

How to think about collaborative science journalism

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SCIENTIFIC METHOD FOR JOURNALISM

OUR PROCESS

Facta's method, step by step



Clear hypotheses

Inspired by experts and scientists, the needs of local communities, relevant literature and the public discourse, we define clear and explicit hypotheses to be tested.



Data and literature

The investigation begins: we search for literature reviews, relevant publications and reports, open and public data, and original or citizens' science experiments.



Field reporting

We go into the field to collect stories and experiences, with a particular attention to the ways local communities deal with problems and the solutions they test.



Feedback

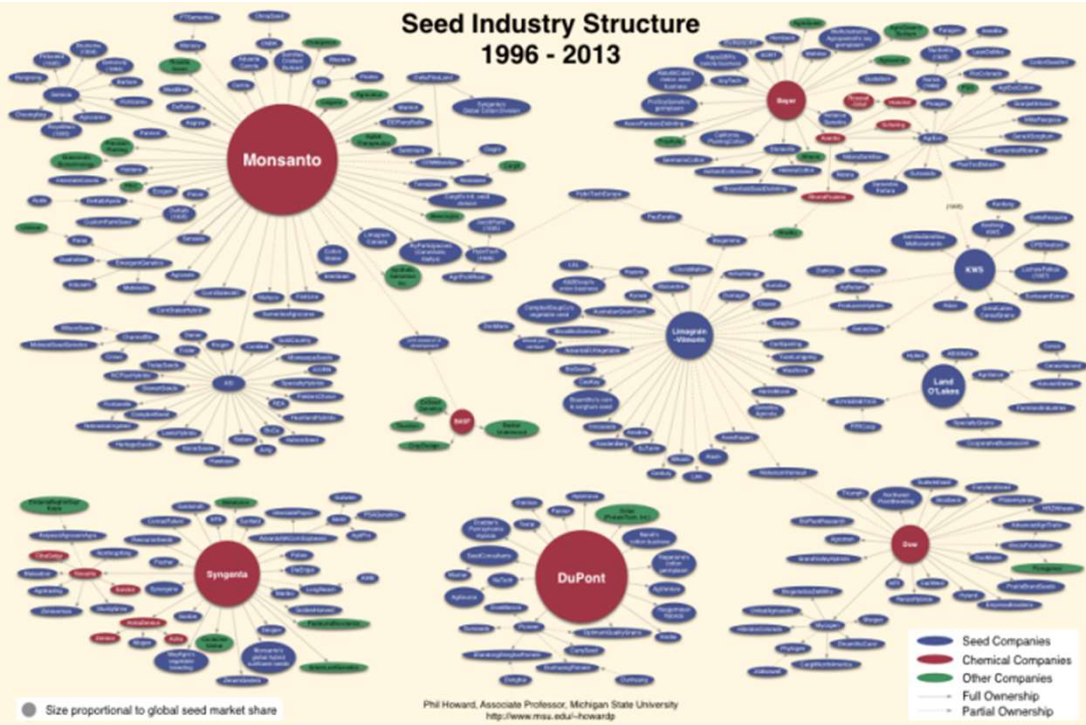
Along the way, we ask experts of various scientific backgrounds to give feedback on the process, the data and our hypotheses.



Final publication

In syndication with other media, we publish our final report in an innovative format, experimenting with data, visualization and multimedia.

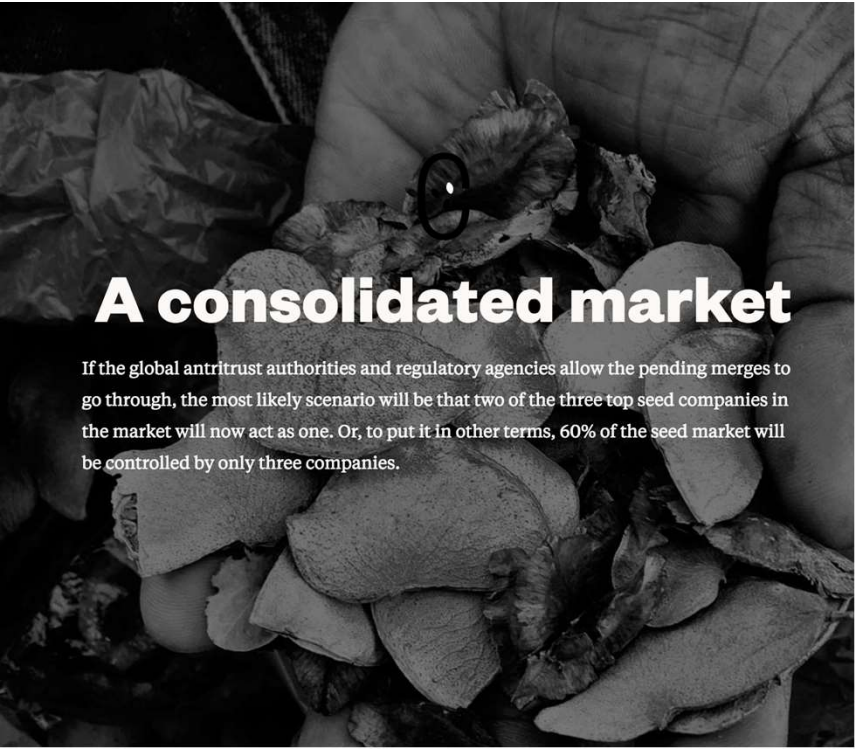
Seed Industry Structure 1996 - 2013



Firm	Acquired/Merged/formed	Year	% Equity	Country (col. B)
KWS	Lochow-Petkus	1967		81 Germany
Limagrain	Vilmorin	1975		51 France
Hoechst	Nunza	1986		Netherlands
Calgene	Stoneville Pedigreed Seed	1987		USA
Mitsubishi Chemical Corporation	Dia-Engei	1989		Japan
KWS	Great Lakes Hybrids, Inc.	1993		80 Canada
Hoechst	AgrEvo	1993		60 Germany
Schering AG	AgrEvo	1993		40 Germany
Seminis	Genecorp	1994		India
Seminis	Asgrow Seed Company	1994		USA
Seminis		1994		
Dow	Verneuil Holding	1995		35 France
HybriTech Seed International, Inc.	Jacob Hartz Seed Co., Inc	1995		100 Germany
Nunza	Nunhems	1995		Germany
AgrEvo		1995		12 Germany
Unilever	Plant Breeding International Cambridge, Ltd.	1995		United Kingdom
Cargill	Cargill Hybrid Seeds North America	1995		USA
Cargill	Cargill's International Seed Division	1995		USA
Monsanto	DeKalb Genetics Corporation	1995		40 USA
Novartis	Northrup King	1995		USA
Seminis	Petoseed	1995		USA
Monsanto	HybriTech Seed International, Inc.	1995		USA
Seminis	Royal Sluis	1995		
Mycogen	Santa Ursula/Morgan Seeds	1996		Argentina
AgrEvo	Plant Genetic Systems	1996		75 Belgium
FT Sementes	Monsoy	1996		50 Brazil
Monsanto	Monsoy	1996		50 Brazil
Monsanto	Terrazawa	1996		100 Brazil
HybriTech Seed International, Inc.	HybriTech Europe SA	1996		90 France
Pau Eurasis	HybriTech Europe SA	1996		10 France
AgrEvo	PlanTec Biotechnologie	1996		95 Germany
RoyalVanderHave	Advanta BV	1996		50 Netherlands
Zeneca	Advanta BV	1996		50 Netherlands
Novartis	Ciba-Geigy	1996		Switzerland
Lochow-Petkus	CPB Twyford	1996		74 UK
HybriTech Seed International, Inc.	AgriPro Seed Wheat Division	1996		100 USA
Monsanto	Asgrow Seed Company	1996		100 USA
Monsanto	Calgene, Inc.	1996		50 USA
Monsanto	Calgene, Inc.	1996		5 USA
Advanta BV	Garst Seed Co.	1996		100 USA
Landec Corp.	Heartland Hybrids	1996		100 USA
Advanta BV	Interstate Payco	1996		100 USA
Monsanto	Agracetec, Inc.	1996		100 USA
Novartis	Sandoz	1996		Switzerland
Pioneer	Sunseeds	1996		20 USA
Mycogen	United Agriseeds	1996		100 USA
Cotton Seed Intl.	AgrEvo Cotton Seeds Intl.	1997		49 Australia
AgrEvo	AgrEvo Cotton Seeds Intl.	1997		51 Australia
Monsanto	Sementes Agroceres	1997		100 Brazil

seedcontrol.eu

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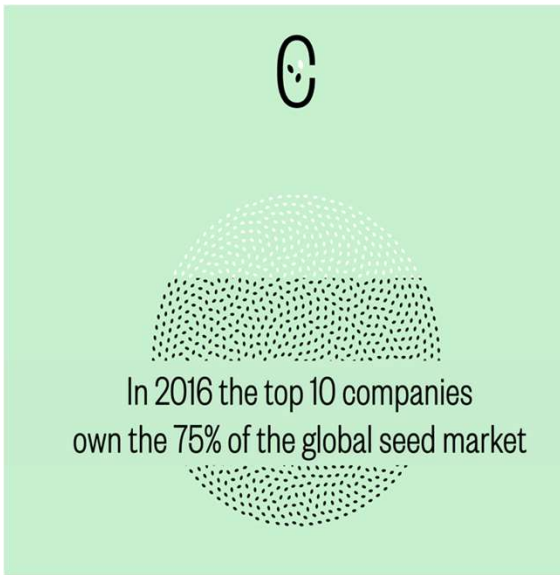
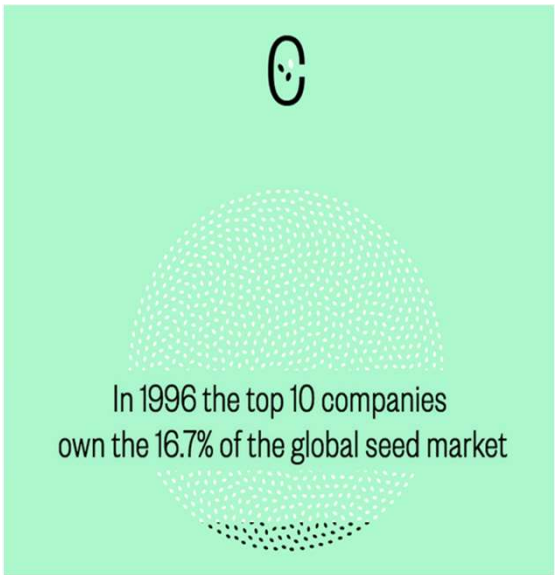


A consolidated market

If the global antitrust authorities and regulatory agencies allow the pending merges to go through, the most likely scenario will be that two of the three top seed companies in the market will now act as one. Or, to put it in other terms, 60% of the seed market will be controlled by only three companies.

seedcontrol.eu

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Foresight Deep into the future planet

W/ CMCC

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L'Adriatico

Le acque del Mar Adriatico, la flora, la fauna, le problematiche: un viaggio a puntate con l'aiuto dei ricercatori e delle ricercatrici di Biologia marina dell'Università di Padova

Adriatico A journey into the problems of the sea Il Bo Live

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ADRIATICO CONDIVIDI    

SCIENZA E RICERCA
30 AGOSTO 2021
Adriatico. Comportamenti responsabili e sostenibilità a tavola

SCIENZA E RICERCA
16 AGOSTO 2021
Adriatico. Fragilità, tutela e conservazione

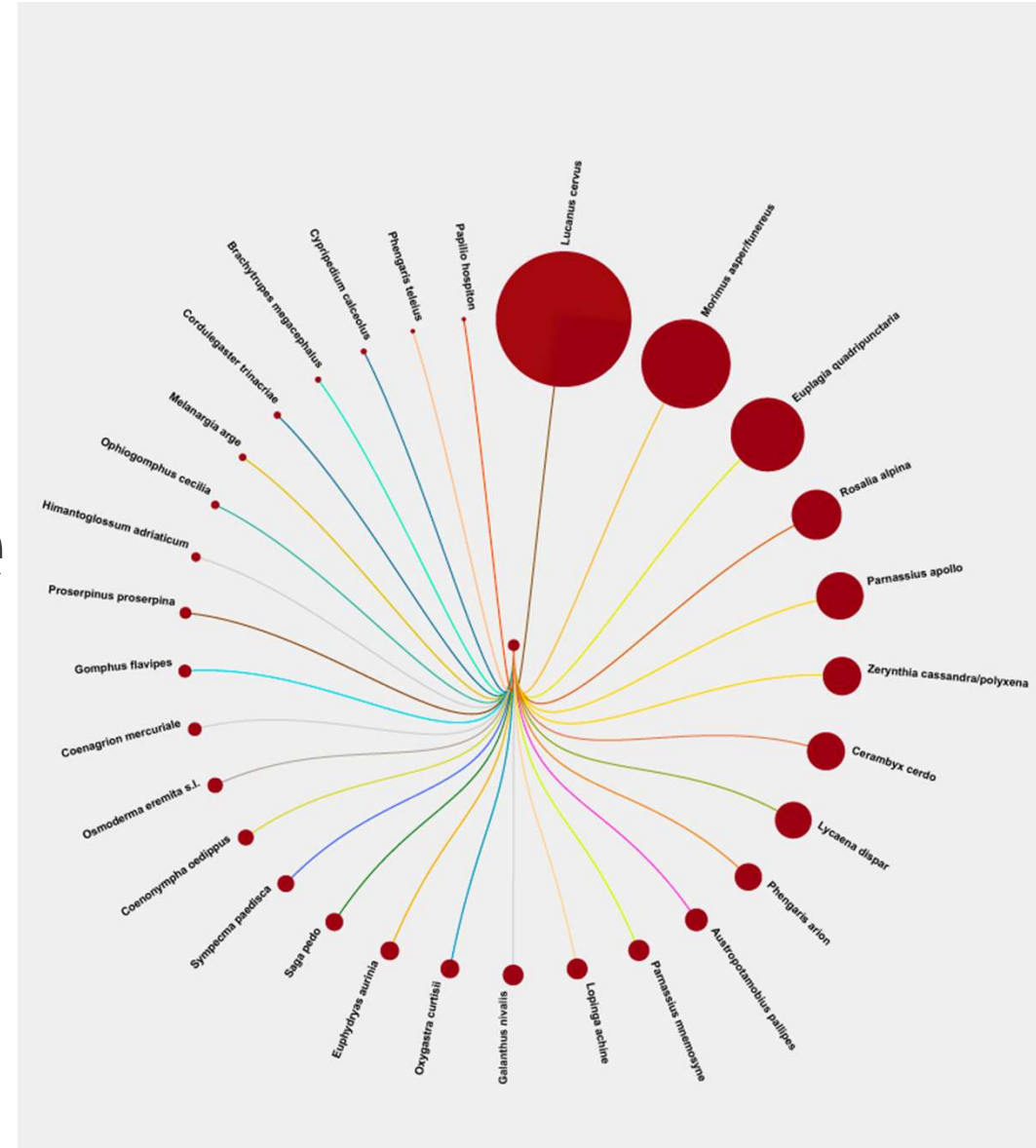
SCIENZA E RICERCA
2 AGOSTO 2021
Adriatico. Il mare e la biodiversità inaspettata

SCIENZA E RICERCA
19 LUGLIO 2021
Adriatico. Dalla laguna al mare

Citizen science and journalism

InNat and Il Bo Live

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Wetlands

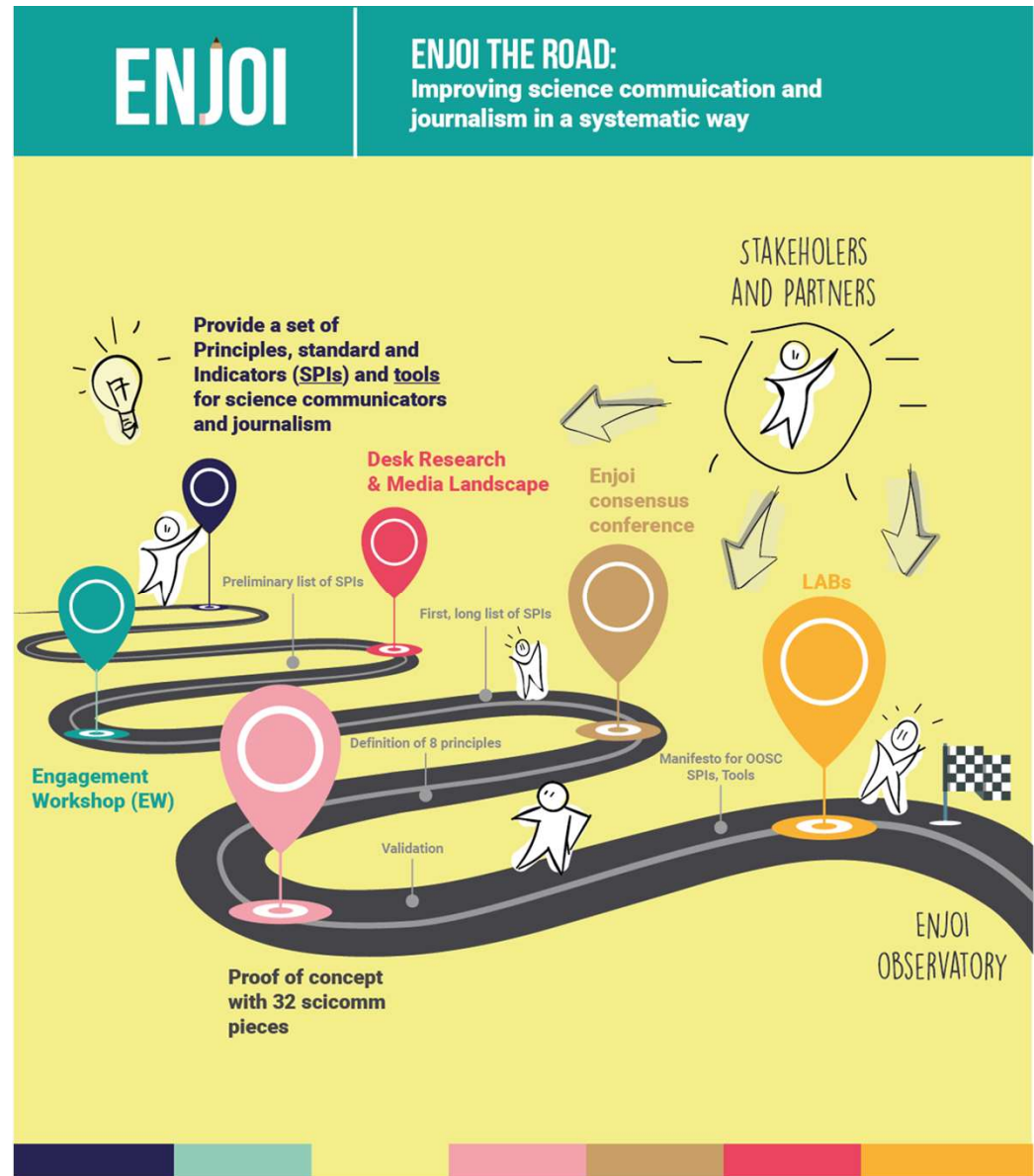
FACTA's method to explore Nature-Based solutions as a way to fight the climate and biodiversity crisis.

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enjoiscicomm.eu

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MANIFESTO FOR OUTSTANDING OPEN SCIENCE COMMUNICATION

A simple guide for science communicators, journalists, researchers, citizens.

DEEPENING THE ROOTS

The future growth of science communication depends on the strength of its roots, especially in contexts where they are challenged by the fragility of the media ecosystem. Independence, honesty, integrity, transparency, rigour, and the use of independent and diverse sources are basic principles of high-quality communication that remain essential and non-negotiable.

On top of that, good science communication needs to convey the full complexity of science. This implies focusing not only on scientific results, but also on the process behind them, and unravelling the connection of science with society. Ultimately, science communication should respond to the rights and needs of citizens, and not to other interests. Citizenship is fragmented into a variety of niches.

It is crucial to understand these niches and tailor communication through a variety of strategies suitable to each one of them. It is especially important to make science accessible to audiences unfamiliar with it and to disadvantaged groups.

Citizens are not mere receivers of information. Real engagement goes beyond sporadic feedback. It requires building a true collaborative framework, and ultimately, a community that takes part in a two-way dialogue.

Science communication is relevant if it generates an impact, which can range from awareness to action. Tools to gauge and improve this impact are increasingly important in the craft.

BEARING NEW FRUITS

ENJOI envisions a set of trends that are likely to shape the future of science communication. These trends open up new spaces and require a critical stand, because they pose both challenges and opportunities. Science communication

happens increasingly in digital platforms, especially in social media. The enormous opportunities of this digital agora are balanced by the challenges posed by algorithms, artificial intelligence, virality, and metrics. Responsible innovation takes into account

social, philosophical, ethical, and legal aspects, and not only technological ones.

Engagement is becoming ever deeper. Rather than being a single step, it plays a role in the whole life cycle of information. This is already affecting the information agenda and the way communication is designed. Engagement provides the opportunity of meaningful two-way dialogue, but should avoid the risk of bending science communication to populism. Rampant polarisation is affecting science communication. Partisanship and false balance are two risks of this situation. Science communication has the opportunity to shape its messages in such a way as to bridge the gaps between opposing factions. But this should not result in self-censorship to avoid backlashes.

Inclusion is cutting through all aspects of science communication. In sharp contrast with the past homogeneity, diversity is set to become a guiding principle, not just in formal and linguistic terms, but at deeper levels, from the choice of sources to the ways contents are distributed. The urgency of health and environmental crises is pushing science communication to focus on solutions. Beyond portraying facts, science communication is likely to explore more often the possible courses of action.

The spirit of open science is impregnating science communication too, not only with special attention to open access sources, but also with a broader commitment towards making science communication itself open.

A LIVING DOCUMENT

The ideas outlined in this manifesto are expanded into ENJOI's SPIs and reports and represent the foundations of the future ENJOI Observatory. These tools are aimed at applying the concepts of the manifesto in the teaching, research, and practice of science communication.

The manifesto is not written in stone: it is an open-ended, living document that will be tested with our advisory board, experts, and engaged communities.

We hope this text will provide a solid and fertile ground for the growth of the science communication of the future.