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Cultivating agroecological narratives

Gardeners' photovoice on underutilised crops' diversity (photo essay)

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Photos from gardens

1. In the context of underutilised and forgotten crops in Hungarian short food supply chains, the application of the photovoice methodology in my research can be traced back to a remarkable moment sparked by the enthusiasm of one of the female gardeners greatly immersed in agroecological gardening. Engaged in the on-farm testing of forgotten and underutilised crops, a collaborative effort involving 13 Hungarian gardeners and farmers 1, she reached out to me with palpable excitement during the early stages of the project. Her inspiration stemmed from enlightening photo essay exhibitions from agroecological meetings across Europe, where farmers had assumed the task of documenting their agricultural endeavours.
2. Contrary to the theoretically driven gaze of ethnographers and newsworthy search of journalists, gardeners had taken on the task of documenting and thus shaping their narratives about their daily work. The resulting images portrayed multi-species moments, uprooted vegetables, generously shared leafy greens, and solitary gardeners, all captured through the lens of the farmers' perspectives. From our animated discussion, a shared fascination emerged — we were both eager to seize moments from diverse agroecological journeys, transcending the confines of space, following vegetables' supply chains, whether in gardens, homes, markets, or restaurants.
3. Sharing a mutual enthusiasm, we agreed to extend an invitation to all gardeners and farmers involved in testing underutilised and forgotten crops. The proposal was for them to temporarily take on the role of photographers, contributing to a joint visual narrative. To give structure to this collaborative endeavour, I suggested embracing a participatory research methodology, more precisely a participatory visual methodology known as photovoice (Wang–Burris 1997).

Photovoice in environmental anthropology

4. Literature emphasises that photovoice draws inspiration from various disciplines, including documentary photography, feminist studies and the critical pedagogy of Paulo Freire (Nasrabadi et al. 2019). Originally, photovoice emerged in 1997 enabling participants to capture and tackle issues surrounding their communities and to initiate meaningful dialogues through their photos. Unlike conventional research methodologies characterised by predefined inquiries and research ques-

tions, the researchers using photovoice assume the role of facilitators applying research ethics within stimulated community dialogues. Consequently, community members become empowered to collectively shape the research agenda by sharing personal insights predominantly through visual mediums. Joint discussions often result in the co-creation of knowledge, yielding a collectively formulated set of insights and perspectives. These outcomes hold potential significance for informing policymakers and engaging other stakeholders in addressing community-based challenges (Wang–Burris 1997).

5. In the realm of anthropological exploration, Krista Harper (2016) embarked on a captivating photovoice research journey in Northern Hungary, delving into social and environmental exclusion among Roma people. Her immersive experience underscored the efficacy of mobilising visuality within the field of environmental anthropology. Unlike in conventional fieldwork explorations propelled by the researchers' curiosity or theoretically grounded inquiries, the participants took charge, wielding the camera lens to delineate the focal points and scenes of fieldwork. Their photographs became a powerful means of capturing situations worthy of display, often remaining concealed from the ethnographers' gaze.
6. Photographs as a medium introduced a palpable sense of clarity to the traditionally logocentric nature of ethnographic fieldwork. They can render complex situations accessible, evoking experiences and feelings that transcend the visual realm and prompt the photographer to articulate them verbally. Photovoice, as a complementary methodology of ethnographic fieldwork, has the potential to reshape hierarchical relationships between researchers and participants and disrupt the binary dynamics inherent in traditional question-answer interview settings. In this way, it is a valuable tool for empathically understanding others' perspectives and co-constructing knowledge. This versatility is evident in research processes delving into case-based biosocial interactions within farming and the production of agroecological knowledge (Enloe et al. 2021). Moreover, photovoice has been effectively employed in the examination and deeper understanding of climate change impacts and adaptation strategies among farmers. The integration of photovoice in these investigations has facilitated a more participatory and inclusive approach to the collaborative creation of knowledge on socio-environmental challenges (Bulla–Steelman 2016, Elum–Snijder 2023).

On-farm testing of underutilised crops

7. In the vast tapestry of plant life, out of 250,000 species, a mere 7,000 have played a remarkable role in our agricultural history. It is a surprising reality, considering the immense biodiversity of our planet. Yet, when we consume our daily meals, we realise the stark truth that a significant chunk of our caloric intake hails from just three plants: rice, wheat, and maize. Our food choices reflect a loss of diversity, a prevalence of homogeneity, and an oversimplification of our diets by commercially available industrial products (DIVERSIFOOD 2017).
8. Plants rarely tasted or recognised are hidden in the shadows of our mainstream food supply chains. In scientific literature and applied research, there is a newfound interest in underutilised, neglected and forgotten crops. These gems, although largely overlooked by the current, globally expanded agri-food systems,

carry historical significance intertwined with local cultures and culinary traditions. These underutilised crops bring more to our table than healthier diets and mere taste and colour diversity. Thriving in poor soils, they might stand tall against pests and diseases, unlike their hybrid counterparts. They also hold the promise of diversifying agriculture, combating climate change, and fortifying the resilience of our food systems, especially when they are grown and traded locally (Lazányi et al. 2023).

9. Delving into the characteristics of these uncommon crops reveals a vital sphere of knowledge. As custodians of these botanical marvels, gardeners and farmers cultivate a profound understanding through hands-on experimentation, on-farm testing, and seasonal cultivation practices. Given the massive varieties of underutilised crops, encompassing various pulses, leafy greens, and medicinal and wild plants, the growers had the autonomy to select their preferred species in the on-farm testing program I coordinated for one year with the participation of 13 gardeners and farmers across Hungary.
10. During the on-farm testing, researchers gave liberty to the gardeners to choose their preferred crops and explain why those underutilised crops can be interesting in their short food supply chains. Discussing with them in individual interviews and during the joint photovoice sessions, they argued that choices are often aligned with external factors such as international research projects and grants that supported certain crops they wish to further test; market demands as boutique restaurants get in touch with them to gather fresh leafy greens weekly; and customer preferences as they produce vegetables for a weekly box system in community-supported agriculture (CSA) models. In many cases, gardeners have also developed a strong personal interest in tastes, local history and culinary applications of less-known varieties, and have been excited to experiment with novel cultivation practices that they have not tried before.
11. Gardeners acquire new insights and knowledge about underutilised crops every day while cultivating, harvesting and selling them. This experiential knowledge has been articulated in their farming journals that were designed and provided by the international research group of the RADIANT project I was a member of. Farming journals were provided as templates containing guiding questions that participants filled in each month. It looked like an open-ended questionnaire raising questions such as: *How is your trial going? What are the difficulties you face? What is the positive outcome of your trial? Are you in touch with other actors of your supply chain?* During the on-farm testing phase, the participants expressed difficulties in remaining committed to journal writing every month. Gradually, they gravitated towards storytelling as they preferred an unstructured and spontaneous mode of expression during my fieldwork interviews. Even the online, phone and in-person interviews were found to be labour-intensive and time-demanding for most of them. However, qualitative data collection of this kind turned out to be the most fruitful during my visits to their gardens, when I shadowed them in doing their daily gardening. Working, walking while giving interview worked better for the gardeners in the testing program.

Photovoice on underutilised crops

12.

For many participants, traditional ethnographic fieldwork created a comfortable setting for sharing their experiences, staying in their gardens and walking among their beloved crops. The act of constant narration in their gardens brought our attention to our material encounters that, viewing from the crops' perspective, had been quite eventful. Gardeners often shared about their crops' past life as seeds and seedlings and subsequent turning into food. Yet, there were innumerable instances where I could not witness the noteworthy moments of the gardeners' interactions with humans and non-humans. The crops' gradual development, the constant micro-level work of insects, crucial market interactions with consumers and gift exchanges with chefs, relatives and other gardeners sometimes remained hidden or secondary in their garden-focused narrations. Through photovoice documentation, nevertheless, the participants resorted to capturing these mundane, less visible occurrences of their daily lives.

13.

Taking pictures was a practice they regularly engaged in, either for personal enjoyment, crop documentation or for social media marketing purposes. Recognising the limits of conventional data collection methods, such as participant observation and ethnographic note-taking, I explored the potential of photovoice that can be adjusted particularly to the increasingly digitalised form of post-pandemic interactions. As a complementary methodology, it served to gather more unstructured and unexpected highlights and micro-narratives. The gardeners, voiced through a selection of photos, shared their experiences about underutilised crop cultivation, harvest, marketing, exchange and culinary usage with the involvement of other actors in their short supply chains. Photovoice encouraged participants to think abstractly and articulate their unique insights through imagery. In this way, they revealed aspects of their experiences in testing underutilised crops that might otherwise have gone unnoticed or unexplored in face-to-face interviews and garden walks.

14.

In the photovoice exercise, I asked the participating gardeners to take pictures of their perceived 'diversity' of underutilised crops, whether this represented agrobiodiversity and different types of cultivation in their gardens, or the social diversity of actors in their supply chains. They had the liberty to bring in any associations and narrate them through their pictures, to share what was outstanding for them. At the end of six months of photographing, I organised a joint online meeting where the gardeners could listen to each other's stories and share their pictures. Further reflections on their shared images were gathered through telephone and face-to-face interviews to get a better sense of what they found important in growing underutilised crops. In this photo essay, I share only a selection of the gardeners' photos from the diversity photovoice exercise. Some images have been omitted for privacy and data protection reasons. The current selection also reflects the curatorial decisions I had to make for this publication. Then, I combined the selected images with quotes from the gardeners who took those pictures, thereby giving a condensed narrative to their visual representations.

Photovoice slides at conferences

15.

The effectiveness of the photovoice methodology lies not only in its ability to create collaborations in research but also in its capacity to yield scientifically and visually pleasant results that resonate with a broader audience, often manifested as exhibitions, photo essays, zines, or even comic books (Díez et al. 2017). In my research, working closely with small-scale gardeners, the fruits of the photovoice method have materialised as a captivating exhibition, presented through a dynamic slide show at the Agroecological Forum in Gyöngyös, Hungary (October 2023). At this gathering, the exhibition emerged as more than a sheer setting for dissemination—it became a vibrant crossroads for empirical data collection and joint reflections on small-scale agroecological farming. Amidst the visual narrative, I gleaned invaluable insights into the perspectives and concerns of fellow researchers, gardeners, farmers, non-governmental organisations (NGOs) and journalists. Moreover, this event served as a stage for the horticulturists who wielded the cameras. The exhibition allowed me, and those attending in person, to showcase their ardent efforts with underutilised crops through pictures beyond the confines of their local networks. Conferences like this offer moments of shared recognition and celebration, where the impact of the work of agroecological gardeners reverberates beyond their gardens. The photovoice essay reached a diverse audience which was eager to engage with the rich visual tapestry of their agricultural narratives.

Diversity in cultivating underutilised crops

16.

‘Almost all my varieties are underutilised crops, of which Siberian kale is my latest experiment. Saving seeds is my way of maintaining diversity, which contributes to a colourful weekly box in my community-supported agriculture scheme.’





17.

'The diversity of underutilised crops provides stability in our permaculture-inspired garden. If one crop is removed from the growing system for any reason, we still have other varieties to rely on to fill our community-supported agriculture boxes for our regular consumers.'



18.

'I grow and sell tomato landrace varieties. I often find that it is not always the organic certification that the customers of my community-supported agriculture boxes appreciate, but the variety I offer, including rare and underutilised crops, and the taste and flavour of my produce.'



19.

'We grow and process herbs and medicinal plants and we also place great emphasis on sustainability, biodiversity and scientific research. By testing under-utilised crops, we aimed to find a crop that could be grown on a small scale in backyards and processed into a safe, nutritious ingredient that could be included in any diet. So we chose chickpeas to process into flour and use as an ingredient in instant soup powder. The most challenging part of the cultivation process was the harvest, as the weather was unfavourable for gathering the ripened crop.'



20.

'Underutilised crops can play an important role in helping to increase functional biodiversity in a farm setting. Diversity is key to the resilience of small farms, and exploring the possibilities of lesser-known crops and varieties can also help farmers find ways to ensure their garden beds are full throughout the four seasons. Introducing new, lesser-known and long-forgotten crops to market and weekly vegetable box scheme offers can also be a good way to encourage an expanding palate in consumer partners. Of course, this is a two-way relationship and introducing new, or reintroducing underutilised varieties requires some patience and creative encouragement by farmers and an open mind from food community members.'





21.

'By enhancing diversity, we can establish a more resilient farming system, which is particularly important in the changing climatic conditions. Underutilised crops, such as local landraces and exotic novelties provide exciting new ingredients for chefs and home cooks willing to experiment. This can help us develop market channels that embrace the diversity we are creating.'



22.

‘As a member of the Hungarian Seed House, I am involved in the conservation of underutilised varieties. I believe that the Seed House’s goals of gene conservation can be combined with community-supported agriculture. In this way, we can show people diversity and raise awareness.’



NOTES

1 The on-farm testing of underutilised crops constituted one of the pillars of the RADIANT Horizon 2020 project (September 2021 – August 2025). Gardeners and farmers from three European agro-climatic regions were recruited through the Participatory Farmers Call. I was one of the coordinators for the Continental Cluster within the 4-years-long RADIANT project. Thirteen Hungarian gardeners and farmers actively engaged in the project, with a handful of them also participating in the photovoice project, unveiling their crop narratives through compelling photos.

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