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AGRICULTURE & INNOVATION



## Climate-smart (sub)tropical food crops in the EU

### How to promote (sub)tropical crop diversification and integrated crop-livestock production systems to make them economically viable and more resilient to climate-change?

Agriculture in the outermost regions of the EU (ORs) is mostly oriented toward exports of products such as sugarcane and banana. These are produced as monocultures, which are more sensitive to pests, diseases and threats posed by climate change. At the same time, the EU outermost regions are generally very dependent on imported food.

Diversified systems, such as agroforestry or mixed crop-livestock systems, adapt better to local conditions. They are also potentially more environment-friendly and resilient to climate change. Market gardening, tuber, fruit or pig and poultry production targeting the local market are successful diversification options in ORs, and local demand is not yet met by current production.

For continental Europe, (sub)tropical crops are of high interest as well, as they can be relevant options in the climate change context. In fact, climate change and the resulting changes in temperature and rainfall may bring further changes in land suitability and crop choices in continental EU.

In line with the Farm to Fork strategy, (sub)tropical crops, both in outermost regions and in continental Europe, can be interesting options to promote more diversified, sustainable and resilient production systems, that are better adapted to the challenges posed by climate change.

The experts of the EIP AGRI Focus Group Climate-smart (sub)tropical food crops in the EU identified key themes for further work to improve the sustainability of tropical cropping systems in ORs and continental Europe:

- ▶ Improving the eco-efficiency of traditional systems in ORs
- ▶ Technical issues to improve current management of (sub)tropical crops (e.g. water use, varieties, crop associations, pest management, ...)
- ▶ Promoting Innovative value chains to create added value for the products of multifunctional agriculture, including labelling and the development of local processing facilities in ORs
- ▶ Supporting knowledge exchange and education, especially between outermost regions and continental EU

*"It became obvious that most problems encountered in these vastly different regions were strikingly similar to ours in French Guiana. Moreover, I enjoyed being able to discuss ideas with this very diverse panel of experts composed of researchers, advisors and farmers. It definitely helped me grow my network!".from the field. We are keeping in touch and continue planning together."*

- Julien Villard (French Guiana), farmer and expert

EIP-AGRI Focus Group on Climate-smart (sub)tropical food crops in the EU -

# Climate-smart (sub)tropical food crops in the EU

## Ideas for Operational Groups

- ▶ Identify and evaluate the different services provided by traditional farming systems (food, environmental, social, etc.)
- ▶ Study the application and implementation of biological and biotechnical control strategies as alternative solutions to control pests and diseases affecting tropical crops
- ▶ Develop new ways to better connect, and foster knowledge exchange between farmers and educational institutions, for instance by creating local, practical courses based on pioneer farmer knowledge
- ▶ Develop customised solutions for low-cost and small-scale food processing equipment, and study the feasibility of creating processing facilities for a collective of farmers or small cooperatives

## Research needs

- ▶ Design eco-intensive traditional farming systems adapted to local conditions, through participatory design methods and considering multicriteria evaluation
- ▶ Assess, compare and monitor agroforestry systems from different pedo-climatic regions, using common tools and methodologies and study how they may contribute to achieving the Green Deal targets, and especially those under the Farm to Fork Strategy
- ▶ Evaluate the impacts of the (ecosystem) services provided by farmers/farms and make sure this is adequately reflected in food prices

More ideas for Operational Groups and research needs are in the Focus final report

## More information on the EIP-AGRI website

<a href="#">Final report</a>	<a href="#">Operational groups related to (sub)tropical food crops</a>
<a href="#">Focus Group webpage</a>	Inspirational ideas: <ul style="list-style-type: none"><li>• <a href="#">Sustainable farming in French Guiana</a></li><li>• <a href="#">Sustainable Spanish papayas</a></li></ul>

Support Facility Innovation & knowledge exchange | EIP-AGRI  
Koning Albert II laan 15 - 1210 Brussels - BELGIUM  
Tel +32 2 543 72 81 - [supportfacility@eip-agri.eu](mailto:supportfacility@eip-agri.eu) - [www.eip-agri.eu](http://www.eip-agri.eu)

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Register to [www.eip-agri.eu](http://www.eip-agri.eu) where you can find peers, projects, ideas and resources to catalyse innovation in agriculture, forestry and horticulture together.

