From Soil to Health: Environmental Knowledge, "Living Soils" and the Rise of European Organic Farming Networks Céline Pessis

Booming research on the public health impact of food, new "nutraceuticals" markets, and serious environmental warnings challenging the intensive farming model seem to suggest that, in a range of arenas, links are currently forming between technical choices regarding agriculture, food quality, the environment, and health.

Studies on the postwar era, however, show that these forms of "agro-health-environmental" concerns have a longer history, and developed in opposition to the emergence of intensive farming. A wide variety of stakeholders (agronomists, veterinarians, farmers, scientists, physicians, hygienists, traders, etc.) worked on establishing a multitude of relationships between the health of soils, plants, animals, and humans. Hence the object of my research project: how did agriculture, health, and environmental concerns come to be interconnected in such a way? Which actors, which knowledge practices, and which concrete organic farming practices contributed to these new attachments? How did these dense circulations between agriculture, food, and health shape the rise of organic farming?

This research project builds on my work on the emergence of organic agriculture in France through practices and knowledge around "living soil" in the 1940s and 1950s (Pessis 2021). This work calls for resituating the genesis of organic farming within scientific debates, medical conceptions, humus care techniques and forms of "pedological anxiety" that are more widespread in the agricultural world than historiography has recorded. It also highlights the importance of transnational circulations in the persistence and renewal of complex environmental knowledge and practices "from soil to health".

This research project is organized in two parts. The first proposes to study the structuring of the first organic farmer collectives around the specific relationships they established with cultivated soils, with the aim of restoring public health. How did different ways of maintaining soil life lead to the emergence of different collectives? The original study that I propose to carry out on the French case would provide valuable material to support a comparative analysis on a European scale.

The second line of research will study the transnational circulations through which real shared knowledge was built on a European scale "from soil to health", from the publication of *Die Fruchtbarkeit der Erde, ihre Erhaltung und Erneuerung* (Pfeiffer) in five languages in 1938 to the creation of the IFOAM (International Federation of Organic Agriculture Movements) in 1972 in Paris.

Working at the intersection of the environmental history of agricultural knowledge and practices (Vogt 2007; Uekoetter 2015; Treitel 2017), public health (Nash 2006), and alternative innovations in agriculture (Wiskerke & van der Ploeg 2004), my research is also informed by works on the manufacturing of ignorance (Proctor, 2011) and on "undone science" (Frickel et al. 2010).