



国際ミニシンポジウム 解題  
2021 ARAFE International Mini Symposium Synopsis

**Transformation towards Sustainable Agriculture, Rural Communities, and Ecosystems:  
Reviewing Global Trends and Local Realities Based on Interdisciplinary Approaches**

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### 1. Welcome Addresses

The 2021 ARAFE International Mini Symposium at the 71st Annual Meeting started with welcome addresses by Asami Atsuyuki, President of ARAFE and Professor of Kyoto University, and Taniguchi Yoshimitsu, President of the Japanese Society of Organic Agriculture Science (JSOAS) and Professor of Akita Prefectural University. Both underlined the importance of interdisciplinary approaches in both the organizations. Through the symposium, Maharjan served as the Chair and Masuda as the Moderator.

### 2. Concept of the Symposium

In the recent decades, sustainability of agriculture, rural communities, and ecosystems face significant challenges under climate change, globalization, urbanization, and environmental degradation. To respond to this crisis of agri-food systems as well as the whole society, the governments, business circles, grassroots farmers' and civil society movements promote solutions in different ways such as agroecology, climate smart agriculture (CSA) (FAO, 2021), carbon farming, precision agriculture and so on. The global north, such as the authorities of Japan, the US, and EU declared their short- and long-term new strategies to transform the current agri-food systems

to be ecologically, socially, and economically sustainable since 2019. The UN Food Systems Summit of 2021 (UN, 2021) was a part of such initiatives. However, the global farmers' and civil society groups firmly contest the ways in which these initiatives promote and claim that agroecological farming and localized food systems and associated traditional knowledge of farmers, including small-scale family farmers and indigenous peoples, deserve to be placed in the center of the debates.

Thus, this symposium intended to address the current issues of global trends and the local realities. To learn from the global trends, three experts of agroecology, small-scale farmers and organic farming, and CSA are invited. Dwelling on their experiences in their disciplines, we invited participants to get involved in interdisciplinary debates.

### 3. Discussion: Key Questions & Replies

After three paper presentations: Lopez-Ridaura (2022), Zollet (2022), Hisano (2022), Sekine gave key questions to each presenter as a discussant.

#### **(Q1) Key questions to Lopez-Ridaura**

i) Can agroecology coexist with genetic engineering technologies, e.g., genetically modified organism (GMO), and genome editing with CRISPR-Cas9 (Doudna and Charpentier, 2014)?

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ii) Is agroecology a type of agriculture? In policies, it is increasingly considered as a type of agriculture. Or all types can make agroecological transformation?

iii) How can we transform our research, dissemination, education systems to promote agroecological transformation?

### **(Q2) Key questions to Zollet**

i) What are the similarities and dissimilarities among policies for small scale organic farming in Italy and Japan?

ii) What are the specificity of “return to rural” in the global north compared to that in the global south? Based on your research, why ‘New Farmers’ can play such significant roles in the global north?

iii) Can immigrant agricultural workers be agency of agroecological transformation in Italy and Japan? What do they need to become agency of agroecological transformation?

### **(Q3) Key questions to Hisano**

i) Your observations on Japanese government’s MeaDRI (MAFF, 2021) through “Power Lens”?

ii) How can we make Japanese academia and society in general conscious of “the big picture”? What are the roles of interdisciplinary approaches and political economy?

Replies from each presenter followed:

### **(R1) Replies from Lopez-Ridaura**

First, agroecology is now considered a practice, a science, and a movement. When talking about practices it is not necessarily a technological practice but as a way of organizing the system differently. Nowadays, agroecology has gone beyond the purely technical and ecological elements and embraces other aspects such as governance, co-creation of knowledge, the respect of cultural elements, and so on.

I believe that there is large room for improvement in the systems with the sunlight, the water resources, and with the soil we have, to make better, most efficient, productive, socially responsible systems. We don’t need GMO as a solution. That’s just against the basic principles of agroecology and the systems approaches. This kind of technologies has somehow

disempowered farmers and food system actors.

I believe that for example, the co-creation of knowledge and the empowerment of people to take their own decisions and use their own locally produced inputs is important. If those elements are difficult to integrate with the GMOs, it’s going to be very difficult to use this technology under agroecological principles. We can diversify farming systems or entire landscapes that may yield as good benefit as the GMO, or nearly any technological, pathway. Moreover, if we have not invested the same level of resources to investigate options for other kind of pathways (for example diversifying farming systems and landscapes) it is difficult to say that the GMO pathway is better.

Second, I think one of the big dangers of labelling types of agricultures, like organic agriculture, is that they get easily “hijacked” by commercial interests. The efforts to formalize or certified agroecology may endanger locally adapted and non-hijackable solutions.

Third, the research, the dissemination, and educational systems must embrace the understanding of the big picture, the concepts, and the analytical frameworks, and then be able to operationalize them, adapting them to local realities, to the transition of local structures.

### **(R2) Replies from Zollet**

First, in Italy, organic farmland is about 15% of total farmland while in Japan it’s less than 1%. I guess one of the big reasons for this is the existence of Japan Agricultural Cooperatives which has a strong control over what farmers do. I think both consumers and farmers don’t feel the need to seek organic or sustainably produced products, because of relatively lower perception of these issues.

My advice for policies is putting some serious money and resources into research about agroecological production methods. We need to find locally adapted solutions and ways of doing agriculture on the ground that are adapted to local conditions.

Also, because of topography it’s quite hard to imagine a large-scale farming in Japan. At this point, the Japanese government needs to realize that small-

scale farming should be the future, and to consider how the goal of MeaDRI (25% organic farming by 2050) is going to happen on the ground, and how we are going to suddenly change this small-scale farming into high-tech larger scale organic farming that they are envisioning in their policies. I feel the Japanese government policies are quite disconnected from the ground reality.

Second, I don't necessarily think that new-comer farmers are the only actors involved in this sustainability transition in agri-food system. But the important aspect of these people is that they are also free from path dependencies. Policies need to support, in a more active and explicit way.

Third, although the current food system is highly productive, it's built on the backs of people who are exploited, underpaid, and sometimes abused. In Italy we have some very positive examples of integration of former immigrants literally revitalizing marginal rural communities, because they moved in mountainous towns, started farming, brought their families and supported both the local agricultural system and the local community. But we need to give these people a chance. And this is what I don't see happening and Japan probably has even more serious issues in this sense.

### **(R3) Replies from Hisano**

First, the same criticism about the CSA can be applied to the MeaDRI, since the latter seems narrowly focused on technological innovation, while less attention is paid to social innovation. We need to pay more attention to the social network of farmers and other actors when it comes to promoting organic and other sustainable agriculture.

Another problem of MeaDRI is its governance: who are included in, or excluded from, the process of policymaking and consultation. Then, it's possible and necessary to look at MeaDRI through the Power Lens. The fact that this policy was prepared for the UN Food Systems Summit tells something. I think that MeaDRI is a part of the global trend of mainstream discourse and policies about the sustainable transformation of

agri-food system according to the interest of hegemonic powers.

The mindset behind CSA can be explained by ecological modernization theory arguing that the institutions of advanced market societies are flexible and reflexive enough to advance technological and managerial innovations with environmentally beneficial outcomes. This mindset also affects and shapes MeaDRI.

Second, what comes to my mind is the idea of "sociological imagination" coined by C. Wright Mills (1959). If many of us in Japan are unaware of the big picture or are unconcerned about what is taking place in the broader society, this is because of a lack of the sociological imagination. We are always busy dealing with personal problems derived from our surrounding environment, without knowing the meaning of and relation with the public issues of social structure. The sociological imagination is the ability to see things socially and understand society in relation to larger historical, social, and economic context. Although it is named as "sociological", this ability is required across the social sciences and humanities.

In Japan, however, the social sciences and humanities are less prioritized, and scholars and students have missed opportunities to learn such a holistic, integrated, and critical perspectives. Furthermore, interdisciplinary environment for our research and education is important to nurture our sociological imagination. Such environment to learn interdisciplinary approaches and critical perspectives needs to be intentionally created.

Not only political economy but also other social sciences offer critical perspectives. Political economy examines national or international level of power dynamics, but power dynamics and relations are everywhere, even at the local and household level. Therefore, sociology and geography, for example, are very useful. History is also needed to understand the big picture in terms of a time scale.

### 3. Concluding Remarks

After thanking the speakers for their farseeing presentations, the presidents of ARAFE and JSOAS for their welcome speeches, and the participants for live discussion, Maharjan noted that the issues raised in the concept of the symposium were well discussed though some may have been addressed partially only. They would be issues of land ownership, livelihood of farmers, their decision-makings, and responsible consumption by citizens. Thus, this aroused questions for future discussions.

Land transaction with ownership changes and/or renting is important for mid- and long-term planning for the farmers and the rural communities willing to conduct sustainable agriculture. The choice of technology and farming system will depend on the decisions made by individual farmers, their experiences, thoughts and wish to produce safe and nutritious food, conserving environment, biodiversity, and emitting less greenhouse gasses. The farmers need to be informed about the technologies, policies, and governance at international, national, and local levels so that they can make integrated decisions.

Such undertakings of the farmers need to be well evaluated so that they can earn enough income to make a decent livelihood. This would include proper evaluation of immigrant labors from global south to global north who contribute to local food production, environment conservation and revitalization of rural communities, which otherwise can be deserted and abandoned.

Answers to these issues cannot be easily found. However, the transparency of the related aspects in the transformation towards sustainable agriculture,

rural communities and ecosystems would help to achieve better results. Mindset transformation among the governments, the global actors, and the citizens are necessary.

Maharjan concluded saying, “With sociological imagination, I inquire why not give higher values to agroecological products. We benefit from cheap food at the expense of cheap labor from unprivileged part of the global society. This must be changed, and we need a mindset transformation for this change and give proper value to foods that is good for the earth and the humankind. This will be the main takeaway from this symposium”.

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