

CITIZENS' COLLECTIVITIES AS AN OPPORTUNITY:

CONNECTING THE COMMONS WITH CITIZEN SCIENCE

TINE DE MOOR
UTRECHT UNIVERSITY



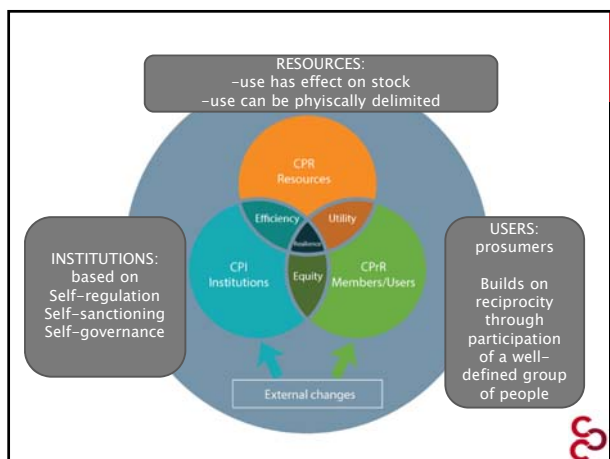
WHAT ARE COMMONS?

–historical form of agricultural collaboration of farmers in a self-governing institution

–currently pars pro toto for various forms of institutions for collective action:

“or institutional arrangements that are formed by groups of people in order to overcome certain common problems over an extended period of time by setting certain rules regarding access to the group (membership), use of the resources and services the group owns collectively, and management of these resources and services

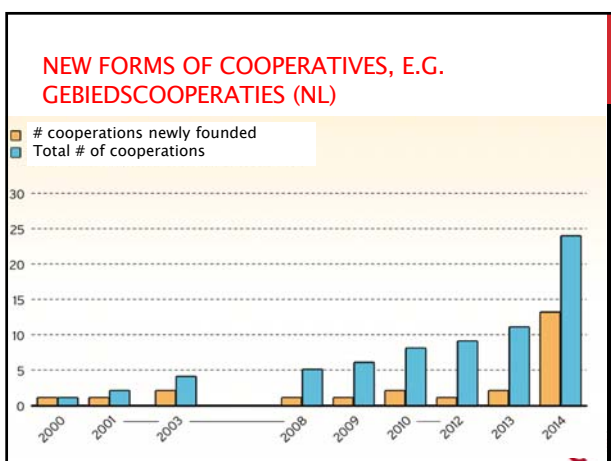
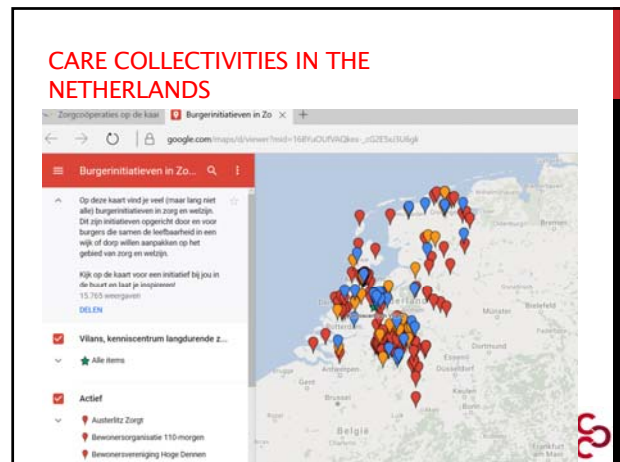
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GEMENE AND LOWEIDEN (NEAR BRUGES, BELGIUM): 14TH CENTURY–TODAY

Common rights: mainly pastureland
Access for descendants from specific families only





WHAT IS CITIZEN SCIENCE?

Recent development and important for scientists:

- High-quality outreach by directly involving citizens in scientific process
- Recruit expert contributors
- Distribute project workload at relatively low cost

Definition:

"Research collaborations between scientists and volunteers, particularly (but not exclusively) to expand opportunities for scientific data collection and to provide access to scientific information for community members"

Limits/boundaries?

-filling in a survey? Being a Guinea pig for medicine testing?

-> **essential: meaningful, intentional, active contribution to the scientific work**

MAJORITY PROJECTS RELATED TO DATA COLLECTION

Data-collection

- Enter observations (bv. bird watching)
- Gaming (bv. FoldIt)
- Transcription sources in database (bv. Ja, ik wil)
- Conduct research yourself and report (bv. Tea Bag Index)
- Describe pictures (bv. Galaxy Zoo)
- Do a test (bv. Nationale Griep meeting)
- Passive contribution bijdrage (automatically generated data through e.g. Health App)

But also think along!

- Intensive consultation patient organisations
- Expert-volunteers willing to cooperate



CITIZEN SCIENCE PROJECT JA, IK WIL! IN CIJFERS

Looptijd: 2/02/2014 tot 1/03/2016

I.s.m.

Totaal aantal deelnemers:

- Bij eindmeet: 486
- Harde kern: ong. 30

Doel: invoeren alle scans elk 5^e jaar (1575-1810)

Totale selectie: 16.339 scans (ong 6 acties per scan), ca. 90.000 inschrijvingen, ca. 180.000 individuen

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CONNECTING COMMONS WITH CITIZEN SCIENCE: THE BOTTOM-LINE

1. Rediscovery of citizenship: similarities in relationship between citizens-scientists & citizens-governments
2. Lessons from resilient commons: what keeps a common going?
3. What are the mechanisms to achieve this?

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WHAT CHANGES IN THE RELATIONSHIP BETWEEN CITIZENS AND GOVERNMENT IF CITIZENS ACTUALLY ALSO WANT TO DO SOMETHING? (1)

Differences with sharing thoughts and opinions via e.g. voting, G1000 or referenda:

- Participation beyond the "verbal" contribution:

- > citizens become **ACTORS**
- > longer-term engagement
- > demands other incentive structure
- > being the actor means being part of **DECISION MAKING PROCESSES**

- Spending time and in particular effort (thinking along is relatively "safe") creates risks and liabilities + citizens organised in collectivities, also as a legal person (e.g. Cooperatives).

- > turns citizens into **LEGAL PERSONS** instead of "interested individuals" -> status changes due to the labour invested
- > citizens become interest groups
- > groups have other dynamics than individuals
- > other ways of dealing with **RESPONSIBILITIES**

AUTHOR: Tine De Moor, Utrecht University



WHAT CHANGES IN THE RELATIONSHIP BETWEEN CITIZENS AND GOVERNMENT IF CITIZENS ACTUALLY ALSO WANT TO DO SOMETHING? (2)

- **Involvement in creative process itself creates (impressions of) ownership (not the same as property)**
 - > creates (belief in) **OWNERSHIP** of the outcome of action: the right to use resources and to claim the benefits of invested effort
- **The implications of their participation will not be so visible due to their limited physical action arena, directed towards local needs**
 - > offers short-cuts to solving problems
 - > linked to very specific constellations of problems: e.g. elderly care demand in Groningen is different from that in Rotterdam
 - > **Translation into policy is difficult:**
 - scaling up? Scaling out?
 - blueprints? Scenario's?

AUTHOR: Tine De Moor, Utrecht University

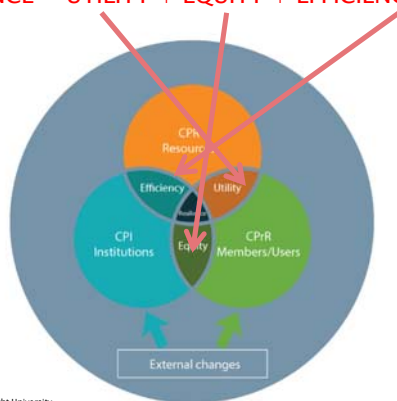


WHAT IS NEEDED TO MAKE THE COMMONS RESILIENT, to make them WORK IN THE LONG-RUN?

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RESILIENCE = UTILITY + EQUITY + EFFICIENCY



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EQUALITY OR EQUITY?

-Equality: equal share in resources

- Accessibility to governance regimes and redistributive mechanisms
- Equal share to use/appropriation of the resource

-Equity -> Fairness:

equal opportunities within the organisation/common

- in participation
- in resource benefits

Difficulty in commons: linking fairness to variable needs over time



LONG-TERM PERSPECTIVE -> VARIABLE NEEDS AND VARIABLE PARTICIPATION

- **Commons:** not a one-time exchange but intended to overcome a social dilemma -> future perspectives matter
- **Equitable access to participation:** having the right to influence the rules on resource division
- **Equitable access to resources:** having the right to retrieve SUFFICIENT resources so to make membership USEFUL (Utility)

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FROM EQUITY TO UTILITY: MAKING MEMBERSHIP SUFFICIENTLY INTERESTING



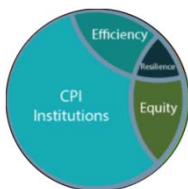
Commons:

- Rights are limited to what is needed within the household
- Unlimited rights lead to
 - More extraction -> resource depletion -> reduced users' utility
 - Commercialisation of collective goods

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FROM EQUITY TO EFFICIENCY ON THE COMMONS



-equity as a right to be part of the decision-making process

- But also a duty:

-> Participation is needed to "internalise" the rules

-> Understanding the rationale behind a decision is essential to ensure efficient resource use (no more than the resource can handle)

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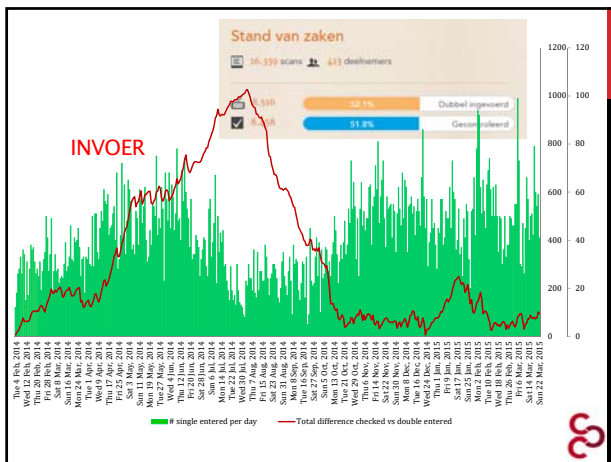


WHAT ARE THE MECHANISMS TO ACHIEVE THIS IN RELATION TO CITIZEN SCIENCE?

- **Utility -> Reciprocity: what do the citizens get in return**
 - Material goods
 - Advice
 - Knowledge
- **Equity -> Feedback in two directions:**
 - Give citizens a say in what you do
 - Consider volunteers as experts in their fields-show respect for their expertise/experience
- **Efficiency -> match collaboration environment with expected input**
 - Clear structured, repetitive, entry format
 - Support/help desk (but also possible via volunteers)
 - Fast feedback

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TECHNOLOGY: NOT NECESSARILY AN IMPROVEMENT....

REPLACEMENT (NEPAL) FARMER-OWNED IRRIGATION SYSTEM (LEFT) BY GOVERNMENT-OWNED IRRIGATION SYSTEM (RIGHT PANEL)



Physical capital markedly better than that possessed by the earlier

BUT:

- never been able to provide water consistently to villages. Agricultural
- productivity is lower now than it was under farmer management

TECHNOLOGY + ECONOMIC ACTIVITY ≠ GOVERNANCE REGIME

Online app + group of individual users ≠ common

- technology is not necessarily an advantage for cooperation
- technology cannot replace institutions
- the frequency and intensity of communication between individuals is more important than the means to do so

But technology can create new opportunities for specific forms of cooperation:

- Decentralisation energy production and distribution due to local grids, solar cells etc.
- Decentral water management