

# PANACEA Roadmap for GREECE

PANACEA



CRES ; COSMOS project



CRES



LIBBIO project, Andean Lupin



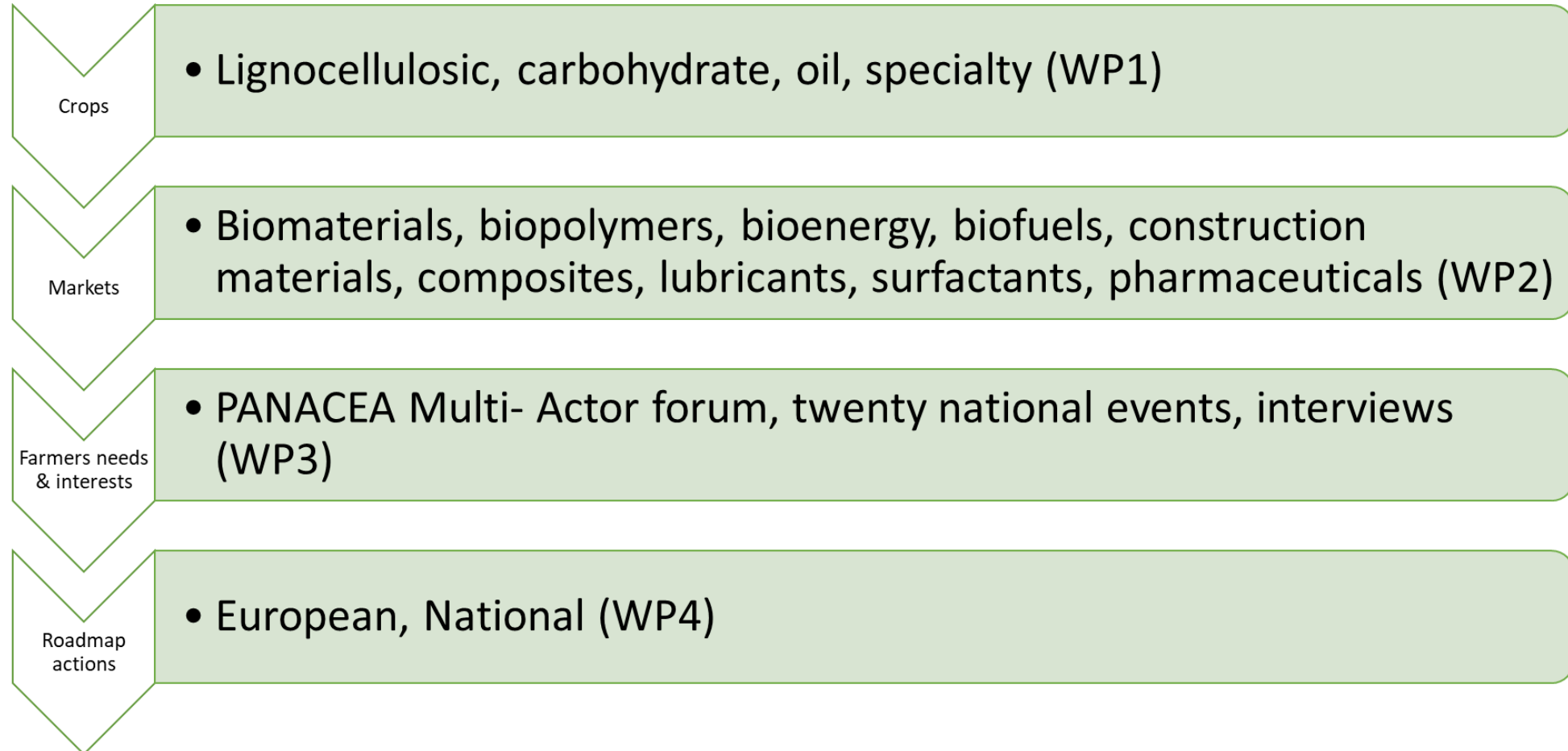
CRES/BECOOOL project



CRES

# Approach & Links to PANACEA Work Packages

PANACEA





CRES ; COSMOS project

### Markets

- Biofuels
- Polymers
- Lubricants, surfactants
- Cosmetics, health care products

### Drivers



- Productivity & ability to be grown in large scale using existing machinery
- Familiarity with ability to produce feedstocks for multiple end-uses
- Profitability
- Sustainability ?

### Barriers



- Cultivated in demo fields  
Low yields compared to rapeseed, etc.  
Low experience on how to fit with the existing rotation schemes.
- Low consumer awareness about camelina oil; small market and high competition with other oil crops
- Low revenue due to low yields
- Low experience of growing in marginal land

TRL>7			a) industrial production already available at commercial scale b) used at commercial scale for multiple end-uses c) high
TRL5-7			a) production available at demo scale b) recognized for its multiple end-uses c) medium
TRL3-5			a) research to production development b) recognized end-use but still at the research level c) low
TRL<3			a) basic research data available b) no recognized end-use c) very low



CRES ; COSMOS project

**Barriers**



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Low yields compared to rapeseed, etc.  
Low experience on how to fit with the existing rotation schemes.

Low consumer awareness about camelina oil;  
small market and high competition with other oil crops

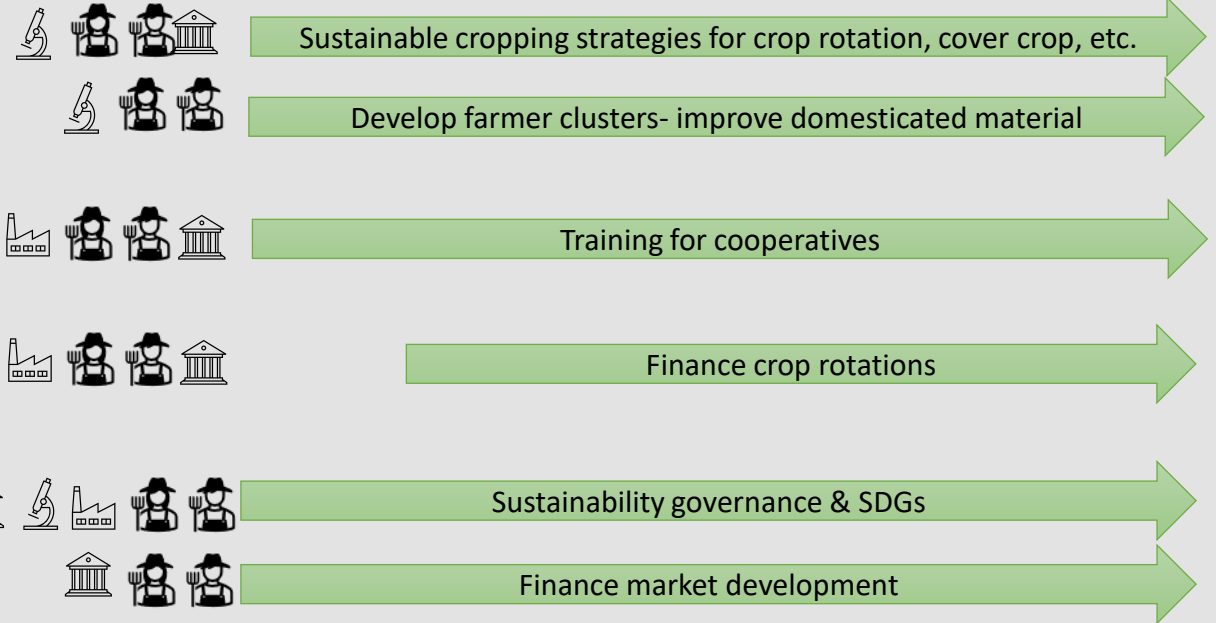
Low revenue due to low yields

Low experience of growing in marginal land

2021

2025

2030



Actors      Research Industry Government Agricultural community



CRES/BECOOOL project

### Markets

- Insulation mats
- Construction materials
- CBD production
- Textiles
- Pellets from its core

### Drivers











- Productivity & ability to be grown in large scale. 
- Familiarity with ability to produce feedstocks for multiple end-uses 
- Profitability 
- Sustainability 

### Barriers



- Harvesting is still not enough mechanized; Logistics require improvements
- Low experience of use in large scale, commercial production
- High processing costs
- Avoidance of monoculture  
Low experience of growing in marginal land

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## Roadmap actions to overcome the barriers



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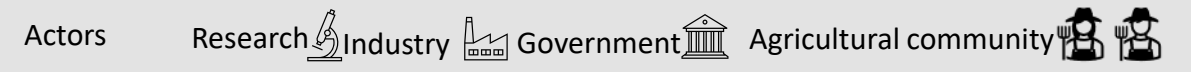
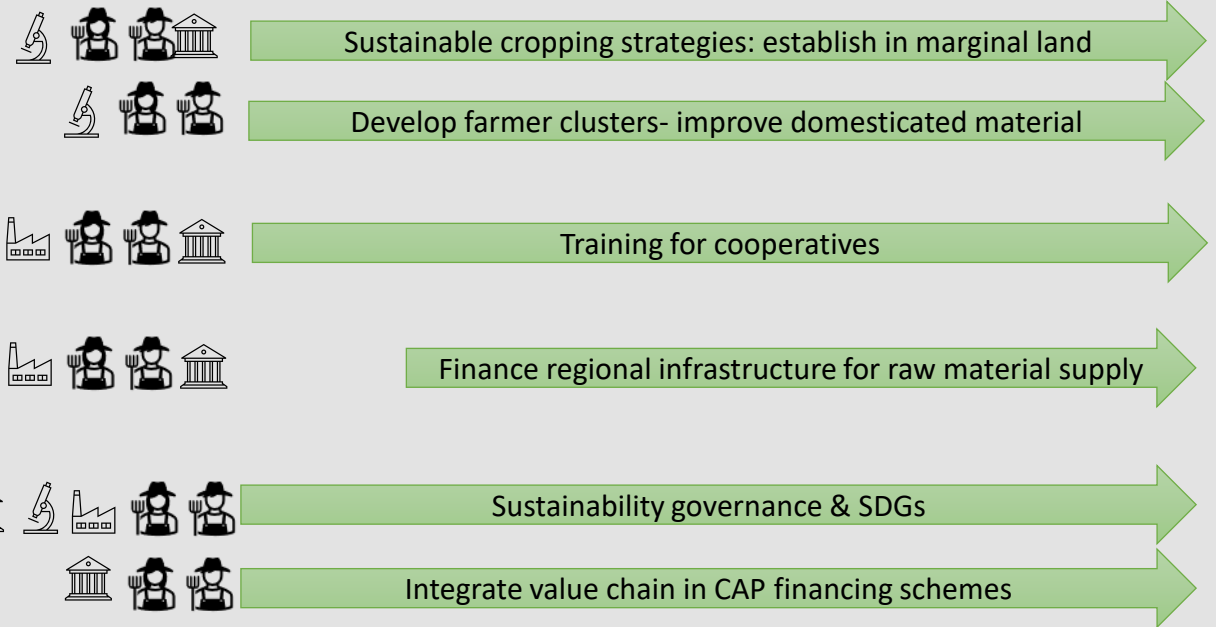
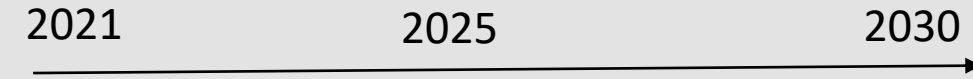
### Barriers

Harvesting is still not enough mechanized;

Low experience of use in large scale, commercial production

Low revenue in low quality soils  
Long payback period

Avoidance of monoculture  
Low experience of growing in marginal land





CRES

### Markets

- Bioenergy
- Biobased materials

### Drivers

- Productivity & ability to be grown in large scale using existing machinery (Happy face icon)
- Familiarity with ability to produce feedstocks for multiple end-uses (Neutral face icon)
- Profitability (Sad face icon)
- Sustainability (Happy face icon)

### Barriers

- Although there is knowledge of growing on marginal lands, this is on small demo fields.
- Low experience of use in large scale, commercial production
- Low revenue in low quality soils  
Long payback period
- Low experience of growing in marginal land

TRL>7			<ul style="list-style-type: none"> <li>a) industrial production already available at commercial scale</li> <li>b) used at commercial scale for multiple end-uses</li> <li>c) high</li> </ul>
TRL5-7			<ul style="list-style-type: none"> <li>a) production available at demo scale</li> <li>b) recognized for its multiple end-uses</li> <li>c) medium</li> </ul>
TRL3-5			<ul style="list-style-type: none"> <li>a) research to production development</li> <li>b) recognized end-use but still at the research level</li> <li>c) low</li> </ul>
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CRES

### Barriers



Although there is knowledge of growing on marginal lands, this is on small demo fields.

Low experience of use in large scale, commercial production

Low revenue in low quality soils  
Long payback period

Low experience of growing in marginal land

2021

2025

2030



Sustainable cropping strategies: establish in marginal land



Develop farmer clusters- improve domesticated material



Training for cooperatives



Finance regional infrastructure for raw material supply



Sustainability governance & SDGs



Integrate value chain in CAP financing schemes

Actors

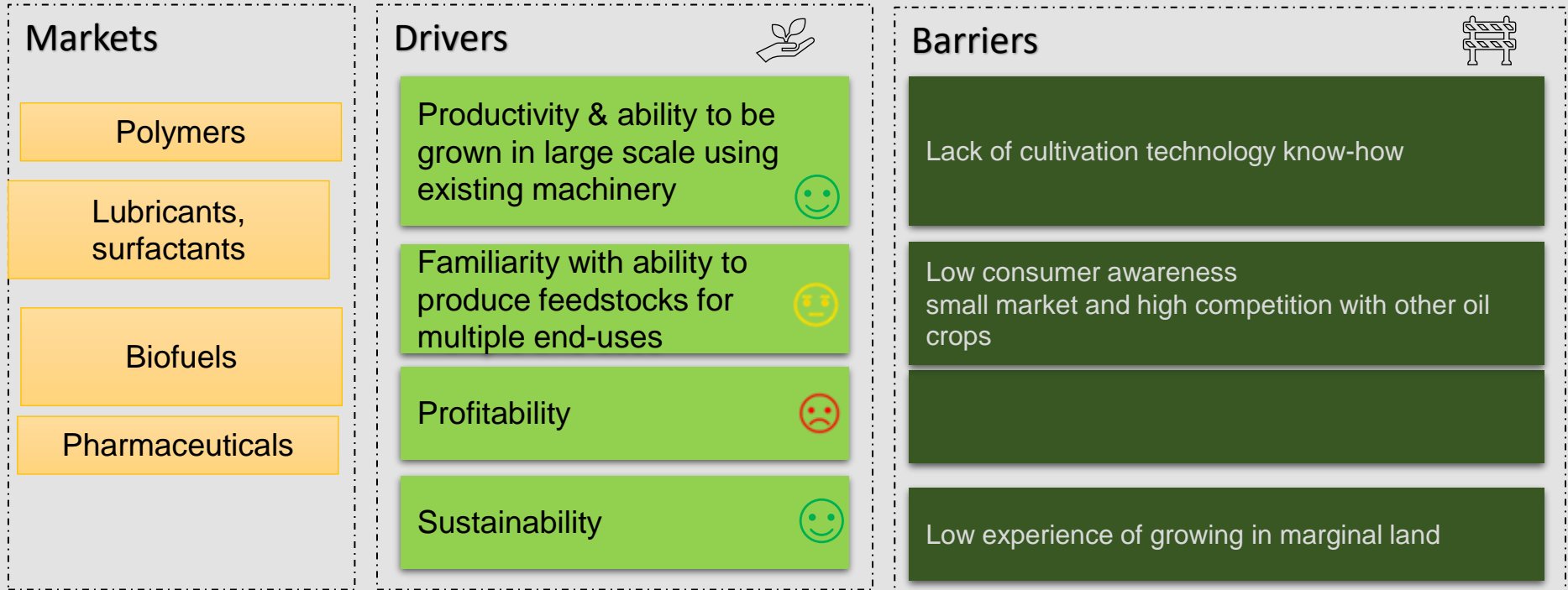
Research Industry Government Agricultural community











# Markets, drivers and barriers



CRES



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CRES

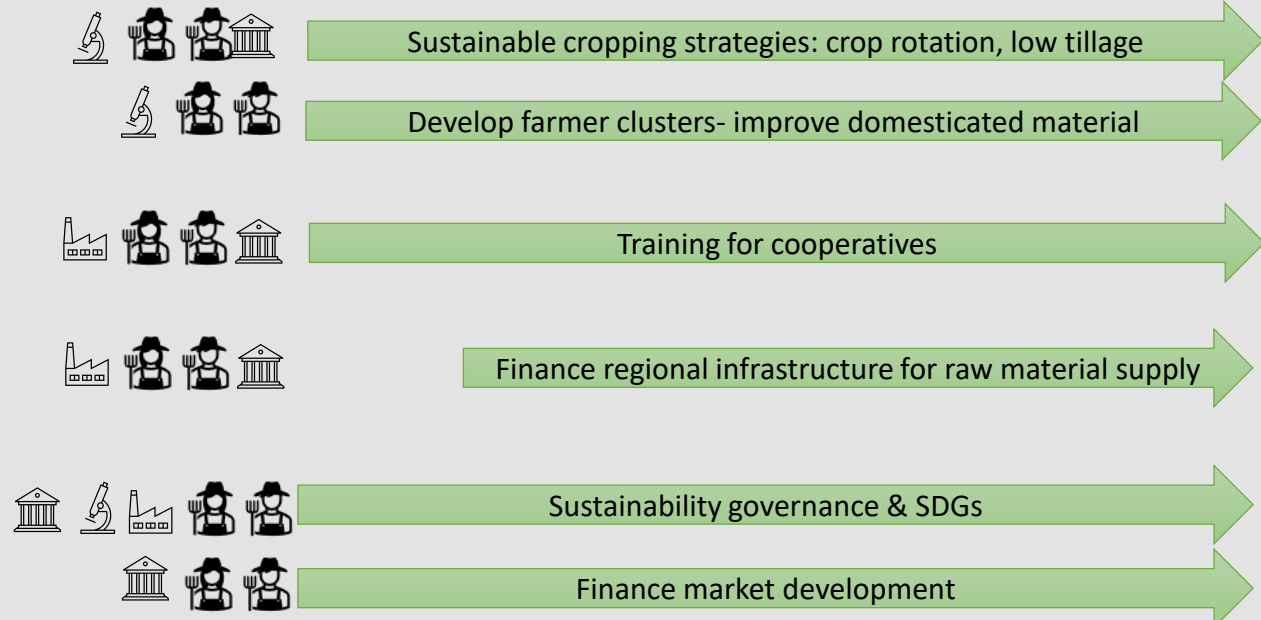
### Barriers






- Lack of cultivation technology know-how
- Low consumer awareness  
small market and high competition with other oil crops
- Low revenue due to low yields
- Low experience of growing in marginal land

2021

2025

2030



Actors    Research  Industry  Government  Agricultural community  



LIBBIO project, Andean Lupin

Markets

Lubricants, surfactants

Polymers

Pharmaceuticals

Cosmetics

Drivers



Productivity & ability to be grown in large scale using existing machinery



Familiarity with ability to produce feedstocks for multiple end-uses



Profitability



Sustainability



Barriers



The mechanical harvest of the crop is not well organised.

Low consumer awareness small market and high competition with other oil crops

Low revenue due to low yields

Low experience of growing in marginal land

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# Roadmap actions to overcome the barriers



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## Barriers



The mechanical harvest of the crop is not well organised.

Low consumer awareness small market and high competition with other oil crops

Low revenue due to low yields

Low experience of growing in marginal land

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Sustainable cropping strategies for crop rotation, cover crop, etc



Develop farmer clusters- improve domesticated material



Training for cooperatives



Finance regional infrastructure for raw material supply



Sustainability governance & SDGs



Finance market development

Actors

Research Industry Government Agricultural community