

**Table S1.** The participants for OCS in MRB2030.

Event	Female	Male	Junior <sup>1</sup>	Senior <sup>2</sup>	Backgrounds
February to December 2021, field visits	100	52	28	124	OCS Farmers visits in three districts of Yasothon province by the first author
January 15, 2022; online session	3	3	4	2	OCS Farmer's group leaders
	1	2	1	2	Researcher
	1	1	1	1	Agricultural extensionist
	1	1	1	1	Organic cassava flour mill
	-	1	-	1	Educator in Higher Education Institution
	1	-	1	-	Representative from organic certification organization
	6	3	5	4	Consumers
February 7, 2023; online session	3	3	4	2	OCS Farmer's group leaders
	1	2	1	2	Researcher
	1	1	1	1	Agricultural extensionist
	1	1	1	1	Organic cassava flour mill
	-	1	-	1	Educator in Higher Education Institution
	1	-	1	-	Representative from organic certification organization
	6	3	5	4	Consumers

<sup>1</sup> Under 45 year-old.

<sup>2</sup> Over 45 year-old.

**Table S2.** Trends and driving factors of OCS towards MRB2030.

Category	Trend description
Social	1. A societal trend was mixed with young and old generations, which approaching the aging society. The population of the society is also dominant with primary education level and insufficient learning curriculum and materials about OCS. This trend is impacting the capacity and opportunity to learn and to take on new opportunities. High learning capacity is a key success factor for on-farm, off-farm and non-farm opportunities, presented by OCS.
Technology	2. The first trend in technology in rural areas is the availability and easy accessibility to a variety of chemical-based technologies, ranging from seed, chemical fertilizers, machines, credits, etc. Without good agricultural practices, it is certain that the application of these technologies can lead to various and long-term health and environmental issues.
	3. The second trend in technology is in applications of Information and Communication Technology (ICT) improving communication and efficiency OCS in urban areas, the demand side. However, in rural areas with low population density the availability of ICT remains an issue, especially in the supply side of agricultural production and processing. With sufficient training, learning and data sets, one can predict the outcome of various production options and collectively can co-manage and allocate resources efficiently. Without financial resources and low education, it is certain that the use of ICT in rural areas will remain low.
Environment	4. The productivity and sustainability of organic crop production depends on knowledge about the interactions of the crop, natural and environmental resources, in particular the knowledge to manage soil water and fertility. The declining qualities and limited quantities of natural resources is an environmental trend agreed among participants, especially declining soil fertility used for cassava production. It is certain that impact is high on OCS at the field situation, however, education and learning opportunities enhance capacity to implement site-specific alternatives.
Economy	5. Increasing inequality is the first trend, with high certainty, agreed among participants and the impact is also high. The economy gap impacted the opportunities of education and participation in decision-making process, especially among the rural population. However, this situation creates a well-defined target individual and/or groups for new skill training programs to take specific activity of the productive economy.
	6. It is obvious that farm families in the rural areas engage in on-farm, non-farm and off-farm activities to provide incomes for essentials to the family members. This situation reflects the learning and adaptive capacity of both the individuals and the farm families. It is likely that OCS can be learned and implemented in the rural areas and developed into a rural industry by collaboration of stakeholders and the right policy.
Policy	7. The common trend in agricultural development policy is a centralized decision-making system. The policy system produced 'one-size-fit-all (OSFA)', with CCS as a result for extension agency to deliver to the farmers. On the positive side, the OSFA provides equal access to public investments, i.e., education and training, health care, social security, access to public data sets and forecasting/warning systems. On the negative side, the system is unable to meet the target population, both farm and non-farm, in various agro-ecosystems with numeric combinations of soil, plant, livestock, climate, weather and socio-economic conditions. However, the impact and uncertainty of the OSFA's policy system is high and unlikely to provide long-term support of the MRB2030-wide scaling up of OCS.