Workshop 8: Digital and technological revolution in the agricultural sector: Fitting in the Agroecological approach?

Convenor: Vassileios Gkisakis (Agroecologiki SP, Greece)

Impulse talks:

- Nicolas Sinoir (Pôle InPACT National, France) - « De la souveraineté technologique des paysans : réflexions et perspectives »
- Mariateresa Lazzaro (Scuola Superiore Sant'Anna, Pisa, Italy) - "Digitalized soil health self-assessment: a SPADE-TEST app from the collaboration with farmers from Italy and Greece"
- Livia Ortolani (Rete Semi Rurali, Italy) - "Managing Crop varieties data: an app for on farm data collection"

The goal of this workshop was to discuss if digital solutions have a place in agroecology, and if so, what role do they play? Recently there has been an influx of new tech into agriculture, in the form of cloud computing, drones, precision farming, and more. But many of these new farming technology companies own the data that is collected, which can leave farmers vulnerable to exploitation by Big Ag. Are the above mentioned compatible with agroecology, which is regarded to emphasise independent experimentation rather than dependence on high-tech equipment from external suppliers with a high degree of dependency on support services? Is this an innovation in agriculture, or is it the same regressive "solution", only under the guise of new technology? What about alternative innovation, where farmers take back the autonomy of their solutions? In this workshop, three people from along the spectrum of this debate presented their perspectives.

Nicolas Sinoir is a coordinator for L'Atelier Paysan, which is a collective for and by farmers that facilitates the development of farmer-driven technology, and then publishes the plans and tools in open source on the web. In this way, L'Atelier Paysan broadens the "genetic diversity pool" of technology solutions, and allows farmers to evolve and adapt their technology and thus enables the autonomy of farmers in crafting their own solutions to their specific problems. Mariateresa Lazarro and Livia Ortolani come from the other end of the spectrum, as both work with organizations that develop technology to assist farmers, while also providing data for researchers. The app Capsella walks farmers through a spade test to understand their soil health, and allows the farmers to choose if this data is also made publicly available for research. Capsella was created through participatory development, with the farmers at the centre. Rete Semi Rurali similarly believes that, provided the technology is created and disseminated with an agroecological approach, it can help support farmers with their agroecological practices.

The workshop discussion made clear that there are strong feelings on all sides of this debate. Some insist that shunning technology that makes farmers lives easier will only make agroecology unpopular among farmers—the very people that need to embrace it most. Others insist that technology too often imprisons farmers within a system. But everyone agreed that taking careful consideration with the data infrastructure is paramount to ensure farmers autonomy.