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Adaptation Capacity of Women to Climate Change in the Alpine region with a focus on pastoral farms.

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Introduction

- ▶ Grew up on dairy farm in Salzburg, Austria
- ▶ University of Natural Resources and Life Sciences, Vienna, Austria
- ▶ Master Programme: Natural Resource Management & Ecological Engineering
 - ▶ focus on human and socio-economic dimension
- ▶ Master Thesis: *The adaptive capacity of women farmers in agricultural communities: a case study on women dairy farmers in the mountainous regions of Tyrol, Austria*



Motivation & Research Background

- ▶ **Anthropogenic climate change and gender disparities** disproportionately affect vulnerable groups the most. (IPCC, 2023)
- ▶ **Adaptive Capacity (AC)** refers to a system or community's ability to adjust and cope with the impacts of climate change. (IPCC, 2023)
- ▶ **Participation of women plays a crucial role in enhancing group performance** in context of agriculture. (Meinzen-Dick et al., 2014)



Objectives of the Research

- *What factors influence the adaptive capacity of female farmers active in dairy milk production in the mountain areas of Tyrol related to cultural, social and human capital?* ?

- ▶ Challenges and Limitations
- ▶ Opportunities
- ▶ Climate Change Risk Perception and Exposure
- ▶ Social Environment and Working Conditions

Adaptive Capacity
Community Capital Framework

Interviews

22 female farmers
3 industry experts

Case Study Region - Tyrol, Austria

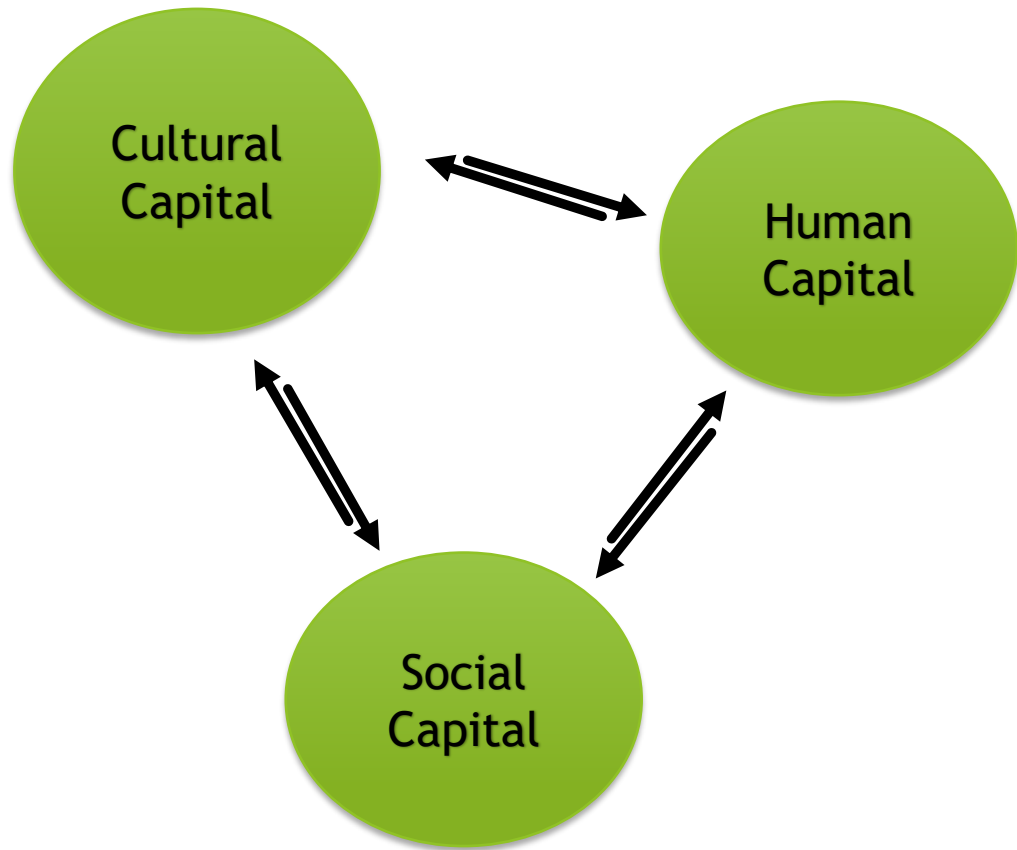


Tyrol, Austria



- ▶ 9569 farms in extreme mountainous locations
- ▶ Dairy production and livestock farming are most important agricultural sectors
- ▶ Small-scale farming: Tyrolean dairy farm keeps an average of 15 dairy cows (BML, 2022)
- ▶ 17% of farms are officially managed by women compared to 33% Austrian average (2021) (Oedl-Wieser & Schmitt, 2017)

Findings



Limiting Factors:

- ▶ Gender Social Norms
- ▶ Farm ownership & Identity
- ▶ Lack of Representation
- ▶ Lack of Involvement in Formal Institutions
- ▶ Time constraints & Multiple Burdens



Gender Social Norms

- ▶ Work distribution
- ▶ Role Models
- ▶ Decisions Making Power
- ▶ Farm Succession
- ▶ Distribution of Capital Assets

*“[...] that's the big issue we have in the female farmers' organisation, actually we want to change the role model, but it can't be changed, or it's very difficult, because **that's how we live it on the farm.** That the woman is responsible for the nutrition, for the guest and for the flowers and for these things. The man is responsible for the rest”. (IP_16)*



Farm ownership & Identity

- ▶ Farm ownership

*“I did not agree. I wanted to stay organic. [...] **It’s very simple. I don’t own it, he owns everything and I can’t oppose it.**” (IP_4)*

- ▶ Agricultural Know-How

- ▶ Representation of Farm

*“And then we had to go to events where the milk processors presented themselves. And **there were almost only men from the farms** who went there and listened to them. As a woman, I was one of the only ones who sat in there.” (IP_19).*

- ▶ Identification with caregiving responsibilities



Lack of Female Representation & Lack of Involvement in Formal Institutions

▶ Lack of Political Female Representation

▶ Lack of Women in Official Gathering

- ▶ Low bridging social capital

▶ Female Farmer Organizations

- ▶ High bonding social capital

*“Political representation is very, very traditional. [...] there **needs to be a lot more women power.** [...]. women who succeed [in the election] are the ones who are very much in line with the **traditional patterns.** And not those who dare to think in a new way. So I find political representation in the Farmers’ Union more difficult than the situation on the farms themselves.” (IP_2)*

“You have an incredibly hard time if you don't have a second or third woman in the group. If you are the only woman in a basic negotiation and have to get involved [...]. If I am honest [...] I also send my husband sometimes [...].” (IP_16).



Time constraints & Multiple Burdens

- ▶ Domestic work
- ▶ Childcare
- ▶ Care of the Elderly
- ▶ Administrative Tasks
- ▶ Income diversification

*“It interests me more than I can do in the end because there is often **not enough time.**” (IP_15)*

*“I say especially in agriculture we are extremely nerve-racked. **Every commitment or anything you take on in addition it is hardly manageable.**” (IP_2).*



Role of Agrotourism & Direct Marketing

- ▶ Additional income
- ▶ Self-efficacy
- ▶ Empowerment
- ▶ Social network

*“What has been a big thing for me now is that the rental business is working great. I’ve had such good success [...] **that it has brought me a lot.** Also, for me as a value at the farm, the fact that what I’m doing really brings in a lot of money for us.”*

(IP_15)



Conclusion & Recommendations

- ▶ Social & Structural Challenge
- ▶ Further Research
- ▶ Awareness Raising & Support Female Role Models & Female Representation
- ▶ Challenging entrenched Gender Norms
- ▶ Invest in Human & Social Capital
- ▶ Promoting equitable Access to Key Resources → Framework Conditions



**THANK YOU
FOR YOUR ATTENTION!**

Time for Questions.



References

- ▶ Bundesministerium für Land- und Forstwirtschaft (BML) (2022). Grüner Bericht 2022: Die Situation der österreichischen Land- und Forstwirtschaft.
- ▶ IPCC, 2023: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge University Press, Cambridge, UK and New York, NY, USA, 3056 pp., doi:10.1017/9781009325844.
- ▶ Meinzen-Dick, R., Behrman, J.A., Pandolfelli, L., Peterman, A., Quisumbing, A.R. (2014). Gender and Social Capital for Agricultural Development. In: Quisumbing, A., Meinzen-Dick, R., Raney, T., Croppenstedt, A., Behrman, J., Peterman, A. (eds) Gender in Agriculture. Springer, Dordrecht. https://doi.org/10.1007/978-94-017-8616-4_10
- ▶ Oedl-Wieser, T., & Schmitt, M. (2017). Frauen in der österreichischen Berglandwirtschaft.: [Fact Sheet 15]. Wien.