



Article

# Integration of the Principles of Responsible Investment in Agriculture and Food Systems CFS-RAI from the Local Action Groups: Towards a Model of Sustainable Rural Development in Jauja, Peru

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Abstract: The Principles for Responsible Investment in Agriculture and Food Systems (CFS-RAI) are shown as suitable instruments to contribute to the Sustainable Development Goals (SDG) in rural areas. Local Action Groups (LAGs) have proven to be effective governance structures for the implementation and management of rural development projects based on participation and collective action. This research integrates the implementation of the LAG from the CFS-RAI Principles for the design of a rural development strategy. The foundations of these new structures are analyzed and the process of creating a LAG linked to the El Mantaro Regional Development Center (RDC) of the Universidad Nacional Mayor de San Marcos (UNMSM), in the Junín region (Peru), is described. The methodological process incorporates the "Working With People" (WWP) approach and the LEADER (Liaison Entre Actions de Développement de l'Économie Rurale) specificities for the analysis of empirical information obtained in surveys and workshops, with 350 people involved in the process. The results indicate that the LAGs, as multi-stakeholder partnerships linked to the RDC, are a novel way to integrate the CFS-RAI principles from participation, proximity management, strengthening local communities and promoting sustainable development through projects. These results contribute to the empowerment of civil organizations and motivate their participation in local political decisions related to sustainable rural development.

**Keywords:** Local Action Group; multi-stakeholder partnerships; governance; sustainable rural development; WWP; Peru; sustainable development goals; CFS-RAI principles



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# 1. Introduction

Since the creation of the United Nations (UN), efforts have been made to improve the living conditions of the world's inhabitants, initially focusing on poverty and food security. After reaffirming and expanding these needs in year 2000, with the approval of the Millennium Goals, later, in 2015, the SDGs [1] were approved based on the participatory construction of the UN member countries.

Solving the problems of hunger, poverty and inequality is so complex that it implies the solution of other collateral problems to achieve a comprehensive solution from the SDGs. The main scenario of actions to solve these problems is rural areas, where 80% of the population live in extreme poverty and 75% are moderately poor [2].

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Faced with problems of land grabbing worldwide [3,4], the Food and Agriculture Organization of the United Nations (FAO) coordinated the elaboration of the CFS-RAI Principles with the participation of different actors from countries across five continents [5]. These principles, adopted in 2014, contribute to the implementation of the SDGs in rural areas.

The SDGs and the CFS-RAI principles promote sustainability in all its breadth [1,5]; however, as it is a concept accepted by society, its achievement is complex. In this sense, it has been pertinent to incorporate sustainability in project management, given that projects show a growing relationship with human activities. Unfortunately, the methodologies to assess the sustainability of projects have different interpretations and are not always aimed at measuring intrinsic sustainability [6,7].

The implementation process of the CFS-RAI Principles is still ongoing and for some years the Polytechnic University of Madrid (UPM) and FAO have been coordinating strategic action through an international network of universities linked to companies and other civil organizations [8,9]. Since 2016, academia has proven to be an important ally in raising awareness of public and private actors about CFS-RAIs and implementing sustainable rural development projects aligned with the SDGs [10,11].

Several factors affect the overcoming of problems in the rural population, mainly limited land tenure [12]. Faced with this situation, small producers have the alternative of improving their opportunities for development through organizational strengthening and leadership [13]. In this regard, the LAGs emerge as a new experimental way of approaching sustainable rural development within the framework of the LEADER initiative as innovative and versatile organizational structures that bring together the actors of a territory from a balanced participation in development planning and management decisions [14]. These structures have proven to generate spaces for good governance and efficiently contribute to development in rural territories of the European Union [15], Mexico [16,17] and Argentina [18].

Poverty is concentrated in the rural areas of Peru and has increased with the COVID-19 pandemic [19]. Despite the efforts of different governments to reduce poverty, the interventions were not very sustainable due to the lack of organization and disarticulation between actors within the territories [20]. In addition, these actors and local institutions lack the processes and competencies to articulate government structures aimed at generating projects from the rural communities themselves.

UNMSM, in its vision of contributing to Peru's decentralized development, created the RDCs [21], where it has been carrying out processes to strengthen sustainability from a bottom-up approach and to structure local organizations based on a relationship with agricultural producers in the Mantaro Valley, in the province of Jauja [22]. As in all rural areas, the population of Jauja has problems that go beyond the problems of the agricultural sector. The solution to these problems has been shown to be effective through collaborative actions between different actors in the territory [23], creating organizational structures in which academia and research play an important role [16,17,24]. In this sense, the UNMSM RDCs have the conditions to improve the link with the needs of the rural population through joint R&D&I projects from the research groups [25].

The UNMSM began the implementation of an R&D&I model in sustainable rural development in its RDCs, with the Program for the Improvement of the Quality and Relevance of Higher University and Technological Education Services (PMESUT), financed by the Inter-American Development Bank [26]. The model applies the WWP approach, with the collaboration of the research group Planning and Sustainable Management of Rural-Local Development (GESPLAN) of the UPM and its more than 30 years of experience, to unite knowledge and action in R&D&I projects consistent with the needs of the population. The process emphasizes research groups and the development of skills to consolidate new organizational structures and strengthen governance by projects with the actors of the territory. In addition, the model incorporates the LEADER specificities, the development of skills in project management and the elements of the research universities, oriented to the establishment of living laboratories, where the solutions to real problems of rural society,

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from project management, reinforce the link between UNMSM and society, favor the generation of knowledge of high scientific value and provide an appropriate environment for quality professional training for undergraduates and postgraduates [26].

The methodological approaches of WWP and LEADER have contributed to the sustainable development of rural territories, with improvement of the organizational structure of the population, articulated with academic institutions, giving rise to the efficient planning and management of development projects [16–18]. Furthermore, WWP is also a powerful methodology that enhances the implementation of the CFS-RAI principles [8,27,28].

The sustainable development of rural territories requires projects that contribute to development, but first an environment of good governance must be consolidated [29], with contributions from community social innovation [30,31] that not only favors the optimal development of projects, but also facilitates the implementation of the CFS-RAI Principles with potential empowering effects on the results of the projects and fully aligned with the SDGs.

## 1.1. The CFS-RAI Principles as an Embodiment of the SDGs

The FAO promotes greater investment in the different links of the agri-food chain for various food products in order to improve food security. However, producing more food is not so simple, because there are many different agri-food systems in different countries, with different contexts and problems. Encouraging food production without considering sustainability has triggered problems of land grabbing [32], labor exploitation [33], pollution [34] and land degradation [35]. For this reason, FAO involved various interest groups of nations from five continents in the consensual elaboration of a set of principles that allows sustainable management of the system. As a result of this initiative, the ten CFS-RAI Principles were approved in October 2014 [5].

A year after the adoption of the CSA -IRA Principles, the United Nations, with the aim of addressing global problems, approved the SDGs, a set of 17 goals and 169 targets, the result of negotiations between the 193 member countries, who commit to fulfill them until 2030 [1,36]. The SDGs aim to achieve a world of well-being for human beings without prejudice to other beings or compromising the availability of resources for future generations.

To contribute to sustainability, the SDG targets are important, and it will be necessary to define targets and indicators for the CFS-RAI principles. However, it is even more important and a challenge for the scientific community to generate methodologies that can measure sustainability without interpretive differences [7].

The SDGs are ambitious and complex to achieve in an integral way, since some goals and their indicators are incompatible [37]; for example, goal 9 (Industry, innovation and infrastructure) uses a large amount of energy from fossil fuels and affects objective 13 (Action for the climate). Eight years into the 2030 goal, progress on the SDGs is variable and seems insufficient to achieve the targets [38], a fact that is worrying, given that there is a commitment from nations to meet the SDGs.

The CFS-RAI principles are voluntary and rural-oriented, to promote the sustainable development of agriculture and food systems. The CFS-RAI principles are integrated and are important drivers in the achievement of the SDGs. In this regard, Table 1 shows how the CFS-RAI Principles relate to the SDGs. It should be noted that all the CFS-RAI principles contribute to SDG 1 and, conversely, none of them with SDG 9. Each principle is different in its association with the SDGs, but together all the CFS-RAI principles promote in an important way the achievement of the SDGs.

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Principles	SDG <sup>2</sup>																
CFS-RAI <sup>1</sup>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Х	Х	Х			Х	Χ	Х		Х		Х	Χ				
2	X	X		X			X	X		X		X		X	X	X	
3	X			X	X		X			X				X		X	
4	X	X		X			X	X		X				X		X	X
5	X	X			X									X			
6	X	X	X			X	X	Χ			X	X	X	X	X		X
7	X	X						X		X	X				X	X	X
8	X	X	X			X	X	X			X	X		X			
9	X									X		X				X	
10	X				X					X	X		X	X	X	X	

**Table 1.** Relationship between the SDGs and the CFS-RAI Principles.

<sup>1</sup> CFS-RAI Principles: 1. Contribute to food security and nutrition, 2. Contribute to sustainable economic development and poverty eradication, 3. Promote gender equality and the empowerment of women, 4. Promote participation and empowering youth, 5. Respect tenure of land, fisheries, forests and access to water, 6. Conserve and sustainably manage natural resources, build resilience and reduce disaster risks, 7. Respect cultural heritage and traditional knowledge and support diversity and innovation, 8. Promote safe and healthy food and agricultural systems, 9. Incorporate inclusive and transparent governance structures, processes and grievance mechanisms, 10. Assess and address impacts and promote accountability. <sup>2</sup> SDGs: 1. No poverty, 2. Zero hunger, 3. Health and well-being, 4. Quality education, 5. Gender equality, 6. Clean water and sanitation, 7. Affordable and clean energy, 8. Work and economic growth, 9. Industry, innovation and infrastructure, 10. Reducing inequalities, 11. Sustainable cities and communities, 12. Responsible production and consumption, 13. Climate action, 14. Life below water, 15. Life of terrestrial ecosystems, 16. Peace, justice and strong institutions, 17. Alliances to achieve the goals. Adapted from: [39].

Rural territories are poorer [2] and have greater difficulty in achieving the SDGs, for this reason it is pertinent to disseminate and implement the CFS-RAI Principles in rural areas as a means to achieve the SDGs, with the participation of universities in the management of this process. In this regard, GESPLAN-UPM, by virtue of letters of agreement with FAO, leads the process of dissemination and implementation of the CFS-RAI Principles, through a network of 20 universities in 10 countries, managing to gradually insert the CFS-RAI Principles in curricular plans, as well as connecting and influencing companies to adopt the principles in their development plans [8,9,27,28,40].

UNMSM is part of the network of universities led by GESPLAN-UPM to disseminate and implement the CFS-RAI Principles [9], through outreach activities in its five RDCs [21]. In the RDC El Mantaro, groups of livestock producers such as the Association of Guinea Pig Producers of the Center (ACRICUCEN) and the Network of Women Producers and Entrepreneurs of the Province of Jauja (RAMPEJ) improve their knowledge and progressively advance towards implementing the CFS-RAI Principles in their organizations.

In Peru, there is progress in SDGs related to poverty reduction, access to basic services, access to education and health insurance, with increased coverage, but poor quality. On the other hand, there is limited progress in SDGs related to climate change, responsible consumption, sustainable production, conservation of ecosystems and biodiversity [41]. This scenario is intended to promote the dissemination and implementation of the CFS-RAI Principles in rural territories to balance the progress in the SDGs.

## 1.2. Local Action Groups

The management of the territories depends on the structures of government and the decisions of the authorities. These descending structures, the predominance of technical aspects and the exclusion of the population in decisions limit sustainable development [42]. Subsequently, the concept of government evolved into governance, which projects a scenario where the interest groups or stakeholders of a territory participate in a balanced way [43], in correspondence with the priority problems and needs of the population. This new concept is consistent with sustainable development and requires new organizational structures.

Ancient civilizations practiced communal living, but evolution modified Peruvian social behavior towards individualism to the detriment of collectivism, affecting representa-

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tiveness and governability [44], and causing social conflicts and delay in rural development. Fortunately, universities have the capacity to reverse this situation [45].

Faced with the failures of interventions for sustainable rural development, the LEADER community initiative was born in 1990, with an innovative proposal to manage resources through the participation of public and private interest groups, with civil society playing a leading role in the planning and management of development through projects. LEADER had three versions that successfully evolved to cover an important area of the European rural territory [46] and, given its success, it was positioned in the European Union's rural development policies and plans.

The LAGs comprise a set of seven specificities of the LEADER initiative: innovation, proximity management and financing, networking and cooperation, LAGs and the bottom-up, territorial and integrated approaches [17,47,48] that work together to enhance rural development results.

The bottom-up approach breaks paradigms and empowers rural people to make decisions together with other actors [49]. LAGs facilitate interaction between actors in the territory and practice governance [29], encouraged by the application of the WWP metamodel [49], resulting in a rich social learning process, useful for leading the community towards sustainable rural development. However, in some contexts, the bureaucratic and administrative burden slows down results [50–52] and when stakeholder participation is unbalanced and becomes politicized, the LAG loses its reason for being [53].

LAGs are organizational structures made up of representatives of the stakeholders of a territory, with balanced and representative participation of the entire population, that is, representatives of the public administration, private company, organized civil society and other representative groups of the territory. These stakeholders learn to interact and collaborate with each other under the coordination of a promoter, which is usually the university, with the common interest of developing the territory. The LAG members have responsibility and decide on the planning and management process of the territory's development, requiring the development of competencies, a process that begins with the participatory diagnosis defined in six steps [17,26]:

- a. Location and characterization of the territory and communities.
- b. Prioritization of problems and opportunities.
- c. Identification of available resources.
- d. Analysis of the condition of the available resources.
- e. Prioritization of development initiatives on endogenous resources.
- f. Implementation of projects that promote the integral development of communities.

The LAGs operate with legal recognition and depend on the legal framework of each country and the assessment made by the LAG members to choose a legal-administrative figure. Conventionally, the General Assembly is the highest authority of the LAG and it is its responsibility to define the structure, statute and internal regulations; it also elects the board of directors, in charge of project management, and the technical team, to support the planning, selection and evaluation of projects [47].

## 1.3. Working with People Approach (WWP) and the CFS-RAI Principles

The WWP metamodel [49] promotes planning processes for sustainable rural development and from its three dimensions: ethical-social, political-contextual and technical-entrepreneurial, it values the participation, interaction and contribution of people, with varied functions and roles within a territory, which leads to social learning capable of aligning collective interests towards the pursuit of the common good. Social learning is the key innovative element that nurtures the conception of projects and allows knowledge to be translated into action. The WWP promotes the formation of groups based on common interests, representing the political, public-administrative, private-entrepreneurial and social spheres [54]; and encourages interaction between actors based on behavior regulated by the principles of respect and priority for people, guaranteeing the social good and sustainable development, and bottom-up, multidisciplinary, endogenous and integral approaches [49].

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The WWP metamodel has successfully solved rural problems in different contexts [55–59], and improved the governance of rural organizational structures to promote private entrepreneurship in highly depopulated rural areas of Spain [60], as well as entrepreneurship in public-private partnerships [61]. The WWP metamodel can also be applied to the analysis of cases of food production sustainability [62], to analyze and propose models of sustainable rural development [63,64], and could facilitate the analysis of the implementation of the CFS-RAI Principles in relation to the three dimensions of WWP (Table 2).

Table 2. Relationship between the CFS-RAI Principles and the dimensions of the WWP.

CFS-RAI Principles		Dimensions WWP $^{\mathrm{1}}$		
Cr3-KAI i incipies	E-S	P-C	T-B	
1. Contribute to food security and nutrition.	Χ			
2. Contribute to economic development and poverty eradication.			X	
3. Promote gender equality and women's empowerment	X			
4. Enhance the participation and empowerment of young people.	X			
5. Respect tenure of land, fisheries, forests and access to water.		X		
6. Conserve and sustainably manage natural resources, increase resilience and reduce disaster risks.		X		
7. Respect cultural heritage and traditional knowledge, and support diversity and innovation.	X			
8. Promote safe and healthy agricultural and food systems.			X	
9. Incorporate inclusive and transparent governance structures, processes and grievance mechanisms.		Χ		
10. Evaluate and address impacts and promote accountability.		X		

<sup>&</sup>lt;sup>1</sup> WWP Dimensions: E-S: Ethical-Social, P-C: Political-Contextual, T-B: Technical-Entrepreneurial. Source: Adapted from PMESUT [26].

## 1.4. LEADER Specificities

The LEADER Community Initiative emerged in the early 1990s as an innovative proposal for rural development in response to a situation of territorial and socio-economic imbalance in Europe and the failure of top-down, engineering-based planning models. LEADER is based on neo-endogenous rural development and its results are influenced by social innovation and social learning management [65]. LEADER comprises seven specificities capable of generating change and contributing to the development of Europe's rural areas [47,48,64]:

- A. Territorial approach. It delimits the territory and identifies problems, needs, resources, opportunities and potential for development, and communication between actors is important.
- B. Bottom-up approach. It considers the participation and decision of the population in project-based planning and development.
- C. Multisectoral and integral approach. Different economic and social sectors participate in complementarity and synergy.
- D. Local Action Group. Equally made up of representatives of the private and public actors of the territory. It articulates local actors for the planning and management of development.
- E. Innovation. Creative way of adding value from projects that develop products and services from endogenous resources, as well as new markets.
- F. Proximity management and financing. Action of the LAG to channel the decision of the population, simplify the management of funds and resources and improve control and monitoring.
- G. Networking and cooperation. Share knowledge and experiences with groups in other contexts to promote learning and linkages between groups.

The LEADER initiative had three successful stages [47] to consolidate and integrate the general rural development policy of the European Union and to be replicated in Mexico [17] and Argentina [18]. However, in some contexts there were imbalances in favor of managing

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authorities [52], which prioritize their interests before the interests of the population [53], or increase bureaucracy [50,51], undermining governance and the contribution to sustainable rural development.

#### 2. Materials and Methods

The methodological proposal is described to design and implement the LAG as a local government structure for the planning and management of sustainable rural development, integrating the CFS-RAI Principles, based on project work, in the province of Jauja. The methodological process incorporates the WWP approach and LEADER specificities, whose conceptual framework was explained in Sections 1.3 and 1.4

# 2.1. The UNMSM RDCs as "Multi-Stakeholder Platforms" for Rural Development

The UNMSM has five RDCs: Huaral, El Mantaro, Maranganí, Pucallpa and Iquitos, located in strategic and representative bioclimatic zones of Peru (Figure 1), places where important technical contributions were made to the local livestock sector with the participation of veterinary science researchers [21,25]. Figure 1 shows the geography of Peru in cross-section, where we note a coastal area close to important cities, an Andean area with rugged relief and high altitude, and an Amazonian area of great biodiversity.

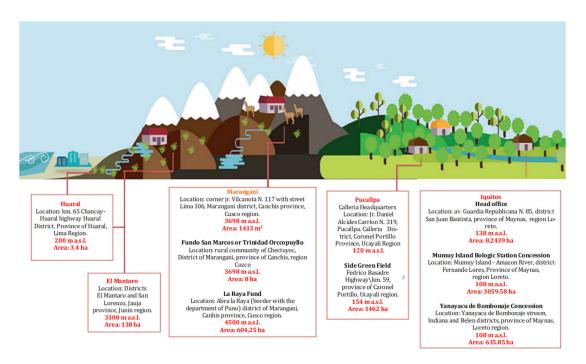


Figure 1. RDC, UNMSM. Source: [25].

Given the interest of the academic community, the availability of resources (infrastructure, laboratories, human capital) and the unmet problems and needs in rural society [26], there is an opportunity to enhance the management of R&D&I of the UNMSM through the interrelation of interdisciplinary research groups with organized rural society in a proposal for sustainable rural development with a territorial, bottom-up and comprehensive approach [64].

## 2.2. Jauja, a Territory That Demands Improvements in Sustainable Rural Development

The province of Jauja belongs to the Junín region and has a strategic and central location in Peru (Figure 2). It occupies the north side of the Mantaro valley with a territory of 3749.10 km<sup>2</sup>, it has 83,257 inhabitants and a 50.9% rural population [66].

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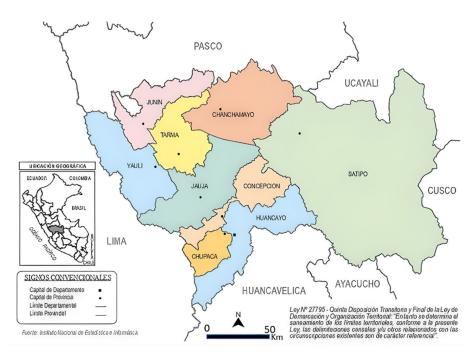


Figure 2. Location of Jauja in the department of Junín. Source: [67].

Jauja has 32,657 arable hectares, distributed in three hydrographic basins: Mantaro, Yacus and Yanamarca, where they carry out agricultural production (potato, maize, olluco, quinoa, oats, beans, barley and other crops) and raise livestock (cattle, sheep, pigs and guinea pigs) [68,69], activities to be considered in rural development plans, including actions to adapt to climate change, given its location in a vulnerable area [70].

In Jauja they produce native foods, appreciated for their nutraceutical properties [71], attributes that increased in preference after the COVID-19 pandemic [72]. In this regard, the experience of developing the value chain of native potatoes [73] enhances the use of endogenous resources and incorporates some CFS-RAI Principles, being a benchmark for new ventures.

The sustainable management of endogenous resources is associated with opportunities for tourism, dependent on territorial roots and social cohesion [74]. In Jauja, the wealth of food, landscape, archeology and biodiversity is accompanied by an attractive culture featuring culinary art, ancestral customs and dances [69], which represent enormous potential for sustainable rural development [75].

The provincial municipality, its 34 district municipalities, the regional government of Junín and the central government participate in the management of public resources in Jauja; in addition, universities, non-governmental organizations (NGOs) and other technical-scientific organizations execute projects with national and international competitive funds. Most development interventions are carried out with a top-down approach, without inter-institutional articulation [20], without projects and without the involvement of the population. This form of management influenced the poor (20%) achievement of goals of the concerted development plan 2008–2018 [69] and poor progress in development indicators (Table 3).

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Table 3.	Development	indicators	in the r	province of	Iauia.	vear 2017.

Indicator	Percentage Value
Level of poverty	30.4
Access to health insurance	73.7
Public water service	94.7
Sewage service	47.9
Electric energy service	88.9
Internet connectivity	8.3
Local roads in good condition	33.7
Children under 3 years with anemia	30.6
Children under 5 years of age with chronic malnutrition	18.2
Rural unemployment	7.2

Source: [66].

Jauja reports high child malnutrition and anemia (Table 2) in rural areas [69], with availability of agricultural foods, a fact that denotes the complexity of the problem and the influence of various factors, including the culture of consumption [76]. Malnutrition and anemia affect the brain development of children, limit their learning and the development of skills [77], damaging human capital and consequently the development of the territory.

The inequality between the urban and rural population of Jauja motivates the migration of young people [78] to the cities in search of opportunities to develop skills [79] and achieve employability. According to [80], in Peru, the inequality of opportunities is greater for communities that live at higher altitudes, with lower population density and greater productive diversification. Similarly, [81] points out that inequality is associated with low economic growth and is determined by three factors: the concentration of power, violence in all its forms, and labor regulatory frameworks. In this sense, in Junín, Jauja and districts, the rulers come to power with low representation, without achieving governability [44], gender violence is recurrent [82] and labor informality affects almost the entire country [83].

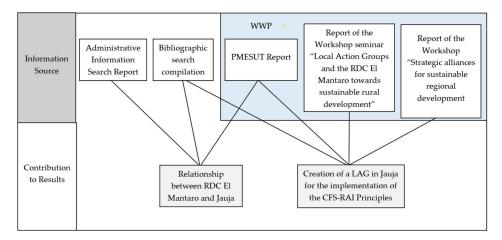
#### 2.3. Data Collection: Instruments and Processes for Working with People

The results of this research work are based on a methodology that incorporates different instruments and sources of information (Figure 3). Mainly empirical information obtained from the PMESUT is developed by the UNMSM from the conceptual framework of the WWP metamodel [49,84] for the design and implementation of a new R&D&I model in sustainable rural development from the RDCs [26], which has three fields of activity, research, innovation and linkage with society with actions and synergies between them from the WWP (Figure 4) to advance towards the design of the rural development model integrating the CFS-RAI principles.

The present study focuses on one of the five territories (Jauja) where the RDCs are located, selected as an intervention area based on the following criteria: (1) existence of a suitable context for participation and generation of joint social learning processes with rural communities from the existence of an alliance with the UPM and FAO for the implementation of the CFS-RAIs; (2) possibility of addressing joint projects from the same perspective that allows comparison as a national sample; (3) geographical and spatial representation of the social, economic, ecological and political diversity of the territory for the formation of a LAG. The RDCs are located in different biogeographical environments in Peru and present different production systems, ecosystems, communities and cultures.

The sample consists of 350 participants who are listed as directors, managers, producers, researchers of the RDCs, involved in joint projects in the RDCs with an approach based on the principles of the WWP planning model [49].

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**Figure 3.** Methodological scheme of the research.

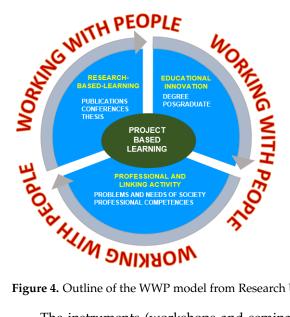


Figure 4. Outline of the WWP model from Research Universities. Source: Adapted from [84].

The instruments (workshops and seminars) have allowed progress towards joint reflection and capacity building for the decentralization of the UNMSM based on the experience accumulated in the different regions of the country: Lima (IVITA Huaral), Junín (IVITA El Mantaro), Cusco (IVITA Maranganí), Ucayali (IVITA Pucallpa) and Loreto (IVITA Iquitos) and other international experiences.

# 2.3.1. RDC El Mantaro and Its Connection to Jauja

A review of the process of evolution of the relationship between RDC El Mantaro and the rural population of Jauja was made, using information from workshops and surveys obtained from the PMESUT [26], records of administrative information and publications [64]. The analysis of the information allows interpreting the relational process between the RDC El Mantaro and the population of Jauja, summarized in a SWOT matrix, which allows defining elements of a KCEF matrix, appropriate to design strategies to strengthen this link.

## 2.3.2. Establishment of the LAG in Jauja to Implement the CFS-RAI Principles

For the establishment of a LAG in Jauja, a first space for dialogue was established with the main actors by organizing an international workshop seminar, "Local Action Groups and the RDC El Mantaro towards sustainable rural development", which was held in July 2021, where 26 people and two facilitators participated, one for virtual activities and the other for face-to-face activities. The event provided information on the perspectives of the UNMSM through the RDC El Mantaro, the potentialities and limitations of sustainable rural Sustainability **2022**, 14, 9663 11 of 26

development in Jauja and the Local Action Groups, their characteristics and experiences, to then develop a discussion workshop and respond to the following questions:

- a. Do you consider LAGs as an organizational structure that can contribute to the sustainable rural development of your territory?
- b. How to define a relevant perimeter to manage an action program with a territorial approach?
- c. How to ensure the representativeness of the local partnership? Which entities should be part of it?
- d. Can the LAG be integrated into an existing structure or is it necessary to create a new structure?
- e. What could be the most appropriate form of partnership (administrative legal system, role of public authorities, institutional practices, etc.)?
- f. What could be the mode of operation to ensure effective participation of local/regional actors?
- g. How to develop the capacities/competences of the different actors to assume the responsibilities of LAG management?

After the workshop seminar, the facilitators consolidated the information and drew up the conclusions, which were read and approved by the attendees. This information, which was collected from the contribution of all attendees, was used in the research results.

To complement the information, perception surveys were taken from members of Jauja organizations, in three meetings, one for each Jauja hydrographic basin. The meetings were convened through the Jauja Regional Directorate of Agriculture and were held in July 2021. Groups of 10, 14 and 16 attended the first, second and third meetings, respectively. All attendees at the three meetings were surveyed. The survey collected information on the characteristics, interactions and internal relations of their organizations. On the other hand, information was also obtained from the workshop "Strategic alliances for sustainable regional development", held in 2017, where information was obtained on the perception of 142 actors (21 were from Jauja) from value chains in the livestock sector, on the performance and relations with organizations linked to their sector [85].

All the information was analyzed from the three dimensions of the WWP metamodel [49], whose versatility allows its application in projects developed in different contexts [55–59]. In this sense, during the seminar and prior to the surveys, an environment of dialogue and exchange of opinions among the actors was fostered, inviting reflection, analysis and participation.

The relevance of LAGs as instruments for the implementation of the CFS-RAIs was based on the analysis of information from workshops and surveys on knowledge, assessment and perception [85] of compliance with the CFS-RAI Principles, complemented with bibliographic information.

The sources of empirical information used in the research are summarized in Table 4.

Table 4	Sources of	information	used in researc	h
iable 4.	Sources or	ппоппапоп	useu iii ieseaic	11.

Type of Information	Number of Participants	Source
Report of workshops and surveys carried out in the five RDCs from the PMESUT	142	[26]
Report of the workshop seminar "Local Action Groups and the RDC El Mantaro towards sustainable rural development" and surveys carried out in three meetings, held in July 2021	66	Own
Workshop report "Strategic alliances for sustainable regional development", held in 2017	142	[85]
Total	350	

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#### 3. Results and Discussion

3.1. Development of the Relationship between RDC El Mantaro and the Population of Jauja

The results of the SWOT matrix (Table 5), built with the information indicated in Section 2.3.1, gave rise to the KCEF matrix (Table 6), and envision high possibilities of improving the relationship between the UNMSM, through RDC El Mantaro, and the actors of the province of Jauja, whose discussion is addressed in the following paragraphs.

Table 5. SWOT matrix of RDC El Mantaro, UNMSM, in relation to the province of Jauja.

Strengths	Weaknesses
Headquarters of a university with prestige and transcendence in Peru Leadership in scientific research Human capital Recognition and trust of the population Alliance with institutions (GESPLAN-UPM) Location in the territory of Jauja	Limited skills in management and direction of development projects old infrastructure Difficulty in addressing complex and comprehensive problems of society top-down approach Weak promotion of decentralized research Little interaction with actors
Opportunities	Threats
Potential connection with more than 400 research groups from 66 professional careers Development of interdisciplinary teams Development of living laboratories Participation in sustainable rural development management	Political instability Change in UNSMM policies Disorganization and social conflicts in Jauja

Table 6. KCEF matrix of RDC El Mantaro, UNMSM, in relation to the province of Jauja.

Keeping Strengths	Combating Weaknesses
Maintain the prestige of the university from the dissemination of achievements Promote scientific publications in impact journals. Improve human capital management Develop participatory projects with the population Maintain and expand institutional alliances Improve contacts and access to the RDC El Mantaro	Prioritize training programs in direction and project management Improve the maintenance and renovation of infrastructure Adapt the WWP metamodel and other innovations in the development of complex projects. Teach and apply the top-down approach Stimulate decentralized research Little interaction with actors
Exploiting Opportunities	Facing Threats
Stimulate the participation of research groups in the RDCs Facilitate the participation of interdisciplinary teams in the RDCs Promote the development of living laboratories Promote sustainable rural development projects	Improve resilience Plan and have contingency plans Promote the organizational strengthening of society

The UNMSM, the dean of America, has 20 faculties and offers 66 professional careers and some years ago decided to become a research university [25,86]. As a result, it increased its scientific production, achieving the first national place among public universities in the web ranking of universities [87,88]. Scientific research improved with the implementation of a management plan and the creation of research groups [89] specialized in different areas of knowledge. However, it is necessary to promote interdisciplinarity [90,91] in order to better respond to society's problems and improve relations with stakeholders based on ethical behavior and trust [92].

The five UNMSM RDCs, El Mantaro, Iquitos, Maranganí, Pucallpa and Huaral, have been operating since the 1960s as stations of the Veterinary Institute for Tropical and Altitude Research (IVITA) of the UNMSM School of Veterinary Medicine, and are spaces for learning for its students, with research that solves local livestock problems and technical assistance for producers. Through the RDCs, an R&D&I model is outlined in sustainable rural development, with the participation of research groups to comprehensively solve the

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problems of society and constitute living laboratories of a real link between UNMSM and organized society [21,26].

The RDC El Mantaro is located in the district of El Mantaro, province of Jauja, and its relationship with residents of Jauja is focused on livestock producers, as a technical–scientific reference in the production and health of guinea pigs, sheep and dairy cattle, being recognized regionally and nationally. In this regard, in the last 20 years of RDC El Mantaro activity, 1082 residents of Jauja have benefited, mainly with extension services and the sale of livestock products [64].

Given that the rural population of Jauja uses varied and complex diversified production systems to survive, livestock improvements are insufficient to meet their needs and problems. For this reason, their problems need to be addressed through planning with a territorial [93] and integral approach [94], accompanied by interdisciplinary research groups [91].

In the last five years only two research groups have been active in RDC El Mantaro. Faced with this low participation, the UNMSM has been improving the management of R&D&I with the support of GESPLAN-UPM [26], whose extensive experience in sustainable rural development, allows it to generate development ecosystems attractive to research groups and beneficial to society, where it is feasible to carry out high-level research, quality training [84,95] renewed with educational innovation [96] and achieve a positive impact on society [86].

Sustainable rural development needs human capital with competences in project management [97], a deficient aspect in RDC El Mantaro researchers, with contextual competences being the least developed (Table 7), suggesting that UNMSM implement a training program in project management competencies.

Table 7. Average assessment of knowledge and experience of the IPMA competencies in RDC El Mantaro.

3.56
3.14
3.61

Source: Adapted from PMESUT results [26].

Ecosystems conducive to development arise from proactive interactions between interest groups of a territory [64,98], within a culture of governance, and united in the process of planning and management of the territory from a bottom-up approach [15], where the university plays a promoting, scientific, innovating role [99].

# 3.2. Creation of a LAG in Jauja for the Implementation of the CFS-RAI Principles

The creation of a LAG in the province of Jauja is an opportunity to reformulate the organizational structures of the population in order to strengthen and empower them to lead the sustainable development of the territory, based on the CFS-RAI Principles. The process began with the application of the WWP metamodel [49] at the international workshop seminar "Local Action Groups and the RDC El Mantaro towards sustainable rural development", where different actors interested in the rural development of Jauja (Table 8) gave their contributions, which allowed defining the first elements of the Jauja LAG (Table 9).

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**Table 8.** Characteristics of the participants in the international seminar "Local Action Groups and RDC El Mantaro towards sustainable rural development".

	Partic	ipants
Classification Criteria	No.	%
Type of participation in the seminar		
In person	6	23.1
Virtual	20	76.9
Gender		
Male	15	57.7
Female	11	42.3
Position in the organization		
Representative	8	30.8
Member	13	50.0
No organization	5	19.2
Type of organization		
Peasant Community	6	23.1
Producers' association	4	15.4
Neighborhood	1	3.8
University	3	11.5
NGO	2	7.7
Local government	2	7.7
Other public institutions	3	11.5
Not belonging to an organization	5	19.2
Total	26	100

**Table 9.** Definition of the first elements of the LAG Jauja.

Criterion *	Defined Element
Organizational structure that can contribute to sustainable rural development in Jauja	LAG
Perimeter relevant for managing an action program with a territorial approach	Political map of Jauja subdivided into its hydrographic basins: Mantaro, Yacus and Yanamarca
Entities that may form the LAG	Network of Associations of Women Producers and Entrepreneurs of the Province of Jauja, Association of Dairy Cattle Ranchers of the Yacus Valley, Condorsinja Agricultural Industrial Development Association, Peasant Communities of: Chocón, Sallahuachac, Julcán, Pacamarca, and other communities of Jauja; Provincial Municipality of Jauja, Agrarian Agency of Jauja, NGO Caritas, SENASA, RDC El Mantaro
Existing structure to which the LAG can be integrated	None
Appropriate legal-administrative form for the LAG	To be defined at forthcoming meetings
Mode of operation of the LAG ensuring effective participation of actors	To be defined in future meetings
Capacity building mode for actors to assume LAG management responsibilities	Skills training program

<sup>\*</sup> The criteria derive from the questions formulated in Section 2.3.2.

After the workshop seminar, a subsequent group of 40 people (Table 10) provided perception information through surveys. All the relevant information of the events is presented and discussed from the three dimensions of the WWP.

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**Table 10.** Characteristics of Jauja stakeholders who participated in the survey (Results of the perception surveys described in Section 2.3.2).

Classification Criteria	Total
Gender	
Male	33
Female	7
Type of organization	
Producer association network	1
Producer association	18
Farmer community	14
Barracks/neighborhood	5
Municipality	2
Type of participant	
Representative	10
Member	30
Total	40

#### 3.2.1. Ethical-Social Dimension

There is an organizational crisis in Peruvian society influenced by globalization and the neoliberal economy, which promote individualism and a lack of interest in joining organizations, resulting in the election of representatives who do not correspond to collective interests [44]. Many civil organizations are temporary and dependent on their members benefiting from some project, without finding a common interest that unites them. This context reveals the need for new organizational structures and ways to improve interpersonal relations, as well as the relevance of implementing CSA-IRA Principles 9 to improve governance and 10 on accountability and transparency.

Opportunities to reduce rural poverty in Peru are limited, among other factors, due to poor land ownership, since more than 80% of agricultural units have less than five hectares [66], with associativity being an alternative [100]. In this regard, several interventions have applied different methodologies to promote collective participation in driving development, with unsatisfactory results [20].

The actors in Jauja consider the LAG as an innovative structure that can contribute to the sustainable rural development of their territory (Table 9). This is because it brings together equity among all actors, with equal opportunities, to make consensual decisions on development planning and management, in coherence with the problems and needs of the population [16–18,29,47], with the possibility of favoring the empowerment of youth and women in the implementation of CFS-RAI principles 3 and 4.

The organizations interested in establishing LAG Jauja (Table 9) show an intermediate level of representativeness, due to the performance of their representatives (Table 11) and the territorial and cultural links. Strengthening the LAG will require interaction within the groups and among the representatives to find common interests, implement rules and define objectives with a sense of equality and common good. Thus, the application of the WWP metamodel [49] is ideal for this purpose.

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**Table 11.** Assessment of the performance of members and representatives of organizations in Jauja (Results of the perception surveys described in Section 2.3.2).

Assessment Criterion	Rating on a Scale of 1 to 5
About its members	
They participate actively	3.5
Have values and practice them	3.4
They participate in decisions and are well informed.	3.7
About the representative	
Deals with members' problems and needs	3.4
Is capable of leading the organization	3.5

The strength of many organizational structures lies in the trust [101] among its members, the practice of values [102] and self-esteem of its members [103], which strengthens their interpersonal relationships in order to have shared responsibility and achieve success in their projects. In this respect, the potential members of the LAG Jauja show an intermediate level of participation and practice of values (Table 10), an aspect that can be improved with the development of competencies [104] and the influence of researchers from the RDC El Mantaro.

Peru is committed to meeting all 17 SDGs, with progress on SDGs 1, 3, 4 and 6 and limited progress on the other SDGs [41]. Undoubtedly, the greatest development challenges for Peru relate to the SDGs and are in rural areas, where the implementation of the CFS-RAI Principles through the LAG contributes to their achievement.

To promote the CFS-RAI Principles, FAO has signed several letters of agreement with UPM and, through GESPLAN, is developing an important work for the dissemination and implementation of the CFS-IRA principles [8,9,27,28,40] in a network of 20 universities in 10 countries and 16 companies linked to the universities [9]. UNMSM is part of the network and, through RDC El Mantaro, supports the implementation of the CFS-RAI Principles in two organizations, a scope that would reach more organizations through its link with LAG Jauja, thanks to its management capacity.

There is a potential contribution of the LAGs and the CFS-RAI principles 1, 3, 4, 9 and 10 with social sustainability, given the experiences of acceptance and social well-being in rural communities [16–18,27,47], which suggests their implementation. However, it is advisable to generate methodological instruments that assess the progress of social sustainability [7].

There is a need to improve the training of researchers on the CFS-RAI Principles because they have a greater appreciation of the potential importance of their knowledge (Table 12). In this regard, the last international academic training program on the CFS-RAI Principles in collaboration with FAO [9] involved seven researchers from UNMSM, three of them from RDC El Mantaro, while a similar business-type program [9] involved eight representatives of actors from the Mantaro Valley, five of them from Jauja.

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Table 12. Assessment of knowledge and potential importance of IRA principles by research teacher
at the El Mantaro RDC.

ID A Deimeinles	Assessment (1–5)	
IRA Principles	K 1	PI <sup>2</sup>
Contributing to food security	3.71	4.57
Contribute to economic development	3.57	4.57
Promote gender equality and women's empowerment	3.71	4.71
Promote youth participation and empowerment	3.57	4.43
Respecting land tenure, fisheries, forests and access to water	3.86	4.43
Conserve and sustainably manage natural resources	3.86	4.43
Respecting cultural heritage and traditional knowledge, supporting innovation	4	4.57
Promote safe and healthy agricultural and food systems	3.43	4.53
Incorporating transparent governance structures, processes and grievance mechanisms	3.57	4.29
Assess impacts and promote accountability.	3.57	4.29

<sup>&</sup>lt;sup>1</sup> K: knowledge, <sup>2</sup> PI: potential importance. Source: Adapted from PMESUT results [26].

#### 3.2.2. Contextual-Political Dimension

The actors define the territorial delimitation of Jauja according to the geopolitical limits of the province and forming subgroups in three hydrographic basins: Mantaro, Yacus and Yanamarca (Table 9), connected naturally and by road networks. The territory defines the population and the available resources to plan development from an endogenous [105] and territorial [106] approach, with the rational and sustainable use of resources.

The LAG Jauja should be created as a new organizational structure, whose legal-administrative form and appropriate form of operation would be defined at a later stage (Table 9). However, given that civil associations were the most widely used forms in Spain [47] and proved to work well in Mexico [16], it is possible that the LAG Jauja could adopt this modality. Regarding the way the LAG works, internal relationships are valuable because they consolidate the group and external ones because they form networks for the exchange of knowledge and resources. These relationships favor the management of proximity and financing for the development of projects, as is the case in the European Union, where LAGs manage private and public funds [46].

It is important to strengthen relationships between actors in Jauja by creating spaces for communication, participation and joint decision-making, given that only the producers' associations, the municipality and the peasant communities interact slightly, and the rest of the organizations hardly interact at all (Table 13). Unfortunately, the organizations responsible for contributing to development carry out disjointed and sectoralized actions, competing with each other as opponents [107]. Despite the deterioration of collectivism, there are organizations that work together (Table 14), willing to form the LAG, and the task of integrating the actors of Jauja from the application of the WWP metamodel is necessary [49]. In this sense, consolidating the LAG structure contributes to the implementation of CFS-RAI Principle 9.

**Table 13.** Stakeholders' perceptions of their organization's interaction with entities in Jauja (Results of the perception surveys described in Section 2.3.2).

Entities	Percentage Value
Entity with which the organization interacts	
Municipality	23
Producers' association	31
Farming community	39
Producing or processing company	6
Universities	8
NGO	3
Research center	3
Regional government	3
MINAGRI	3

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**Table 14.** Assessment of the performance of Jauja organizations (Results of the perception surveys described in Section 2.3.2).

Assessment Criterion	Rating on a Scale of 1 to 5
About the organization	
Is well structured	4.1
Contributes to sustainable rural development and seeks the common good	4.4
Is suitable for integration into a LAG	4.4
Has adequate governance to work on a project basis	3.5

In rural development, it is essential to provide basic services, because they reduce inequality and poverty. However, authorities with low representativeness [44] often manage investments that are incompatible with the needs of the rural population; on the other hand, the LAG is representative of all the actors in a territory, and plans and manages development based on social learning. The LAG's representativeness empowers it and makes it reliable for the management of public funds [47] or highly influential in political decisions concerning the territory, a condition that is reinforced by the support of academia.

Developing the Jauja GAL from representativeness and in coherence with the demands and needs of the population seems to be the best alternative for sustainable rural development in the province of Jauja, even more so at a time when Peru is going through a political crisis, where governors are elected with low representativeness and generate mismanagement [108]. In this sense, LAG Jauja can empower itself with collective support and become an influential local political actor.

From the observation of actors of agricultural production chains in Jauja on the compliance with the CFS-RAI principles in their environment, progress can be classified in three levels: intermediate for principles 1, 2 and 8; low for principles 3, 4, 6 and 7; and very low for principles 5, 9 and 10 (Table 15). The CFS-RAI principles are voluntary and adequate to guide sustainable rural development, and the Jauja LAG can contribute to an effective implementation of these principles because traditional rural activities in Jauja have an affinity with the CFS-RAI principles, a circumstance that facilitates their acceptance and replication in the community. Likewise, it is important to note that the CFS-RAI principles promote sustainability economically (principles 2, 7, 8), socially (principles 1, 3, 4, 9, 10) and environmentally (principles 5, 6). For this reason, the systematic and complete implementation of the ten CFS-RAI principles is preferable.

**Table 15.** Perception of compliance with CFS-RAI Principles of actors in agricultural production chains in Jauja (21 respondents out of 142), 2017.

CFS-RAI Principle	%
Contribute to food security and nutrition.	48
2. Contribute to sustainable and inclusive economic development and poverty eradication.	57
3. Promote gender equality and women's empowerment	33
4. Enhance the participation and empowerment of young people.	38
5. Respect tenure of land, fisheries and forests and access to water.	19
6. Conserve and sustainably manage natural resources, increase resilience and reduce disaster risk.	42
7. Respect cultural heritage and traditional knowledge, and support diversity and innovation.	38
8. Promote safe and healthy agricultural and food systems.	52
9. Incorporate inclusive and transparent governance structures, processes and grievance mechanisms.	10
10. Evaluate and address impacts and promote accountability.	14

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# 3.2.3. Technical-Entrepreneurial Dimension

Sustainable rural development aims to improve the quality of life of the people who inhabit a territory, making rational use of its resources and without compromising their availability for future generations [109], a purpose consistent with the SDGs and specifically with the CFS-IRA Principles. In the neoliberal system, rural development is oriented towards the enhancement of endogenous resources, from a bioeconomic approach [110] through research, development, innovation and entrepreneurship, which results in the planning and management of projects. For all the people to meet their needs, projects must be integrated into organizations or actors that make up the LAG, so that the LAG prioritizes and meets the demands of all its actors [16–18,29,47].

According to the perception of 142 agricultural producers in the Mantaro Valley (21 of them from Jauja), the different public and private institutions in the Junín region (provinces of Jauja, Huancayo, Concepción and Chupaca) have limited capacity to interact in a coordinated manner in favor of development, and in the midst of this poor appreciation, the universities' performance in terms of trust, interest in the development of productive chains and competent human capital stands out [64,85]. This remarkable recognition strengthens UNMSM's RDC El Mantaro to encourage and guide the process of sustainable rural development in Jauja by fostering relationships of trust between the actors that make up the LAG in a context of mistrust [111].

Project-based development in Jauja, led by its LAG, with the application of the WWP metamodel [49], will merge the knowledge, experience and know-how of the different stakeholders on current productive activities with the expertise of UNMSM research groups in different areas of knowledge, resulting in valuable social learning. However, in order to improve the impact of the projects from a multisectoral and integral approach, it is pertinent to foster interrelationships between actors from different sectors and university research groups [64], analogous to the quadruple helix proposal [31].

The functionality of the LAG will depend on the competences of its members and will be influenced by the contributions of the technical team, where the researchers of RDC El Mantaro are called upon to integrate this team. However, the LAG and the technical team will need to strengthen their competences [64,112] in order to achieve good performance. In this regard, the UNMSM maintains an alliance with GESPLAN-UPM, an institution capable of strengthening the LAG Jauja—RDC El Mantaro binomial, from orienting the creation of the LAG, developing competencies in project management, training competencies in development planning and management [113], and project evaluation and monitoring; subjects that GESPLAN-UPM is proven to have mastered in its experiences in Spain [47], Mexico [16,17] and Argentina [18]. In addition, it is advisable to train UNMSM researchers in the prestigious UPM master's program [95,96], because of the impact it could have on decentralized rural development in Peru, through the RDCs, with the possibility of evolving into a postgraduate program at UNMSM.

The actors in Jauja consider that the method of developing capacities in agents to assume management responsibilities in the LAG would be through a competency training program (Table 9), which could be virtual, oriented towards project management and open to actors who wish to participate, in order to identify people with good performance and qualities to integrate the LAG.

The main productive activities in Jauja are agriculture and livestock (Table 16), with land limitations [114], technological, access and organizational deficiencies, which oblige producers to maintain subsistence production systems and which are to be included in poverty zones [115].

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<b>Table 16.</b> Distribution of actors in the productive sectors in Jauja (Results of the perception surveys
described in Section 2.3.2).

Sector	Percentage Value
Sector in which the organization operates	
Agriculture	88
Livestock	88
Trade	7
Forestry	3
Tourism	17

The development process of the Jauja territory is unique and the key element is social learning, guided by the LEADER specificities and the CFS-RAI Principles. In this process it will be necessary to develop products and services using endogenous resources, with contributions from research and innovation, whose attractiveness will be shaped by the impregnation of emotions, identity and culture [49].

The projects developed by LAGs are unrepeatable considering the context, resources and objectives, aspects that guide the purpose of each project, such as improving conventional production systems [116], transmitting identity and culture in products [93], revaluing agricultural heritage [117], and so each project makes its best contribution to the common good. The tourism approach, especially the experiential type [118], can contribute to the sale of products and services developed with research and innovation, making an important indirect contribution to the fulfilment of CFS-RAI principles 2 and 8, related to economic development and safe agri-food production.

In the conventional rural development of a territory, projects are carried out that prioritize economic sustainability, but generating negative impacts on social and environmental aspects [119]. Therefore, it is better to develop profitable projects (CFS-RAI Principle 2) that make reasonable use of endogenous resources (CFS-RAI Principles 5 and 6) to develop innovative products and services (CFS-RAI Principles 7 and 8), with the support of the university and contribute to the equal benefit of the inhabitants (CSA-RAI Principles 1, 3, 4, 9 and 10). That way, rural development will be sustainable.

It is important that from the first projects managed by the LAG, the CFS-RAI Principles are implemented as part of the community culture, so that when companies present themselves (even better if they do so in alliance with universities [120]) to carry out commercial scaling of products or services, the conditions of sustainable rural development are respected, fulfilled, improve the valuation of their products and services, and contribute to the SDGs.

# 4. Conclusions

After these years of implementing the WWP metamodel to integrate the CFS-RAI Principles in different rural territories, in line with international SDG trends, the potential of UNMSM's RDCs to promote a new model of participatory rural development has been realized.

The results of the implementation of the PMESUT, supported by the Inter-American Development Bank and the FAO-UPM agreement, show a new approach to sustainable rural development based on the territorial approach and the role of the RDCs.

The innovative figure of the LAG is key for the articulation and formulation of projects that integrate the CFS-RAI principles and accompany the development of organizational competences at the local level for endogenous and sustainable development. The formation of these local structures in Jauja has been developed in parallel with processes of capacity building and competence development from the leading role of the UNMSM's RDCs, and is seen as a great novelty for rural development in Peru.

The participatory processes and joint activities from the WWP model have allowed a selected territory to form a LAG, with social learning processes and joint reflection by local agents and research groups on the potential of the CFS-RAIs for the design of projects that respond to their own needs and strategies for sustainable development.

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This new partnership, as a structure of social organization, in the RDC's territory of influence, is generating R&D&I processes, marking the beginning of a new conception of R&D&I in rural development, based on a territorial approach, the creation of local government structures, and links with society and decentralized management through project-based governance.

The present study validates the foundations of the WWP model and the potential of the RDCs for the integration of CFS-RAI in rural areas in Peru through its application to a territory and its potential replication in other territories under the influence of the RDCs of the UNMSM. The results obtained demonstrate the relevance of the RDCs for the creation of local partnerships, and promote an experimental approach to sustainable rural development in Peru.

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