OPEN RESEARCH AGENDA SETTING

CARTHAGE SMITH

With thanks to:
Giulia Ajmone Marsan
Dai Qian (OECD)

General public a key actor in open science

- **Citizen science**
- **Open access**
- **Open data**
- **Crowd-sourcing**
- **Crowd-funding**
- **Public engagement**
- **Open research agenda setting**

Rationale and methodology

- **Project Aim**: to analyse a number of selected cases of open research agenda setting, at different scales and from different sectors, and explore how such initiatives can be most effectively designed and implemented;
- Desk-top research on 7 selected cases
- 2hr interviews using structured questionnaire
- International workshop to present and discuss cases in Seoul
- OECD STI Policy report, Dec, 2017.

7 case studies

...Project

3. RISTEX, Japan,
4. X-Project, Korea,
5. Dutch National Research Age...
6. CIMULAC, a European initiat... Danish Board of Technology F...
7. The James Lind Alliance, Unite...

Areas explored

- Historical background and context
- Overall aims,
- Key actors and governance arrangements
- Project design – methodological approach and use of digital technologies
- Implementation challenges and lessons learned
- Follow up and assessment

The Great New Zealand Science Project

Aim: to foster public engagement in research agenda setting for the 2013-22 science plan

- Led by Ministry of Business Innovation and Employment

- Focus on thematic areas: marine resources, biodiversity, natural hazards, fighting diseases, land and water, climate change, advance materials

- Media and outreach campaign to encourage public engagement.

- Web submissions from public and from STI sectors. All ideas triaged by 'peak panel' of scientific experts to identify national science challenges.

Ideas for Change (Colombia)

Aim: to develop agreed solutions with the aid of scientific experts

- Focusing on vulnerable communities and engagement on local actors
- Developed by the Colombian science and innovation agency, Colciencias
- Initial broad priorities (water, biodiversity, energy) defined at Govt. level in discussion with research institutions and sponsors
- Communities then involved in formulating specific challenges, proposal selection and development of solutions (co-design and co-production)

RISTEX (Japan)

Aim: to develop innovative solutions for social challenges by joint cooperation between researchers and the general public. (Established in 2001 following the World Conference on Science)

- RISTEX is a funding institution affiliated to the Japan Science and Technology Agency

- Uses text mining and on-line surveys as initial input to priority setting

- Interviews and workshops with experts and multiple stakeholders to define R&D focus areas.

- R&D projects must be trans-disciplinary and are actively managed by RISTEX.

- Implementation support programme to encourage use and adoption of outcomes

X-Project (Korea)

Aim: to expand participation beyond the research community in suggesting and addressing research problems

- New mechanism to involve citizens in research agenda setting exercise using an online platform via which questions can be raised and ideas incubated

- Problems are initially proposed by the public and triaged by an expert steering committee

- Open calls for proposals to address these problems (~50) are then made and research teams selected

Guiding principles: all ideas should be respected, all participants should be rewarded, researchers should target problem-solving, all content should be transparent and open, simple design, scaling up.

Dutch National Research Agenda (the Netherlands)

Aim: Dutch government started to develop a new national science strategy in 2014 and wanted real public input and 'buy in'.

- One pillar was public consultation to develop research priorities ("ask a scientist a question") – 12k questions submitted

- On/line tools and text mining software were used to cluster research questions – 248 clusters

- 3 Conferences, discussion groups and expert panels narrowed down to 140 questions.

- Questions then matched to relevant national research organisations and also mapped to H2020

- Digital tool to link original questioners with organisations and researchers

Guiding principles: science4science, science4society, science4competitiveness

Ref. De Graaf et al (2017)

Main messages (i)

1. **Simple design and simple questions** to motivate, encourage participation and make sure everybody is on "equal footing"

2. **Methodology needs to match aims.** Consultation on proposed priorities is different to co-design

3. **Manage expectations on both sides.** Experts need to learn on how to interact with non-experts (and the limitations). The general public need to now that it takes time to fund research and obtain results.

4. **Transparency and trust.** Involve citizens at all stages by communicating in a clear, open and transparent way every decision taken.

Main messages (ii)

5. **New ideas can definitely emerge.** E.g. CIMULAC -> experts suggest incremental modifications while citizens completely new ideas. GNZSP -> citizens want more social sciences/health services research rather than classical clinical research.

6. **Digital tools and personal interactions are both important** and need to be used in a complementary way.

5. **Evaluations** are at an initial stage and difficult to develop. More thinking is needed.

Further information