

Co-production research projects: Case study examples

Excerpts of case studies from OECD, *Addressing societal challenges using transdisciplinary research*, OECD Science, Technology and Industry Policy Papers, No. 88 (2020). OECD Publishing, Paris.

Food4Sustainability

Main Institutions: Université catholique de Louvain (UCLouvain), Université libre de Bruxelles (ULB), Katholieke Universiteit Leuven (KU Leuven)

Disciplines involved: Economics; policy science; business; philosophy; agronomy; social science and humanities.

Societal partners: Stakeholders related to food supply chain, urban gardening, cooperative/social economy, catering, labelling, local currency and social financing.

Summary: Reforming food systems is essential for a transition towards a low-carbon, resource-efficient society. This project examined potential transformation pathways, both in mainstream food systems that rely on large processors and retailers and in alternative food systems that have

typically emerged in a bottom-up way, often through local and citizen-based initiatives. Challenges were identified in the project proposal, but precise themes resulted from co-design in the first and third years of the project.

To integrate across disciplines, the team implemented workshops and joint publications. This project relied on extensive semi-structured interviews and workshops with societal actors to identify potentially effective policy innovations, accounting for the values and beliefs of stakeholders in the various food systems. Non-academic participants were selected through systematic mapping of actors in the alternative food networks (urban gardens, collective food buying groups, etc.) and through workshops. Non-academic participants were all involved in co-design of research questions, with workshops being held at regular intervals.

Innovating Spatial Development Planning by Differentiating Land Ownership and Governance (INDIGO)

Main Institutions: KU Leuven; Universiteit Antwerpen; Harokopio University; OMGEVING cvba (BE) (private consultancy).

Disciplines involved: Spatial development analysis and planning; territorial development; geography; legal studies; environmental sociology; political economy.

Societal partners: Consulting offices in spatial planning; government agencies in planning, environment, rural development; organisations of landowners; professional federations of planners and notaries; nature conservation organisations; farmers; housing providers.

Summary: INDIGO was a research project on territorial development, land ownership and governance of land use rights in Flanders (Belgium). It aimed to understand how land use rights are governed, land access is organised and landed commons are co-created and to contribute to the development of innovative forms of shared land use and valuation. This complex study involved multiple disciplines and stakeholders across different sites in Flanders and linked with parallel studies in other European countries.

Letters of intent were written by all academic and stakeholder partners during proposal development, ensuring long-term commitment and engagement was challenging, as was the full inclusion of diverse (academic and stakeholder) perspectives. In addition to formal governance structures and workshops, continuing informal discussions were necessary. Various novel methods were also used, including provision of research funding for stakeholders and co-publication of a non-academic book. These efforts resulted in strong engagement of all stakeholders in developing the analytical framework and good involvement of researchers from different disciplines in conducting the case studies.

Jigjiga University One Health Initiative (JOHI)

Main Institutions: Jigjiga University; Somali Regional State, Ethiopia; Armauer Hansen Research Institute, Ethiopia; Swiss Tropical and Public Health Institute.

Disciplines involved: Human health; veterinary medicine; nutrition, water and sanitation; rangeland management.

Societal partners: Pastoralist and agro-pastoralist communities in the Somali Region of Ethiopia; health and animal health care providers; regional and federal authorities, community leaders.

Summary: The health and wellbeing of mobile pastoralists and agro-pastoralists, and the animals that constitute an important part of their livelihood, can be improved through locally-adapted interventions in health care, nutrition, animal health, rangeland management, market access and food system transformation. This truly inter- and transdisciplinary research programme engages with local communities, local, regional and federal authorities and scientists to co-produce transformational knowledge for locally-adapted interventions and policy recommendations. For example, pastoralists share their own soil classification system which is matched with satellite images.

The active participation of local communities, authorities and experts is crucial for development of locally-adapted interventions. Participatory transdisciplinary stakeholder meetings were critical at the outset of the project to contextualise and co-define the problems to be addressed. Similar meetings took place at least annually to jointly review and, where necessary, amend the research agenda, discuss results, plan interventions and review implementation progress. Projects have thereby fostered a high level of local ownership, both at the University of Jigjiga and among the communities and local authorities involved in the study.

Mobility Innovation project by Centre of Innovation (COI, Mobility)

Main Institutions: Nagoya University; Toyota Motor Corporation.

Disciplines involved: Mechanical engineering; information science; urban planning; human health; sociopsychology; law.

Societal partners: Toyota Motor Corporation; Japan Ministry of Land, Infrastructure and Transport; Aichi Prefectural Government; Toyota City; Kasugai City; Nagoya City; Kota Town.

Summary: This project aimed to develop mobility technology to allow senior citizens in the ageing Japanese society to stay active and participate in their communities. The research plan emerged from discussions among Nagoya University, the Aichi Prefectural Government and Toyota Motor Corporation, and was then approved by the COI visionary team consisting of leaders in industry and academia.

A transdisciplinary approach was essential for this research project on development of practical mobility services for the elderly. Early in the project, 'elderly wellbeing' was defined through a series of interviews with local elderly people. These interviews led the project to redefine its goal, shifting from full-scale to 'slocal' (i.e., slow and local) automated driving. The new formulation focused on social implementation to fulfil local residents' actual needs. To date, the project has developed hardware and software for 'slocal' autonomous driving and a walking assistance robot. Traditional research approaches would have struggled to grasp the true problems associated with social implementation.

