





"GENDER AND RESEARCH DESIGN CYCLE"

Exploring key options for Gender⁺ integration in research in the agri-food sciences

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CICYTEX 21 April 2022

Cyprus

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AGRICU TURAL RESEAR FOR DEVELOPMENT

CIHEAM

A

Institute

of Sociology

Czech Acaden of Sciences



WAGENINGEN

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YELLOW WINDOW





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Please get in touch if you need more references

THANKS! Margreet







Gender⁺ integration into the agricultural, food and life sciences

- 4 year funded by EU-HORIZON 2020, 2019-2022
- Each partner: tailor-made Gender Equality Plan
- Also WUR: as working & learning site and in 'doing science' (RRI)
- Integrative and participatory approach
- Commitment highest management as secured in advance
- Support by ISAS and YW





URGENCY TO ADDRESS GENDER IN AGRICULTURE AND FOOD



Turning point

FAO director-general Jacques Diouf (FAO 2011):

'Achieving <u>gender equality and empowering women</u> is not only the right thing to do; it is also crucial for agricultural development and food security' (FAO 2011, foreword).





FAO 2011: <u>https://www.youtube.com/watch?v=uDM828TpVpY</u> FAO 2013 <u>http://www.fao.org/resources/infographics/infographics-details/en/c/180754/</u> See for more: <u>https://www.visualistan.com/2016/08/women-in-agriculture-infographic.html</u>







Gender as intersecting with other social dimensions / inequalities

EU: STRENGTHENED COMMITMENT



GENDER EQUALITY

A STRENGTHENED COMMITMENT IN HORIZON EUROPE



- More women participating in research and innovation programmes
- Better integration of the gender dimension in the content of research and innovation projects
- More participation of EU widening countries in actions dedicated to gender equality in research and innovation organisations
- Broadening gender equality policies in research and innovation to intersections with other potential grounds for discrimination such as ethnicity, disability and sexual orientation



I am determined to step up our efforts on gender equality and support more talented women in research and innovation. I am committed to ensuring that the gender dimension is fully integrated into research and innovation supported by Horizon Europe, and that it is fully acknowledged in the European Research Area.

Mariya Gabriel Commissioner for Innovation, Research, Culture, Education and Youth

Gender(⁺) Equality Plan at institutional level as funding requirement

See more:

February 2021

EU-website; Brochure













1st. Gender Equality Plan, 2022-2025 for Employees of CICYTEX,

11 thematic blocks, 66 measures to be implemented over four years.

English version GEP; English version presentation







Block 6.10. RESEARCH

- General objective to improve research quality by CICYTEX through
 - greater active presence of women
 - incorporation of the gender perspective. TODAY
- Specific objectives:
 - 10.1 Integration of the gender perspective in CICYTEX research projects **TODAY**
 - 10.2 Increased participation of women in research projects, their leadership and scientific production.
 - 10.3 Awareness raised of gender gaps in research in scientific society







Gender⁺ integration into the agricultural, food and life sciences

Agri-food sciences as serving agriculture and food systems, covering:

research on crops, livestock, fishing, forestry, garden production, trees, soil, natural resources, food, biofuels, and

the related production processes and their management, such as farm, chain and natural resource management

including water management, postharvest processing, supply and added value chains, and markets and consumption. (e.g. Meinzen -Dick et al., 2010)







- A great variety of fields of study / research / innovation / extension
- From research focus to:
 - What does drive you in your research
 - How does gender⁺ and gender⁺ integration fit in?
- Basic terminology
- Why gender matters in 'Science for impact':
 - 're-peopling' of the research focus in agri-food sciences
 - integration of societal and social aspects
 - examples from the agri-food sciences
- The research cycle: how to systematically include in research (project) design



TERMINOLOGY AND UNDERSTANDING INTERSECTIONALITY OR GENDER⁺



- Not exclusively about women, also men → gender
- Not exclusively about gender, also heterogeneity among women and among men (age/generation, nationality, religion, socio-economic status, race, caste, etc) → gender⁺
- Not exclusively about diversity as 'neutral' difference, or as individual characteristics, also as part of hierarchical AND dynamic normative cultural value systems; which are deeply engrained and therefore often normalized
 - \rightarrow intersecting social dimensions of inequalities

 - Implying importance of gender⁺ in social <u>relationships and structures</u>









Science is / scientists are part of society

When acknowledging this, able to opening to uncover historically grown bias and overlooked aspects \rightarrow Critical and reflexive attitude to strengthen scientific relevance of research, esp. when meant to be as science for (societal) impact

- added value of research in terms of excellence, creativity and business opportunities
- an in-depth understanding of all people's needs, behaviours and attitudes
- goods and services better suited to the needs of all people
- enhanced societal relevance of research and innovation.

@EUScienceInnov

#UnionOfEquality #HorizonEU



European Commission









- Data collection \rightarrow biased results
 - Examples:
 - What/who in focus; who invited, thought of concerning what
 - Who present, who vocal, who represented
 - Conceptual framework: what integrated, what overlooked
- Data analysis \rightarrow biased results
 - Examples:
 - Single analysis, difference stated, not interpreted why
 - Single analysis, only interested in patterns, not deviants
 - Single or cross analysis, not interpreted how related
 - Interpretation not possible since missing integration in conceptual framework
 UNIVERSITY & RESEARCH



- Beyond open science as allowing open access to big data collections (incl. statistics)
- also
 - Co-creating data with 'citizen' groups
 - sharing of knowledge and self-studies by 'citizen' groups
 - Inclusion (who and whose)
 - ✓ Traditional / local knowledge
 - Marginalized groups
 - Adjusted Conceptual frameworks









EXAMPLE:

1. OBSERVATIONS

2. COMMUNITIES OF PRACTICE



Citizen Science

- Volunteered geographic information
- Crowdsourcing geospatial data
- Public Participatory GIS
- People-centric sensing
- Participatory sensing
- eParticipation
- Environmental Vinual Observatories
- Citizen Observatories
- Community-based Monitoring & Information Systems
- Community Science
- Participatory Action Research





www.weobserve.eu/cops







MANY GROUPS TO BE HEARD AND INCLUDED

Copa and Cogeca are the united voice of farmers and agri-cooperatives in the EU.

Copa: 23 million farmers and their families; Cogeca represents 22,000 agricultural cooperatives.



WOMEN IN AGRICULTURE

copa*cogeca european farmers european agri-cooperatives

KEY POINTS

1 - Supporting work life balance initiatives, as well as improving the quality and accessibility of infrastructure facilities and services will improve the situation and living standards for those living in rural areas.

2 - Promoting diversification and multifunctional activities in rural areas can provide opportunities for rural female entrepreneurs in sectors such as agro-tourism, direct marketing or social farming, etc.

3 - Cooperatives can play a vital role in supporting rural women and providing opportunities to rural areas in terms of employment, entrepreneurship and better access to market.

4 - Access to credit remains one of the biggest obstacles to female entrepreneurship that needs to be addressed. Avenues of funding targeting women through EU cohesion policy and Research and Innovation should be open to all regions, including rural areas.

5 - More data collection and information surrounding the economic and social situation of rural women is needed to better address inequality in rural areas.



EU: GENDERED INNOVATIONS II



RESOURCE:

- 15 case studies in health, AI & robotics, climate change, energy, transport, urban planning, waste management, agriculture, taxation, venture funding, building on Horizon 2020 funded projects
- Refined methodologies on the integration of sex/gender-based analysis, and intersectional analysis, in R&I content
- Evidence-based policy recommendations for Horizon Europe
- Awareness raising material including factsheets

Full Policy Review Report and Factsheet released on 25 Nov. 2020



Slide: Mina Stareva Head of sector – Gender equality DG Research & Innovation, 21 Apr. 2021







Basically:

Agricultural and food sciences are essentially applied sciences, as ongoing mission: 'science for impact',

→ societally defined and subjected to RRI (responsible research innovation)



If people matter \rightarrow gender⁺ matters



High potential of inclusion and integration in system approaches







Process-Level Farm Simulation



FARM SYSTEM

- <u>Integrated</u> Farm
 System approach
- As explained by US
 Dept. of Agriculture
 Extension Service
- How is the farm defined?
- What is included / what left out?











Added:

People =

Re-peopling agriculture

 Contexts of agriculture = Societal embeddedness







Determinants

(Norman 1980; Norman et al. 1982)

- Human aspects: exogenous + endogenous
- Technical aspects: physical + biological (later also natural resources)
- Labour plus management
- Off-farm factors and processes beside cropslivestock

→ Whatever changes, it influences other parts





Norman, D. (1980) The Farming Systems Approach: Relevancy For The Small Farmer, MSU Rural Development Paper No 5, p. 4.



knowledge products: State of agricultural systems science. Agricultural systems 155, 269-288, p. 277.



Awareness of Interrelations - contexts
 Transdisciplinary programming







Where to focus on people and on gender⁺?









- Many agricultural innovations are proven to structurally affect people (e.g., man/women) differently and unequally; though not included systematically when developing and introducing them ('user' and -indirect- 'impact approach').
- Gender⁺ normative structures sustain that structurally people (e.g., women/men) unequally and unfairly profit from innovation opportunities / suffer from climate and food shocks.
- Restrictive norms are engrained in institutions such as family, education, banking, services, any organisation; these often constraint marginalized groups as women in their agency concerning resources, services, mobility, representation and decision-making; even more the case for who is being part of other underprivileged groups.
- Inclusion of gender⁺ analysis to go from individual level up to structural level



- Science for impact → contexts matter; science as part of social processes Acknowledgement:
 - Groups of people as <u>actors</u>
 - Groups of people as being <u>directly or indirectly affected</u>
 - Social thus inclusive gender aspects to be <u>taken seriously</u>
 - Need to address <u>potential biases</u> (aspects overlooked, biased concepts)
 - Gender dimension as intersecting with other social dimensions, <u>Gender</u>⁺
- not doing 'harm' / beyond accommodative
 - \rightarrow transformative social / gender approaches







Agri-food <u>systems</u> approaches provide an opening to integrated approaches across diverse crop, livestock, and farm and natural resource management as well as institutional dimensions.

Basically:

considering agriculture <u>beyond components</u> <u>but as farming and agri-food systems</u> <u>in societal and ecological contexts</u>







- Agricultural production
- Livestock production
- Grass -woodlands production
- Agri-food technology
- Industrial cork and wood technology
- Relationships with?
 - Social & gender studies
 - Nature conservation / biodiversity
 - Agroforestry farming system agroecology
 - Integration / social cohesion
 - Healthy Food
 - Tourism







Centro de Investigaciones Científicas y Tecnológicas de Extremadura





EXAMPLE: DESIGN BEYOND 'REFERENCE MAN'



WHAT for who is NOT like him????

Think out-of-the box to overcome:

- Options for ergonomic adjustments /size:
- Widening which tasks to be studied for technology support
 - Post-harvesting
 - Direct marketing & home-use



- Extension of extension and meetings to both m/f
- Inclusion of labourers in information meetings & hearings, testing and training





► EXAMPLE: COMPONENT RESEARCH →INCLUSIVE BREEDING / INNOVATION



- Including gender-sensitive decisions at each R&D stage, e.g.,
- Participatory breeding / technology generation innovation
 - Diagnosis: identification problem and identification possible alternatives
 - O Analysis demand adjust development
 - Scenarios: participatory testing / impact assessment, also indirect impacts
 - Differentitated alternatives targeting
 - O Inclusive dessimination stragegies



Tufan, H.A., S. Grando and C. Meola (eds) (2018). State of the Knowledge for Gender in Breeding: Case Studies for Practitioners. Lima (Peru). CGIAR Gender and Breeding Initiative. Working Paper. No. 3. <u>https://cgspace.cgiar.org/handle/10568/92819</u>



EXAMPLE: INCLUSIVE DEHESA FARMING SYSTEM AS REGENERATIVE AGRICULTURE



The dehesa in Spain and the natural practice of regenerative grazing, 2020: <u>see</u>, also short <u>video</u>

How to make inclusive: people - gender⁺?





3 Andalucia 5 Madrid

Farm with less than 20% of dehesa formation



A *dehesa* is a multifunctional, agrosylvopastoral system and cultural landscape of southern and central Spain and southern Portugal; in Portugal, it is known as a *montado*.

OPPORTUNITIES: NEW WAYS OF CULTIVATION



Biological and organic farming is in general more appealing to women

Supporting research in this sector =

Opportunity to supporting women in their leadership and livelihood

Often also social and cultural motivation for entrepreneurship which can be combined with other societal goals or SDGs



Permaculture, La Codosera, Extremadura





□ stepwise system approach

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- Mapping gender gaps, constraints and options
 often within and beyond internal system
- Cooperatives can play a major intermediating role in introducing training, social cohesion, social security aspects







Equality Benetits Al

LABOUR MARKET: INCLUSION AND SOCIAL COHESION



~

Spain will make it easier for migrants and the unemployed to find work in agriculture. (...) In a bid to unblock bottlenecks in the production chain and prevent the prospect food shortages, the government said it would allow farms to take on between 75,000-80,000 people. (...)

The initiative is particularly important for the regions of Andalusia, Murcia, Extremadura, Aragon and Catalonia, where most of Spain's agricultural activities take place.

Planas said that the show of support for Spain's agricultural sector was not just intended to strengthen the local market but to guarantee exports to other EU nations as well:

(...) from EU countries like Bulgaria and Romania Par IIII MIGRANTS InfoMigrants | Publié le: 08/04/2020 as well as those coming to Spain from Morocco.



The harvesting season in Spain is supposed to begin in April | Photo: picture-alliance

FOOD | ACRICULTURE | MICRANT WORKERS | CORONAVIRU

Spain to hire foreign workers to cover agriculture shortfall

https://www.infomigrants.net/fr/post/23946/spain-to-hireforeign-workers-to-cover-agriculture-shortfall





Sexual abuse of workers in Spain's strawberry fields



Nick Kightley | 18 April 2019





Moroccan women <u>https://www.ethicaltrade.org/blog/sexual-</u> <u>abuse-workers-spains-strawberry-fields</u>

BANAT/EXTREMADURA: Cultural Closeness of Romania and Spain





The Government of Extremadura in collaboration with Romanian immigrants organized a photography exhibition Banat/Extremadura, which will be opened within European Heritage Days. The exhibition is titled Aproximaciones culturales entre Rumania y España (BANAT/EXTREMADURA: Cultural Closeness of Romania and Spain) and it will be celebrated in the Museo de Cáceres (Spain) from 15th September to 31st October, 2016 to showcase the obvious parallelisms between both regions with a common Roman past and a Romance language. The issues revolve around traditional architecture of mud walls, the "sacrifice" of the pig, gastronomy of meat dishes and milk-derived products, farming and cultural landscapes, popular religiosity and culture of death, as well as the relationship between people and natural environment.

EXAMPLE: INCLUSION AS SOCIAL SYSTEMS



- Community Supported Agriculture
- Inclusion and Integration opportunities
- Green care

Sectoral links of multifunctional agriculture







INCLUSION: EU GREEN DEAL AND 'JUST' TRANSITION?

<u>EU Farm to Fork strategy</u> 6 objectives under EU Green Deal contributing to:

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EU climate change agenda

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- protection of the environment
 (Zero Pollution Strategy and
 Circular Economy Strategy)
- preservation of biodiversity
 (Biodiversity Strategy for 2030)
- sustainable food consumption
- affordable and healthy food for all
- improvement of farmers' position in the value chain.





'Just' as between regions defined

https://ec.europa.eu/commission/presscorner/detail/en/ip_20_17 http://capreform.eu/agriculture-in-the-european-green-deal/

COLLABORATION (YELLOW) AND <u>CONTENTS</u> (RED)



Based on <u>model EU</u> <u>Toolkit by YW</u>



CONCLUSIONS & RECOMMENDATIONS



- If recognition gender⁺ matters in 'Science for impact', it implies
 - 're-peopling' of the research focus in agri-food sciences
 - integration of societal and social aspects
- The research cycle: how to systematically include in research (project) design
 - Look for
 - <u>connections within your great variety of fields</u> of study / research / innovation / extension based on what drives you
 - <u>which contexts</u> do matter,
 <u>which people will be affected</u> (also indirect beyond end-users) / might been overlooked
 - Define what /whom you can connect to in your project include societal and social aspects, citizens and outdoor expertise, establishing longer-term working relations
 - Include enough time in project (proposal)s for exchange and capacity building





















- Contact details: <u>Margreet.vanderBurg@wur.nl</u>
- Gender-SMART websites:
 - WUR: <u>https://www.wur.nl/en/project/Gender-SMART-1.htm</u>
 - EU: <u>https://www.gendersmart.eu</u>
- Other significant links for handbooks, manuals, tools and videos!
 - EU report Gendered Innovations II, 2021
 - EIGE portal gender in agriculture and rural development: <u>https://eige.europa.eu/gender-mainstreaming/policy-areas/agriculture-and-rural-development</u>
 - FAO gender portal: <u>http://www.fao.org/investment-learning-platform/themes-and-tasks/gender-analysis/en/</u>
 - Worldbank gender portal: <u>https://www.worldbank.org/en/topic/gender</u>
 - CGIAR GENDER platform: <u>https://gender.cgiar.org/</u>; CGIAR GENNOVATE: <u>https://gennovate.org/</u>

