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Co-producing Gender Equality Knowledge in a European Project Setting

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Abstract

In the Horizon 2020 funded project "CHANGE"[1], tailor-made gender equality plans were implemented in research performing organisations for the duration of four years. In order to make related activities more sustainable, efforts were also made to aim at the initiation of long-term structural changes towards more gender equality in science and research. To accomplish this ambitious goal, we learned from previous gender (equality) projects but also sustainability research, and came up with a new approach, which attempted to tackle the existing *knowledge-to-action gap,* respectively the *research-to-practice gap*. Translation gaps from theory to practice help to understand why identified barriers for gender equality in science and research and the connected recommendations for change have seldom been put into action and/or their actual impact remained marginal. In this paper we describe what we mean when we say we are co-producing gender equality knowledge together in a European consortium of academic and research institutions. The introduction of the underlying ideas of the project, as well as it's architecture, will explain how structural changes inside the institutions will be enabled through integrated knowledge co-producing processes and through the engagement with institutional key players (Transfer Agents).

Keywords: structural change, gender equality, communities of practice, feminist knowledge

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1 Background of structural change policies

The Horizon 2020 Specific Programme describes the aim of Part V 'Science with and for Society' as follows: *"The aim is to build effective cooperation between science and society, to recruit new talent for science and to pair scientific excellence with social awareness and responsibility"*[1]. This statement highlights that scientific excellence can no longer be seen detached from a responsible and socially aware institutional culture; a culture which does not regard gender and diversity as differentiating factors but as sources for an inclusive and innovative science with the potential to overcome the current societal and grand challenges within the European Union.

Starting in Framework Programme (FP) 5 to FPs 6 and 7 and now Horizon 2020, the EU has funded actions to identify gender inequalities in different sectors and subjects, always with the aim to set up (policy) recommendations to improve the situation. The focus of funded actions shifted the approach from an individual ("fixing the women") to an organizational ("fixing the institutions") approach. Instead of focusing on inequalities from an understanding of socialized gender differences, the current approach questions existing structures and their unjust outcomes for women in science and research.

Today, in the European Research Area (ERA), the advancement of gender equality and gender mainstreaming in research are one of six key priorities. This includes a special focus on 1) the promotion of women's careers in science and research, 2) the creation of gender equal decision-making boards, and 3) the integration of the gender dimension into research and innovation activities[2]. Furthermore, in the strategy for an innovative Europe 2020 the European Commission declared that the establishment of gender equality in research performing organisations (RPOs) as one of the key success factors.[3] In our

1. https://ec.europa.eu/programmes/horizon2020/en/h2020-section/science-and-society [17.6.19]

2. https://ec.europa.eu/info/research-and-innovation/strategy/era_en [17.6.19]

3. European Commission (2010), EUROPE 2020. A strategy for smart, sustainable and inclusive growth, Brussels: European Commission. 3.3.2010.COM (2010) 2020.

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experience[1], many past 'gender in science'-research projects finished by stating current gender in-equalities, naming several barriers for women's careers, and giving recommendations for gender equality in science and research (cf. Thaler & Wächter 2005; Caprile et al. 2012; European Commission 2012; Carvalho & Machado, 2017; Carvalho et al, 2013; Carvalho & Machado, 2011, Dahmen & Thaler 2017). However, due to knowledge translation gaps these recommendations were rarely put into action. Furthermore, the politics of *feminist knowledge transfer and power issues* (as described by Bustelo et al. 2016) led to a situation where gender equality would appear in nice words on a website, without the real problems being tackled in many RPOs, as well as in research funding organisations (RFOs). From this it is clear that gender experts and scholars have provided enough evidence and knowledge, but we are still lacking strategies to translate this knowledge properly to be useful for the relevant stakeholders to put this knowledge into practice.

1.1 Translation gaps in knowledge production

Such shortcomings are not unique for the field of gender equality (research) but have been described for various other thematic areas as *research-to-practice gap* (e.g. discussed by Roxborough et al. 2007) and *knowledge-to-action gap* (see e.g. Strauss et al. 2009). The research-to-practice gap describes the challenge faced by practitioners, who are often not aware of results from research produced by academia, or that research results are not valued by practitioners as relevant for practice and consequently not used. The knowledge-to-action gap describes a very similar problem, and often these two notions are conflated. However, the knowledge-to-action gap also underlines that it is not only research-based knowledge which does not find its way out from the 'ivory tower', but that the uptake and use of knowledge is related to the process of how it was generated. In the context of sustainability research this has described as '*discursive dimension of knowledge*' (Magnuszewski et al. 2010: 24), a notion with wide applicability. What kind of knowledge is considered at which point in time in practice, e.g. in (policy) decision making,

1. The authors have long-standing EU-project experience with explicit gender focus: INDECS (FP5, 2000-2001), WomEng (FP5, 2001-2003), PROMETEA (FP6, 2003-2005), Advance (FP6, 2006-2008), HELENA (FP7, 2009-2011), MOTIVATION (FP7, 2008-2010), GenderTime (FP7, 2013-2016), and now CHANGE (H2020, 2018-2021).

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may be seen as a discursive or even political act in itself. Although the societal relevance of research, and the exploitation of results in practice and policymaking has been heavily promoted since the mid 1990s, a better integration of research in policy and practice has succeeded only to a limited extent so far. Causes are often attributed to a lack of cooperation and limited exchange of knowledge between the various knowledge holders and relevant actor groups. This is particularly pronounced in the classical disciplinary academic research, while transdisciplinary and action research proved to be useful approaches in tackling these shortcomings. However, even if the same overall goals are pursued by different actors, cooperation, especially co-production, is not an easy task as a multitude of experiences have shown (see e.g. Wiek 2007*, Karner et al. 2011, Goszczyński et al. 2017*).

For instance, in many past gender projects from the EU different types of gender (equality) knowledge have not been used by each participating organisation, and sometimes different types of gender knowledge have been mixed up, leading to conflicts about theories, and an absence of practical implementation possibilities.

1.2 Feminist knowledge conflict

In previous EU-funded structural change projects one reason for problems in institutionalising gender equality in science and research is the so called “conflict of knowledges” (Albenga 2016, p.140). Viviane Albenga argues that the transfer of ‘feminist knowledge’ into gender expertise needs awareness regarding gender equality (ibid.). This is the approach CHANGE considered for implementation. What Albenga calls ‘feminist knowledge’, we have labelled ‘scientific gender knowledge’, drawing upon the gender knowledge concept invoked by Angelika Wetterer (2009), based on the parallels between Albenga’s gender expertise and Wetterer’s ‘gender expert knowledge’. The important rationale behind CHANGE bears a striking resemblance to the findings of Albenga’s ‘EGERA’ project, namely the difficulty of transferring research into practice or knowledge to action. Together with the problem of resistance against gender equality actions, we identify these difficulties as are the main reasons why in the past so many initiatives have chosen the easier way of ‘changing the women’ instead of ‘fixing the system’ (Schiebinger 2008).

The impact of CHANGE lies in tackling those for gender equality in science and research: by involving relevant stakeholders and key actors in research organisations (such as

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university and research organisation managers, research funding directors, gender equality officers, research policy makers, etc.) and listening to their experiences (Lee et al. 2010) to **co-produce gender equality knowledge together.** This represents the core idea of CHANGE.

In CHANGE, we address the knowledge-to-action gap, by acknowledging the different types of gender knowledge and their producers as legitimate knowledge holders. Wetterer (2009) coined the term ‘gender knowledge’, which Wetterer defines as the knowledge different groups of persons have about gender, gender theories and/or gendered practices. She distinguishes between everyday, expert, and scientific gender knowledge.

1. Everyday gender knowledge

• A property of all humans, learnt informally during the span of their lifetime

• Characterised rarely as reflected knowledge

• Often strongly influenced by media images, gender stereotypes, etc.

2. Expert gender knowledge

• Often a kind of knowledge that gender practitioners like gender equality officers, gender trainers, etc. have

• Comprised of professional knowledge and competences about gender equality

• Based on a limited number of gender theories, which are preferred by the very practitioners

3. Scientific gender knowledge

• A kind of knowledge gender scholars have and produce themselves

• Results in the evolution of gender theories as the knowledge of the gender scholar grows (this sometimes results in increasing levels of complexity)

• Only a percentage of this knowledge is immediately used for practical implementation.

In former projects concerning gender in science and research, the aim was often to involve two or sometimes three different types of actors, or sometimes it ‘just happened’. These actors included:

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1.) Scientists or engineers, who are supposed to do gender research even though their academic qualification lies within other fields of expertise. Often women have been chosen as they were seen as 'naturally interested' or even 'naturally competent' for gender issues, which may be a false assumption in many cases. The point is that involving scientists or engineers is important, because their experiences in the field are relevant and important, but it is crucial to keep in mind that their gender knowledge is an everyday gender knowledge. Thus, this group needs support from gender scholars/social scientists, with their knowledge about gender theories, and social science methods (e.g. conducting and interpreting interviews according to the scientific state of the art, etc.).

2.) Gender scholars, who, as gender studies is an interdisciplinary field, stemmed from various disciplines (philosophy, sociology, pedagogy, psychology, etc.) also have different backgrounds of scientific gender knowledge and advocated for different gender theories. In addition, the group of gender scholars could be further divided into two types:

a.) first professors or other university personnel (tenure track),

• who, as Europe is lacking interdisciplinary gender departments, might conduct gender research, but do so in their position which is appointed to a specific discipline (with specific performance indicators, like disciplinary publications, etc., but certainly no acknowledgement for gender equality action implementation),

• and, consequently, publish a lot of papers, even in projects with a heavy implementation character like 'coordination and support actions' of the EU; and

b.) party funded researchers (mostly post doc),

• who engage with these gender projects 'professionally',

• devote their expertise to interdisciplinary gender research,

• and, therefore, lack a disciplinary performance record, which would be preferred by most university ratings and career systems.

3.) Gender practitioners, such as gender equality officers from universities, who in some projects were also included. Gender practitioners brought practical experience and gender expert knowledge (e.g. about mentoring, coaching, gender budgeting, sexism in academia, etc.) into these gender projects. This type of expert knowledge, and the role of these actors in their organisations, is a very important resource for the implementation of

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projects. However, when a specific gender project demands gender research and/or managing a larger project or work package within an international group, these national experts sometimes lack language skills and/or research project experience.

Laube (2017) analysed the difficulties for gender equality change based on these three individual positions, and in line with this, Bustelo et al. (2016) describe tensions between academic and practice expertise in the context of gender training. On the one hand, academic work does not pay enough attention to the analysis of practice, while gender training practitioners do not draw much on theory or research outputs (which are considered to be technocratic, and not very useful for "real-life" cases). As a consequence, in order to overcome the separation of academia, policy development and practice, CHANGE follows an **approach of integrated co-production of gender (equality) knowledge**.

2 Architecture of CHANGE

CHANGE tackles the two major problems explained above while aiming at implementing gender equality plans (GEPs) towards structural change in science and research.

1) The knowledge-to-action gap will be closed by integrating relevant actors and stakeholders from the beginning and *co-producing gender equality knowledge together*, in order to come up with practical knowledge, which is relevant for and will be meaningful for the respective actors in RPOs and RFOs.

2) Power issues ('the politics') of the feminist knowledge transfer will be tackled by *integrating so called Transfer Agents* (TAs), and later further stakeholders from RPOs and RFOs in the project consortium to build *regional communities of practices* (CoPs). The TA-concept has been tested in the EU-FP-7-project GenderTime (Thaler 2016; Thaler, Karner & Wicher, forthcoming), where Transfer Agents were defined as relevant institutional actors, who are committed to gender equality and structural change and most importantly have a certain authority within their organisation (management level – in the organisation which works on gender equality plans). The idea of co-producing knowledge and building CoPs had been tested in knowledge brokerage and RRI projects as well, where it has proven to be a successful strategy to enable structural changes (cf. Karner et al. 2014; 2016; 2017).

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2.1 Co-production of gender equality knowledge

Practices of knowledge co-production might be diverse, but the overall goal is to make different types of knowledge more accessible and responsive to each other, to establish a mutual understanding, to learn from each other and come up with more integrated knowledge, and to better align activities. Co-production in CHANGE builds on iterative learning cycles of communicative interaction, action, and reflection, which needs time and an intermediate social space as co-production certainly also involves power issues regarding knowledge hierarchies as well as considering the capacity for organisational change. Such an intermediate social space is created through the CHANGE project, which offers room for tailored interaction and the planning and implementation of gender equality activities over a period of four years.

In CHANGE knowledge co-production takes place on several levels, essentially in line with the scale of the different Communities of Practice. These levels include the project consortium, within the GEP implementing organisations, regional CoPs, and the international expert community through the regular interaction with other projects, such as EU funded sister projects.

At the *consortium level* knowledge co-creation is institutionalised by means of physical meetings every six months. These meetings are conceptualised as interactive workshops, where partners exchange gender equality knowledge, which is as diverse as the scope of team members' expertise is broad, ranging from academic gender scholars to people from administration and newcomers to the field, who started with hardly any gender expertise into the project. The design of the co-creation workshops is tailored for each meeting according to the specific stages in the project. However, the general pattern is similar:

Partners share their knowledge, which so far concerned shortcomings in GE in general, the actual state of the art in partners' organisations regarding GE, specific contextual conditions influencing GE, plans and strategies for improving GE in the participating organisations and the rationales behind it, and already implemented activities, experiences and results. The group then reflects together upon what was shared, partners get inspired by the ideas of others, feedback and advice is collected, and shortcomings are addressed. Finally, plans for the next steps are revised or further elaborated based on the discussions, either at the consortium or at the organisational level. This links to another very central

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level of knowledge co-production, each of the partner organisations have started to establish multi-actor CoPs, of which the core groups are built by CHANGE team members and Transfer Agents (see next section).

This multi-level design allows for knowledge co-production, which is both systematic and standardised where it is possible (to compare and learn from each other, e.g. the structure of GEPs, the institutionalisation of transfer agents, recruitment and retention activities etc.), but also flexible and open where country and organisational specifics require it (e.g. salary schemes, parental leave, work-life-balance measures).

2.2 Involving transfer agents and stakeholders

In order to successfully and sustainably implement gender equality knowledge in a strategic manner, it is necessary to involve individuals in powerful and relevant positions, who are committed to the idea of gender equality in science and research and support the implementation of the gender equality plans. These individuals, in their respective positions, are so called **Transfer Agents** (TAs are a concept created by Anita Thaler in the EU-project GenderTime, see Thaler 2016). Because TAs are relevant actors of CHANGE institutions (e. g. human resources managers, heads of institutions, or equal opportunity officers) and additionally **stakeholders** from science and research (e.g. policy makers, research funding actors) are involved, gender equality changes also go on after the project ends. All TAs have been asked whether they would support the course of this gender equality implementation project and their national teams in the task of sustainably implementing gender equality measures according to the gender equality plans (GEPs). Their commitment was a prerequisite for the institutions to become partners in the CHANGE consortium.

The specific roles and possibilities of support available from the respective TAs were defined separately for each institution, this is due to variations in what each of the TAs were able and willing to do, depending on their position, time and motivation. The commitment of a TA can be moderate (regular involvement on specific occasions like TA workshops, and additional internal meetings) or it can be (ideally) higher and lead to a very active and continuous collaboration also beyond the organisation (networking activities with stakeholders etc.).

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It is important to stress that any kind of support of the involved TAs is welcome and appreciated, the involvement is likely to increase through the process, especially because of the co-production of knowledge approach (see Karner et al. 2011).

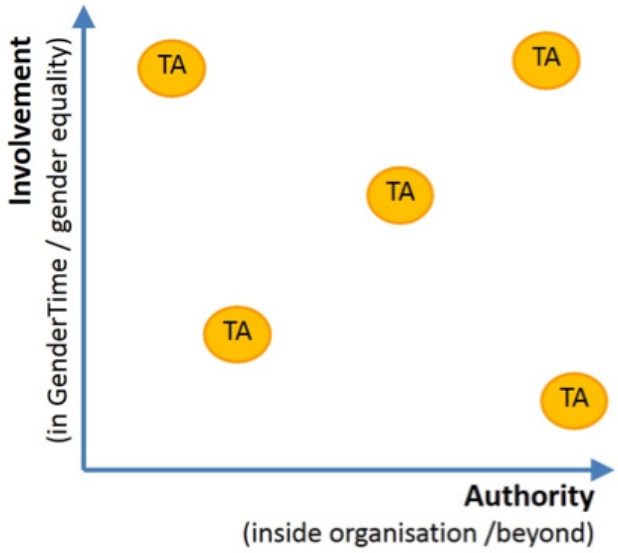

Fig. 1: *Transfer agents with different impacts depending on their degree of authority and involvement (Thaler 2016, p. 19)*

This could be proven for the EU-project GenderTime (2013-2016), where:

> "it could be found out with data collected by project partners about their knowledge transfer activities that the impact of transfer agents (for improving gender equality policies and/or practices) depends on their involvement in the project and their authority. In other words, the involvement means commitment towards gender equality in science and research and authority means power/networks/influence within their own organisation and beyond. It could be observed that a variety of different transfer agents had very different impact on gender equality implementation processes"
>
> (Thaler 2016, p. 18 f.; see also Fig.1 above).

3 Sustainable implementation of gender equality

One main aim of CHANGE is it to support RPOs to implement gender equality plans in a sustainable way. An essential factor for achieving this, is the involvement of the above mentioned TAs. In each organisation they will, together with the core consortium partners,

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transfer co-produced gender equality knowledge inside their institutions. This innovative approach ensures the promotion and institutionalisation of the GEPs beyond the project duration. Furthermore, through mutual learning and networking with external target groups, the project partners will become regional resource centres skilled to provide gender equality knowledge and expertise to other RPOs and also research funding organisations (RPOs). With such a co-production of knowledge approach, and by building *communities of practice* among RPOs in each participating region, support and mentorship structures will be established and sustained even after the project will be finished. Regular networking and exchange with national and European stakeholders (policy makers, researchers, ministries etc.) ensures a spill-over effect of the project results to other target groups in the respective countries.

3.1 Contextualisation of a project like CHANGE

CHANGE pursues an approach, which connects to the pillars of action research, even if it is an implementation project (as opposed to a research project). Like in an action research project, CHANGE evaluates the current institutional practice (here related to gender equality) and tries to improve it by implementing intervention actions in practice. An action research project demands careful planning and persons involved that can generate solutions to practical problems; further practitioners need to be involved in the implementation and development activities (McNiff and Whitehead 2005). CHANGE fulfils this requirement by pairing newcomers in the field of gender equality with experienced gender scholars and practitioners. TAs and committed management authorities help to assess potential solutions and support their implementation. The evaluation, monitoring and critical reflection on the process and the outcomes of change actions are essential, as well as offering room for reflection for the people involved (Dahmen and Peterson 2017). Monitoring itself is therefore regarded as integrated part of CHANGE and based on monitoring principles developed within the GenderTime action (Dahmen-Adkins and Peterson 2019). Another commonality of CHANGE and action research concerns the generated knowledge, which is very specific based on evaluation and the particular context in which it was gained. Common reflection on underlying processes of change helps to obtain an enhanced organisational understanding, which can lead to an improved and adapted (gender equality) action plan (Reason and Bradbury 2008).

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3.2 Five phases of CHANGE

Kotter (2014) developed a model on how to achieve structural change in institutions, including 8 consecutive steps, each of which have to be fulfilled to change the culture of an organisation in a sustainable and inclusive way: 1) Create a sense of urgency; 2) Build coalitions; 3) Form strategic visions and initiatives; 4) Enlist a 'volunteer army'; 5) Enable action by removing barriers; 6) Generate short term wins; 7) Sustain acceleration; and 8) Institute change. The general methodological approach of CHANGE is built up on a condensed version of Kotter's model on how to achieve structural change in institutions. Instead of 8 steps the CHANGE model includes 5 phases (see graph 2), which support achieving structural change in RPOs and RFOs towards more gender-inclusive science and research.

Fig. 2: *Methodological approach of CHANGE*

During the **first phase** the implementing partners undertook an institutional gender equality benchmarking. The main focus here is to get to know the institution better, to talk to organisational key players about gender equality issues, and at the same time to raise awareness for the needs and benefits of gender equality. This phase was also used to communicate the ideas, aims and targets of CHANGE towards the members of the institution. Furthermore, gender trainings were implemented for the project teams in each institution. **Continuous involvement of transfer agents**, who are going to support the institutional acceptance of CHANGE took place right **from the beginning**, as well as an early identification of other potential supporters and allies on department and managerial

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levels in order to increase the sustainable embedding of gender equality in the organisations (as suggested by Karner et al. 2017).

The **second phase** was devoted to exchanging the collected data, discussing the collected data in their organisations, and also in the consortium as a whole. This step is important for identifying and understanding institutional mechanisms and structures, which can support or hinder the success of the planned GEPs. During this phase, the final GEP were individually designed (while being constantly monitored and, if necessary, revised and adapted/updated during the whole project progress) bearing in mind the institutional and national pre-requisites and circumstances. A roadmap for the implementation of the GEP includes institutional objectives and targets, which will be used for assessing the impact of CHANGE at the end of the project.

So-called quick actions are implemented in **phase three**, which is the current stage. The advantage of the implementation of short-term actions or quick actions helps to increase the visibility of the project within the institution and the awareness of gender equality issues which are already at an initial stage of the implementation. Lessons learned from previous gender equality projects showed that the implementation of short-term actions not only enhanced the commitment of the involved researchers and Transfer Agents, but also immediately showed the involved organisations that this project really changes something (rather than merely speak about change). Another point is the idea of “giving something back” to the involved staff. While many gender projects do research about the involved organisations and ask the staff to answer questionnaires and to take part in focus groups or interviews, quick actions show that the money dedicated for the project is immediately destined to support the organisation in its gender equality efforts and initiates changes, which are visible to the staff. Possible examples for such kinds of actions are inviting experts on the topic of including the gender dimension in research, setting up brown bag sessions to make gender researchers more visible, initiate a women’s peer group, or collecting ideas to improve conditions in the working environment.

Phase four is devoted to the implementation of middle and long-term actions, which are equally important as most of the system changes (not only in the involved RPOs but also beyond in the whole science and research system) need time for planning and implementing actions, which are designed for changing the organisational culture of organisations. Middle-term actions are defined as activities, which will be started and

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finished during the project life cycle; actions for a long-time implementation will start during the project and will be maintained beyond the funding period.

In the **fifth and last phase** questions about the sustainability of the GEPs or specific actions will be discussed and tackled. For a successful implementation CHANGE takes sustainability aspects into consideration right from the beginning, based on the practical experience made during the realization of actions, modifications, adaptations and changes might be necessary. Another emphasis during this phase lies in the regional, national and international knowledge transfer of the co-produced gender equality knowledge with in CHANGE. Workshops will be set-up as means for dissemination, communication and exploitation.

All the activities in the described five project phases are constantly process monitored. A set of tailor-made qualitative and quantitative monitoring tools including performance indicators is therefore adopted (Peterson and Dahmen 2018). The gathered monitoring knowledge is regularly fed back to the project team and the implementing institutions to improve the project outcomes.

To increase the success and sustainability of the strategic actions, the involved TAs have to be on board from the beginning of the project and are therefore considered as part of the CHANGE team, additionally stakeholders (e.g. from RFOs) are involved in an early stage of the project as well.

4 Conclusion and outlook

CHANGE contributes to closing the research-to-action gap, respectively the theory-to-practice gap by means of a knowledge co-production approach, which follows iterative learning cycles following the action research concept. The co-production activities we implement are tailored and engage various knowledge holders and key actors, who hold a certain power, for change in the participating organisations and beyond, the Transfer Agents, from the beginning and throughout the whole project duration.

This upstream engagement is not only driven by substantive motivations, such as integrating various types of gender knowledge and practice expertise, but also by strategic considerations that support from influential actors and a wider group of key actors, positively impacts the success and sustainability of GEPs in the participating organisations. At the given point in time CHANGE is in its second project year, the results

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of the institutional gender benchmarking have been analysed and discussed with TAs and the project team. Subsequent activities included the implementation of quick actions within the institutions, and all partners started connecting and networking with relevant key players and practitioners in the field of gender equality in science and research. This is a first step towards the foreseen communities of practice, which will represent one sustainable project output. Changing the culture of an institution is not going to happen in four years' time, we are realistic enough to know that. To reach gender equality in science and research organisations, a common vision is needed, with strategic planning, the knowledge to implement the plans, and the persons who are committed to work on the changes, also after the project ends. It's a long-winding process. However, an intervention action like CHANGE can be an impetus to scrutinize existing structures and to develop new ideas for social gender just organisations in a participatory way.

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