



## **RRlizing lab - experiences in the implementation of RRI principles at a higher education institution**

### **1. How did it all begin?**

Often in the context of implementation of the responsible research and innovation principles (RRI) in large organizations, the question arises as to who should "pull" or "push". If we think about the fact that someone should "pull", we often imagine those who have formal power - superiors - visualizing future successes and then "from above" encouraging other employees to reach such a lofty goal. If, on the other hand, we think about the fact that someone needs to "push", we imagine employees in the organization - job executors - who start initiatives for change, growth and development "from below" and propagate these initiatives to other parts of the organization, convincing their colleagues to join, and their superiors to provide them with support and structure needed for these activities. The experiences of the Faculty of Agriculture of the University of Novi Sad (PFNS) show that this kind of dilemma is redundant and artificial - it is in the general interest that descending and ascending forces appear alternately, because both superiors and those who perform tasks have their roles in achieving complex change.

Teaching staff within the PFNS had the opportunity to participate in the large international project NewHoRRizon (<https://newhorizon.eu>) in Madrid and in Prague in workshops called "social laboratories" - places and contexts where groups of collaborators had the freedom and resources to explore the challenges of implementing responsible research and innovation within the institutions where they worked in. The teaching staff from PFNS were not alone in these first steps - colleagues from the Scientific Institute for Food Technologies in Novi Sad (FINS) and from the Faculty of Technical Sciences (FTN) with their participation made the first changes to the establishment of the principle of responsibility in work receive university (UNS) approval. Teachers within the PFNS reported their experiences to their superiors, conveying their positive impressions and ideas for positive changes at the Faculty. Based on this information, the Vice-Dean for Science and International Cooperation concretized the enthusiasm of his associates through the delegation of responsibility for each of the "pillars" of the RRI principle, with some specifically added in this context: education and science, gender equality, open access, ethics, relations with the public, management, and the generation gap. Specific names were associated with specific areas, thus creating a quality team - one in which each member felt personal responsibility and recognized individual contributions to the overall progress towards more responsible research.

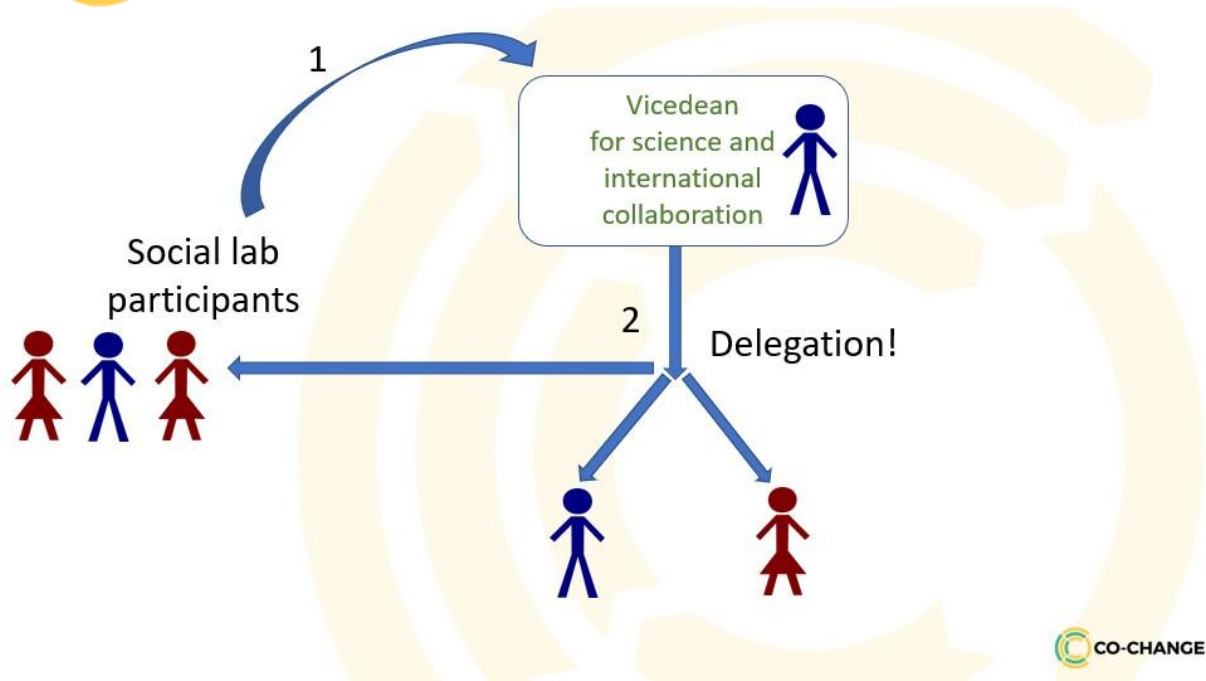


Figure 1: Dynamics of relationships in the institutionalization of RRI changes to PFNS

At this moment, a perfect combination was created - just as riding a bicycle requires one foot to aim for the sky, and the other one to dive to the ground, so in initiating institutional changes for the sake of greater responsibility at work it was necessary to alternately have forces that act "top-down" and those that they act "bottom-up" (Figure 1). These first steps found their continuation in the next, third "social laboratory" which was held in Novi Sad (picture 2), where participants from as many as thirteen countries developed and practiced the application of RRI principles in an institutional context over the course of two days. All participants, but especially the ones from the UNS institutions, learned how responsibility could be applied in the work of individual researchers and scientists.

Meetings of team members became frequent, as well as their informal communication. Together they were able to learn, create, discuss and understand what the requirements, challenges and successes were. The Corona virus pandemic of 2020 only slightly slowed down these activities, as team members adapted to the new circumstances and continued to work together despite the current restrictions. At this moment, the next international project that deals with the implementation of RRI principles in organizational changes - Co-Change – started. Within this project, PFNS obliged to create its own laboratory for institutional changes called "RRlzing Lab", with the idea of further developing the practical application of the principles of responsibility in research and innovation at this institution.



Figure 2: NewHoRRizon social laboratory organized in Novi Sad in October 2019.

## 2. How is it going now?

In the next three years (2020 - 2023), the RRIZing laboratory, as part of the Co-Change project, is experimenting with institutional changes that at PFNS can contribute to greater responsibility towards society and the natural environment during research work and innovation. FINS and FTN contribute to these activities, themselves creating changes within themselves. Some of the results are shown below:

Institutional changes:

PFNS:

- Gender equality board established at PFNS
- Gender equality plan adopted at PFNS <http://polj.uns.ac.rs/sr/node/3385>
- Person in charge of gender equality named at PFNS
- Creation and implementation of an Open repository for textbooks at PFNS. <https://zenodo.org/communities/unsPFNS>



- OA aspects and elements implemented in the publishing rulebook of the PFNS – first level of adoption passed, still to be fully adopted and put into force

#### FINS

- Code of academic integrity of FINS adopted and associated Ethical board established
- Gender equality plan adopted at Institute of Food Technology (change inspired by PFNS)

[https://fins.uns.ac.rs/uploads/plan%20rodne%20ravnopravnosti-sr\\_20211230\\_0001.pdf](https://fins.uns.ac.rs/uploads/plan%20rodne%20ravnopravnosti-sr_20211230_0001.pdf)

- Gender equality board established at Institute of Food Technology (change inspired by PFNS)
- Person in charge of gender equality named at Institute of Food Technology (change inspired by PFNS)

#### Other activities:

- Workshop at 45. Conference for Students of Agriculture and Veterinary Medicine with international participation "Responsible research and innovations strategies in agriculture and veterinary medicine"
- Organization of a webinar on open access, 47 persons, <https://youtu.be/h0PP7C2Sh5c>
- Report on open access at Faculty of Agriculture, 150 persons [https://zenodo.org/record/5911850#.Y\\_ZEnnbMI2w](https://zenodo.org/record/5911850#.Y_ZEnnbMI2w)
- GRRIP project Closing Conference - presentation of RRlzing lab activities related to gender equality and open access "Gender equality and open access: from small talk to institutionalization at Faculty of Agriculture", 60 persons, <https://grrip.eu/grrip-closing-conference/>
- Dialogue with Institute of Food Technology on gender equality institutional changes, showing the model of Faculty of Agriculture.
- Workshop "Responsible research in agriculture and veterinary medicine" was organized at 46th Conference for Students of Agriculture and Veterinary Medicine with international participation, 20 persons, 46. Conference for Students of Agriculture and Veterinary Medicine with international participation.pdf (uns.ac.rs)
- Workshop on Gender equality organized by RRlzing lab (Faculty of Agriculture) and Institute of Food Technology, 54 persons. <http://polj.uns.ac.rs/sites/default/files/upload/Rodna%20ravnopravnost%20kao%20neizostavni%20segment%20odgovornog%20upravljanja%20istra%C5%BEivanja%20i%20inovacija.pdf>
- "Agroecoinfo 2022 conference", Volos, Greece, 180 persons
- Workshop on Effective Communication of Agrometeorological Services, 30 persons
- EMS2022 conference, Bonn (Germany), 50 persons



- Presentation of project "Digitalisation of PIS recommendations", 130 persons
- Participation at TetRRIs 2nd winter school – policy lab, Santander, Spain, 18 persons <https://site.evenium.net/tetrris2ndpolicylab/registration>
- Institute for economic diplomacy, Belgrade, training session - presenting gender equality institutional changes conducted at PFNS at the training "Law on Gender Equality - Obligations of Employers and Employees". <https://www.instagram.com/p/CbanLjdtszM/?igshid=YmMyMTA2M2Y%3D>
- Serbian association of female scientists SRNA, Promoting gender equality through Science education "Little Scientific paper contest" - inspiring girls to practice science (organized by SRNA). One elementary school girl student was a guest at our lab and conducted a small scientific research which was later presented and evaluated by expert committee.
- Serbian association of female scientists SRNA, Participation at "International girls day celebration" organized by Association of Female Scientists of Serbia SRNA, as participant and one of the mentors of awarded students of the "Little Scientific paper contest". <https://www.instagram.com/p/CjlcjdjNOg6/?igshid=YmMyMTA2M2Y%3D>
- International Association of students in Agricultural and related Sciences, (IAAS), participation in the workshop on gender equality organized by Faculty of Agriculture and Institute of Food Technology and presenting students' opinion on gender equality.
- RRIzing lab webpage created <https://www.rri.stocarstvo.edu.rs/>
- Organization of a workshop at European Researcher's night (promoting gender equality and science education) - coorganized with Kreativno edukativni centar Novi Sad, 600 citizens
- Organization of a workshop at 17th International education fair in Novi Sad "Putokazi" - jointly organized with multiplier organization "SRNA" Association of female scientists in Serbia (promoting gender equality and science education), 6000 citizens
- TV interview on gender equality, 300 citizens, <https://www.youtube.com/watch?v=Jr2yYu6VwUA>
- Social media shares of the activities (LinkedIn, Instagram, Facebook), 1950 citizens
- TV report on gender equality workshop, 36 citizens, <https://www.youtube.com/watch?v=LHdQIDIAF9Y&t=2s>
- Press release on gender equality workshop, 37 citizens, Rodna ravnopravnost na Poljoprivrednom fakultetu | TV KANAL 9 NOVI SAD ([kanal9tv.com](http://kanal9tv.com))

### 3. What lies ahead?

All the mentioned activities, as well as numerous challenges encountered along the way, made the RRIzing team determined to continue its mission to make PFNS even more responsible in its work, and along the way to present its experiences as an example of good practice to other UNS members. New



project activities are ahead of this team - together with the Faculty of Technical Sciences and the Faculty of Technology, the Faculty of Agriculture is currently participating in a new international project with the acronym REINFORCING, since January 2023, which deals with providing comprehensive assistance to organizations that want to become more responsible in their work. Negotiations and writing of other international project proposals on related topics are underway. From those who took their first steps in the application of RRI principles in scientific work a few years ago, members of the RRIzing team have become local leaders of the concept of institutional responsibility and an example for other subjects in the local environment.

#### 4. How can other higher education institutions initiate their own institutional changes?

As shown in the example of PFNS, the promotion of responsibility in research and innovation within higher education institutions is a complex process that engages numerous actors and various activities:

- The personal initiative of employees is extremely important because it indicates the motivation and dedication of researchers and lecturers, while setting an example for other colleagues.
- Institutional support in the implementation of those initiatives, with an appropriate vision and commitment to those values, is another important aspect because success will only be possible if organizational changes are supported by higher decision-making levels.