VU VRIJE UNIVERSITEIT AMSTERDAM

SHORT EXERCISE

Visioning the role of Research and Innovation (R&I) in for a future-proof food system.

In a nutshell

- The aim of this exercise is to dive deeper into the role of R&I for a future-proof food system.

What for?

- To work with my community on transforming the food system.
- To improve R&I policy coherence and alignment.

How long?

60-90 minutes

For whom?

Policy Makers, Farmers, Students, Businesses, Researchers, Funders, NGOs, Educators

Created by

Athena Institute, VU University
www.science.vu.nl/en/research/athena-institute

Something to share?

Leave us a comment about this tool on the platform. You can also contact fit4food2030.beta@vu.nl .

This tool was developed as part of FIT4FOOD2030 project. See this tool and others on the FIT4FOOD2030 Knowledge Hub.

Date of creation: May, 2018
How to cite?

Athena Institute, VU University (2018) *Visioning.* Retrieved on: [website]

(OPTIONAL) EXERCISE: Card Game to get familiar with R&I and RRI.
30 - 40 minutes

Play a game: to get familiar with R&I and RRI via RRI tools. For example have a look at the RRI Self-Reflection Tool. This tool is aimed to help you reflect on RRI principles that can improve your research and innovation practices. The game provides you with questions around five RRI Policy Agendas, including: *Ethics, Gender Equality, Governance, Open Access, Public Engagement,* and *Science Education[1]*. Another example is to play a game with cards. See the example exercises below which is adapted from the HEIRRI project.

1. **Facilitator introduces the exercise (5 minutes)**
Explain that this is a card game, meant to get familiar with R&I and RRI in a more playful way. The cards include statements related to RRI dimensions (see the Appendix for all card statements). Cards from 1 to 13 correspond to issues related to diversity and inclusion, cards from 14-27 to openness and transparency, cards from 28-36 to anticipation and reflection and cards from 37 to 40 to responsiveness and adaptive change. Explain that the group will divide in subgroups (around 6 persons per group, depending on the number of people present), and that each group receives the 40 cards. Ask them to pick a card (individually) with which they do not agree and one with which they agree, so that they can discuss this within their subgroups.

2. **Ask the group to divide in subgroups (2 minutes)**

3. *Group discussion (10 minutes)*
Subgroups discuss their chosen card statements. One person begins with the card-statement he/she agrees with. After the explanation, group members will react. Go on until everyone has explained and reflected on the card they agreed with. Repeat this procedure for all cards people do not agree with.

4. **Reflect plenary (10 minutes)**
Ask each subgroup to reflect on what they discussed.

If you feel participants are familiar with R&I and RRI sufficiently, continue (during the same or a follow-up session) with a visioning exercise on the role of R&I in a future-proof food system, see the example exercises below.

---

[1]RRI Self-Reflection Tool – how it works: https://www.rri-tools.eu/documents/10184/94414/SRT-HowItWorks.pdf/06e0ff71-897c-41cb-887f-6074decbc307

EXERCISE: on role of R&I for future-proof systems.
60 - 90 minutes

''The following visioning exercise is meant to dive deeper into the role of R&I in a future proof-food system. We will use the aspired vision of the first exercise as starting point'' (make sure the list of shared and not–shared characteristics on the flipchart is visible for all participants, and - if possible - show them on a screen as well).

1. **Ask participants to think about R&I (10 minutes)**
   Ask them to come up with at least five post-its related to the following two aspects of R&I:

   1) The knowledge gaps associated with the aspired vision;
   2) How R&I can help us to get there.

   Say that everything which comes up in their minds is good.

2. **Ask participants to form groups of four persons and to place post-its to create a mind map (15 minutes)**
   Ask participants to compare their post-its and to place the post-its on a flip-chart to create a mind-map. Ask them to try to make connections, relations, clusters, etc.

   OPTIONAL: If you experience this is difficult for people, share some **'Action Cards'** with them, which they can use for inspiration (Appendix).

3. **Reflect plenary on the four mind maps (15 minutes)**
   Ask each group give a brief presentation of their mind map. Which knowledge gaps did they identify? And which roles did they envisage for R&I? Write down aspects/characteristics of each presentation on a flipchart, and ask them whether there is agreement or disagreement regarding the knowledge gaps and the role for R&I. If so, ask why they did or did not agree. Also indicate the stakeholder groups who are proponents of the action and the stakeholder groups who are not. Check with the group whether the most important knowledge gaps and roles for R&I are included and whether all information is correct. Finally, ask how they experienced the exercise, was it interesting, any striking aspects? Why?

   TIPS & TRICKS
   OPTIONAL: ask people to vote on which knowledge gaps and roles for R&I they think are most important.
   This is the body text, just select this caption text and start writing whatever you need, you can make it as long as necessary. This is the body text, just select this caption text and start writing whatever you need, you can make it as long as necessary. This is the body text, just select this caption text and start writing whatever you need, you can make it as long as necessary

APPENDIX A: STATEMENTS-CARDS

The cards below are extracted from the document "Facilitating reflection on Responsible Research and Innovation", developed by the HEIRRI project[2].

CARD 1	CARD 2	CARD 3
Public should be involved in decision-making processes of the development of emerging technologies	Public is not educated enough to be involved in decision-making processes of the development of emerging technologies	If we consider the values and needs of society in the research and innovation process, the research results are of a higher quality

CARD 4	CARD 5	CARD 6
Considering the needs and values of society in the research and innovation process can limit or divert the development of scientific knowledge	Public cannot participate in scientific research because it does not understand scientific language	Society's opinion on research can be consulted, but not considered when deciding what should be investigated and how

CARD 7	CARD 8	CARD 9
Before starting a research process, it is necessary to consult with the actors that are affected, to find out their opinions and needs	Researchers should implicate themselves in the scientific education of citizens, for example they could include as an objective the creation of educational material in their research projects	Citizen science projects should be encouraged, in which anyone can participate, collecting or analyzing data

CARD 10	CARD 11	CARD 12
Methods of citizen participation in scientific or technologic topics should guarantee that all social groups are represented (gender, population, social class, religion, politics, sexual orientation, etc.)	Research methods should contemplate diversity, for example when working with animal models, to not only work with male models, or when doing research with people, to represent different cultures	Stakeholders must be able to participate in the research process from start to finish, from the definition of what is being researched and how it is being researched to the assessment of results and possible applications

CARD 13	CARD 14	CARD 15
Research teams should be gender balanced because they work better	Any person should be able to consult and understand which research projects are under development	The information on research projects should only be available to the scientific community

CARD 16	CARD 17	CARD 18
The information on research projects should only be published once these have finished	Both positive and negative results of research projects should be published	The digital laboratory notebooks that scientists use in their research should be able to be consulted on a public platform

CARD 19	CARD 20	CARD 21
Only positive results from research projects should be published, as negative results are not of interest to society	Peer-review process should guarantee that the only people assessing if research is of quality or not are other researchers from the same field	Research and innovation results should be assessed by experts from different areas of expertise, to make the knowledge more valid

CARD 22	CARD 23	CARD 24
The uncertainties of a research project should not be shared with the persons implicated because these could generate mistrust towards science	It is important to share uncertainties of a research project with the interested parties	If the results of a research project imply negative consequences, the researcher should be held responsible

CARD 25	CARD 26	CARD 27
Research projects should include various disciplines to be more relevant	For an R&I Project to be considered of excellence, the team must be made up of the most prestigious scientists	Research teams that include scientific and non-scientific personnel (such as NGOs, stakeholders etc.) tend to have more socially relevant results than those that are formed solely by scientists

CARD 28	CARD 29	CARD 30
Before starting a research project a study should be conducted on the possible mid-term and long-term risks and impacts	It is not necessary to study the long-term risks of a research project or technological innovation because they are impossible to predict	All research or innovation implies certain risks and researchers should assume responsibility of those

CARD 31	CARD 32	CARD 33
If it is found out that a researcher has carried out ethically unacceptable practices, such as plagiarism or publication of false data, they should be forbidden to work as a researcher again	If a research project has important environmental impacts, it shouldn't be carried out even if it has obvious benefits	Researchers should predict the possible misuses of their research results and assume responsibility for them

CARD 34	CARD 35	CARD 36
Researchers are not responsible for how their research results are used in the future	If the organization that finances my research asks me to rewrite the project conclusions to make them more convincing, I should accept so as to continue investigating	Scientific excellence should be measured according to the number of publications in prestigious scientific journals

CARD 37	CARD 38	CARD 39
During the progress of a research project, if it is detected that there is not a good response from the interested parties, the course of the research should be changed	If a large portion of the population does not agree with a technological innovation, for example the use of genetically modified organisms, research should not be continued	When a research project is started, the planning should be followed strictly, even if circumstances change, such as the appearance of a competing research group or a change in legislation that affects the results

CARD 40
The reasons to do research should be purely of scientific interest and not for the prestige of the researcher as an individual

APPENDIX B: EXAMPLE ACTION CARDS

The Action Cards below are based on the document of the EC on Open Innovation and Open Science[3].

Example Action Cards Researchers (R)	Example Action Cards CSOs/Citizens/Consumers (C)	Example Action Cards Public sector/Policy makers (P)	Example Action Cards Business/Industry (B)
Produce knowledge (R)	Create demand for innovation (C)	Shapes regulatory environment for innovation (P)	Funding of technical innovation (B)
Co-create, generate skilled human capital (R)	Act as source of innovative ideas (C)	Puts in place rules and tools (P)	Funding of social innovation (B)
Promote absorption of knowledge within business and industry (R)	Have a say in what research is meaningful to them and can impact their lives (C)	Fostering faster market access and development (P)	Funding of research social sciences (B)
Work with citizens and consumers (e.g. 'participatory action research) (R)		Coordinates actors, encourages actor cooperation and coordination (P)	Funding of fundamental sciences (B)
Seek collaboration between social and life sciences (R)		Creates demand for innovation (P)	
Inspire other researchers to work in more inter- and transdisciplinary ways (R)		Procures innovative solutions (P)	
		Fostering and creating incentives for Open Science (P)	
		Developing research infrastructures for Open Science (P)	
		Removing barriers to Open Science (P)	
		Mainstreaming and further promoting open access policies (P)	

---

[3] Open Innovation, Open Science, Open to the World – a vision for Europe (2016): http://www.openaccess.gr/sites/openaccess.gr/files/Openinnovation.pdf

Coordinated by:

Partners

www.fit4food.eu
info@fit4food2030.eu
#FOOD2030EU