- is responsible for ~430m tons of CO₂ eq.
- 11% of EU CO₂ emissions
- Main byproducts: CH₄ & N₂O

EU goals:
- 40% reduction on GHGs emissions by 2030
- Net-zero emissions by 2050
Cyprus GAP analysis

- Determining and assessing the gaps for the adoption of sustainable practices in the agriculture sector
- Questionnaire survey targeting policy makers (TG2), regional authorities and other stakeholders
- Questionnaire survey targeting farmers (TG1)
**Questionnaire**

- Available online and on mobile app.
- Duration of 10 min.
- Questions regarding educational and social background, agricultural activities, use of ICT, sustainable practices, etc.
## Key survey findings

<table>
<thead>
<tr>
<th></th>
<th>TG-1: Farmers</th>
<th>TG-2: Policy Makers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>80% ≥ 40 years old</td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>90% have received no higher education (jus primary or secondary)</td>
<td>University graduates or even with a PhD.</td>
</tr>
<tr>
<td><strong>Further training</strong></td>
<td>Very limited</td>
<td>Special courses or seminars related to sustainable practices (no field training though)</td>
</tr>
<tr>
<td><strong>Familiarity with ICT &amp; other technologies</strong></td>
<td>Very limited</td>
<td>Full extend</td>
</tr>
<tr>
<td><strong>Familiarity with sustainable practices</strong></td>
<td>Limited or none</td>
<td>yes</td>
</tr>
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<td><strong>Agricultural sector</strong></td>
<td>80% believe that the agricultural sector does nothing wrong related to the environment</td>
<td></td>
</tr>
<tr>
<td><strong>environmental impact</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Familiarity with</strong></td>
<td>50% do not comply or rarely comply with current legislation</td>
<td>yes</td>
</tr>
<tr>
<td><strong>legislation in force</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Crop yield monitoring</strong></td>
<td>90% have no business plan in place and 50% do not monitor their crop yields</td>
<td></td>
</tr>
<tr>
<td><strong>and business plan</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Government subsidies on</strong></td>
<td>90% unaware of such funding schemes</td>
<td>Most of them already exploited of such financial instruments</td>
</tr>
<tr>
<td><strong>sustainable production</strong></td>
<td></td>
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<td>Importance of sustainability</td>
<td>70% consider it to be not important at all</td>
<td></td>
</tr>
<tr>
<td>Challenges on sustainable practices implementation</td>
<td>Complexity of sustainable practices, lack of information and support,</td>
<td></td>
</tr>
<tr>
<td>Favourable environment on sustainability</td>
<td>90% stated that this is not the case</td>
<td></td>
</tr>
<tr>
<td>Reasons hindering sustainable development</td>
<td>Insufficient education and training of the producers, low level of education on the topic of local counselors and agronomists, lack of significant economic and other incentives</td>
<td></td>
</tr>
</tbody>
</table>
Conclusions

- Aging human workforce in the agri sector.
- Sufficient lack of education and training of farmers in Cyprus.
- Unfamiliarity with the use of ICTs and other emerging technologies.
- Incomprehension of sustainable practices and circular economy concepts.
- Unfamiliarity with the actual causes of climate change.
Conclusions

- Lack of knowledge and training on sustainable practices adoption

- There is a huge gap related to policy makers perception on sustainability in the agricultural sector and the farmer’s perception on it.

- Poor knowledge dissemination and transfer mechanisms between state (policy making) level and farmer’s level
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Thank you for your attention

Questions?