FISEVIER

Contents lists available at ScienceDirect

# **Environmental Innovation and Societal Transitions**

journal homepage: www.elsevier.com/locate/eist



# Introduction to the special issue on just food system transition: Tackling inequalities for sustainability

Minna Kaljonen<sup>a,\*</sup>, Teea Kortetmäki<sup>b</sup>, Theresa Tribaldos<sup>c</sup>

- <sup>a</sup> Finnish Environment Institute, Latokartanonkaari 11, Helsinki 00790, Finland
- <sup>b</sup> University of Jyväskylä, Faculty of Humanities and Social Sciences, Department of Social Sciences and Philosophy, University of Jyväskylä, Seminaarinkatu 15, PL 35, 40014, Finland
- <sup>c</sup> Centre for Development and Environment, University of Bern, Mittelstrasse 43, Bern 3012, Switzerland

#### ARTICLE INFO

## Keywords: Just transition Food system transition Sustainability transition

#### ABSTRACT

This special issue builds understanding of just transitions by looking at specific dynamics in food system transitions. The articles in the special issue apply a multi-dimensional understanding of justice, which stress that in addition to distributional matters, also recognition and procedural justice require attention in transitions. The current injustices in the food system emphasize the interrelatedness of these dimensions. The special issue includes eight articles that scrutinize food system transition in various contexts from Finland to Brazil and from farm-level decision-making to the UN food system summit. The papers demonstrate the focality of recognition justice for interpreting contestations around sustainability transitions. They also draw attention to existing power imbalances that affect the alternative visions of sustainability and need attention for procedural justice. In future, salient power analysis and normative frameworks are required to spot trade-offs and blind spots in just transition.

# 1. Introduction

Just transition is gaining increasing scholarly and political interest that has arisen from the need to consider social and environmental justice as intertwined components of systemic transitions (McCauley and Heffron, 2018). The idea of a just transition was first introduced by labor unions in North America during the 1970s, in response to concerns about the impacts of environmental policies on employment (Stevis and Felli, 2015). It has now entered more forcefully to the center of climate policies, e.g. in the Paris Climate agreement as well as in the Green Deal of the European Union. The key message of the European Green Deal is 'leave no one behind', paying attention to workforce but also to sectors and regions most affected by transitions (EC, 2019). To support the regions in transitions, the European Union has introduced a specific Just Transition Fund to mitigate disparities. The emphasis on just transition is also taken up in a recently published ILO, UN and IUCN report on decent work in nature-based solution (ILO, UNEP and IUCN, 2022) which shows a broad diffusion of the concept in public discourse and policy making.

Most of the research on just transition has concentrated upon energy transitions. The research has drawn attention to impacts of climate mitigation efforts on employment, economy, local communities, energy poverty as well as on global justice (Newell and Mulvaney, 2013; Sovacool et al., 2019; Martiskainen et al., 2021). Just transition will, however, be focal in other socio-technical transitions as well. In future, the importance of food system change will increase in the mitigation and adaptation to climate

E-mail address: minna.kaljonen@syke.fi (M. Kaljonen).

<sup>\*</sup> Corresponding author.

change (IPCC, 2019).

In this special issue, our aim is to strengthen the understanding of just transition in attempts to build more sustainable food systems. There is growing evidence that more sustainable food systems cannot be built by technological solutions alone, but broader systemic changes are required in both food production and consumption (Hebinck et al., 2021; Zurek et al., 2022). Food system transition challenges not only the livelihoods of farmers, but also the cultural models of eating well, which makes the transition painful and highly prone to conflicts. Examples of such conflicts are emerging in different countries. In the Netherlands, plans to limit nitrate emissions and livestock production have provoked major protests (van der Ploeg, 2020). In Finland, farmers have opposed restrictions on using peatlands, although peatlands produce more than half of the greenhouse gas emissions from the agricultural sector (Puupponen et al., 2022). Issues evoking farmers' resistance extend well beyond distributive impacts and include cultural values related to farming, land ownership, farmer identity, and rural wellbeing. Likewise, the different ways of eating are connected not only to the socio-economic structures of provision but also to varying cultural understandings of eating well (Kaljonen et al., 2021). Responding to these issues requires engaging with justice in a multi-dimensional way.

The multi-dimensional understanding of justice underlines that in addition to distributional matters, governing of transitions need to pay attention also to recognition and procedural justice. The distributive justice addresses the distribution of costs and benefits among the involved actors, while procedural justice examines fair and accessible decision-making processes. Recognition justice focuses on socio-cultural equality and the recognition of vulnerable groups, asking whose voices are listened to and which viewpoints are considered as legitimate while downplaying or marginalizing non-dominant viewpoints (Schlosberg, 2007; Sovacool et al., 2019; Kaljonen et al., 2021). The current injustices in the food system emphasize the interrelatedness of these dimensions (Clapp et al., 2018; Zurek et al., 2022). In this special issue we apply the multi-dimensional understanding of justice to food system transitions and examine how it can assist in developing a more comprehensive take on just transition.

# 2. Overview of the special issue

Papers in this special issue were collected with an open call for papers during 2021. The call attracted a lot of responses, which shows the interest in the emerging topic of just food system transitions. During the collection of the special issue, we organised a full day workshop to share and discuss our approaches to just transition and food system change. In total eight peer-reviewed papers are published in this special issue. The articles scrutinize just food system transitions in various contexts from Finland to Brazil and Guatemala and from farm-level decision-making to the UN food system summit. It is important to note that the papers in this special issue present, by no means, a full set of issues related to just food system transitions. Together they, however, show how studies of just transition can benefit from multi-dimensional understanding of justice. They also show how the long history of food justice studies can contribute to the understanding of just transition more broadly.

In this editorial piece, we summarize the main take-home messages of the special issue contributions. The introduction is divided into the three different perspectives on just transition as demonstrated by the papers. We first introduce the papers by Kaljonen et al. (2021) and Tribaldos and Kortetmäki (2022) which explicate the theoretical understanding of just transition in food systems. The next papers by Lehtonen et al. (2022), Kuhmonen et al. (2022) and Ortiz et al. (2022) highlight the position of farmers in transition. The papers demonstrate how transition will be particularly challenging for farmers due to many existing injustices and policy incoherencies. Consequently, these empirical papers highlight novel dimensions for just transition research by calling attention to capacity building and resilience in the governance of transitions. Finally, we introduce the papers by Tanzer et al. (2022), Maluf et al. (2022) and Tschersich and Kok (2022), which focus on procedural justice and related power imbalances, interlinked with the matters of recognition. We close the editorial by highlighting research needs for future.

## 3. Theoretical contributions: widening the scope and establishing principles for just transition

The multidimensional understanding of justice has become commonplace in structuring the discussion and research on just transitions (e.g. Jenkins et al., 2016; Williams and Doyon, 2019). The papers by Kaljonen et al. (2021) and Tribaldos and Kortetmäki (2022) explicate the multidimensional understanding to food system transitions contributing to its further theoretical development. Kaljonen et al. (2021) do this by scoping the research questions posed by just food system transitions. They scrutiny the case of dietary changes to underline the need to pay attention not only to distributive matters (such as livelihoods and right to food) but also to recognition and procedural aspects in transition. The case of dietary change highlights the need to address recognitive justice, which has remained somewhat in the background in the previous just transition scholarship. Dietary change challenges the dominant modes of life and socio-cultural values of eating well. Procedural justice is also important since decision-making structures in food systems span across multiple scales and domains where power is unevenly distributed. Consideration of the impacts of transition on consumers highlights the need to pay specific attention to capacities in and for transition, both in research and policymaking.

Tribaldos and Kortetmäki (2022) develop the multidimensional understanding of justice further into a principles and criteria framework that can serve as a basis for organizing and assessing conflicting claims, highlighting trade-offs, and revealing the prioritised or hidden aspects in the different framings of just transitions. The framework proposes general principles for just transitions and explicate more detailed criteria for food system transitions specifically. The principles developed can be applied to assess just transitions in other socio-technical systems as well. Tribaldos and Kortetmäki call for greater philosophical scrutiny in the assessment of just transitions to stay alert to commonly invisible concerns and vulnerabilities. The principles and criteria are developed as a framework that can assist also policy making in making sense of conflicting claims and in distinguishing justifiable and misleading claims for justice.

## 4. Empirical contributions: farmers and livelihoods in just transition

Farmers will be affected by sustainability transitions in many ways. The papers by Lehtonen et al. (2022), Kuhmonen et al. (2022) and Ortiz et al. (2022) examine the role of agriculture and the position of farmers in transition processes. Contributions demonstrate that employment and livelihoods are focal for just food system transitions, similarly to just energy transitions. Lehtonen et al. (2022) introduce specific transition pathways to examine the distributive impacts of climate change mitigation actions on agriculture. They point out that significant greenhouse gas emission reductions in the Finnish food system will require both changes in land use (peatland cultivation) and in diets. They show in their analysis how the impacts of these changes distribute unequally across the regions. For justice, this implies that changes will impact regions and farmers in very different ways and that farmers in livestock dominated regions require special attention to make the transition more just. The revision of agricultural policy is central for ensuring both effective mitigation and justice to farmers.

Kuhmonen et al. (2022) and Ortiz et al. (2022) continue the examination by emphasizing the necessity of capacity and capability building in just transitions. For doing that Kuhmonen et al. (2022) introduce the concept of resilience, by which they examine the possibilities of peripheral farmers to respond to the transition. With their empirical analysis amongst peripheral farms, they show that while there is potential for transformation amongst a minority of farmers, also the change-oriented farmers are vulnerable to regime-level changes affecting farm income. Genuinely sustainable and transformational change necessitates addressing power imbalances that limit farmers' options for action. Changes that support new sources of livelihoods for peripheral farms are of high importance. Authors, hence, call attention to measures that promote resilience at the farm level and build accessible and inclusive transition pathways. Such measures should aim at building resilience especially for those actors most vulnerable to systemic transitions. Alternative pathways should be conducive to a diversity of geographical contexts and production conditions.

In a similar manner, Ortiz et al. (2022) bring in the voices of women from Guatemala. They apply the lens of recognition, distributive and procedural justice and include capabilities and community-belonging as analytical categories to examine the perspectives of female farmers on different agroecological innovations in Guatemala. They find that while national, regional, and local policies acknowledge the importance of supporting gender equality, policies often lack the means to do so or to enforce supporting measures. However, agroecological innovations have the potential to improve recognition and distributive justice through empowering female farmers to run e.g. their own coffee businesses successfully and being recognized for it. A leadership school for women and girls is a first step towards greater procedural justice but improving capabilities needs to be supported through the education of women in civil rights and the continued exchange among female farmer networks. The study shows that agroecological innovations can contribute to just transition processes but need special attention to actively highlighting women's roles in society in combination with financial and technical support for female farmers' activities.

These three papers highlight how food system transition concerns distributive justice, but also recognition and capacities. If farmers' capacities to respond to sustainability transitions are to be strengthened, policies must include measures supporting capacity building and strengthening of capabilities. The current weak position of smaller peripheral farmers makes this question salient but difficult. The papers highlight how policy incoherencies inhibit capacities to respond to sustainability transitions.

# 5. Process-oriented contributions: power imbalances and procedural justice

Several papers in the special issue call for a fundamental transformation to the power and governance structures guiding global value chains and food systems. The papers by Tschersich and Kok (2022), Tanzer et al. (2022) and Maluf et al. (2022) scrutinize in detail the current power imbalances amongst the food system actors. Maluf et al. (2022) show how different narratives and power asymmetries influence the ways in which various justice and sustainability concerns get articulated in the contested discursive spaces of transition. In their examination of the globally significant Brazilian soy-meat complex, the authors identify two discursive repertoires that highlight and propose different justice and sustainability issues and solutions. Whereas the commercial private sector repertoire focuses on distributive matters and proposes that inequalities are best overcome by focusing on the economic development and private mechanisms that generate jobs and strengthen markets, the repertoire of the civil society movements and organizations makes the claim for radical system transformations where recognition and procedural justice and the democratic regulation of food systems are crucial.

In a similar tone, Tanzer et al. (2022) scrutinize how procedural justice was discussed and assessed in the UN Food System Summit. They investigate the realisation of procedural justice through three mechanisms of inclusion, introduced by Jenkins et al. (2016): local knowledge mobilization, information disclosure and institutional representation. In their analysis, they show how the holistic view of food systems adopted by the Summit opened an arena in which the regenerative and extractive narratives competed for attention. They conclude that with respect to mobilization of local knowledge, the Summit managed to support the emergence of new narratives and thus highlight new transition pathways. However, in terms of information disclosure and institutional representation, the procedural justice could not be convincingly met. Especially, the actors putting forward the alternative regenerative narratives were critical of the information disclosure and the more powerful institutional representation of the actors representing the extractive narratives. Several procedural factors in the Summit contributed to the outcome. The authors call more attention to the multiple and conflicting roles of multilateral organisations in future. They remind that if multilateral organisations such as UN or FAO are to support sustainability transition, change is needed in the organisations themselves. In the meantime, transformative capacity of actors and institutions outside the multilateral system need to be fostered in the support of just transition.

In their paper, Tschersich and Kok (2022) also remind that a deeper democratization of agri-food transition governance will require paradigm shifts. Tschersich and Kok call attention to three paradigm shifts needed to overcome current deficits: (1) from expert

towards pluralist understandings of knowledge; (2) from economic materialism towards post-growth strategies; and (3) from anthropocentrism towards reconnecting and revaluing human-nature relationships. These pleas are clearly echoed in the alternative narratives posed by the civil society actors in the UN Food System Summit and in global South. Together, these process-oriented contributions in the special issue demonstrate how just transition scholarship needs to critically examine the power imbalances that affect the debates over alternative visions of change. These inequalities may influence policy-making processes even when procedural justice at the formal level has been established. Addressing procedural justice, requires pairing it with recognition and attention to the transition narratives and discursive repertoires grounding the different claims for just transition.

## 6. Conclusions

The papers in this special issue broaden the understanding of just transitions. The papers demonstrate the focality of recognition justice that has remained in the margins of just transitions research. Recognition provides the domain for interpreting contestations and conflicts around sustainability transitions. In this respect, the papers collected to this special issue highlight the contestations related to livelihoods and cultural values of farming. In addition to recognition of diverse ways of farming, also the socio-cultural differences in eating require due attention in just transition. The latter was left with less empirical scrutiny in this special issue. In future, the burgeoning social scientific research on dietary change and cultural ways of eating should be incorporated more firmly to the study of just transitions. This necessitates also critical analysis of the pathways and narratives proposed by food industry and retail. To date the role of private actors and governance has been left with too little notion in just transitions.

The papers in this collection bring the existing injustices to the fore, making just transition a historically and geographically bounded process. Current power imbalances may also inhibit the alternative visions of future food systems from gaining momentum. The papers collectively demonstrate this in the context of global South and recall that power analyses need to be incorporated into the critical examination of just transitions (see also Newell and Mulvaney, 2019). This holds also for the political analysis of just transition governance. In many cases the claims for just transition are utilized for hampering change (Zurek et al., 2022). Normative frameworks for assessing different claims for justice in transition, such as the one developed by Tribaldos and Kortetmäki (2022), can assist in evaluating these claims and relating them with each other. In future, such frameworks should be developed further to support the planning, implementation, and critical evaluation of just transition policies. Normative frameworks can help to spot trade-offs and blind spots in just transition discourses and direct attention to those actors and issues that are at risk of being left unnoticed or even left behind.

This special issue has demonstrated how sustain-ability of sustainability transitions requires going beyond the sole acceleration of innovations. Long-term investments in adaptive capacities, social sustainability, and democracy are required, when transforming from one system to another. Just transition perspective can contribute to these discussions by pointing out what is required for making changes transformative rather than incremental. It highlights the importance of disrupting structures that curb benefits to already advantaged and powerful actors and of strengthening the transformative capacities of less powered, even disadvantaged, actors and communities. Strengthening transformative capacities in the global South and North may, however, require totally different kinds of policy actions and procedural development. There are no one-size-fits-all for promoting just sustainability transition. Clarifying these requirements and appropriate procedures for developing difference-making solutions will evidently be one of the key issues for future research on just transition.

## **Declaration of Competing Interest**

We have no declaration of interest to be made.

# Data availability

No data was used for the research described in the article.

# Acknowledgments

As special issue guest editors we want to thank the contributors to the special issue as well as all the reviewers involved. We also gratefully acknowledge the constructive support and feedback of Bernhard Tuffer and Jeroen van den Bergh who as EIST editors oversaw the special issue's development. The funding of the Strategic Research Council of the Academy of Finland (grants 327284, 327269, 327371) made the collection of special issue possible.

#### References

Clapp, J., Newell, P., Brent, Z.W., 2018. The global political economy of climate change, agriculture and food systems. J. Peasant Stud. 45, 80–88. https://doi.org/10.1080/03066150.2017.1381602.

EC, European Commission, 2019. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions 'The European Green Deal'. COM(2019) 640 final, Brussels, 11.12.2019.

- Hebinck, A., Klerkx, L., Elzen, B., Kok, K.P.W., König, B., Schiller, K., Tschersich, J., van Mierlo, B., von Wirth, T., 2021. Beyond food for thought Directing sustainability transitions research to address fundamental change in agri-food systems. Environ. Innov. Soc. Transit. 41, 81–85. https://doi.org/10.1016/j.
- ILO, UNEP and IUCN. 2022. Decent Work in Nature-based Solutions 2022. Geneva. Licence: CC BY-NC-SA 3.0 IGO. https://www.ilo.org/global/topics/employment-intensive-investment/publications/WCMS 863035/lang-en/index.htm (Accessed 15 December 2022).
- IPCC, Intergovernmental Panel on Climate Change, 2019. Climate Change and Land. Summary for Policymakers. https://www.ipcc.ch/report/srccl/(Accessed 15 December 2022).
- Jenkins, K., McCauley, D., Heffron, R., Stephan, H., Rehner, R., 2016. Energy justice: a conceptual review. Energy Res. Soc. Sci. 11, 174–182. https://doi.org/10.1016/j.erss.2015.10.004.
- Kaljonen, M., Kortetmäki, T., Tribaldos, T., Huttunen, S., Karttunen, K., Maluf, R.S., Niemi, J., Saarinen, M., Salminen, J., Vaalavuo, M., Valsta, L., 2021. Justice in transitions: widening considerations of justice in dietary transition. Environ. Innov. Soc. Transit. 40, 474–485. https://doi.org/10.1016/j.eist.2021.10.007.
- Kuhmonen, I., Siltaoja, M., 2022. Farming on the margins: just transition and the resilience of peripheral farms. Environ. Innov. Soc. Transit. 43, 343–357. https://doi.org/10.1016/j.ejst.2022.04.011.
- Lehtonen, H., Huan-Niemi, E., Niemi, J., 2022. The transition of agriculture to low carbon pathways with regional distributive impacts. Environ. Innov. Soc. Transit. 44, 1–13. https://doi.org/10.1016/j.eist.2022.05.002.
- Maluf, R.S., Burlandy, L., Cintrão, R.P., Jomalinis, E., Carvalho, T.C.O., Tribaldos, T., 2022. Sustainability, justice and equity in food systems: ideas and proposals in dispute in Brazil. Environ. Innov. Soc. Transit. 45, 183–199. https://doi.org/10.1016/j.eist.2022.10.005.
- Martiskainen, M., Sovacool, B.K., Lacey-Barnacle, M., Hopkins, D., Jenkins, K.E.H., Simcock, N., Mattioli, G., Bouzarovski, S., 2021. New dimensions of vulnerability to energy and transport poverty. Joule 5, 3–7. https://doi.org/10.1016/j.joule.2020.11.016.
- McCauley, D., Heffron, R., 2018. Just transition: integrating climate, energy and environmental justice. Energy Policy 119, 1–7. https://doi.org/10.1016/j.enpol.2018.04.014.
- Newell, P., Mulvaney, D., 2013. The political economy of the 'just transition. Geogr. J. 179, 132-140. https://doi.org/10.1111/geoj.12008.
- Ortiz, R., Mesias, P.A., Peris, J., 2022. Just transitions through agroecological innovations in family farming in Guatemala: enablers and barriers towards gender equality. Environ. Innov. Soc. Transit. 45, 228–245. https://doi.org/10.1016/j.eist.2022.11.002.
- Puupponen, A., Lonkila, A., Savikurki, A., Karttunen, K., Huttunen, S., Ott, A., 2022. Finnish dairy farmers' perceptions of justice in the transition to carbon-neutral farming. J. Rural Stud. 90, 104–112. https://doi.org/10.1016/j.jrurstud.2022.01.014.
- Schlosberg, D., 2007. Defining Environmental Justice. Oxford University Press, Oxford.
- Sovacool, B.K., Martiskainen, M., Hook, A., Baker, L., 2019. Decarbonization and its discontents: a critical energy justice perspective on four low-carbon transitions. Clim. Change 155, 581–619. https://doi.org/10.1007/s10584-019-02521-7.
- Stevis, D., Felli, R., 2015. Global labour unions and just transition to a green economy. Int. Environ. Agreem. 15, 29–43. https://doi.org/10.1007/s10784-014-9266-1. Tanzer, M., Gläsel, A., Egermann, M., 2022. Elucidating the capabilities of international mechanisms to foster procedural just system change the case of the 2021 UN Food System Summit. Environ. Innov. Soc. Transit. 45, 72–82. https://doi.org/10.1016/j.eist.2022.09.002.
- Tribaldos, T., Kortetmäki, T., 2022. Just transition principles and criteria for food systems and beyond. Environ. Innov. Soc. Transit. 43, 244–256. https://doi.org/10.1016/j.eist.2022.04.005.
- Tschersich, J., Kok, K.P.W., 2022. Deepening democracy for the governance toward just transitions in agri-food systems. Environ. Innov. Soc. Transit. 43, 358–374. https://doi.org/10.1016/j.eist.2022.04.012.
- van der Ploeg, J.D., 2020. 'Farmers' upheaval, climate crisis and populism. J. Peasant Stud. 47 (3), 589–605. https://doi.org/10.1080/03066150.2020.1725490. Williams, S., Doyon, A., 2019. Justice in energy transitions. Environ. Innov. Soc. Transit. 31, 144–153. https://doi.org/10.1016/j.eist.2018.12.001.
- Zurek, M., Hebinck, A., Selomane, O., 2022. Climate change and the urgency to transform food systems. Science 376, 1416–1421. https://doi.org/10.1126/science.