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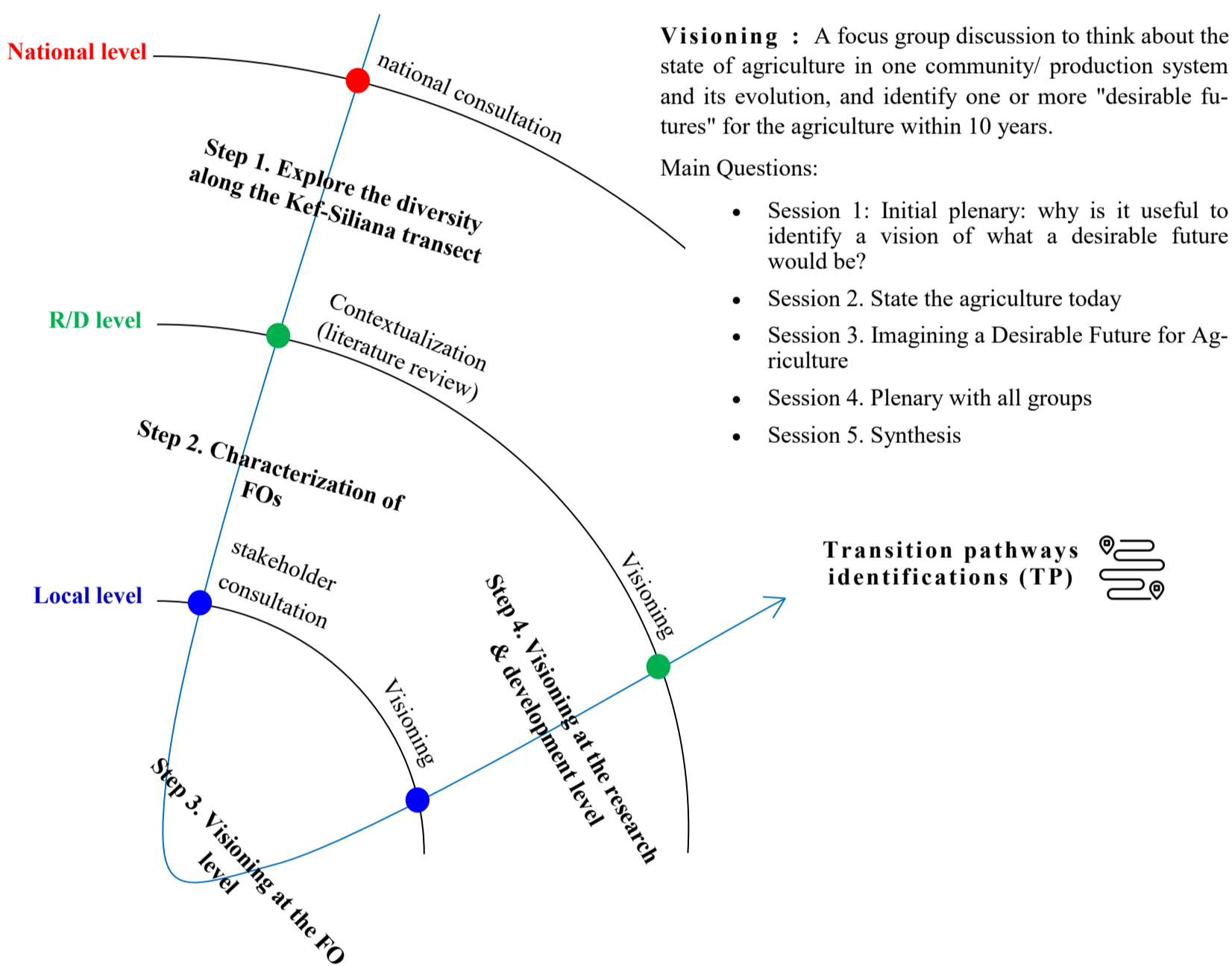
Tunisian agriculture has always tried to adapt to the increase in food demand for centuries, and the modes of agricultural production have been gradually transformed. Notably, agriculture was intensified, through productivist orientations, with increased land degradation. The opportunities of a sustainable development are more and more weakened. Focusing only on economically profitable agricultural systems has heavily aggravated the agro-environmental landscapes with increasing risks and uncertainties. The impact of agricultural activities on the environment and its less favorable consequences on resources such as land support and water resources are more harmful in mountainous areas than in the plains since mountain agriculture has specific characteristics: difficult natural environment related to altitude and climate, fragility of natural resources and land resources, the sharp decline in the number of farms due to social and geographical isolation.

## PROBLEM:

- Land degradation high risk
- Low sustainable intensification
- Fragility of natural resources
- Absence of context-specific models

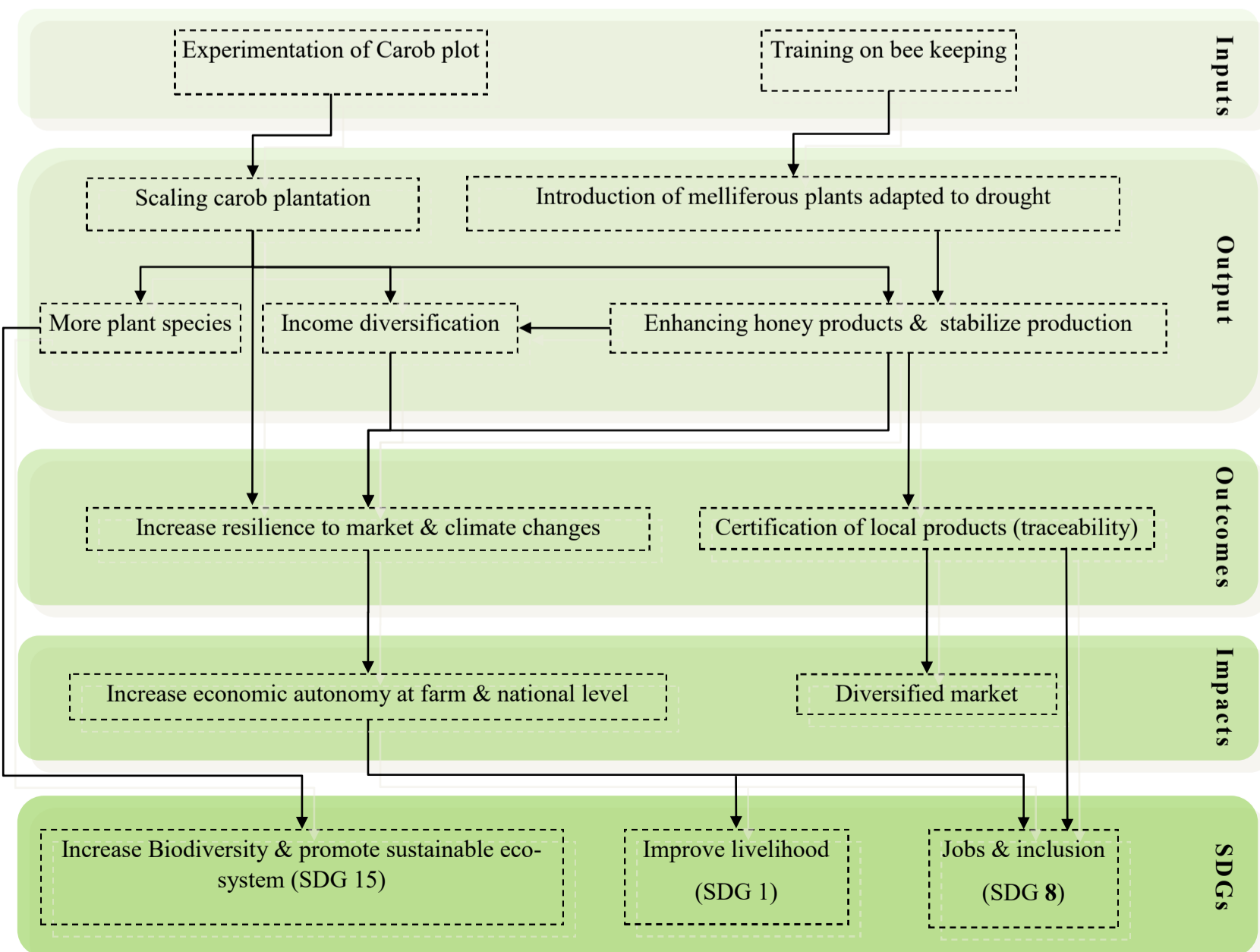
**RESEARCH QUESTION:** How to define and build a context-specific transition pathway in an agroforestry system?

**METHODOLOGY:** A solid methodology is needed, that combines literature review, national and stakeholder consultation, visioning, and focus group discussions with feed backs.



## RESULTS :

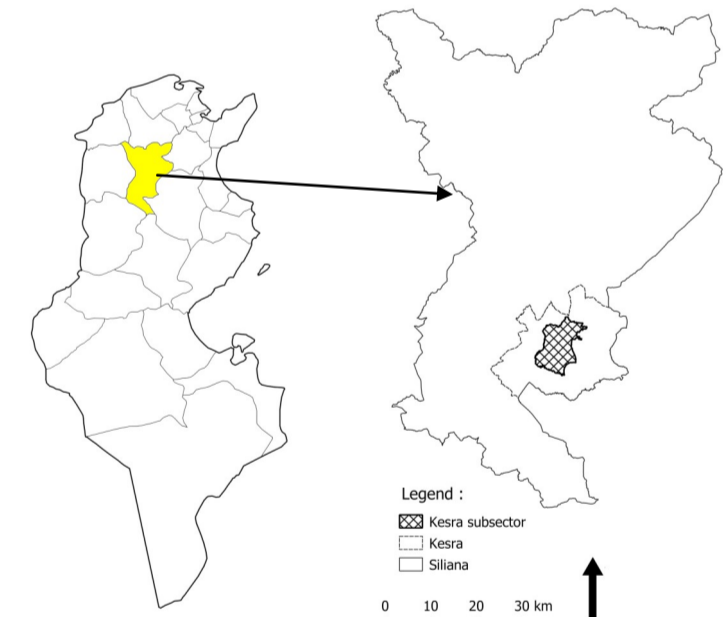
### TP : DIVERSIFIED LOCAL AND NATURAL BASED PRODUCTS LIKE HONEY AND CAROB



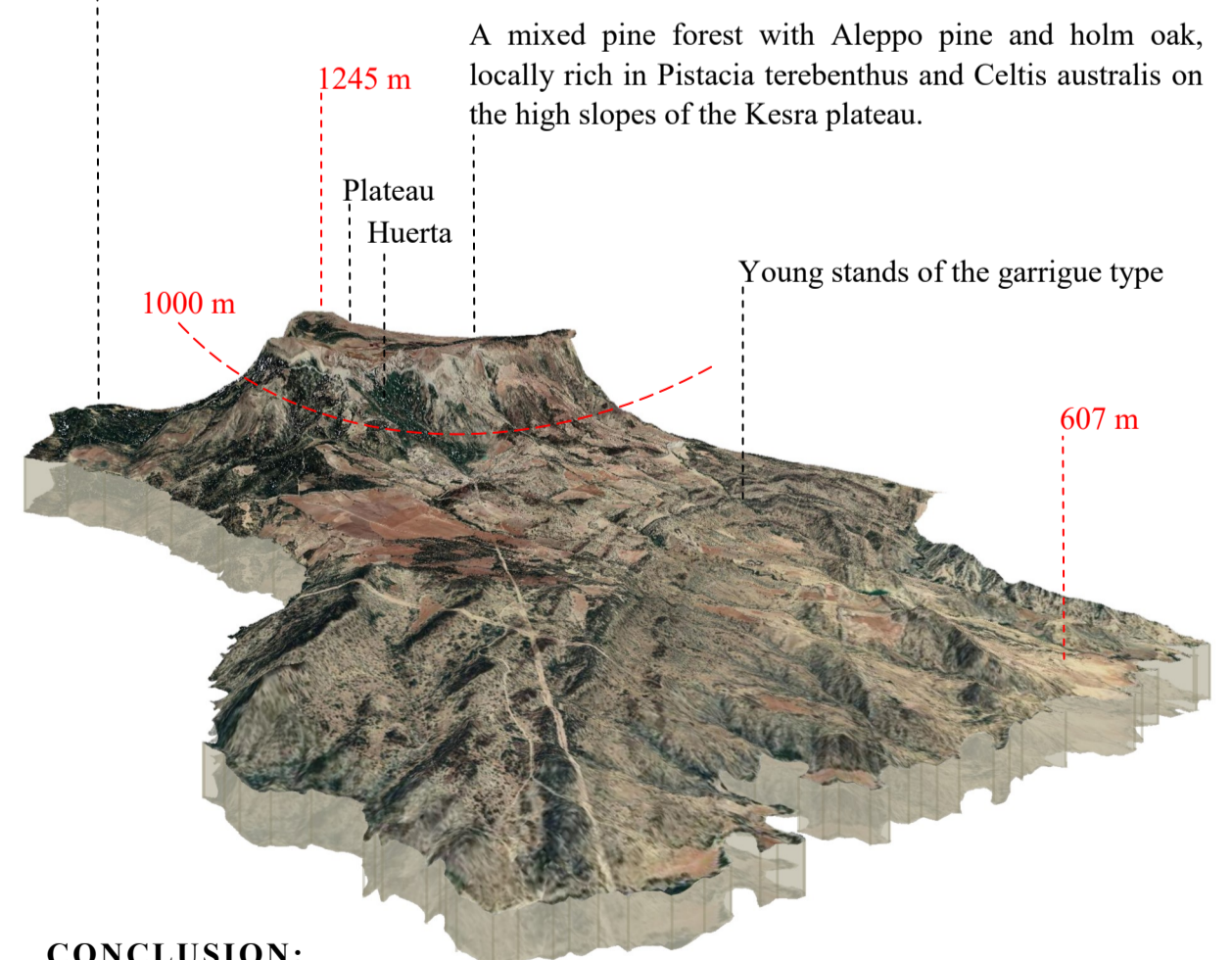
Typical agroforestry traditional unit in Kesra. (35°81'14.61"N, 9°36'43.23"E) An agricultural production unit of too small size with a gravity irrigation network. Terraces divided by low walls of dry land and stone cordons. A diversity of cultivated species (olive tree, fig tree, pomegranate tree, vegetable species for family consumption) delimited by wild berries associated with forest trees (cypress...), see (Abaza,2021 ; Mars et al., 2009)

## CONTEXT:

- very uneven relief.
- Upper semi-arid bioclimatic stage with cold winters and hot summers.
- The average annual temperature is around 15°C.
- The average rainfall is around 450 mm.
- The diversity of soils is high due to the extreme variability of substrates, climates and plant formations.
- Water resources are quite diverse. There are 8 equipped deep boreholes, nearly 100 shallow boreholes, 17 hill lakes, 20 natural springs and two hill dams.
- The olive tree is the most widespread fruit species in Kesra. It is cultivated in the open or in association with other fruit species such as fig, cherry, almond and pomegranate trees.
- The current vegetation cover of Kesra is a mosaic of plant units composed of floristic groups of different ecological affinities interwoven into the landscape of the region. The flora of Kesra is very rich in rare, endemic and biodiversity-relevant species.



An Aleppo pine forest, locally rich in red juniper, oleaster, lentisk and oxycedar juniper, on the middle and lower altitudes.



## CONCLUSION:

The success of this on-field interventions and the expected results in term of outputs, outcomes and SDGs will still depending on other determinant factors such as stakeholders engagement, policies, climate bottlenecks which will need other complementary research and studies.

## Acknowledgement

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