Global population growth will require a 60% increase in food production by 2050 (FAO, 2022). However, the current food system has failed to provide nutritious food for all and contributes to environmental and natural resources degradation. Therefore, a profound transformation towards ecological practices and techniques can bring responses for designing and managing agricultural and food systems that are productive, resilient, sustainable and equitable.

In Tunisia, olive-based farming system prevails as one of the dominantly agricultural production systems. In the transect of El Kef-Siliana, in the semi-arid region of Tunisia, olive plots are overwhelmingly owned by small scale producers, which comes with a set of challenges related to escalated soil degradation and extremely poor soil health, low productivity and incomes, and lack of commercial integration into effective value chains (Attaoui and Boufateh, 2019).

Figure 1. Kef-Siliana transect

The methodology used to build the most appropriate agroecological transition pathway is based on participatory approaches. Visioning is a focus group discussion.

Results

The AE transition pathway identified in semi-arid olive-based system suggests an emphasis on the valorization of the olive products and by-products (recycling and certified products) in addition to other agricultural practices such as input reduction, synergies across system components, biodiversity, animal health, etc.

Conclusion

The resulting impact pathway records promotes diversified food pattern, improving soil health, increasing economic autonomy at farm and national level, diversifying market, and promotion of local products. A set of action research and development activities have been developed and will be implemented during 2023 and 2024 to pilot the suggested transition pathways.

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