

Profile of the Sustainable Reserve Food Garden (SRFG) Program in Pacitan Regency, East Java

Titik Wijayanti^{1(⋈)}, Endang Arisoesilaningsih¹, Yayuk Yuliati², and Amin Setyo Leksono¹

Biology Department, Faculty of Mathematics and Natural Sciences, Brawijaya University, Malang, Indonesia

kititn71@gmail.com

² Socio-Economic Department, Faculty of Agriculture, Brawijaya University, Malang, Indonesia

Abstract. The aims of this study is to describe the profile of the Sustainable Reserve Food Garden (SRFG) program in term of organization, capital, activities, and sustainability, and to analyze the relationship between organizational and capital aspects to the activities and sustainability of the SRFG program in Pacitan Regency, East Java. The method used in this study was a survey method with research instruments in the form of questionnaires, observations, and interviews. The research was carried out from June to August 2021, with 45 SRFG organizations as respondents that spread across 12 sub-districts in Pacitan Regency. The results showed that generally, SRFG in Pacitan Regency was about 11.1% with excellent category achievement; about 35.6% achieved success category, about 46.7%; on fair category achievement, and about 6.7% with poor category condition. Besides that, there was a relationship between organizational solidity and capital stability in the activities and sustainability of the SRFG program in Pacitan Regency.

Keywords: Program · Pacitan District · Organizational · Capital · Sustainability

1 Introduction

Sustainable Reserve Food Garden (SRFG) or *Kawasan Rumah Pangan Lestari* program is a residential environment concept that seeks its home gardens intensively to be utilized as a source of food and family nutrition in a sustainable manner by considering aspects of the potential of natural resources and family nutritional needs. The SRFG program is the implementation of food security programs in all provinces in Indonesia initiated by the Indonesian Agency for Agricultural Research and Development. The purpose of the SRFG program is to increase the participation of the women's community in food and family nutrition sources provision through optimizing the utilization of home gardens as producers of nutritional sources and increasing the diversity of food commodities. The target of the SRFG program is to increase the family's capacity based on the community about food and nutrition needs, towards prosperous families, and the realization of food diversification and native food crops conservation [1].

Evaluation of SRFG program development policy is carried out through a literature study of documents related to SRFG, namely 1) Presidential Regulation No. 22 of 2009 on the policy of accelerating the uniformization of food consumption based on local resources; 2) Regulation of the Minister of Agriculture Number 43/Permentan/OT.140/10/2009; 3) Food Security Council (DKP) Session and Conference; 4) General Guidelines for SRFG Models published by Indonesian Agency for Agricultural Research and Development, Ministry of Agriculture in 2011; and 5) Other documents, namely exposure or manuscript or paper by related officials in seminars or workshops related to SRFG and its development is carried out throughout Indonesia [2]. The policy on SRFG in the era of Jokowi's Presidential is contained in Nawacita or the priority agenda of the Presidential Cabinet (*cabinet Kerja*), which is to establish food sovereignty, fulfillment of the right to food of good nutritional quality and culturally appropriate, produced with a sustainable and environmentally friendly agricultural system [3].

Pacitan regency is located in East Java province. Hilly is the topographic characteristic of the Pacitan regency. The area of Pacitan Regency is 1,389.89 km². Administratively Pacitan Regency consists of 12 sub-districts namely Donorojo, Punung, Pringkuku, Pacitan, Kebonagung, Arjosari, Nawangan, Bandar, Tegalombo, Tulakan, Ngadirojo, and Sudimoro [4]. Pacitan Regency area is grouped into three units of morphological area, namely: the morphology of the hills is the widest area covering 80% of the area. Kars morphology spreads along the south coast. And the morphology of the plains that exist along the flow of large rivers that occupy a narrow coastal suburb. The wide alluvial plains are found in the Pacitan in the downstream area of the Grindulu River and the Lorog area around the Lorog River [5].

The SRFG program has been implemented in Pacitan Regency since the implementation of the program by the President in 2012. The implementation of the SRFG program in Pacitan Regency can reduce spending on food consumption, and increase energy and protein consumption and PPH (Daily Food Pattern). However, the share of food consumption expenditure of the average household of SRFG members is still relatively large (61.8%) compared to the aggregate data (in 2010) for east Java which is 52.2%, and Indonesia at 51.4%, slightly lower than the average expenditure of non-member households which is 62.9% [6]. This indicates that member and non-member households of the SRFG program in Pacitan Regency are still less prosperous than the aggregate of provinces and Indonesia. The types of plants cultivated in the yard of SRFG members in several villages in Pacitan Regency are mostly types of food crops, medicinal plants, and ornamental plants [7]. The implications of SRFG activities that have been carried out in Pacitan Regency include that the SRFG program has been able to reduce family food consumption costs through the use of their home garden [7]. The SRFG success rate positively affects home income and increases family nutrition intake with PPH 71.5 and average receipts of Rp 48,448/month [8].

Generally, the SRFG program is determined by several factors including organization and capital. The success of SRFG is also determined by the potential of land resources, the human resources capacity of farmers as land managers, land location-specific technology, and SRFG management institutions. Land area, availability of production facilities, the culture of consumption of home garden products, the strength of availability of nursery, technology resources, regular meetings, and home industrial processing. The successful



Fig. 1. Map of Pacitan Regency East Java. Source: BKP-Kementan Pacitan Regency

implementation of SRFG is driven by the conformity of SRFG with cultural roots and the direct impact felt by SRFG members, the local administrative government, and the involvement of the district government [6, 8–12]. However, the circumstances of each region may vary, particularly with regard to the environment, regional infrastructure, economic capacity, and community culture. In addition, a few research that examines the organizational and capital aspects of the SRFG program in relation to their activities and sustainability. Thus, the purpose of this study is to describe the profile of SRFG in terms of organization, capital, activities, and sustainability, and analyze the relationship between organizational and capital aspects to the activities and sustainability of SRFG programs in Pacitan Regency in East Java.

2 Methods

2.1 Study Site

The research was carried out from June to August 2021, pada 45 KRPL yang tersebar di 12 kecamatan di Kabupaten Pacitan, Jawa Timur.

Pacitan Regency is located at 7 92' – 8 29' South Latitude and 110 90' – 111 43' East Longitude. Based on its geographical position, Pacitan Regency is located in the southwest of East Java Province, which borders Ponorogo Regency (East Java) and Wonogiri Regency (Central Java), in the east it borders Trenggalek Regency (East Java), in the south, it borders the Indian Ocean and in the south it borders the Indian Ocean. West borders with Wonogiri Regency (Central Java). Pacitan Regency is mostly of hills and mountains, and steep ravines and includes a thousand mountains that stretch along the island of Java. The total area of Pacitan Regency is 1.389.89 Km².

2.2 Methods

The research was conducted from June to August 2021 in Pacitan Regency, East Java. The sub-districts in Pacitan Regency are: Donorojo, Punung, Pringkuku, Pacitan, Kebonagung, Arjosari, Nawangan, Bandar, Tegalombo, Tulakan, Ngadirojo and Sudimoro sub-districts. This type of research is survey research. The sample in this study was 45 selected SRFG spread over 12 sub-districts in Pacitan Regency. The sampling technique

was determined randomly with a percentage of 30% of the total population [13], in Pacitan Regency with a total of 149 SRFG [7].

The research instruments used are questionnaires, field observations, and interviews. The questionnaire instrument consists of questions containing four aspects, namely organization, capital, activities, and sustainability. The respondents in the questionnaire instrument are the head of the SRFG. Interviews were conducted with the SRFG management and several community members. Field observations were carried out to see directly the secretariat and SRFG land.

The data obtained were analyzed descriptively and statistically. The descriptive analysis includes frequency, and Likert's scoring to categorize the success of SRFG into excellent, good, fair, and poor, Each aspect in SRFG is categorized as good, fair, and poor. Chi-square test to determine the relationship between two variables.

The SRFG profile in Pacitan Regency was observed from four aspects, namely organization, capital, operational activities, and sustainability. Each of these aspects contains the things observed as shown in Table 1.

The data obtained was used to determine the success category achievement of SRFG in Pacitan Regency. Table 2 contains an explanation of the general SRFG condition categories.

Aspect	Observed list	
Organizational	Organization structure	
	Job description of management	
	Secretariat	
	Management	
Capital	Financial capital	
	Fixed capital	
	Human resources	
Activities	Type of SRFG activity	
	Activity management	
	Activity output	
Sustainability	Age of SRFG	
	SRFG condition dynamics	
	An impact on environmental improvement	
	An impact of economic improvement	
	Cultivating cooperative attitude	
	Innovation in the environmental field	

Table 1. Aspects observed listed in the questionnaire

SRFG category	The characteristic of SRFG	
Excellent	The SRFG implements all SRFG activities, with active member participation, and is able to provide improved environmental conditions and improve the economic well-being of member families, with continuously increasing performance	
Good	The SRFG implements all SRFG activities, with active member participation, and is able to provide improved environmental conditions and improve the economic well-being of member families, with constant performance	
Fair	The SRFG that implement some SRFG activities with sufficiently active member participation, and is able to provide improved environmental conditions and improve the economic well-being of member families, with less sustainable performance	
Poor	The SRFG is less able to implement SRFG activities with the participation of less active members, and less able to provide improved environmental conditions and improve the economic well-being of member families, with declining and unsustainable performance.	

Table 2. The characteristics of the SRFG category

3 Result and Discussion

3.1 Result

3.1.1 The SRFG Success Profile in Pacitan District

The results of categorizing the success rate of SRFG in Pacitan Regency are illustrated in Fig. 1 (Fig. 2).

The profiling results showed that SRFG in Pacitan Regency was divided into four categories based on the level of success. Most of the success rate of SRFG in Pacitan Regency was a fair category about 47%. While the SRFG with an excellent success category is 11%, SRFG with a good category success rate is quite high about 35%. The SRFG with the poor condition is relatively small, at 7%. So it could be concluded that

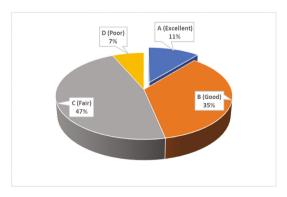


Fig. 2. Percentage success category of SRFG in Pacitan Regency

the successfulness of SRFG in Pacitan from fair until the excellent category was very large about 93%.

3.1.2 The SRFG Success Rate in Organizational, Capital, Activities, and Sustainability Aspect

The success rate of SRFG was also observed in detail in four aspects. They were an organization, capital, activities, and sustainability aspect. The percentage of SRFG success rate based on four aspects of SRFG showed in Fig. 3.

An observation about the organizational aspect of SRFG in Pacitan Regency, most of the SRFG were in the fair category, about 84.4%, while only 6.7% of SRFG were in poor organizational condition. Thus, the success rate of SRFG from the organizational side from the fair to the good category was very high about 93.3%. The results of observations in the capital aspect showed that SRFG with the availability of capital, in the good category, was relatively low, about 6.7%. Meanwhile, the SRFG with the fair condition and poor capital availability was relatively balanced respectively. So the level of availability of SRFG capital in the fair until the good category was relatively good enough, about 51.1%.

The success of SRFG from the aspect of activities showed that most of the SRFG activities were categorized as poor condition, about 53.3%. Meanwhile, SRFG with activities categorized as good was relatively small, about 15.6%. So that the success rate of SRFG in the activities aspect from fair until the good category was about 46.7% which was still lower than the percentage of SRFG in the poor activities category. The sustainability aspect of SRFG in Pacitan Regency showed that SRFG with good, fair, and poor sustainability categories was relatively balanced, however, SRFG with good sustainability conditions was still lower than SRFG with fair and poor sustainability categories. So that the success rate of SRFG in the sustainability aspect from the fair until the good category was relatively large about 64.5%.

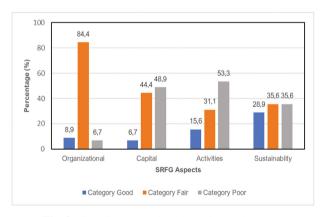


Fig. 3. SRFG category based on observed aspects

3.1.3 Analysis of the Relationship Between Organizational and Capital Aspects to Activities and Sustainability of SRFG

The study also analyzed the relationship between the aspect of organization and capital as an internal variable of SRFG to activities and sustainability as external variables (output) of SRFG organization. The analysis intended to observe how far the level of organizational solidarity of SRFG and the stability of capital owned by SRFG organization in improving the performance of SRFG activities and the sustainability of SRFG organizations over time.

The results of the statistical analysis of the Chi-square test, showed the relationship between the aspects of organization and capital to the activities and sustainability of SRFG are listed in Table 3.

Table 3 showed a significant relationship between the organizational aspect and also capital to the operational activities and sustainability of the SRFG program in Pacitan Regency. An overview of the relationship between the aspects of organization and capital to activities and sustainability could be explained in Fig. 4.

Figure 4 indicated a relationship between the organizational aspects of SRFG activities, where a good organizational condition would improve the performance of good SRFG activities as well. SRFG with organizational conditions in fair categories would

Aspects	Value Sig-p (2-sided)		
	Activities	Sustainability	
Organization	0.000	0.017	
Capital	0.000	0.000	

Table 3. Chi-square test result

^{*} Sig-p (2-sided) value < 0.025 indicates a significant relationship

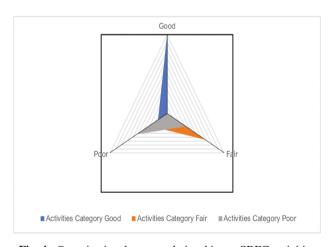


Fig. 4. Organizational aspect relationships to SRFG activities

be quite able to carry out activities with a fairly good category. While SRFG with poor organizational conditions was not able to carry out SRFG activities properly.

Furthermore, an overview of the relationship between the capital aspect of SRFG with activities and the sustainability of SRFG on Fig. 5 and Fig. 6.

Figure 5 showed the relationship between the capital aspect in SRFG and its activities, where the more capital owned will be better activities, and conversely, less capital leads to low SRFG activities. Figure 6 shows the relationship between the capital aspect to the sustainability of the SRFG program in Pacitan Regency, where the high capital in SRFG

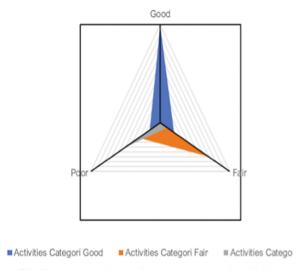


Fig. 5. Relationships capital aspect to SRFG activities

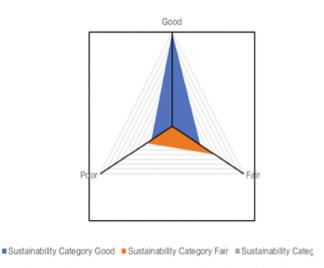


Fig. 6. Relationships capital aspect to the sustainability of SRFG programs

will increase the sustainability of the SRFG program. Conversely, the lower capital in SRFG causes a tendency to lack or low the sustainability of the program.

3.2 Discussion

SRFG is a nationally launched program. Programs such as village community empowerment programs and increased land productivity are intended to improve community food security [14–16] improve the economic well-being of the community [14, 17], increase land use [14, 18, 19], and the preservation of plant and environmental resources [18, 20–22]. Basically, home garden activities, are agricultural activities of village communities that have been for generations since ancient times. These activities are sided agricultural activities outside the main agricultural activities located in the rice fields [14]. The SRFG organization in the village consists of mothers who are usually formed by the village government, whereas the stewardship is formed from the family welfare organization namely *PKK* administrators and the community of Women Farmer called *KWT*. So it is not surprising that organizationally, the organizational aspect of SRFG is quite solid. In carrying out its activities, SRFG has a secretarial that is usually in the chairman's house, and the village office sometimes also has its own secretarial office. This is due to the varied village government infrastructure in the Pacitan district.

In the capital aspect of the SRFG organization, SRFG capital comes from 2 sources, namely government assistance and independent funds. Independent funds could come from village funds and citizen dues. Fixed capital managed by SRFG was land that usually belongs to the village government or belongs to one of the SRFG members. The land area ranges from 100-300 m², in the land area sometimes there were screen house buildings for nurseries, and small buildings as offices and warehouses where to store equipment, and in some villages, there are water towers for water irrigation SRFG. In addition, some SRFGs have work equipment but some do not. In carrying out the SRFG program which includes planning, division of tasks, and evaluation, usually the board conducts meetings accompanied by a companion from the agriculture officer of the Pacitan Regency Government. Occasionally officers from the agriculture service make field visits to provide advice and problem-solving assistance that arises during the implementation of the SRFG program. SRFG activities carried out vary, including activities of cultivating vegetable plants, herbs, and fruits. There were also supporting agricultural activities, such as the manufacture of organic fertilizers, organic pesticides, and crop nurseries. Some SRFGs carry out livestock and fishery activities, such as local chicken, laying hens and goats, and catfish fishery. Agricultural activities is one of the enterpreuner activities that if developed will be the driving force of a very large community economy and high resilience [16, 23]. In addition, agricultural activities can be activities that are able to recycle organic waste that has implications for environmental sustainability and create new useful products [24, 25].

The plant or animal products of SRFG activities are usually utilized directly by SRFG members and also for sale to neighbors or in the local market. SRFG at Nanggungan Pacitan village makes small stores that sell products from SRFG member land. Activities to increase the added value of products from home gardens were sometimes also carried out by some SRFG, such as making various kinds of chips, although still not optimal. The existence of SRFG generally have a role in improving the environment

[18, 21, 25, 26], level of welfare [15, 17, 18], innovation upgrade [17, 19, 20], as well as "kegotongroyongan" (social cooperation) [14, 23].

The results showed that the SRFG program in Pacitan Regency could be said to be successful. This is indicated by the percentage of SRFG that is categorized as fair to excellent was about 93%, so only 7% of SRFG were in poor or successful condition. SRFG is actually an organization that is expected to be able to trigger and increase village development. Many studies showed the role of village driving organizations in strengthening the development of rural communities [14, 23]. The results also showed that the success rate of SRFG in terms of the organization also showed the correct path. SRFG which was categorized as fair until good in the aspect of the organization was very high, which is 93%. The aspect that needs to be improved was the capital aspect. This was because SRFG has fair capital to good percentage about only 51.1%, relatively slightly higher than SRFG with poor category capital. Capital is one of the important aspects in the implementation of the activities of an organization. So capital raising efforts from various sources are important. Capital rising in the form of fundraising can be obtained from the SRFG products selling. Product value-added improvement activities need to be encouraged and stimulated through training, initial funding, product design and packaging, and other efforts [16, 19, 20].

However, from an aspect of activities perspective, the success of SRFG activities in Pacitan Regency still needs to be improved in terms of the quantity and quality of SRFG activities. Because the success rate of SRFG from the aspect of activities with fair until good categories was only 46.7%. The observation of the 2 factors as driving factors in internal SRFG, namely organization, and capital, then it seems that the limiting factor is the capital owned by SRFG. This is because, the organizational aspect of SRFG has been very good, but still weak in terms of capital aspects. Statistical analysis shows that the role of organizational and capital aspects is significantly related to the quality of SRFG activities.

The SRFG activities more or less contribute to the sustainability of SRFG activities. Monotonous activities could make boredom of SRFG members in continuing to play an active role from time to time. So one day, there was a vacuum of activities that cause SRFG activities to stop and difficult to restart activities. The success rate of SRFG in Pacitan Regency from the sustainability aspect with fair category until to good category was relatively high, about 64.5%. The results of statistical analysis showed that aspects of organization and capital affect the sustainability of the SRFG program. Uniquely the organizational aspect becomes a more influential factor than the capital aspect. This was shown from the results of the analysis that shows that SRFG with good sustainability was SRFG that had good organization. While SRFG with organizational aspects is only fair and poor condition, then the sustainability of the SRFG program is also less good. While from the aspect of capital perspective, SRFG has good capital, then the sustainability of the SRFG program is going well as well. SRFG which only has fair category capital even poor category still could maintain the sustainability of the SRFG program with a fairly good category. This showed the solidarity of villagers to be a key factor in the sustainability of SRFG activities in a village, although with limited funds.

4 Conclusion

The implementation of the SRFG program in Pacitan Regency has succeeded in developing SRFG with the percentage of SRFG which was categorized as fair to excellent reaching 93%. The organizational aspects, capital, activities, and sustainability of the SRFG organization in Pacitan regency were also in quite good condition. Organizational and capital aspects had a significant relationship to SRFG activities and sustainability.

References

- Kementerian Pertanian, Pedoman Umum Model Kawasan Rumah pangan Lestari (MKRPL). Jakarta, 2012.
- S. Saptana, F. Friyatno, S. Sunarsih, Analisis Kebijakan dan Program Model Kawasan Rumah Pangan Lestari (M-KRPL), Laporan Penelitian: Pusat Analisis Sosial Ekonomi dan Kebijakan Petanian, Badan Penelitian dan Pengembangan Pertanian, Kementerian Pertanian, 2012.
- S. Konyep, Mempersiapkan petani muda dalam mencapai kedaulatan pangan. Jurnal Triton, Vol. 12, 2021. DOI: https://doi.org/10.47687/jt.v12i1.157
- 4. BPS Kabupaten Pacitan, Kabupaten Pacitan dalam angka. Badan Pusat Statistik Kabupaten Pacitan, 2020.
- 5. BKP-Kementan, Indeks Ketahanan Pangan Indonesia. Badan Ketahanan Pangan Kementerian Pertanian, 2018.
- 6. T.B. Purwantini, S. Saptana, S. Suharyono, Sustainable reserve food garden program in Pacitan Regency: its impact and prospect, J. Analisis Kebijakan Pertanian, 10(3), 2012, pp. 239-256.
- 7. Indartato, A. Hakim, A.S. Leksono, B. Yanuwiadi, Sustainable reserve food garden program and its implication for food security in Pacitan regency Indonesia, IJSRP 9(6), 2019, pp. 29-34.
- 8. Oka, D.P. Darmawan, N.W.S. Astiti, Keberhasilan program KRPL pada kelompok wanita tani di Kabupaten Gianyar, J.Manajemen Agribisnis, 4(2), 2016, pp. 133-146.
- 9. W. Mamilianti, N.I. Hidayati, Strategi pengembangan KRPL di Kabupaten Pasuruan guna mendukung ketahanan pangan, J.Wacana Equiliberium, 2(2), 2014, pp. 1-8.
- E.A. Sirnawati, A. Yuliana, A. Ulpah, Faktor-faktor yang mempengaruhi keberhasilan KRPL di Pulau Sumatera, 2014, J. Pengkajian dan Pengembangan Teknologi Pertanian 18(1), 2014, 11-27.
- 11. Hermawan, Faktor pendorong keberhasilan dan permasalahan dalam implementasi model KRPL di Jawa Tengah, Semnas Optimalisasi Pekarangan, UNDIP Press, 2015, pp. 176–184.
- B.R. Askina, I.W. Windia, I. Anggreni, Strategi pengembangan program KRPL pada KWT Karya Harum di Desa Karang Sidemen, Lombok Tengah. J.Agribisnis dan Agrowisata Vol.6 (3), 2017, pp. 326–335.
- S. Arikunto, Prosedur Penelitian: Suatu Pendekatan Praktik (Edisi Revisi). PT. Rineka Cipta. Jakarta, 2010.
- Z. Ferdousa, A. Dattaa, A.K. Analb, M. Anwarc, A.S.M. M.R. Khan. Development of home garden model for year round production and consumption for improving resource-poor household food security in Bangladesh, NJAS-Wageningen, Journal of Life Sciences Vol. 78, 2016, pp. 103 –110.
- Galli, S.M. Pires, K. Iha, A. Alves, D. Lin, M.S. Mancini, F. Teles, Sustainable food transition in Portugal: assessing the footprint of dietary choices and gaps in national and local food policies, J. Science of the Total Environment, Vol. 749, 2020, pp. 141307.
- Guell, C.R. Brown, V. Iese, O. Navunicagi, M. Wairiu, N. Unwin, Understanding changing practices of local food production and consumption in small island states, 2021, J.Social Science & Medicine Vol.284, 2021, p. 114214.

- G. Kruseman, K.A. Mottaleb, K. Tesfaye, S. Bairagi, R. Robertson, D. Mandiaye, A. Frija,
 S. Gbegbelegbe, A. Alene, S. Prager, Rural transformation and the future of cereal-based agri-food systems, J. Global Food Security, Vol.26, 2020, pp. 100441.
- T. Wijayanti, P.B. Lestari, D. Setiawati, Homegardens management: improving soil fertility and total microbiological state (case on Pacitan District, East Java, Indonesia), EQA-International Journal of Environmental Quality Vol.45, 2021, pp. 10-16. DOI: https://doi.org/10.6092/issn.2281-4485/12288
- K.M. Francis, Z. Guob, M. Bekundaa, H. Sseguyac, F. Kizitod, F. Baijukyae, I. Hoeschle-Zeledonf, Sustainable recommendation domains for scaling agricultural technologies in Tanzania, J.Land Use Policy Vol.66, 2017, pp.34

 –48.
- Steiner, F. Cal'o, M. Shucksmith, Rurality and social innovation processes and outcomes: A realist evaluation of rural social enterprise activities, Journal of Rural Studies Vol.86, 2021, 2021, pp. 76–86.
- Csurg'o, M.K. Smith, The value of cultural ecosystem services in a rural landscape context, Journal of Rural Studies Vol. 86, 2021, pp. 76–86.
- 22. G. Leduc, G. Manevska-Tasevska, H. Hansson, M. Arndt, Z. Bakucs, M. B"ohm, M. Chitea, V. Florian, L. Luca, A. Martikainen, H.V. Pham, M. Rusu. How are ecological approaches justified in European rural development policy? evidence from a content analysis of CAP and rural development discourses, Journal of Rural Studies, Vol.86, 2021, pp. 611–622.
- B. Yang, M.W. Feldman, S. Li, The status of perceived community resilience in transitional rural society: an empirical study from central China, *Journal of Rural Studies*, Vol.80, 2020, pp. 427–438.
- 24. V. Torrijos, D.C. Dopico, M. Soto, Integration of food waste composting and vegetable gardens in a university campus, Journal of Cleaner Production, Vol.315, 2021, pp. 128175
- 25. H.I. Helena, E. Eckberg, M. Widenberg, J.A. Olsson, Gardens' contribution to people and urban green space, J.Urban Forestry & Urban Greening, Vol.63, 2021, pp. 127198.
- S. Altomonte, J. Allen, P.M. Bluyssen, G. Brager, L. Heschong, A. Loder, S. Schiavon, J. A. Veitch, L. Wang, P. Wargocki, 2020, Ten questions concerning well-being in the built environment, J.Building and Environment, Vol.180, 2020, pp. 106949.

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