

Qualify citizen science projects - A new framework taking into account their diversity

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QUALIFY CITIZEN SCIENCE PROJECTS

A NEW FRAMEWORK TAKING INTO ACCOUNT THEIR DIVERSITY

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INRA conducts multidisciplinary research in fields very close to the daily political concerns of citizens: **Agriculture, Food and the Environment**. Because of this, INRAE carries out a number of citizen science projects.

Here is a sample of 6 projects illustrating the wide range of citizen science practices at INRAE, from crowdsourcing to participatory action research:



NUTRINET

Web-based and long-term study of relationships between nutrition and health with 150,000 participants



PL@NTNET

Image-based plant species identification and large-scale plant inventory via a participatory platform



ITIQUE

Ecology of ticks and the diseases they transmit, via a crowdsourcing app and an open lab



ECOVITISOL

Winegrower-participatory study of crop management impact on microbiological soil quality



BAKERY

Co-research on diversity and interactions between wheat varieties, bakers' practices and sourdough



MANECH

Co-design for collective management and breeding of a local dairy sheep breed

With 200+ such projects and the need to provide support to researchers with thematic training, workshops or feedbacks from other researchers and participants, we are faced with the challenge of distinguishing between the different types of projects. Existing typologies, however, are based on a single criterion and overlook the specificities of projects. We have thus developed our own frame of reference based on 13 criteria cover 6 dimensions:

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OBJECTIVES AND IMPACTS OF THE PROJECT	In favor of common / public good	Manech CiTIQUE Pl@ntNet NutriNet	Bakery EcoVitiSol		In favor of vested interests, especially commercial interests, for a group of actors
	Action-oriented project	Manech	CiTIQUE EcoVitiSol Pl@ntNet NutriNet	Bakery	Oriented towards scientific knowledge production only
	Aiming to empower participants	Manech CiTIQUE	EcoVitiSol Pl@ntNet	NutriNet Bakery	Without the aim of empowerment (even if it can be)
	Local or regional spin-offs	Manech	Bakery EcoVitiSol Pl@ntNet	CiTIQUE NutriNet	National or international impact
TYPE OF ENGAGEMENT	Project initiated by researchers	CiTIQUE NutriNet Pl@ntNet Bakery EcoVitiSol	Manech		Project initiated by <u>non-</u> researchers
	Questions formulated only by researchers	NutriNet EcoVitiSol	CiTIQUE Bakery Manech Pl@ntNet		Questions formulated only by participants
	Engagement only concerns data collection	NutriNet	EcoVitiSol Pl@ntNet	Manech Bakery CiTIQUE	Engagement at several stages of the research process
TYPE OF PARTICIPANTS	Citizens without any particular economic or professional interest in the project	NutriNet	Bakery Pl@ntNet CiTIQUE	EcoVitiSol Manech	Socio-professional actors engaged because of their professional or economic activity (e.g. farmer)
	100% of the participants are pupils, students and/or teachers		CiTIQUE Pl@ntNet		No participants from primary or secondary school
	Homogeneous set of participants relative to the project topic	Manech Bakery EcoVitiSol	NutriNet	Pl@ntNet CiTIQUE	Heterogeneous set of participants relative to the project topic
SUPPORT FOR SHARING	Participation through facilitation tools (models, drawings, mind maps, games, etc.)	Bakery Manech	NutriNet CiTIQUE	EcoVitiSol Pl@ntNet	Participation only through spoken word or through digital data collection tools
VALORIZATION	Project outputs adapted to societal actors		CiTIQUE NutriNet Bakery Manech EcoVitiSol Pl@ntNet		Project outputs in academic format only
RESEARCH STANCE	Researchers are in the position of experts	NutriNet EcoVitiSol	CiTIQUE Bakery Pl@ntNet	Manech	Researchers are in a position of facilitators and mediators

DO YOU SEE HOW AND WHERE YOUR PROJECT MIGHT FIT IN THIS TABLE?
IF AN IMPORTANT ASPECT OF YOUR PROJECT IS NOT HIGHLIGHTED IN THE TABLE, PLEASE LET US KNOW!