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The Multidisciplinary Approach of Rural Studies - Editorial

Make or buy: that is the question for rural development.
A collection of essays in memory of Flaminia Ventura

Pietro Pulina

Editor in Chief
Department AGRARIA, University of Sassari, Italy

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Guest Editor: Pierluigi Milone

ORCID
PP: 0000-0003-1147-6891

Rural development is the arena where some of the most critical challenges of our time are faced-issues such as the unequal distribution of resources, famine reduction, sustainability, climate change, food security, and food safety. This multifaceted and complex field demands the attention of researchers, practitioners, and policymakers alike. Addressing these challenges requires diverse expertise, spanning economic and technical knowledge as well as pragmatic, problem-solving capabilities to craft effective frameworks for interpretation and action.

Flaminia Ventura stands as one of the most exemplary contributors to this endeavour, dedicating her intellectual rigour and practical insights to improving the quality of life in rural areas – a mission with implications for the broader civic community. Her work bridged theoretical complexity with practical relevance, offering decision-makers in public and private sectors actionable solutions to pressing rural management issues. Her untimely passing has left a void in the field, depriving us of a pillar of knowledge and expertise in this ongoing struggle.

In honour of her legacy, REA-Italian Review of Agricultural Economics has dedicated this issue to advancing the research and policy discourse on rural development, inspired by Ventura's unparalleled contributions. This collection brings together six researchers who had the privilege of collaborating with Ventura, benefitting not only from her professional mentorship but also from her friendship. These contributors represent a select group of scholars who go beyond merely assessing rural territories, actively generating new knowledge in theory, methodology, and regulatory strategies to promote rural development.

The six papers presented here are united by a shared focus on neo-institutional analysis as a powerful framework for addressing the intricate, interdisciplinary challenges of rural development. This thematic coherence is purposeful: the Perugia school, to which Ventura and her colleagues have made significant contributions, is recognised as a leading national and international reference point for the neo-institutional approach to rural studies.

Jan Douwe van der Ploeg explores the essence of rural studies and highlights the role of Ventura and her colleagues in applying a transaction costs perspective to the field. The "make-or-buy" framework emerges as a unifying tool, integrating insights from diverse disciplines and moving beyond deterministic approaches to provide tailored, context-specific solutions. Ventura's work exemplifies the bridging of science, policy, and practice.

Gaetano Martino emphasises the need for a comprehensive methodological and interpretative framework to address the institutional dimensions of rural development. He identifies a neo-institutional nexus between agricultural economics and rural sociology, positioning agriculture within a triangular relationship among territory, socio-technical systems, and farming styles. This perspective emphasises the local-specific nature of rural development and the varying responsibilities of central and peripheral policymakers.

Pierluigi Milone illustrates how the "make-or-buy" dilemma is often resolved through "nested markets" – hybrid forms of exchange such as on-farm dining, direct sales, and online marketplaces. These markets minimise transaction costs and reflect the empirical methodologies championed by Ventura. The theory of "nested markets" itself emerged from the fieldwork-intensive research approach that Ventura exemplified.

Sergio Schneider and Alexander Cenci investigate the "buy" aspect of market participation, posing critical questions about which markets best support family farms and the policies needed to facilitate them. Their case study of Rio Grande Do Sul, Brazil, demonstrates how local social contexts influence market arrangements, underscoring the collective action dimensions of market institutions.

Angelo Frascarelli provides a policy-oriented analysis of European Union rural development initiatives since 1999, emphasising the centrality of agriculture within multifunctional rural areas. He advocates a territorial, multisectoral policy approach that positions agriculture as a driver of environmental, socio-cultural, and economic value creation, fostering new revenue streams and employment opportunities.

Terry Marsden reflects on the concept of "polycrises" to explore the integration of diverse challenges such as zero emissions, dietary shifts, food security, and regenerative practices. Using two British case studies, he argues for nuanced, context-specific transitions in agri-food systems rather than a linear shift toward agroecology. His analysis underscores the importance of power relations and socio-ecological settings in shaping these transitions, further highlighting the relevance of the neo-institutional framework.

This collection of papers underscores, on one side, the complexity of rural development and the imperative for interdisciplinary collaboration among researchers, policymakers, and practitioners and, on the other, the vital importance of the pragmatic dimension of the rural development. The challenges ahead demand careful navigation, informed by both rigorous analysis and a pragmatic understanding of rural realities.

Flaminia Ventura was a researcher, a policymakers' counsellor and, not least, a cowgirl. Let us honour her contributions by continuing the work she championed – bridging theory and practice to address the evolving challenges of rural development.

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The Multidisciplinary Approach of Rural Studies - Research article

Rural studies: A new paradigm that integrates previously separated disciplines

Jan Douwe van der Ploeg[1,2]

[1] *Emeritus Professor Wageningen University, the Netherlands*
[2] *Adjunct Professor Sociology of Farming at the College of Humanities and Development Studies of China Agricultural University in Beijing, Pechino, China*
E-mail: Jandouwe.vanderploeg@wur.nl

Abstract. Rural studies are the theoretically informed and empirically grounded integration of disciplines that, until recently, were widely separated. This separation came with different grammars, mutually contrasting problem definitions and different methodological instruments that together resulted in a scattered understanding of countryside, farming, and the processing and distribution of food. The article discusses the main features of rural studies and especially explores the theoretical, institutional and historical backgrounds of these features. It argues that the specificity of agriculture strongly impacts its study and theoretical representation – as much as the resulting theories contribute to shaping the unfolding of agricultural activities over time.

Keywords: Neo-institutional Analysis, make-or-buy, rural development, rural studies.
JEL codes: Q19.

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HIGHLIGHTS

- Neo-institutional analysis played a central role in the emergence of rural studies.
- Perugia University developed into the cradle of neo-institutional analysis of farming and agricultural markets. This was due, mainly, to being located at the intersection of agricultural practice, policy and science.
- The heterogeneity of Italian agriculture contributed to neo-institutional analysis, becoming the backbone of rural studies.

1. INTRODUCTION: THE REDISCOVERY OF THE LOCAL AS THEORETICALLY RELEVANT

Rural studies emerged from many different sources and many people have been involved in its construction and development. This article focuses on one of these sources – an important one: the loosely structured but widely recognized network of, mainly, Italian academics who developed the neo-institutional analysis of agriculture and rural development. Several of these academ-

ics also became engaged in agricultural policy making and in the organization of new practices. Grounded on this involvement, Vito Saccomandi (chair holder at the University of Perugia and later Italian Minister of Agriculture) and Flaminia Ventura (one of his gifted collaborators) played an important role in the making of rural studies. Here I will try to substantiate their contribution and its relevance, focusing especially on the work of Flaminia Ventura. She was undoubtedly one of the pioneers of what we now know as rural studies.

In a convincing PhD thesis, built on empirical research undertaken in Umbria throughout the 1990s and defended in Wageningen in 2001, Flaminia Ventura delved deeply into the specificities of two local farming systems: Chianina cattle breeding and tobacco cultivation. Her research was located at the interface of two, at that time, newly emerging academic traditions: the analysis of 'districts' (as exemplified in the work of e.g. Becattini, 1989; Iacoponi, 1990; Becattini, Rullani, 1993; Garofoli, Mazzoni, 1994) and the application of neo-institutional analysis to the production and marketing of food and other agricultural products (Saccomandi, 1991 and 1995). Districts are characterized by localized, combined and mutually interdependent economic activities that, together, produce synergies and thus create competitive advantage. Neo-institutional analysis represented a new way to understand how economic activities are embedded in wider sets of relations that structure their organization and development. Both traditions were, in a way, a reaction to the then-dominant neo-classical paradigm that represented economic activity (agriculture included) as a meeting point of technology and market relations. It viewed an enterprise as just a non-specific point in time and place. It was simply the locus of the function of production, but otherwise it was empty, and lacking agency. Equally, spaces were considered as only consisting of atomized units of production and consumption – except for possible irregularities and noise that could disturb the functioning of the markets. This particular theoretical perspective was associated with, and equally contributed to, an undeniable trend towards the standardization of agricultural practices.

Nonetheless, diversity never disappeared. In as far as it 'remained' it was far from just being a remnant of the past but, instead, a permanently (re)produced phenomenon. While old forms of diversity withered away, new forms were actively constructed. All this was amply documented in a range of new, and often groundbreaking, studies that focused on rural districts and newly emerging ways of farming (see e.g. Iacoponi *et al*., 1995; Ventura, Milone, 2005 and 2012). In the meantime, the neo-institutional analysis of agricultural production (and marketing) proposed a language that opened questions about *why* and *how* such diversity was produced and reproduced.

Thus, a new agenda emerged. This was aptly summarized by Ventura in the first pages of her dissertation: "There are two elements that [bring] the local to the centre of studies of economic development. The first [is] a renewed understanding of economic spaces as being far from homogenous. Instead, they have different characteristics, which are rooted in the local specificity of resources, history and social relationships. The second [is] the multi-dimensional nature of economic development that includes, alongside the economic aspect, the surrounding ecological and socio-institutional dimensions" (2001:1; 2023:15).

At the same time, multi-dimensionality and the associated diversity assume normative frameworks. In this respect Ventura talks of "the ethics of development"[1]. "Different development models perform differently against the criteria of equity and sustainability" (*ibid*:15). The combination of these elements allows for questions that concern "the relevance of local communities having control or influence over development processes". More generally speaking, they point to "differences between endogenous and exogenous models" (*ibid*.).

2. THE LOCAL AS THE CORE OF RURAL STUDIES

This is, in a nutshell, what we now perceive as constituting the core of rural studies, i.e. studying, understanding and representing agriculture as a localized expression, as well as an integral part, of both society and nature. Local farming practices are shaped by social, economic, cultural, geographic, historical and ecological processes and parameters. This core insight was central to the work of Saccomandi, Ventura and their colleagues. Through pursuing this path their work contributed strongly to the emergence and unfolding of rural studies. Agriculture came to be understood as a *bricolage* of ever-so-many locally shaped practices, networks and trajectories. Each practice, network and/or trajectory represented a *specific combination* of economic, ecological and social parameters and processes. Unravelling these combinations, that is introducing the local and the specific as practically and theoretically meaningful categories, thus became the stronghold of rural studies.

Instead of being *determined* by reigning price relations and evolving technologies, each agricultural reality emerges as a specific choice out of many *possibilities*.

[1] See also Pulina, 2007: 304

Markets and technologies provide a more, or less, extended space for manoeuvre that allows farmers different choices. In turn, each specific practice entails a wider set of developmental trajectories, one (or more) of which will become a reality in the years to come. Thus, past, present and future are connected through the strategic choices of the involved actors. Consequently, heterogeneity enters the analysis, *not* as an aberration but as the outcome of many different but interlinked processes of development and change. At the same time rural and agricultural policies were rethought: how could they interact with the overwhelming heterogeneity and adequately deal with the possibility of differential development tendencies? For if the dialectics of the real and the possible (Kosik, 1976) become central in the understanding of agriculture, then policies can no longer be an extension of the 'iron laws' entailed in the markets. Rather, policy too becomes a specific choice (that precludes or marginalizes other options). Policy both assumes and represents agency.

In this panorama, rural studies had to ask why things are as they are and explore the possibilities contained within them. This means that the inquiry needs to embrace both the general and the specific, the exceptions and the rules, just as it needs to ponder on continuities and discontinuities, similarities and dissimilarities. Analysing existing realities also needs to consider *what else* could have been realized.

Agricultural actors constantly face a series of dilemmas, each of which has to be properly resolved *at the local level* and integrated into a well-balanced constellation that can smoothly function locally but also in relation to the macro level. These dilemmas include:

1) Whether to construct a relatively autonomous resource-base or acquire considerable amounts of needed resources from upstream markets?
2) Whether to specialize on the production of one competitive product or aim for a broad portfolio of products and services to be offered to the downstream markets?
3) Whether to opt for labour-driven intensification or for a technology-driven process of intensification (often associated with spurred scale enlargement)?
4) Whether to develop the farm enterprise in a step-by-step way or organize the farm development process as an ongoing series of ruptures?
5) Whether to organize internal labour relations (and the associated gender and intergenerational relations) in hierarchical or in more open, negotiable and equal ways?
6) How to link farming to wider society and the surrounding ecosystem: through progressive disengagement or various forms of re-integration?
7) How to best defend property rights in times of market volatility, generalized insecurities, and unequal power relations?

Most often such dilemmas go unnoticed. They are hidden behind the routines of everyday life and the implicit choices they contain. They are also clearly linked – one having implications for others. Nonetheless, each of them needs to be resolved in its own way – and any solution needs to be coherent and enduring (that is to say one cannot repeatedly jump from one extreme to the other). Together the different choices need to constitute a well-balanced whole. The definition of the most adequate balances cannot be derived solely from market relations and tendencies. On paper, the market may well be translated into an 'organizational plan' and 'optimal development trajectory', but in practice (i.e. in real life) this is impossible, for one reason because the chosen balances also need to meet the needs, prospects, expectations and capacities of the actors involved[2], just as they need to be, more or less, in line with local ecology and history, town-countryside relations, local and regional networks, market agencies, etc.[3]

Of course, resolving the different dilemmas and constructing an adequate balance would be a too daunting task – especially if this needs be done on a daily basis. Hence, farming families, rural communities and the professional layers around agriculture rely on normative frameworks to help them navigate through this sea of questions and uncertainties. Such frameworks (or 'institutions' as I will later describe them) specify what is to be done, how, when, why and by whom. People will explain and justify their (institutionalized) practices by saying; 'this is because we have always done this; it is our custom/practice/habit'. Or they argue: 'this is the best way' (which means: it fits well with our needs, prospects, criteria, insights, whatever). Such (often informal) institutions are relatively stable and mostly go uncontested. They indicate the best (proven) way to proceed. And they do so until slow changes or sudden crises introduce cracks, frictions and even despair. Then it is observed that 'things are not functioning properly anymore'. Such moments precipitate an urgent need to delve into the institutional routines and begin the exploration of new ones.

In this text I will argue that the *combination* of neo-institutional economics (NIE) and rural sociology (RS) make rural studies well-equipped to identify and analyse the institutions that guide farming communities to deal with the dilemmas outlined above. By doing so I

[2] Here it is worthwhile considering the work of Chayanov (1925/1966).
[3] It goes without saying that here political economy and political ecology have much to offer.

will underline how NIE offers, with nearly mathematical precision, the points where the social and the economic (and consequently agrarian economics and rural sociology) meet and mutually strengthen one another. These points are evidently the institutions that govern agriculture, rural life and food markets. For it is precisely these institutions that specify how to *read* the markets, how to *relate* to agricultural policies and how to *develop* one's own farm.

3. THE GENESIS OF RURAL STUDIES

Variety, diversity and heterogeneity[4] are intrinsic to farming. The point, though, is whether they are recognized and considered as being theoretically and practically relevant: reflecting, and revealing, underlying structural patterns[5]. In neo-classical agrarian economics it was *not*. Variety, if considered at all, was basically due to distortions (of whatever kind).

Neo-classical economics undoubtedly contributed to the specialization, scale enlargement and spurred intensification of growing parts of European agriculture between the 1950s and 1990s. It did so by making prices, costs, the functions of production and expected profitability central to the analysis. Rural sociology did the same by juxtaposing the '*traditional* peasant' to the '*modern* agricultural entrepreneur' and designing methods to transform the former into the latter (Hofstee, 1946; Mendras, 1971). This undoubtedly contributed to the rhythm of technological change (the 'diffusion of innovations') and simultaneously encouraged farmers to take on debts.

However, to the initial surprise of many, the making of the single European market did not standardize European agriculture. Although there were unifying tendencies there were also trends towards further differentiation. Even *within* apparently homogeneous agricultural systems, remarkable processes of differentiation could be identified, as noted for instance by Saccomandi in his authoritative work on institutions that govern agricultural markets (1991: 489-503). In short, farming could *not* be understood and represented as textbook-application of neo-classical agrarian economics. Saccomandi resolved this by incorporating key concepts of the neo-institutional approach (initially developed for industrial economics) into agrarian economics. It is not the markets as such, but an understanding of the *differential interrelations* between agricultural markets and farm enterprises that allows for a theoretically well-grounded explanation of (at least considerable parts of) the empirically existing variety, diversity and heterogeneity. With this shift, neo-classical economics lost much of its credibility.

Something similar occurred in rural sociology. After having strongly contributed to the modernization of European agriculture, this discipline appeared to lose its relevance. With the emergence of a new class of agricultural entrepreneurs, completely integrated in the markets and planning according to general accountancy principles (see especially Mendras, 1984) the 'social' was thought to have lost its importance in shaping agriculture. Thus, exit rural sociology. It was thought that modernization would turn agriculture into just another sector of the economy.

It turned out differently. The pioneering works of Constandse (1964), Benvenuti (1982a; 1982b; 1983), Osti (1991) and Brusco (1979) (among many others) made this increasingly clear. The definitive change came with the incorporation of fundamental insights from other scientific traditions. In this case especially from the sociology of labour (Braverman, 1974; Mok, 1994; Marsden *et al*., 1992). The rediscovery of the labour process as being the heart of the (agricultural) process of production was decisive. Labour was (re-) discovered as a creative process (i.e. as far more than simply 'putting the means of production in movement' as Marxists of that time would have it). Simultaneously, the process of production was (re-) conceptualized as a process of *construction*. That is to say, the labour process not only aims for, nor just results in, the making of *end-products* (such as milk, meat, wine or whatever). It also embraces the (enlarged) reproduction of the *resources* used. This results in improved land, enlarged and improved herds, increased farmers' knowledge, new and well-functioning networks, etc. Above all, however, the labour process moulds *specific styles of farming*, each style being a distinctive and strategically informed way to organize and develop agricultural production. Together such styles give rise to the inter and intra-regional diversity of agriculture.

In short, the 'social' can no longer be understood as residing mainly, or exclusively, *outside* the spheres of production and circulation, that is to say in families, communities, villages, cultures, or whatever. Instead, it is increasingly understood as also being present *at the place of work*. The 'social' adjusts and interlinks the many balances inherent within farming: the balance between labour input and economic size; drudgery and benefits;

[4] Variety refers to differences within specific systems; diversity refers to differences between systems; heterogeneity cross-cuts systems: it is both within and in-between different systems.

[5] This raises yet another important theoretical consideration: there is no *single* structure that drives or can explain agricultural practices. There are, instead, multiple structures that simultaneously co-exist, each being part of complex actor-structure dynamics (Giddens, 1997; Long, Ploeg, 1994)

size of the herd and available acreage; internal and external resources; scale and intensity; short- and long-term prospects; family and enterprise; etc. (Benvenuti, 1982a; Ploeg, 1994; Ventura, 1995; Ventura, Meulen, 1995). Thus, rural sociology came to conclusions similar to those elaborated by neo-institutional agrarian economists.

Both disciplines (NIE and RS) converged through the focus that they started to share from the 1990s onwards: their mutual interest in, and the theoretical importance attributed to locality, heterogeneity, multiple causation and differential relations between context and farm (or more specifically: between farm enterprises and markets). Thus, both the 'social' and the 'economic' entered, in renewed (i.e. reconceptualized) ways, into the then-emerging field of rural studies.

The integration of NIE and RS into what is currently identified as rural studies coincided with the end of modernization as the hegemonic politico-economic discourse in agriculture and the subsequent rise of new rural development policies (as e.g. outlined in the Declaration of Cork, 1996). Agricultural development is no longer understood (and practiced) as a sectoral process, but more as a territorial process that needs to take into account interests, prospects and points of view other than purely agricultural ones. From the 1990s onwards, new developmental tendencies started to take shape all over Europe (and beyond). These included multifunctionality at the farm level, the construction of new markets and increases in levels of self-provisioning which all became important features that started to reshape the contours and dynamics of Europe's food systems. Initially these phenomena were not very well understood – 'old-fashioned' agrarian economics and rural sociology found it difficult to come to grips with the 'end of modernization' and the 'beginning of rural development'. In an article co-authored with other European scholars, Ventura tellingly referred to rural development as a set of newly emerging practices and policies *that urgently needed a corresponding theoretical approach*. As yet it was "a practice without theory" (Ploeg *et al*., 2000; see also Saccomandi, 1994, who referred to the notion of rural development as "*not yet* very clear"[6]).

In the end, what we now know as rural studies became both a significant driver and an important theoretical expression of rural development processes. It is solidly grounded in neo-institutional economics and those parts of rural sociology that went beyond the modernization paradigm. The emergence of rural studies closely interacted with, and supported, the newly emerging practices and policies. Rural studies developed the capacity to understand 'what was happening', indicating why this was important and proposing how these new trends could be supported and strengthened through agricultural and/or rural policies. Rural studies were able to help develop new answers to dilemmas that had been lying dormant for a long time, and which re-emerged in the 1990s and the following decades. Initially, there was some resistance to such explanations but increasingly the performativity of rural studies proved to be far stronger.

Although rural studies emerged from many cradles, spread all over Europe, there was a very strong impetus in Italy. This is not surprising. Italian agriculture is strongly localized: it is, to paraphrase a well-known Chinese saying, an agriculture where one thousand localities blossom. These are reflected in, and represented by, the many regional specialties and high-quality products, and in the many visible, and sometimes nearly invisible, districts. It is an agriculture of many novelties: new products, practices, techniques, insights and networks developed by farmers themselves (Scettri *et al*., 2001).

Against this background Italy became a fertile ground for the early genesis and prosperous unfolding of rural studies. But there is another and extremely important feature that has to be taken into account: Italy contains a far wider range of agricultural faculties and research institutes than other European countries. In such a situation every faculty and/or research institute looks for, and actively develops, *distinction*. Even if they are involved in networks of mutual cooperation, they seek to be distinctively different from each other. In this vein Portici stood out for its Marxist orientation; Parma and Bologna for their strong and well-developed neoclassical orientations; Milan and Padua for combining technological and economic approaches; Trieste and, on the other side of Italy, the University of Calabria both focused on issues of peripherality; and the Universities of Rome paid particular attention to agricultural policies. They all had their own distinguishable positions and expertise.

A well-known insight from biology and evolutionary theory is that the best possible condition for the emergence of *new* life resides in the *absence* of life. To consider such a dictum as applicable to economics would be somewhat cruel. Nonetheless it is not too hazardous, I think, to argue that the presence of a well-developed and institutionally rooted school of economic thought does not favour the emergence of a new, and competing, theoretical approach. In the academic panorama of the 1980s and 1990s Perugia was, at least as far as agrarian economics was concerned, the proverbial excep-

[6] Later on Saccomandi elaborated a theoretically grounded definition of rural development. This is discussed in Ventura, Milone, 2007 and in Cecchi, 2007.

tion. Precisely because it was somewhat at the margin of the well-vested schools of thought it could become the cradle for the then completely new neo-institutional analysis of agricultural production and marketing[7]. Here Saccomandi developed his "*Istituzioni di Economia del Mercato dei Prodotti Agricoli*"[8]. Flaminia Ventura closely cooperated with Saccomandi in working on this approach. Beyond that, she was the first to systematically apply the newly elaborated theoretical insights in empirical analysis.

4. THE CONTRIBUTION OF NIE TO RURAL STUDIES

In this section I will discuss three important themes located at the interface of markets and farms. By focusing on these themes Ventura not only introduced NIE into rural studies but also made a strong contribution to the further development of NIE itself. She helped to move the latter from a mere extension of the neo-classical approach (by introducing the concept of transaction costs as additional determinant of choice) to a fuller understanding of the dynamic role of institutions and agency (Milone, Ventura, 2012).

4.1. 'Make or Buy?'

One of the strengths of NIE resides in its analysis of the relations between markets and enterprises. Here two key questions emerge: to what degree do enterprises *use* the market in order to compose and recompose their resource-base, and to what degree do enterprises themselves seek to *produce* the factors of production and non-factor inputs they need? This dilemma is synthesized by NIE as 'make or buy', and the discipline developed the concepts of *transaction costs and governing costs* to analyse this problem. Ventura and her colleagues were among the first to systematically apply this analytical approach to farm enterprises and agricultural markets and this soon turned out to be a most fruitful exercise (see e.g. Ventura, Meulen, 1994 and 1995; Ventura, 2001).

Farming enterprises and agricultural markets are a magnificent showcase of the 'make or buy' question: the question pops up in a myriad of ways and the consequences of the choices made are often far-reaching.

The process of agricultural production can be grounded on an ample, relatively autonomous and historically guaranteed resource-base that makes the farm – as a productive unit – into a largely self-provisioning constellation. What is needed is available *because it has been made* (directly or indirectly). This applies to hay, horses, heifers, hemp seeds, hands, whatever. But they can also be acquired (bought, leased, or hired) on the market. Such choices depend on the perceived transaction and governing costs and the control over property rights. Where can good hay be bought? Can its quality be trusted or has it been harvested from a vineyard after the vines have been sprayed? Will there be a regular supply? What if something goes wrong? Or, to take another everyday-life issue (that was dear to Ventura): the pruning of olive trees. If others are contracted to do the job, will they be youngsters from the village who know how to do the job (and will be careful not to lose their reputation) or will they come from an employment agency using low-paid and less knowledgeable people from elsewhere?

The point is clear. The perception, valuation and equilibration of transaction and governing costs is highly dependent on (informal) institutions; the 'rules' that shape and guide actions (including economic ones). These institutions are closely aligned with the norms, values and the organizational patterns of communities, just as they are informed by collective memory, class relations and the emancipatory aspirations of the social groups involved. Some of them are short-lived, they come and go; other institutions are strongly rooted in the materiality of social life: in landscapes, irrigation systems, cooperative structures, eco-systems, intra and inter familial obligations and dependencies, etc.

Thus, by bringing in, and centring on, *institutions*, NIE creates an incisive instrument that allows for a mutual understanding and, in the end, maybe even a fusion of agrarian economics, rural sociology and other disciplines, such as agrarian history, social geography, etc. This is because it opens the doors for an open-minded inquiry into *whom* and *what* shapes economic life, and *how* and *when* this constitutive process operates and unfolds.

4.2. 'Specialized or multifunctional?'

There is mouldability, not only at the input-side of farms, but on the output-side as well. Here, the guiding question is: '*specialise or diversify*'. There is a wide spectrum of possibilities – and in this respect Italian agriculture represents, once again, an amazing richness. Some farms develop a broad portfolio of products and services, while others are highly specialized.

Along with many others, Ventura contributed to the meticulous documentation of this many-sided vari-

[7] This point of view is supported by the essay of Giuseppe Saccomandi, son of Vito (see Saccomandi, 2007).

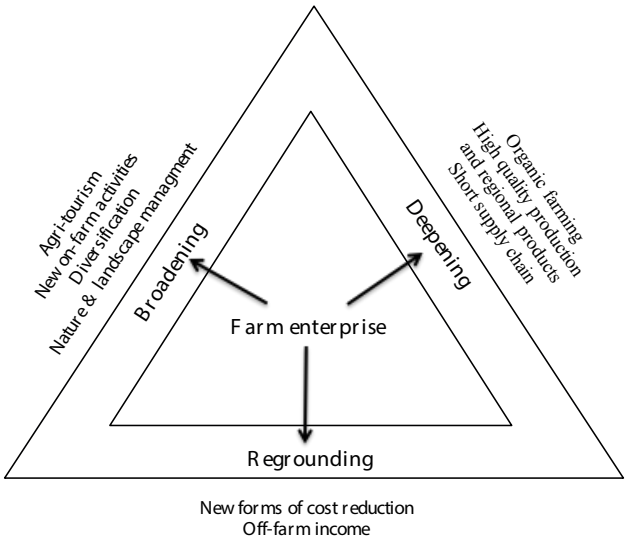
[8] It was first published in 1991, reworked and translated into English (1998) and finally republished in (1999).

ety and the novel mechanisms it fostered. By building on Panzar, Willig (1981), she pioneered the analysis and theoretical representation of the multifunctional farm. In doing so, she developed, together with Milone, the concept of 'changing farm boundaries' (2004). This theoretical notion became a cornerstone of what is now understood as rural development. The concept also explains why and how rural development activities can generate considerable additional flows of income.

Let the inner triangle in Figure 1 represent the conventional farm. The three sides of the triangle refer to its basic aspects: the mobilization of resources, their conversion into products and services and the farm's position within the countryside and society. This inner triangle represents the *specialized* farm, producing raw materials for processing in agro-industries, having little relationship with the surrounding context and only able to function due to the mobilization of resources in the respective factor and non-factor markets. The surface of the (inner) triangle represents the income that is generated in this specialized farm. Now, this conventional farm can well be 'enlarged' through new forms of multifunctionality, which will *change its borders*. Thus an enlarged triangle (with a higher income) may be constructed. This can occur through several different processes: re-grounding, broadening and deepening. Deepening refers to all kinds of productive activities that aim at obtaining more value added per unit of end product: switching to organic production and/or regional specialties, on-farm processing, on-farm or direct selling, etc. Broadening refers to the integration of other non-agricultural economic activities into the farm, in order to add more value added to the enterprise. This can happen through e.g. remunerated maintenance of nature, landscape, the development of biodiversity or water retention, agro-tourism or offering different kinds of services to neighbouring villages or nearby towns. Re-grounding refers to a reshuffle or recombination of the production factors on which the farm is based. This can be organized through e.g. new forms of local cooperation, pluri-activity and/or new relations between farming and nature.

NIE helps to conceptualize the processes at work here. It helps us to understand that multifunctionality does not come down to a mere *addition* of activities. This is because the costs of producing two products together are lower than producing them individually – especially if they are linked by synergistic loops. "As cases of indivisible investments and inputs are common, [the] joint production of a number of products allows for better utilization of both inputs and outputs" (Scherer, 1975; Saccomandi, 1998). Thus, synergies are created and the economies of scope replace economies of scale.

Figure 1. Boundary shifts.



Theoretically important with this shift to economies of scope (Milone, Ventura, 2000: 454-458; Brunori, Rossi, 2000) is that the farm enterprise enters the analysis as an *institution*. It is not just a (non-) place where the function of production is located – it is, instead, the assemblage of resources and actors who, in a knowledgeable, goal-oriented and strategically inspired way, develop their farm and the networks in which it is embedded. The farm is not only *surrounded* by (economic) institutions – it is also by itself a major (economic) institution. Later on, this argument was extended to the *market* as such. As Milone and Ventura argued: "The market can be basically conceived as an institution with specific social rules which provide the basis for exchanges to take place" (2015: 41).

In this way, yet another major meeting point between agrarian economics and rural sociology was forged. But more importantly is that this same observation, i.e. the market being an institution by itself, allowed for the theoretical possibility, and quickly expanding practices, of *constructing new markets* (Milone, Ventura, Ye, 2015; Ventura, Schiavelli, Milone, 2016).

4.3. 'Step-by-step or jumping?'

There are major differences discernible in the *direction* of development trajectories constructed by different farm enterprises, even within one and the same economic environment (where the institutions, technologies and markets are the same for all farms). As amply documented in Ploeg (1990), Ploeg, Saccomandi, Roep (1990)

and Ventura (1995), there are also important differences in *nature* and *rhythm*. Some farms develop 'slowly', in a step-by-step way, and they do so largely by building on the available social and material resources and networks and by taking into account the limits implied by society and nature. Other farms, by contrast, develop through the creation of ruptures. They try to 'jump' over the limits implied by existing resources, networks and external conditions. Their growth is structured as a process that brings magnitude and presumably also market power.

These differences in growth patterns underscore the explanatory value of conceptual pairs, such as endogenous vs. exogenous development, transformational costs vs. costs of governance (understood as embracing both feedback and feedforward loops) and incremental vs. radical innovations. Such concepts help to explain how farmers face and resolve several of the dilemmas mentioned above. The consequences of different growth trajectories turn out to be considerable. Growing inequalities, the emergence of an environmental crisis, the (re-)birth of right-wing rural protest movements and deep divisions within rural societies are but a few of the outcomes.

A new challenge for rural studies resides in adequately grasping the dilemmas that are related to the way farmers currently face the future (as shaped by agricultural and especially environmental policies). For some farmers 'the burden of the past' prevails – they are squeezed, as it were, by the urgencies of the present and the routines and goals that they developed in the past. Others are driven by opportunities entailed in the future (and therefore willing to engage in spending and investments that others consider as too dangerous).

5. BRINGING IN INSTITUTIONS AND INTRODUCING NEW FIELDS OF INQUIRY

The systematic application of NIE to agriculture opened a range of new fields of inquiry. These were aptly summarized in 2007 by Ventura and Milone as:

– The territorial articulation of agriculture and the diversity of its organizational forms.
- The interrelations between the farming family and other components of rural communities [and food systems]; and the double role of the farming family as provider and beneficiary of services.

Related to this there are fields of interest situated at the interface of agriculture and policy:

– The adaptability and flexibility of structural policies for agriculture.
– New interpretative schemes that allow for the elaboration of appropriate policy interventions that are able to meet the real and differing needs of different territories.
– The governance of local processes of transition through the redesign of the interaction between farm enterprises and other components of the food system(s).
– The relations between regional autonomy on the one hand and central authority on the other, within a framework of subsidiarity (Ventura, Milone, 2007).

The study of these fields can produce policy proposals that centre on the introduction and development of *new institutions*. A telling (if not monumental) example here is that, during the negotiations about the McSharry reform of the Common Agricultural Policy (a reform that was a definitive step in the liberalization of the Common Market), Saccomandi (then Minister of Agriculture) proposed, and obtained, the European Regulation for the Protection of Products with Denominated Origin. Thus, the partial elimination of one set of institutions (the rules that governed the European market for agricultural products) was countered by the development of a new set of rules, which had a positive and visible impact on Mediterranean agriculture (and increasingly beyond). The new rule set allowed for further deepening at the farm and territorial level, for the construction of new markets and the protection of those that were at risk from copy-cat products.

Following this stance, Ventura and others developed an impressive array of insights into existing, and proposals for new, institutions able to support and strengthen processes of rural development (Milone *et al*., 2015; Ventura *et al*., 2016).

6. THE DISTINCTIVE FEATURES OF RURAL STUDIES: A SUMMARY

Facing and (theoretically) resolving the dilemmas that are inherent to farming as a practice and as a developmental process requires a paradigm that goes beyond the limits of single disciplines. This applies especially in times of crises, i.e. when one dominant agro-political orientation (such as modernization) is challenged by another (such as rural development). Rural studies promise to provide such a paradigm and can do so, as argued in several contributions in Valorosi and Torquati (2007), because it reconsiders several of the main dilemmas that were previously seen as irrelevant. Rural studies are also distinctively new and different in that they employ a range of methodological features (or devices)

that differ significantly from those that characterize the more classical agrarian sciences. I will briefly elaborate here on six such features.

6.1. Multi-disciplinarity

Multi-disciplinarity is a central feature of rural studies. It is grounded in the recognition that "economic development [has] a multi-dimensional nature that includes, alongside the economic aspect, the surrounding ecological and socio-institutional dimensions" (Ventura, 2001: 1 and 2023: 15). It is important to note that we are *not* talking here of multi-disciplinarity as knowing a bit about every discipline (and consequently barely knowing any single discipline well). The type of multi-disciplinarity that is central to today's rural studies is grounded on a set of interfaces that allow for the identification of dilemmas (such as make-or-buy) that are situated at the intersection(s) of the social and the economic. It is at such intersections that the social feeds into the economic and vice-versa. Such 'feeding' is both translational and performative. Economic relations, prospects, parameters and concepts are translated to the social and thus help to shape it (the latter is the performative aspect). This evidently also applies in reverse, from the social to the economic. The mutual flows of translations and performance meld the economic and the social into one single and indivisible reality: a reality that is experienced (by practitioners) and theorized (by scientists) as *simultaneously* economic and social. Separating such realities into single and isolated halves only produces blind spots, confusion and misunderstanding.

6.2. Context: Taking time and place into account

Institutions are translational: they transport meaning from one domain to another, just as they prescribe how to read events and translate them into recommendable and/or needed courses of action. Institutions are also subject (though often resistant) to change. New institutions may emerge, others will fade away. During their 'life' (which might be short or extremely long-lived) they always carry a balance of continuity and change. Change can be purposeful or result from external and uncontrolled events, processes and/or circumstances. More specifically: farming strategies may be adapted as new markets or new technologies appear (or existing ones are adapted) and the structure and composition of rural communities (and the subsequent patterns of cooperation and division of labour) evolve. All this implies that time and place definitely need to be included within the analysis. This is precisely what rural studies does. Importantly, it does so very much through *comparative analysis* and considering extended *time series*. Rural studies take into account the *longue durée*. They refrain from only using *cross-sectional* analysis (that for a long time dominated the study of agriculture). On the other hand it is also true that rural studies are sometimes hindered by a surfeit of *un-mediated case studies*. This hinders the understanding of what-is-being-studied (the object of study) as part of a more encompassing flow through time and space. Overcoming this limitation will be decisive for the further unfolding of rural studies.

6.3. The dialectics of actor-structure relations

Whilst acknowledging the crucial importance and often far-reaching impact(s) of structural patterns, rural studies reject any form of determinism (and especially the technological and economic determinism embodied in agrarian disciplines of the past). In doing so they build on actor-structure relations as developed in sociology by Anthony Giddens (1997) and the actor-oriented approach developed by Norman Long (1977, 2015). On the economic side a similar 'duality' (structures impacting on actors and actors reproducing and changing structures) is discernible. Markets shape the behaviour of enterprises but enterprises, in turn, affect and sometimes reshape market relations. "A firm is usually not a prisoner of its industry's structure […] It also attempts to shape its environment in a firm's favour" (Porter, 1985: 7). An interesting interface here is the 'bridging' activity of (proto-) entrepreneurs operating at the margins of existing but separated markets: they connect previously separated value circuits. By doing so they create value, trigger economic growth and simultaneously improve their own incomes. They often come to the fore as *tertius gaudens*: "an entrepreneur in the literal sense of the word – a person who generates profit from being between others" (Burt, 1992: 34). It is the type of entrepreneurial behaviour one sees among those strongly involved in the development of multifunctionality, the construction of new markets and the creation of new, long-term flows that link past, present and future in novel ways (Rooij, Ventura, Milone, 2014). It is, in short, behaviour that contains and tries-out new solutions for the many dilemmas farmers (and others in the food system) face during transitional periods.

6.4. Bringing in living nature

When raising the issue of 'make or buy', the balance of internal and external resources (internally made vs.

bought resources) moves to the centre of the analysis. In agriculture this implies that the *role of living nature* needs to be included in the discussion. For agriculture is co-production. It is, like all productive activities, the ongoing encounter, interaction and mutual transformation of the social and material. But in farming, the material includes *living* nature: animals, soils, trees, vines, etc. There can be no agriculture without living nature (Ploeg, Ventura, 2014). However, in farming, the position of living nature can vary dramatically – especially, but not only, due to technological development. In the context of co-production, the productive potentials of living nature can be enlarged considerably (or, can equally be reduced or destroyed). If living nature is enhanced it becomes an increasingly productive force that allows specific forms of competitiveness and high levels of sustainability but also different modalities of endogenous growth (Ploeg, Saccomandi, 1995). This was shown, in a convincing and detailed way, in the early work of Ventura (Ventura, 1995; 2001; Ventura, Meulen, 1994). Later on this was elaborated further, notably in a key publication Ventura co-authored with other European colleagues (Ploeg *et al*., 2019).

The search for sustainability is another entrance that necessarily directs to co-production and the central role of living nature. Reducing the use of fossil fuels, pesticides and nitrogen-containing inputs implies the further development of *internal* resources and, especially, an increase in levels of use-efficiency (an early exploration of this theme is found in Ventura 1995).

6.5. The labour process

Just as rural studies bring living nature back into the analysis of agriculture, they also excel in re-introducing labour (partly via the concept of co-production). As argued before, labour is not simply about setting the means of production in motion. The labour process is constructive; it not only produces end products but also and especially a way of farming (a farming style). Hence, the *qualitative* dimension of labour (the knowledge, skills, design-capacities, abilities to engage in networks, and experiences embodied in it) comes to the fore as a constitutive pillar of agricultural and food systems. It largely explains 'X-efficiency' (Salter, 1966). Understanding labour in this way helps to introduce the mouldability of farming and agriculture into the analysis – thus opening new, previously often neglected inroads into potential transition processes (Ventura, Milone, 2005). Consequently, farmers' innovativeness emerges as important field of research (see e.g. Ventura, Milone, 2004). As a matter of fact, the exploration of novel practices produced in, and through, the farm labour process is now one of the strongholds of rural studies, the results of which feed into, and strengthen, new forms of policy making. "Development from below" is the often-used keyword here.

6.6. Micro-macro linkages

A final feature of rural studies to be mentioned here is their attention to the complexities of micro-macro linkages in agriculture. The macro-level is definitely not seen as a mere agglomeration of data derived from the micro-level (or the local). Neither do macro-phenomena directly shape activities at the micro-level. The local is not a derivate of the macro. Instead, the local is the place where specific realities, new tendencies, the rules and deviations are constructed – but under conditions that are often defined as macro phenomena, such as price-levels, price-relations and market tendencies. These are actively 'read' by the actors operating in different micro situations and then 'translated' into specific courses of action. Echoing Porter (1985), some of these actors are even able to reset several of the seemingly untouchable parameters that reign at the macro-level.

Between the macro- and micro-levels there are many in-between levels, in several of which influential institutions play important roles. Meaning 'travels' from level to level and at every interface there are important processes of translation and negotiation. A considerable part of the real-life economy is constructed at these interfaces and it is precisely here where room for manoeuvre can be created, enlarged or reduced. Rural districts (as discussed above) are a point in case.

7. BY WAY OF CONCLUSION

In this article I have tried to discuss how, why, where and by whom rural studies have been built. It would be ridiculous, of course, to even suggest that their construction depended on only a few places and people; it would be equally ridiculous to point to direct and straightforward connections between changing practices and policies on the one hand and the rise and fall of theoretical approaches on the other (*or vice versa*). Having said this, it can be maintained, I think, that the neo-institutional analysis of farming and agri-marketing initiated by Vito Saccomandi and later further developed by Flaminia Ventura and her colleagues has contributed remarkably to the rise of rural studies. This occurred directly (through books, articles, contributions to conferences, etc.) but also through the stimulating role of both Saccomandi and

Ventura in scholarly and agro-political networks that covered Europe and later extended to China and Brazil.

It should be admitted that rural studies have made research into, and the elaboration of adequate theories of, the rural *more* complex than it was before. Going beyond traditional and well separated disciplines, such as neo-classical agrarian economics and rural sociology, has made our work far more complex and difficult. The six features of rural studies, elaborated above, are more than proof of such complexities. But then, whilst it might be more difficult, rural studies are equally and definitely more attractive and exciting than the single disciplines of the past – probably because they do not accept simplistic explanations and have stopped to suggest easy solutions (which, if implemented, mainly result in frustration and increased disorder).

We have to be modest. There surely will come a time in which the shortcomings of rural studies become evident. Rural studies may even become obsolete – as happened to their predecessors. It is fairly impossible to assess when that time will come, although it doesn't appear to be imminent. In the meantime, however, it is good to have this thing called rural studies.

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The Multidisciplinary Approach of Rural Studies - Research article

The institutional analysis of rural development processes: an interpretation of the writings of Flaminia Ventura

Gaetano Martino

Department of Agricultural, Food and Environmental Sciences University of Perugia, Perugia, Italy
E-mail: gaetano.martino@unipg.it

Abstract. Institutional analysis of rural development (IARD) is characterised by systematic attention given to the institutional dimensions of the rural development process. While different research enquiries have been developed in recent decades, which can be framed by rural development, a systematic understanding of its analytical features, research method and main results has not yet been achieved. This study aims to elaborate on a particular series of studies connecting agricultural economics and rural sociology by categories drawn mainly from new institutional economics. Therefore, the objective is to identify the contribution of this approach to IARD. Two subsequent stages of reflection are identified: the first articulates the analysis of the nexus between the concept of organisation and that of farming style, and the second makes the picture more complex based by connecting the territory, the sociotechnical systems and the organisation effectively and coherently. Finally, this study seeks to delineate possible areas of research that could contribute to advance IARD.

Keywords: rural development, neo-institutional economics, organisation, farming style, autonomy.
JEL codes: Q13, O35, Z13.

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ORCID
GM: 0000-0001-6827-3185

HIGHLIGHTS

- In the analysis of rural development processes, institutions should take centre stage.
- The centrality of institutions requires some major theoretical innovations that are encountered at the interface of neo-institutional economic analysis and rural sociology.
- This approach leads to critically combining the analysis of transactions and enquiry into farming styles and a focus on the interaction between biological and socio-technical subsystems in rural space and economy.

1. INTRODUCTION

The study of rural development processes must consider political, social and economic institutions as central features of rural economies. In fact, *institutional analysis of rural development* (IARD) is a key stream of theory and empirical analysis in rural studies. It refers to an enormous area of research within which the institutional dimensions of rural development take centre stage. IARD is a multidisciplinary field of study that embraces different units of analysis and allows for the application of various conceptual frameworks. The interplay among different disciplines has contributed to progressively delimitate IARD, drawing conceptual achievements and categories especially from rural development analysis, agricultural economics, local development theory and economic geography. Different theoretical bases have been adopted to develop studies of the institutional dimensions of the rural development processes. In general, rural sociologists have sought to overcome the modernisation paradigm and to discover idiosyncratic patterns of development (van der Ploeg, Saccomandi, 1995; Lowe *et al*., 1998; Woods, 2011). Moreover, the outcomes of local development studies (Becattini, 1982) have provided different conceptual bases, centred on the idea of territory as a socio-economic entity, and have triggered new lines of rural development analysis, mobilising multiple-concept networks and inducing different disciplines to converge towards common sets of issues (Musotti, 2000; Belletti, 2002; Camagni, 2016). Capello (2011), in particular, offered a comparative analysis of regional development theories, highlighting among them the ability of local development theory to account for the heterogeneity of territories as a factor in their competitiveness. From this perspective, territories base their distinctive development opportunities on the heterogeneity of activities as well as exchange relations and institutions (Tinacci Mossello, 2002; Abbozzo, Martino, 2004; Capello *et al*., 2020). Thus, studies on rural development institutions and territories have progressively evolved through various theoretical perspectives. In this context, the objective has been to identify a specific adaptation of the conceptual frameworks typical of new institutional economics (NIE) (Saccomandi, 1995), as well as a recognition of the specificity of network forms (Murdoch, 1988; Powell, 1990) and its explanatory power. With this approach, several theoretical issues have arisen – starting from the diversity of the units of analysis central to the aforementioned perspectives – but it also invites scholars to engage with two crucial questions. The first concerns the evident organisational variety of agri-food economies (Saccomandi, 1995; Martino *et al*., 2017) and rural territories (Abbozzo, Martino, 2004; Capello, 2011). The second involves the relationship between the level of actors (particularly territorial ones, primarily farms) and the broader layer of institutional environment, whose recent developments seem able to provide new instruments of analysis (Ménard, 2014; Abbott, 2017; Ménard *et al*., 2022).

This study does not account for a comprehensive examination of IARD, which would require efforts from different disciplines; rather, it aims to clarify the very nature of a specific contribution to the definition of IARD, namely rural sociology and NIE. The specific objective is to discuss the approach theoretically inspired by NIE concepts that focus on, as far as the empirical field is concerned, especially, albeit not exclusively, economic features and dynamics. The key concept adopted here is the analytical path entailed in the writings of Flaminia Ventura (van der Ploeg *et al*., 2023). Ventura's work represents a strategic contribution to IARD, especially in regard to the interaction between rural sociology and NIE and the interface between the territorial base of agriculture and the variety of its organisational forms. The intention is to show how this specific analytical path, on the one hand, is rooted in the joint work of Vito Saccomandi and Jan Douwe van der Ploeg (Van der Ploeg, *this issue*)[1], and, on the other hand, can be used to establish a dialogue with recent development in NIE (Ménard, 2014, 2017, 2018; Kunneke *et al*., 2021; Ménard, Martino, 2024), which in turn could enhance IARD.

The article is organised as follows. Section 2 introduces the analytical path that studies rural development in light of organisational transformation and farming style analysis. Section 3 builds on new insights elaborated in institutional analysis and subsequently delineates possibilities for further deepening the study of rural development processes. Lastly, Section 4 presents some final remarks.

2. NEW INSTITUTIONAL ECONOMICS AND INSTITUTIONAL ANALYSIS OF RURAL DEVELOPMENT: AN INTERPRETATION

2.1. Basic analytical elements

There are different theoretical paths involved in the exploration of rural development processes; together,

[1] It is impossible to fully account here for the richness of the Italian experience and its leading actors. The volume edited by Valorosi, Torquati (2007) as well as the *Proceedings of the Giornate Tassinari per l'Economia e la Politica Agraria*, held in Assisi (Italy), provide a main introduction to the related area of study.

they highlight their multidimensional dynamics and impacts, the multiplicity of the scales involved and, above all, the multi-actor aspects. These different paths also pay attention to institutional dimensions, but they follow various approaches. Indeed, approaches that draw from the institutional analysis and development framework, old institutional economics (Derville, Allaire, 2014; Derville 2023) and convention theory (Marescotti *et al.*, 2000; Tregear *et al.*, 2023) – as well as specific results from local development analysis (Arrighetti *et al.*, 1997; Gabi Dei Ottati, 1994) – have produced a corpus for the IARD process, in which rural sociology and NIE have a relevant role.

The line of reflection considered here is characterised by the use of key analytical elements of both NIE, as projected in the field of agricultural economics analysis (Saccomandi, 1995), and rural sociology (van der Ploeg, *this issue*). This combination rightly generates the question of whether we are dealing with a well-argued eclecticism or with (the beginning of) a coherent integration that is justified (and defendable) both conceptually and methodologically. This article proposes to answer this question by referring to two middle-range theories developed within the institutional analysis framework. It should be noted that the very concept of 'institution' is defined differently depending on the context of the theoretical approach (Hodgson, 2006; Ménard, Martino, 2024). In this study, institutions are understood as the set of norms and rules embedded in devices and mechanisms that emerge from interactions among agents (or classes of agents) in search of coordination to face states of nature (Ménard, Martino, 2024). Following Ostrom (2005), institutional analysis seeks, first, to identify universal components that underline markets, hierarchies and other complex situations and, second, to verify whether these components constitute fundamental parts of theories that are able to explain regularities in human behaviour across diverse situations (Ostrom, 2005). In institutional analysis, *frameworks* identify elements that are considered to be such components. Frameworks also provide a general list of variables and a meta-theoretic language to be used to discuss theories and to identify universal elements. Accordingly, theories enable a researcher to specify which elements of the frameworks are particularly relevant for specific research questions. Theories carry, and focus on, a framework and thus make specific assumptions necessary for a correct diagnosis of the phenomenon to be investigated, a correct explanation of processes and their dynamics and a probable prediction of outcomes (Ostrom, 2009).

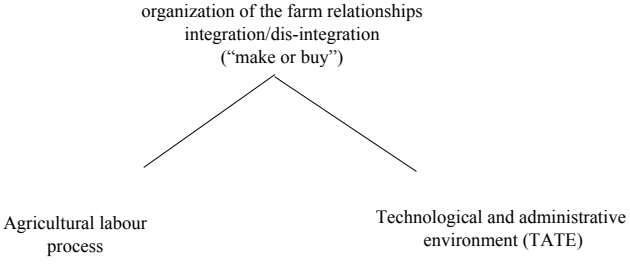
In the IARD framework, the dialogue between rural sociology and NIE is grounded in, and inspired by, a joint meta-theoretic language that necessarily orients attention to the interfaces of 'the social' and 'the economic', the shifts of meaning occurring at these interfaces and, consequently, the institutions facilitating such shifts (or, as is equally possible, preventing them). The first consequence of this dialogue is that IARD becomes progressively endowed with a coherent set of analytical tools to investigate rural development processes; it is also grounded in, and part of, the metatheoretical language required for the analysis of such processes. The second consequence is that IARD, owing to its genetic relationships with rural sociology and NIE, contributes to the original definition of *institutions* in relation to rural development.

2.2. Theory of organisational transformation and farming styles

Central to the approach discussed here is the assumption that the organisation of interrelations within and along the food chain should be investigated from a dual angle (see also Figure 1): first, with respect to the wider set of relationships influencing the operation of the farm (Benvenuti, 1982; Ventura, 2008), and second, considering the dynamics of the agricultural labour process (van der Ploeg, 1988). This assumption can be easily identified in the studies by Saccomandi (1995) and Van der Ploeg, Saccomandi (1995).

The *theory of the organisational transformation* represents a key analytical step in the understanding of the agri-food chain institutional dimensions (Saccomandi, 1991). While it provides basic tools to understand the organisational variety of the agri-food chain (coherently with the new institutional thought, see among others Ménard, Valceschini, 2005), it also aims to build upon a comprehensive understanding of rural development processes. This effort primarily considers the necessity of explaining the organisational changes of farms consistently with the understanding of the territorial processes that are at the core of rural development. As we have

Figure 1. Conceptualising the organisational change in farming.

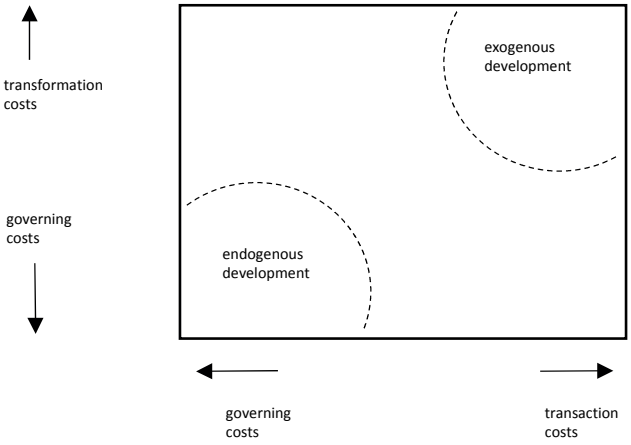


seen, the first attempts to establish this coherence was the connection of change with the labour process and the 'external environment'.

A consequence of the hypothesis illustrated in Figure 1 is that the organisational plan and specific development path of the farm (the calculation and planning as stated by Williamson, 1993) is understood only if the dynamics of the farm as a land–labour institution and the impact of the external environment are considered properly. In this way, the integration of rural sociology and NIE, as entailed in rural studies, clearly comes to the forefront as a theoretical (and empirical) area of the more general NIE tradition – areas need to be endowed progressively endowed with the original tools. This article seeks to account for the identification of such tools, at least some of them.

NIE fosters concepts that are most relevant for the exploration of rural development processes in Europe. Based on the original assumption, adoption of the concept of a *governance structure* represented a major step ahead, especially the conceptualisation by Williamson (1985), which provides the most useful analytical tool for understanding the transformation of farming activities. The way in which the farm is connected to both the upstream and downstream stages of the food chain was progressively understood in terms of the *organisation of transactions* between the agricultural and processing stages (Saccomandi, 1985, 1991). This point of view fundamentally renewed the conceptualisation of the agricultural market and subsequently provides room for the empirical investigation of the *modes of organisation*. It represented a decisive step beyond the standard neoclassical focus on market exchange and allowed for the elaboration of a *theory of organisational transformation* that aims to explain how the dynamics of organisational choices relate to the diversity of development paths in agriculture. Williamson (1985) argued that a good can be bought on the market ('buy' option) or produced in and by the firm itself ('make' option). Consistent with the discrete alignment principle and second-order economisation introduced by Williamson (1985), van der Ploeg, Saccomandi (1995) explored the implications of this model for the organisation and development of farms. Farmers make organisational decisions by comparing the transaction cost associated with an alternative organisation to the cost of governing the farm without entering into such an alternative. This notion also translates to the level of alternative rural development trajectories. *Endogenous* development is based mainly, but not exclusively, on locally available resources, making full use of the ecology, labour force and knowledge of an area, as well as the locally developed organisational patterns that link

Figure 2. Schematic representation of costs involved in exogenous and endogenous development.



Source: adapted from van der Ploeg, Saccomandi (1995).

production and consumption (van der Ploeg, Saccomandi, 1995: 10). In contrast, *exogenous* development requires an increased number of transactions characterised by comparatively high transaction and transformation costs, whereas endogenous development results in low levels for these cost categories (see Figure 2, in which the costs of governing the production process correspond to the transaction costs of the 'make' option)[2].

In Figure 2, the transformation costs (vertical axis) are involved in the reorganisation of a farm according to the new technological models proposed by the development process (van der Ploeg, Saccomandi, 1995: 25, Note 10). These are jointly considered with the costs of governing the technological model adopted by the farms. The more farms follow an exogenous development path, the larger the transformation and the governing costs. The transaction costs (horizontal axis) are also jointly considered with the governing costs. Figure 2 shows that the exogeneous development process tends to increase the complexity of the exchange for the farms and the transaction and governing costs they face.

The IARD perspective in this paper considers organisational polymorphism (Saccomandi, 1998, 1991) and addresses it with the theory of organisational transformation (Saccomandi, van der Ploeg, 1994). By doing so, it fully embraces its relationships with economic-agrarian reflection and its premises. Among these, the following are of particular interest here: (1) the observation of

[2] The attributes 'endogenous' and 'exogenous' correspond to a level of debate that was partially overcome in subsequent work (Gkartzios, Lowe, 2019; Cejudo, Navarro, 2020). The references cited in the text are sufficient to capture the key meaning. It is beyond the scope of this article to account for the development of the debate.

the variety of organisational forms in the agro-industrial system, (2) the identification of entrepreneurial choice as the main cause of polymorphism (Saccomandi, van der Ploeg, 1994), and (3) the recognition that the agro-industrial structure is strongly influenced by processes of horizontal and vertical integration (van der Ploeg, 1995). The new-institutionalist thesis of economisation (Williamson, 1985) is of particular importance with respect to these elements. This view is built on Coase's (1937, 1960) fundamental intuition and its subsequent analytical developments, where the organisational problem is framed in terms of the neo-institutionalist thesis (Williamson, 1985). Consequently, the variety and organisational changes observed in the agro-industrial reality is explained by the decision-making process undertaken by the enterprise, which is considered to be the main economic agent in the theoretical interpretation of empirical constellations (Saccomandi, 1998). Hence, a perspective that prioritises society as a whole cannot explain the institutional structure; rather, it interprets individual behaviours as *conditioned* by the wider social process (Coase, 1992).

In this context, *farming style* is a central category (van der Ploeg, 1994). It is understood as an entrepreneurial approach that centres on the combination of agricultural resources to achieve economic (and social) objectives that are defined, although not always consciously, by farmers. The concept allows us to conceptualise the specific organisation and development of the farm as a social construct. More specifically, it refers to the specific ways in which the farm labour process is organised (van der Ploeg, 1994). A farming style can be defined as a consistent pattern that includes the following elements (Ventura, 2023a: 38-39):

- a specific set of strategic notions, values, capacities and information (i.e. culture repertoire) shared by a particular group of farmers that specifies how farming should be organised;
- a specific and coherent way of structuring farm practices that corresponds to the strategic design (or cultural reporting) used by these farmers; and
- a specific set of relationships between the farm and the surrounding markets for both input and output flows, the actors that operate in these markets as well as the political and social institutions and technological development.

Adopting an NIE perspective in rural development studies leads to two results. First, the heterogeneity of the farms is studied in terms of comparisons between transformation and transaction costs, a feature that endows rural studies with a powerful analytical tool. Second, the 'dry' Williamsonian *contractual man* (Williamson, 1985) is replaced with 'living' farming styles. Simultaneously, these styles are enriched by the contracting dimension:

> A style of farming can therefore be understood as the 'organizational plan' of the farm enterprise. It reflects, and is informed by, the coherent and normative choices of the farmer concerning the interplay of internal and external resources. Different balances between the internal and external resources (reflecting approaches that veer towards the endogenous or exogenous) are evaluated differently by the farmers on the basis of their experience, their propensity to risk and the influence of the social, economic and institutional contexts to which they relate. (Ventura, 2023a: 26)

An organisation includes rules. Therefore, recognition of the organisational nature of farming styles is an important analytical outcome, as it brings to light its institutional dimensions and connects it to the wider institutional order and dynamics (including rural development processes). More precisely, Ventura's proposal of interpreting the farming style in organisational terms contributes to connect rural sociology and NIE to agri-food analysis. In this view, the organisational variety of the agri-food chain is still understood in terms of the organisation of the transactions (Martino *et al.*, 2017; Ménard, 2018). The farming style appears to be able to characterise the transaction the farm undertakes and, in turn, it is affected by the modalities chosen to organise the transaction.

2.3. Exploring the connection with territory: from the external environment to localities

Originally concerned with the role of the external environment as constituting a system of influences and constraints on farmers' entrepreneurship (Benvenuti, 1982; Saccomandi, 1991), rural development studies have progressively taken advantage of the large literature on local development (Iacoponi *et al.*, 1995; Musotti, 1997; Ray, 1997; Becattini, 2004; van der Ploeg *et al.,* 2008; Ventura, 2023a). The idea of *locality* goes beyond a simplified view of context and tends rather to integrate multiple dimensions of *space*: spatial practices, which range from individual routines to the systematic creation of zones and regions; representations of space, that is, forms of knowledge and practices that organise and represent space; spaces of representation; or collective experiences of space, which in turn include symbolic differentiations and collective fantasies about space, resistance to dominant practices, and the resulting forms of individual and collective transgression (Urry, 2001: 11). The

connections between the farming styles, rural development processes and locality depend on the institutional order of space: farming styles are grounded in political and social institutions, integrate cultural repertoires and are articulated through their organisation plans (Ventura, 2023a). On the other hand, as noted above, transformational patterns at the farm level contribute to the specificity of rural development at the territorial level and, consequently, to its organisational variety. The idea of identifying a taxonomy of local systems on the basis of modes of organisation and spatial divisions of labour in rural systems (Ventura, 2023: 34-35) helps to theoretically underpin the organisational variety in agricultural sectors (Lamine *et al.*, 2012, 2019; Belletti *et al.*, 2017; Martino *et al.*, 2017).

It is necessary to note that labour process analysis enters this theoretical construction at least at two levels: the labour process is seen as a constitutive pillar of different farming styles, and the transformation of the labour process is understood as both resulting from and impacting the transformation of the organisation. Hence, organisational transformation is a theory of change of the farm and a theory of how the labour process affects the wider connection between nature and society, that is, as a driver of the reproduction of the farm's resources (van der Ploeg, *this issue*).

2.4. Peasant innovativeness and organisational transformation

Rural studies scholars are aware that the dynamics that are observable in rural systems cannot be fully understood without considering the innovative pushes activated by the farmers themselves (van der Ploeg, *this issue*). This implies that the theory of organisational transformation aims to include a comprehensive theorisation of innovation and novelty production. A sociotechnical system (STS) is a powerful and innovative concept that shapes multiple areas of study. An STS embraces production, diffusion and the use of technology: it is defined as the linkages between the elements necessary to fulfil societal functions and consists of artefacts, knowledge, capital, labour and cultural meaning, among others (Geels, 2004). Innovation is a key issue in this context, as the system tends to limit the possibility of radical change except for *niches* that provide locations for learning processes – for example, about technical specifications, user preferences, public policies, and symbolic meanings (Geels, 2004: 922). Rural studies scholars utilise the STS approach by considering – beyond the general structure – the concepts of novelty and niche (Wiskerke, Van der Ploeg, 2004). According to Geels (2004), novelty is a modification of, and sometimes a break with, existing routines. It is, in a way, a deviation. It might emerge and function as a new insight into an existing practice or might consist of a new practice. Novelty is mostly a new way of doing and thinking – a new mode that has the potential to do better or to be superior to existing routines. Therefore, in rural development studies, novelties can indeed be seen as *seeds of transition* (van der Ploeg, 2004).

New ways of organising endogenous resources to overcome system constraints and to put into place strategies for diversification might equally represent novelties, especially if they generate *synergies* between internal and external resources (Ventura, 2023b: 222). In Figure 2, such synergies are conceptualised in terms of economies of scope. The boundary between the internal and external relations is set by the comparative magnitude of the governance and transaction costs, with the sociotechnical regime setting the possibilities for innovating and capturing economies of scope as well as contributing to the levels of costs incurred.

This perspective reconceptualises the theory of organisational transformation and proposes the idea that niches in rural development are locations where it is possible to deviate from the rules in the existing regime, thus providing potential room for radical innovations. Niches are parts of an STS in which interactions among rural actors can constitute new possibilities and practices, exploit emerging nested markets and increase the possibilities that come with increased autonomy (Van der Ploeg, Schneider, 2022; Milone, Ventura, 2024). The concept of *changing farm boundaries* (Ventura, Milone, 2005) systematises the idea of organisational changes and situates itself at the core of rural studies (van der Ploeg, *this issue*): deepening, broadening and re-grounding are all related to changes in the boundaries of the firm and the associated consequences in the neo-institutional terms of integration/disintegration.

In summary, as argued above, rural studies connect the organisational change of the farm – essentially seen in terms of NIE – with the territory, namely its characteristics and dynamics. Owing to the very nature of agriculture, it is necessary to account for territory and to integrate it theoretically with the understanding of sociotechnical regimes. Second, it is necessary to conceptualise the territory in a coherent way with the organisation of the farm, and this is done with the concepts of institutions and systems. *Rural institutions* have the distinctive function of aligning farms and territories into a coherent and dynamic whole, which allows for the proper unfolding of the rural development process. There are a proper set of norms and rules embedded in

devices and mechanisms that emerge from interactions among rural agents in search of coordination in a rural territory.

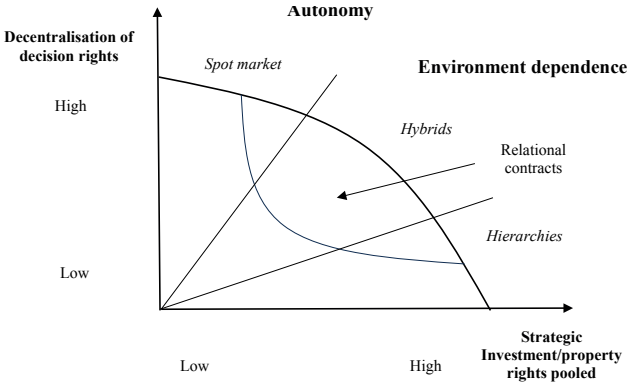
3. NEW TASKS FOR NEW INSTITUTIONAL ECONOMICS WITHIN THE FRAMEWORK OF RURAL STUDIES?

Thus far, this paper has argued that it is important, both theoretically and practically, to identify the institutional order of the territory and the dynamics that create it. The organisation set by the farm is a micro-institution that engages agents involved in transactions. Recent developments in NIE seem to add additional strength to the analysis of rural development processes. First, NIE has enriched the representation of the institutional framework of an economy by identifying three layers (Ménard, 2014, 2017, 2018; Kunneke *et al.*, 2021): the macro-, meso- and micro-layers. Each layer is characterised by a distinctively different role in: (1) defining, allocating and monitoring property and decision rights; (2) establishing devices and mechanisms for the implementation of these rights; and (3) framing the way operators transact these rights. Meso-institutions bridge the gap between the macro- and micro-layers, making the macro-rules operational and allowing the micro-agents to implement them (Ménard, 2014, 2017, 2018; Kunneke *et al.*, 2021)[3]. For this purpose, meso-institutions carry out three functions: (1) they *interpret* and *adapt* rules and norms generated at the macro-level, making them context specific to a sector and/or a country and/or a region and allowing agents to organise their transactions within the environment thus framed; (2) they *monitor* the actual implementation of rules and norms by those micro-institutions that organise the production and distribution of goods and services; and (3) they *enforce* these rules and may transmit feedback by connecting policy-makers and operators.

Identifying and analysing meso-institutions in rural development is an urgent task. The heterogeneity of rural space is the outcome of the interaction between farming styles and the institutions operating on the meso- and micro-layers. Changing farm boundaries is at the core of current rural development processes (van der Ploeg, *this issue*): these boundaries can be understood as the outcome of meso-institutions properly channelling the choice at the micro-institutional level. On the other hand, rural development studies also underline the possibility of micro-level institutions triggering change at other levels. A theory that has been properly developed on meso-level institutions could provide a logical frame for understanding how rural institutions can be designed and made effective based on increasing innovativeness and sustainability (Milone, Ventura, 2024). Moreover, meso-institutional theory could provide effective tools for rural development analysts and lead them to properly address the multiple dilemmas faced by agricultural actors (Van der Ploeg, *this issue*).

Furthermore, the identification of proper farming models (that is, more innovative and more sustainable) could be facilitated by considering modes of governance that differ in terms of the allocation of decision and property rights (Ménard, 2013). Regarding a specific transaction, Figure 3 distinguishes between different organisational solutions in terms of centralisation/decentralisation of decision-making and ownership rights among the parties involved. The horizontal axis represents strategic investments for a transaction and can thus also be interpreted in terms of property rights: these rights become increasingly centralised as one moves further from the axis origin. The vertical axis, on the other hand, pertains to decision-making rights over resources: the farther from the origin, the more decentralised these rights are among the parties involved in the transaction. Figure 3 highlights the need for an efficient combination of rights allocation according to the characteristics of the transaction: the more concentrated the investment in strategic resources, the less decentralised the decision-making rights. Thus, the area outlined by the axes identifies alternative governance structures (the theoretical boundaries between the three possible structures – market, hybrid and firm – are highlighted). The analysis developed in Ventura's studies can be relat-

Figure 3. Decision rights and property rights.



Source: adapted from Ménard (2018).

[3] The concept of a meso-institution, introduced by Misa (1994), was developed into a comprehensive theory by Ménard (2014, 2017). A similar approach is being developed in political sciences (Abbott *et al.*, 2017). See also Ménard, Martino (2024)

ed to this theoretical framework, positioning autonomy as opposed to dependence on the external environment.

This representation also allows for examples of rural institutions as defined above. For example, the consortia engaged in the management of geographical indications perform meso-institutional functions: while their activities are carried out across the entire territory recognised in their statutes – also incorporating practices related to traditional production and consumption – their establishment foresees that certain decision-making rights regarding company resources are partially transferred to the consortia themselves, such as decisions related to production technology and, at times, the planning of production itself (Martino *et al*., 2016). Additional examples include supply chain contracts aimed at organising the offerings of specific territories by defining the combination of property rights and decision-making within agricultural enterprises (Scaramuzzi *et al*., 2020), as well as quality certification processes according to participatory schemes (Sacchi *et al*., 2023).

4. FINAL REMARKS

This article has outlined, and further explored, the institutional analysis of rural development processes by building on selected achievements contained in the work of Flaminia Ventura. It has shown how, by building on this work, NIE can further strengthen and enrich rural studies and, more specifically, how different concepts can be tied together in a coherent and probably convincing conceptual network. Moreover, increased levels of farmer autonomy seem to be achievable through the construction of adequate rural institutions. Consequently, additional efforts are needed to explore the meso-institutional layer in rural development and to characterise farm styles better in terms of decision-making and property rights.

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The Multidisciplinary Approach of Rural Studies - Research article

The role of farmers: governing the farm enterprise, markets, and networks

Pierluigi Milone

Dipartimento di Ingegneria Civile e Ambientale, Università di Perugia, Perugia, Italy
E-mail: pierluigi.milone@unipg.it

Abstract. Being a farmer is far more complex than we often consider. The job includes the capacity to organise and combine factors of production (land, capital and especially labour) and simultaneously meet the needs of consumers and many other things. To do so, the farmer has to face, time and again, strategic choices related to the "make or buy" decision that concern, and materially affect, the boundaries of the farm's operations. This article argues that agency and networking are crucial concepts in the analysis of such choices. These two concepts are also at the heart of rural studies. Here the focus will be on agency as strategic in the active organisation, combination and development of factors of production. In turn networking is central in the construction of (new) markets and other solutions to day to day or strategic problems. This article will use the experience of nested markets, as seen through the neo-institutional approach with a focus on transaction costs, to highlight that strategically organising production factors is central to being a farmer. It is a capacity that needs to be developed and strengthened rather than replaced and/or externalized. This applies especially when farmers seek to realign themselves with the needs of the environment and society.

Keywords: agency, networking, neo-institutional economics, market, sustainability.
JEL codes: Q12, Q13.

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ORCID
PM: 0000-0001-6087-0348

HIGHLIGHTS

- Italian farmers are increasingly moving towards multifunctionality in order to defend their assets. This process includes developing new market relationships with consumers.
- The neo-institutional approach allows for an economic interpretation of the importance of entrepreneurial capacities in constructing new relationships, both market and political-institutional, that guide production practices and processes.
- The boundaries of farms are dynamic and move in coherence with the entrepreneurial activities of defending the farm's assets, which translates into a strategic choice of what, how and when to produce.

1. INTRODUCTION

At the end of the 1990s both political and scholarly debates increasingly centred on re-conceptualizing agriculture[1]. In an overview of these debates, Flaminia Ventura and myself identified three key points concerning the interrelations between farms and markets (Milone and Ventura, 2000).

1. Market transactions generate transaction costs that force farms to continuously rethink their choices. To successfully carry out a market transaction one needs to know with whom to deal, the quality and quantity that is expected, valorising this quality, how to formulate the contract, what rules need to be observed, and so on. Correctly managing all this is usually complex and costly.
2. Farm enterprises are dynamic systems whose boundaries may expand or shrink, depending on events (external or internal to the farm) and the transaction costs associated with them. Moving the farm boundaries can be realised in either a co-operative or autonomous way (Williamson, 1998).
3. Protecting control over the factors of production (land, family labour, capital invested, know-how, networks and structures) is always central in the entrepreneurial activity of farmers. Maintaining this control over one's assets allows for economies of scope that give the farm enterprise the flexibility needed to overcome moments of crisis.

We argued that these three points were essential in order to properly understand the multi-dimensional diversity in agriculture. While neo-classical agrarian economists regarded these phenomena as being of secondary importance, several new approaches emerged in the 1990s, which put the diversity of the organizational forms of farms centre stage. These included the farming styles approach, initially developed in Wageningen, and the neo-institutional approach, developed in Perugia, that centred on the polymorphism of agricultural production and marketing.

In the first approach, it was shown that within homogeneous environments (characterized by the same set of economic, technological and institutional parameters) different entrepreneurial strategies resulted in the construction of contrasting farming styles[2]. The second approach, in turn, made it possible to *explain* this diversity by putting it in the specificity of both territorial contexts and resources and the presence of transaction costs. The diversity of farming was observed, analysed and explained by Saccomandi (1991) in terms of transactional economics (Coase, 1937; Williamson, 1985) and organization theory (Chandler, 1982; Tirole, 1991).

Thus, the perfect market hypothesis, which argues that the market is capable of performing the function of the most efficient resource allocator with zero transaction costs, was challenged by the imperfect market hypothesis and the possibility to choose other organizational forms as substitutes for the market. These forms are tightly interwoven with the governance structures of transactions, internal and external to the firm, and their implied cost.

In this way, the unit of analysis changes from the neoclassical firm, an entity that maximises profit in a perfect market, to a firm seen as the institution that internalises the processes of production whenever the cost of their acquisition of their output on the market entails transaction costs exceeds the costs 'doing it oneself': *i.e. whenever the market is inefficient*. A dynamic institution can change its boundaries over time in response to changing transaction costs. Such changes are often linked to developments in the technical-scientific system, the institutional context or the nature of resources (such as craftsmanship). This new interpretation of the farm enterprise helps to explain the current forms of multifunctional farms, networks of cooperating farms and the presence of economies of scope. Transaction costs refer to the *use* of the market, whilst organisational costs are internal to the farm enterprise. It is precisely at the intersection of these different costs where Williamson located his make-or-buy "*decision*" (1975; 1981). When the transaction costs of using the market are higher than the organisational costs of the enterprise then the enterprise will have an incentive to internalise the production process rather than purchasing the output of that process in the market.

In the meantime, empirical research provided evidence that the growing dependency of farms on upstream markets (also studied as 'incorporation') as well as the progressively external prescription of entrepreneurial decisions (i.e 'institutionalization') had

[1] This reconceptualization was strongly associated with, and fed into, the emergence of the new paradigm of rural development that gave rise to the new policy framework for European agriculture with the establishment of Pillar II, which was precisely aimed at supporting specific policies for rural development and a new model of multifunctional agriculture. A higher degree of flexibility (in comparison with the First Pillar) enables national, regional and local authorities to formulate individual multiannual rural development programmes based on a European 'menu of measures'. The European Union's Rural Development Policy was introduced under the 'Agenda 2000' reform. It is co-financed by the European Agricultural Fund for Rural Development (EAFRD) and regional or national funds.

[2] Ploeg defines farming styles not on the basis of the capital/labour ratio, but in relation to the weight of external variables of an economic and institutional nature that determine the choice of technologies and forms of governance of market transactions (Ploeg, 1990, 1994, 2000).

strongly affected farmers' choices that regard the make-or-buy decision.

Over time the dynamics of incorporation and institutionalisation (mostly understood as integral aspects of modernization) resulted in processes of disintegration and deactivation of farm enterprises and the loss of strategic capacity on the part of agricultural entrepreneurs.

At the same time, however, it has been shown that alternative solutions are possible. These solutions (that will be illustrated and discussed further in this paper) are based on entrepreneurial behaviour that departs from the path of modernization. This can occur through a combination of three elements:

1. 'non-rationality', linked to the presence of property rights over resources, the stubbornness in defending these resources, and the presence of continuity in terms of family work;
2. the possibility of developing economies of scope that allow for the diversification of production;
3. the possibility to enlarge the economic size of the farm through the creation of networks that can result in new markets rather than through processes of vertical integration or increased scale.

Thus, alongside the specialized, single-product farm that supplies raw materials to agro-industries a new model emerged (both materially and theoretically): the mixed, multi-product farm that is directly linked to consumers, often through new markets embedded in networks that directly link production and consumption.

The shift from the focus on production efficiency towards organisational efficiency (Ventura, 2001) makes it possible to explain links and transactions between enterprises that are not regulated by the market and allow the agricultural enterprise to find original solutions in response to external changes while safeguarding its assets. The objective of the work is precisely to understand these links or transactions, the elements that determine and characterize them. In this, agency and networking are crucial concepts.

The interpretation of this new phenomenon, however, requires a new, multidisciplinary approach (as developed in rural studies; see Ploeg in this special issue). Neo-institutional theory plays a key role in this new approach.

2. THE GOVERNANCE OF TRANSACTIONS WITHIN A FARM ENTERPRISE

The agricultural enterprise is an institution located at the intersection of different networks of economic and social relations that influence its organisational choices over time. There are three major practical and theoretical implications to this. First: if and when the conditions for a perfect market are lacking the enterprise enters the analysis as the *institution* able to organize, combine and develop factors of production[3]. Second (and according to Coase (1937: 390), this institution (in our case the farm enterprise) can seek to draw on its capacity to *reduce the costs of using the market* (i.e. its transaction costs). Theoretically this reduction can be grounded on several mechanisms. The development of multifunctionality is one of these. Third: the role of coordination is played by the *entrepreneur.*

The governance of transactions can take different forms. These are evaluated in terms of their ability to reduce transaction costs. Forms of governance can take two extremes, represented by the market and hierarchy (enterprise) and include hybrid, intermediate, forms of quasi-organisation and quasi-market (Saccomandi, 1998; Ventura, 2001). Williamson wrote that "…[t}*his level of analysis can be thought of as developing the criteria for and defining the 'efficient boundaries' of an operating unit*" (Williamson, 1981: 549). Changes in agriculture and the rural context force the farm into dynamic approaches of adaptation that widen or narrow these 'efficient boundaries': increasing its reliance on the market or re-appropriating functions that were formerly externally delegated. This is the key point of multi-functionality.

Industrial economics theory (or industrial organization as used in US) offers several insights into how farm enterprises may seek to reduce transaction costs (Stigler, 1968; Tirole, 1991; Saccomandi, 1998; Pasini, 2013).

2.1. Transaction costs and the make-or-buy rule

As argued, neo-institutional economics focuses on the variations, over time and space, in the forms of market governance as a function of the attributes/characteristics of transactions and their costs. Transaction costs can be defined as "*the costs incurred by participants in an exchange, in order to initiate and complete the transaction. Such costs occur to some degree in all real-world transactions, and thus affect all real markets. All participants may incur transaction costs, including both buyers (investors) and sellers (hosts). Transaction costs are not only the out-of-pocket expenditures necessitated, but the opportunity costs – the lost time (delay) and resources (e.g. money, managerial attention) – that could have been*

[3] In this sense firm or farm enterprise emerges to minimise transaction costs or to reduce market or exchange uncertainty (Knight, 1921), it merges as a device to coordinate or exploit the worker (Marglin, 1974) or it emerges as an organisational equilibrium of a bargaining process among corporate actors (Aoki, 1984).

devoted to the next best opportunity for that participant" (Dudek and Wiener, 1996: 15). Transaction costs can take many forms but some of the main types are include searching, negotiating, approving, monitoring, enforcement, information, uncertainty reduction and insurance. They can refer to two periods of bargaining: the ex-ante and the ex-post, where in the former the focus in on incentive alignment and efficient risk bearing, in the latter to the governance of the contract (Williamson, 2000).

According to Williamson (1985), there are three main characteristics that determine transaction costs and their variations: asset specificity; uncertainty, and; the frequency with which the exchange takes place. Asset specificity is defined as the value of sunk investments. The uncertainty of a transaction can lead to very high costs that can jeopardise the very existence of the transaction in the absence of rules and an organisation to ensure compliance. As far as frequency is concerned, more frequent transactions are, the lower the transaction cost per transaction. Thus, transaction costs can be expressed in the following equation (Menard, 2006):

$$TC = [\![f(AS,F,U)]\!] \quad (1)$$

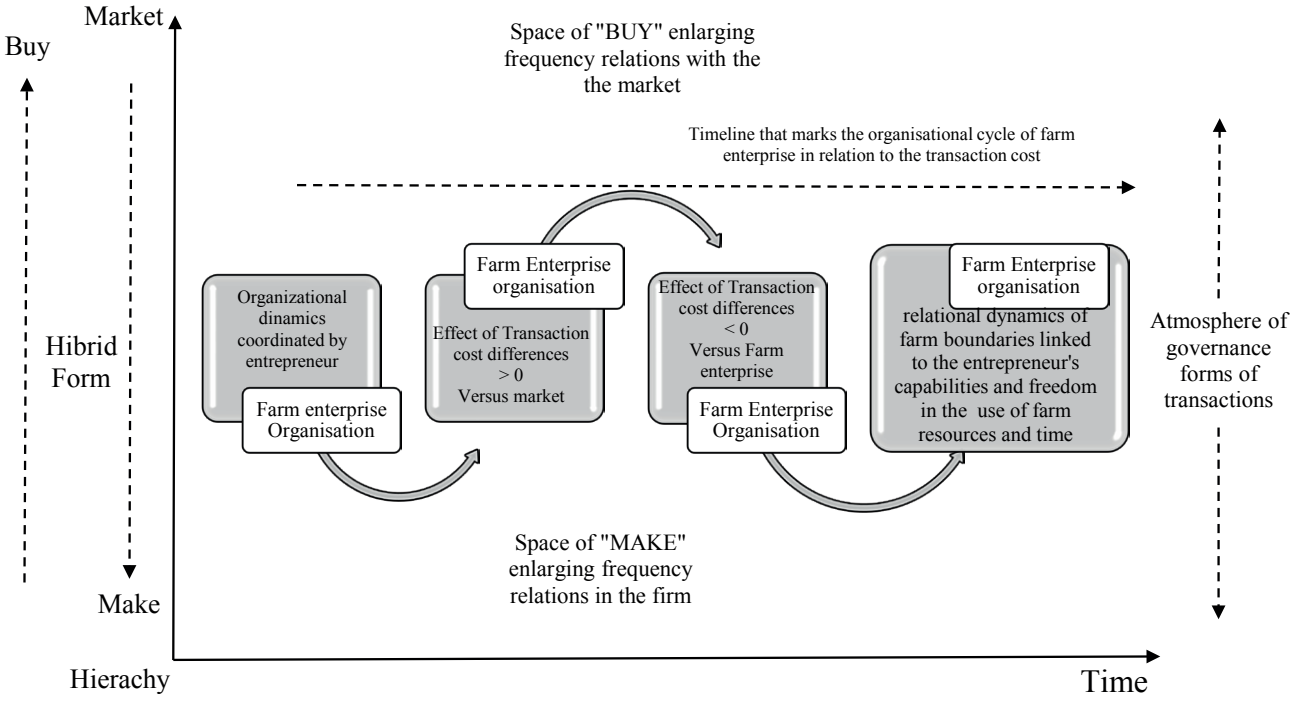
TC: Transaction Costs
AS: Specific Assets: the higher the specificity, the higher the transaction costs
F: Exchange frequency: the lower the frequency the higher the transaction costs
U: Uncertainty: higher levels of uncertainty translate in higher transaction costs

The possibility of a transaction and its form of governance depend on the assessment of the expected costs, which combine differently over time, change at different speeds and are also dependent on other transactions. This generates a dynamic approach of continuous readjustment of the forms of governance and their recursive evolution over time gives rise to the organisational innovation cycle of the enterprise (Saccomandi, 1998). Figure 1, below, shows how, depending on changes in the market environment, technology and transaction costs, the enterprise can adapt by modifying its forms of governance, moving from the market to the enterprise and vice versa, passing through hybrid forms.

The choice of one form over the other is illustrated by Williamson (1985) through an S-function that depends on the degree of resource specificity k (or AS – as mentioned above). The S-function is obtained as the sum of the differences, between vertical integration (hierarchy) and market:

$$S(k) = \Delta CT(k) + \Delta CP(k) \quad (2)$$

Figure 1. Organisational Innovation cycle of firm.



In this equation ΔCT(k) represents the difference between *transaction costs* in the vertical integration condition (hierarchy) and those in the market condition[4]. ΔCP(k) represents the difference between *production costs* in the vertical integration condition and those in the market condition[5]. The presented function (2) defines the make-or-buy rule. The function can take on values higher than, less than or equal to zero. With values of S(k) > 0 the market is more efficient than the enterprise. Conversely, with S(k) <0 the enterprise becomes the more efficient solution (Nisticò, 2009: 362)[6]. In the first case we have the preferred buy condition, while in the second case we have the preferred make condition. This rule expresses the dynamic nature, over time, of the forms of governance of exchanges and the relative changes in market conditions and transaction costs that condition the boundaries of the firm and the use of the market with respect to the exchanges involved.

The optimisation of the choice between make and buy is subject to various constraints. Some of these are of an objective nature, i.e. linked to the institutional context, public and private, within which the enterprise operates, and to the capacity of these external actors to provide the farm with services. Others are of a more subjective nature and are linked to the entrepreneur's capacities and propensity to risk. The first type of constraint resides mainly in the incompleteness of the information to which the entrepreneur has access (Stigler, 1961). The second type of constraint is represented by the entrepreneur's inability to scrutinize all possible alternatives (Simon, 1947).

2.2. Agency and property rights

Following Emirbayer and Mische (1998), I consider agency "*as a temporally embedded process of social engagement, informed by the past (in its habitual aspect), but also oriented towards the future (as a capacity to imagine alternative possibilities) and towards the present (as a capacity to contextualise past habits and future projects within the contingencies of the moment)* (p. 963).

Therefore, agency implies the capacity to build on the past and to shape the future through the organization and coordination of the strategic assets of the enterprise. This capacity might be embodied in the farmer who is controlling the farm's assets, particularly those over which he (or she) holds the ownership or residual rights. However, this same capacity might be strongly conditioned by, and even shift towards external agencies (Ploeg and Marsden, 2008).

In this "temporally embedded process" the present is the outcome of previous choices, just as it builds (partly or completely) on the resources created in the past. Past and present are also linked through (collective) memory, experience, learning, critical judgements, the strength of routine and, most possibly, by path-dependency. At the same time, the present always contains several possibilities for developing different trajectories to construct the future. Here, the choices (the agency) of the farmer are, again, strategic. In short: it is through agency that past, present and future are interconnected and, in doing so, agency itself might also get strengthened. This highlights the ability and potential for its transfer along generations or between different subjects safeguarding the firm's assets.

According to Kabeer (1999) "*enhanced agency can [also] be a mechanism for securing resources [….]. Furthermore, it is helpful to [consider] that agency can be articulated through decision-making, bargaining and negotiation, deception and manipulation, subversion and resistance.* (In Farnworth *et al*., 2020: 275)".

Agency clearly unfolds as a multilevel activity. It shifts from the farm to the context in which it operates, giving rise to rural networks in which different actors create temporal and relational fields: multiple and overlapping ways of ordering time and space. Thus, the different actors engage in, and actively contribute to, several and probably overlapping networks.

Agency is strongly linked to the concept of property rights over resources, i.e. the expression of power to decide on the use of resources (or renegotiate residual rights over time) or to exclude others from their use (Hart and Moore, 1990; Grossman and Hart, 1986).

This feature is especially crucial in agriculture where the farmer holds rights over at least two strategic resources: land and labour – his own labour as well as the labour of family members. These rights can be limited by external effects such as investments, policies, regulations, institutions (market, state, etc.). For example, in the case of specific investments, recourse to bank credit entails a limitation of the right of ownership over the use of resources insofar as the choice of what to do is strongly conditioned by the need to repay the debt created and by the specificity of the investments made, the non-use of which would generate sunk costs. In the same way, adherence to agro-environmental policies[7]

[4] ΔCT(k) = TC in vertical integration – TC in the Market.
[5] ΔCP(k) = CP in vertical integration – CP in the market.
[6] For more details and a graphic representation of the model, see Williamson (1985: 182-188).

[7] Agro-climatic-environmental policies have been established within the framework of rural development financed by the European Structural Funds (European Agricultural Fund for Rural Development-EAFRD).

commits entrepreneurs to specific activities and investments aimed at the policies' objectives generating a lock-in effect in which the policy maker influences entrepreneurial choices. Both sunk costs and external prescription result in incomplete contractual forms that generate high transaction costs. The presence of agency and control over resource property rights (or residual rights in the case of incomplete contracts), allow the entrepreneur to autonomously coordinate and organise resource use and minimise transaction costs. The implementation of economies of scope and/or network economies, as well as the orientation towards multifunctionality and multi-product enterprises fit well in this pattern. It is important to add that making these choices should in no way be seen as an isolated activity of atomized individuals. Making such choices implies involving other actors, sharing experiences, etc. In this respect Darré (1999; 2006) referred to *Groupement Professionnel Local* (GPLs). But again: external condition and prescription is equally possible. In this context the TATE[8] concept developed by Benvenuti (1975) still is most relevant.

2.3. Networking

The activity of organizing, coordinating and developing the productive resources of a farm lead the entrepreneur to create a series of relations and alliances that can be horizontal and/or vertical: horizontal when they concern relations between farms; vertical when they concern relations between the farm and other economic actors in the chain, including consumers (Ventura, 2001). Both horizontal and vertical relations exist within institutional frameworks (and these might strengthen or reduce local specificity). That is, they are themselves part of the construction of the broader social relations that regulate and characterise the territorial context in which the enterprise operates. According to Ventura (2001), both horizontal and vertical relations have two dimensions: the repetitiveness of relations and the exchange of information and knowledge that takes place informally and without specific costs.

The process of transmitting information and experience allows the construction of common knowledge and the repetitiveness of the relationships means that opportunistic behaviour, that would lead to their termination, is prevented. Thus, reputation is built and becomes a key element for the continuity of the relationship over time. In this respect, one must consider that rural areas have become places of both production and consumption (Marsden *et al*., 1993). Consequently, different networks emerge[9], the functions of which are gradually differentiated and segmented, especially in relation to flows of capital, information, people, and goods (Murdoch, 2006). As argued before, each network consistently connects past, present and future in a particular way that often contrasts sharply with that of other networks (Ploeg, 2003: 6). Taken together, these different networks compose a specific (socio-economic) constellation that might be understood as a hybrid pattern (Milone and Ventura, 2010) capable of building coherence between the dimensions that contribute to the sustainable governance of complexity in rural areas. In the literature such a pattern is mostly referred to as the *rural web* (Ploeg and Marsden, 2008; Kanemasu *et al*., 2010; Horlings and Marsden, 2010; Messely *et al*., 2013; Guinjoan *et al*., 2016; Rashid *et al*., 2020; Adai *et al*., 2023). A well-functioning rural web can result in locally specific and promising solutions for the maintenance and development of rural areas and their economies and an enhanced quality of life and attractiveness of these same rural areas.

Being part of a rural web can become an important mechanism for survival. The web can become a space where material and immaterial resources are exchanged (Cook and Whitmeyer, 2003). Being part of a rural web, can help improve one's position in terms of gaining autonomy or reducing dependence on others for access to resources. Within, and through, this rural web, the agricultural entrepreneur builds and enlarges his or her cognitive capacities, skills and autonomy. That is, he or she uses the web to build identity, space for manoeuvre, and specific alliances – and by doing so he or she contributes to changing the environment. In short: the network concept underpins and highlights actors' capacity to coordinate and organise farm resources, create alliances outside the farm, and minimise transaction costs.

These policies provide for multi-annual contracts (up to a maximum of 5 years) with agro-climatic-environmental commitments aimed at strengthening and safeguarding the environment and biodiversity and their resilience to ongoing climate change. However, the contracts are, by nature, incomplete as it is never possible to foresee all the conditions and they are also subject to controls aimed at ascertaining that farmers keep their commitments, thus limiting their right to use their own resources. Monitoring and enforcement imply high transaction costs, while the incentives lend themselves to opportunistic behaviour on the part of farmers.

[8] TATE is an acronym for the Technological Administrative Task Environment. It refers to the technological and administrative context of the farm, which is constituted by a series of entities. The TATE represents the professionally relevant environment for the farmer. Such environment provides the farmer with a pre-defined role. The role refers to the complex of behaviours or functions that are considered socially and technically appropriate for a person that occupies a certain position within a certain social context (Benvenuti, 1975).

[9] For a more detailed discussion of the different types of networks see Ventura and Milone, 2010.

I will further illustrate these points through a case study (below).

3. THE SHEPHERDS OF ABRUZZO

More than 25 years ago, together with Flaminia Ventura, I started to document the developmental trajectory of an emblematic experience in the Abruzzo: the farms of Gregorio and Nunzio which, had already been established for 25 years. The overall 50 year period offers an amazing insight into the dynamics of interlinking past, present and future through agency and network development. At the same time their particular experience is somewhat enigmatic: it shows how a prosperous and self-propelling process of development is possible even under harsh and marginal conditions.

3.1. The past

In 1975, when Gregorio started his farm, his only certainty was that he did not want to follow his father's decision to go to the seminary in order to become a priest. His scant savings only allowed him to buy a small flock of 200 sheep. Apart from that he could count on the knowledge of another shepherd, Nunzio, on how to organize herding in communal pasture lands. At that time building a new farm in the mountains of the Abruzzo National Park in Scanno seemed to be as impossible as heroic. Yet his dream of living in, and working with, nature drove him forward. Regardless of everything, in the first 25 years Gregorio succeeded in increasing his number of sheep, building the required farm structures (stables, shelters, and small units for processing meat and milk) and buying some additional land. In 2000, the farm had more than 1,500 dairy and meat sheep and offered full-time employment for 5 family members and other full-time workers. The farm was self-provisioning in terms of feed, fodder and the reproduction of the animals. Step-by-step its development had avoided taking on large debts, whilst contacts with small and medium enterprises for agricultural machinery assisted in developing small-scale on-farm units for processing cheese and meat. Thus, networking helped to construct additional autonomy. In turn, the on-farm production of cheese triggered the question on how to sell it in the best possible way.

The year 2000 represented, in a way, an important turning point. After his graduation from secondary school, his 18-year-old nephew Dino decided to take the entrepreneurial route with his uncle Gregorio. This, over time, led to important changes in the farm's organizational structure and boundaries. The option of associating with a cooperative for large-scale cheese production was avoided – even though considerable public money was available. Instead, Gregorio and Dino decided to further develop their own small-scale processing units and to extend the basket of products. But it turned out to be increasingly difficult to sell these products in the local markets.

Thus, they faced a context characterized by:

1. low number of farms combined with low numbers of consumers;
2. a high specificity of resources and products;
3. an overly wide range of products and market conditions that were unsuitable for allocating these products correctly;
4. high costs to formally certificate the products in order to assure consumers of their quality, origin and genuine nature.

As a consequence (and in line with Williamson's theory), the transaction costs linked with using this (local) market were far too high and this spurred Gregorio to explore alternative solutions aimed at minimizing the transaction cost. Interestingly, the solution was found in establishing link with *other* local markets characterized by other preferences and possibilities. Gregorio undertook long journeys to various Italian *piazze* in Northern and Central Italy (the *piazza* is the physical, and traditional, square where products are directly exchanged at least once a week). In these squares, especially in the North, Gregorio encountered consumers seeking high quality and distinction and, at the same time, willing to pay good prices. Gregorio increasingly succeeded in meeting these expectations and to find new markets for his ever-expanding product range. Thus, he created reputation and therefore no longer needed formal certification. The costs of reaching these squares were minimized through the use of family labour and, especially, through an alliance with Nunzio with whom transport and marketing costs were shared. Over time, Gregorio's name became synonymous with quality, sustainability, fairness and craftmanship. Thanks to this, the farm diversified further towards services with the opening of agro-touristic facilities and a farm shop. Gregorio also created a local network of shepherds, which over time expanded with the entry of young people who further enlarged the range of products brought to the market.

Even by the year 2000 the economic relevance of the chosen trajectory turned out to be quite promising[10]:

[10] For a complete discussion and in-depth analysis of values, please refer to the PhD book (2004) and publication Agriculture in Transition (Milone, 2009).

1. The quantity of milk per ewe was only 25% of the milk yield obtained in specialized, market-oriented farms, while the number of family labour hours per ewe was higher.
2. On the other hand, feeding costs were lower due to the use of feed and pastures on the farm.
3. Taken together this resulted in a revenue per ewe that was 42% higher than the one obtained in sheep farms specialized only in milk production.
4. The final profit per ewe was more than double that of specialized dairy and market-oriented farms (further details are presented in Milone, 2009).

3.2. The present

Today Gregorio is no longer with us, but his story continues – due to the constructed specificity and the many networks in which the farm is embedded. Dino has continued to operate according to the script build into the farm. In terms of the number of animals the farm remained virtually unchanged with 1,500 sheep. Only the number of cows has been increased slightly: the herd now numbers 40 and they are well supported by the farm's land and pastures. It has become a healthy and well-functioning family farm where the principles of product quality, biodiversity and craft have not only remained intact but, have been actively developed. Over the years, investments have been made to improve product quality and animal welfare. The stables have been enlarged to provide more space for the animals. A new unit was built for processing milk (cheese and mozzarella) and meat (both fresh and processed). The family labour force used in the various farm activities now numbers six full-time equivalents (fte) – that is one more than in 2000. In addition, 3 more family units are involved on part-time basis. The number of non-family workers increased by fte. A new breed of sheep was introduced over the years – this new breed is very apt for pasturing but gives a somewhat higher yield per ewe (now at 35% of yield levels of the specialized and large-scale sheep farms that strongly push yields upwards by using high doses of concentrates). Cheese production from cow's milk increased due to the increase in the number of cattle of the Pezzata Rossa breed, a breed that has a good milk yield with a high content of fat and protein. But here as well the yield per milking is far lower than in specialized dairy farms. In spite of this, however, *revenues* per animal remain well above those recorded for specialized farms. The diet remains almost exclusively based on pastures and mountain hay. The only concentrates used are produced on the farm itself (from cereals). The orientation of farm practices is organic.

The farm's product range has increased: there are now about 40 types of products available as well as services such as home-deliveries, restaurant and agro-tourism. The markets have increased whilst safeguarding the historical ones. The products are all sold *directly* by the farm to (1) specialized shops in Rome and along the Adriatic coast, (2) high quality restaurants with distinguished chefs, (3) in the farm shop and (4) at trade fairs (*piazze*) in several municipalities in Northern, Central and Southern Italy. In 2021, Dino decided to increase prices by 25 per cent as a result of strong increases in both raw materials and energy products. This increase did not reduce sales at all. Consumers and customers, including historic ones, continued to buy – they understood and recognized Dino's need in face of increased costs, especially energy, and to safeguard the continuity of the farm. The bond of trust based on reputation thus helped to maintain and even strengthen the networks that link producers, clients and consumers. This allowed for an increased turnover and more liquidity – thus enabling the entrepreneur to maintain control over organizational choices.

The following table compares the productive and economic results realized in 2000 and 2023 – it synthesizes the trajectory followed by Dino who built on the earlier work of Gregorio:

1. Revenues per head, in the case of both sheep and cows, have been increased. The increases are linked to two elements. First, the sale prices of processed products that allow for a higher remuneration per litre of milk (more than double the market price for non-processed milk). Second, the slow but persistent increase in quantities of milk produced per animal; these remain far below the level of realized in intensive farming, but still for a higher milk quality.
2. The ratio of family and non-family labour remained unchanged but the total amount of employed labour increased.
3. The overall costs per animal increased by about 25%. This is especially due to the costs of meat processing (which involves considerable energy use).
4. Despite these cost increases, the final profit increased – both for sheep and cows.

It is interesting to note that in 2021 the average specialised dairy cow herd in the North of Italy reported a loss of EUR 6.96/100 kg of milk, despite the fact that the yield per head had increased over the past years by 5% (Menghi and Ruffato, 2021). This equals a loss per animal of 708 Euro per head. This is a remarkable difference compared to the profit made per cow on Dino's farm, which stands at + 1,319 euro. This difference con-

Table 1. Comparison of company results 2000-2023.

	2000	2023	Difference
Full-time family work unit	5.00	6.00	1.00
Part-time family work units	1.00	3.00	2.00
Non-family work units	5.00	9.00	4.00
n. of sheep	1,500	1,500	-
n. of cows	6	40	34
Milk per ewe (kg)	50.00	75.00	25.00
Milk per cow (kg)	2,500.00	3,000.00	500.00
Revenue per ewe (euro)	296.00	397.50	101.50
Revenue per cow (euro)	4,200.00	6,200.00	2,000.00
Costs per ewe (euro)	275.60	360.40	84.80
Costs per cow (euro)	3,561.30	4,881.00	1,319.70
Profit per ewe (euro)	20.40	37.10	16.70
Profit per cow	638.00	1,319.00	681.00
no. of products	15.00	40.00	25.00

Source: elaboration on farm accounting data.

vincingly demonstrates, I think, the impact of agency, networking, reputation and the associated reduction of transaction costs. Together these elements made for a smooth trajectory that aligned past and present and carries considerable promise for the future.

3.3. The future: elements that drive success

In 2023, the farm showed further increases in complexity in terms of production range, product qualities and activities. More concern for animal welfare enlarged complexity even further. According to neo-institutional theory, this increased complexity will translate into increased transaction costs This is due to:

1. the farm being grounded on asset specificity and simultaneously having a wide range of products that require heavy investments in terms of communication, certification and marketing;
2. outputs being limited to low trade volumes and frequencies;
3. the presence of information asymmetry which brings uncertainty.

These elements have led the enterprise to pursue alternative avenues in which 'making' dominates over 'buying'. This 'making' translates into the construction and reproduction of an autonomous resource base. It equally translates into the development of networks that sustain suitable nested markets that make prices meet needs. There is a rich spectrum of such markets: on-farm restauration, home-delivery, direct sales to specialised shops and gourmet restaurants, farm shop, on-line sales and trade fair events in Italian municipalities. These are all hybrid forms of exchange in which the costs mentioned above are minimised through (1) the reputation built by Gregorio and further developed by Dino and (2) the availability of family labour, which also allows for flexibility, if needed. In addition (3) the multi-product farm allows the entrepreneur to implement strategies in the different markets that balance the product types and prices. This maintains room for managing different possibilities and thus allows for strategic decision making. Equally, (4) operating in these nested markets generates a mutual relation that guarantees protection and equally distributed levels of satisfaction.

The uniting element here is the agency developed and represented by Gregorio and which was, later on, transferred 'free of charge' to Dino. Dino did not 'buy' agency. His agency was 'made' through his cooperation with Gregorio, that is in working together within the farm, going together to the different markets, learning together, experimenting together, and so on and so forth. This allowed Dino, at the time of Gregorio's death, to take over at the helm of the company and continue without suffering any setbacks.

In this temporally embedded process of social engagement it was not only the capacity to coordinate and organise farm assets that was actively transferred. The involvement in local and extra-local networks and the associated reputation were also transferred. A multilevel and multidimensional process is activated, trough the time and generations, by creating coherence between the different dimensions and levels. This represents the emergence of a rural web.

Thus, a strong resource base (or huge amount of assets) was constructed that, in strict economic terms, would be unthinkable. On turn, this ample resource base (that definitely includes both agency and networks) probably is the best possible starting point for moving to the future.

4. DISCUSSION AND CONCLUSIONS

Recent decades have seen a worrying trend of increasing disconnections between the agricultural system on the one hand, and the environment and food provisioning on the other. These disconnections are at the heart of the 'agrarian question' of our time. They are due to many factors: the many failures brought by the 'modernisation' of agricultural processes of production; the erosion of entrepreneurship (through external

prescription and sanctioning[11]); and the strong impact of modern solutions (intensification, use of genetic engineering and big data). It is increasingly suggested that the way out of this 'agrarian question' will be to bid *adieu* to agriculture as a land-related production system and replace it by advanced food production systems that require less space and have lower environmental impacts.

At the same time there is a strong countermovement. There are new rural movements fighting to defend property and labour rights. These movements are strongly rooted in the (often forgotten or neglected) world of stubborn people defending the dignity of their work, family and capital. It is a world that struggles daily to obtain quality products and food to offer to citizens/consumers who are increasingly interested in the authenticity and environmental sustainability of food production. A world that also constructs new exchange relationships based on aspects of reciprocity, reputation and the redistribution of wealth, circumventing the principles of profit maximisation and replacing them with those of mutual satisfaction.

It is difficult to properly analyse the import of these two conflicting trends in today's modern world. Perhaps, what is critically missing is a more widespread use of *rural studies* as outlined by van der Ploeg in his article in this special issue: a new, multidisciplinary analytical framework, capable of going deep into the complexities of exchange relationships and giving value and economic meaning to the farm enterprise as multi-facetted institution. The farm enterprise is a living, dynamic, and well-coordinated constellation of different factors shaped over time according to the knowledge, experience and needs of the actors involved. A system of relationships, internal and external, that aim to sustainably produce goods and services, whilst remunerating the resources used. Such a remuneration does not include the financial dimension only, but also regards values as diverse as personal satisfaction, pride, dignity, continuity of work, animal health and the sustainability of resources. As Gregorio explained: "*The sheep respond to the care you give them. If you treat them well, without stress and with good stables and feeding conditions then you get milk in return in the right quantity and quality. If you treat them badly you get little milk, poor quality and in time their death*". Would it ever be possible to put a strictly *financial* value on this? What value can be attached to the stubbornness of farmers who continue to work and defend their farm-assets even in the absence of profit? What economic explanation can be given to a consumer who accepts a 25 per cent increase in the prices of products he normally buys without complaining (as occurred with the consumers in Dino's supply network)? The multiple meanings and many expressions of *value* are to be re-explored in order to understand the processes that currently shape the countryside. This is why *rural studies* are badly needed.

The rich work of Flaminia Ventura convincingly shows that there is no creation of value, nor any substantial development without exchange relationships that involve, apart from products and services, also knowledge, values, and customs. These relationships involve different actors with different cultures, roles, blocks of knowledge and a wide array of experiences. This brings subjectivity into the analysis – meaning that the quality of the subjects involved determines the success of the exchange and its development over time.

Agricultural entrepreneurs play a key role in the construction and coordination of relations within and outside the enterprise. I am well aware of the trend towards an erosion of this entrepreneurship – a kind of 'proletarianisation' – that is linked with spurred scale increases, technology-driven intensification and high levels of indebtedness (in short: the 'industrialization' of agriculture). This trend threatens entrepreneurship, whilst it opens the door to speculative free-rider behaviour that aims solely at obtaining extra profits (and/or public money) in the short term and abandoning, when the extra profits run out, the farm enterprise and the territory. The territory is drained to death, or there is ecological disaster and/or the enterprises go bankrupt. By contrast, real entrepreneurs such as Gregorio and Dino represent and create wealth for the territory. They themselves are resources that contribute to the identity, well-being, and promising prospects for the future of the territory.

New spaces for policy implications and research can be opened. Policy instruments should be more focused on human capital and on the preservation of labour and knowledge contained in it. In this respect the rural web, as methodological device and as a tool, can play an important role. Leader approach and new cooperation interventions in CAP policy 2023-2027 can take into consideration rural web concept but also further develop the agency and networking aspects already considered in it. Rural Studies can pave the way for new research that highlights the presence, value and potential of human capital and the relationships it implies – thus shifting the concepts of sustainability and competitiveness from the farm to the territory.

[11] This erosion was theorised by Benvenuti who developed the TATE concept (see note 12). Current versions of such a TATE are represented e.g. by agro-environmental schemes (Pillar 2 of the CAP), Eco-Scheme (Pillar 1), regulatory schemes of agro-industries, financial regulations imposed by banks, etc.

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ORCID
SS: 0000-0002-4353-6732
AC: 0000-0001-7800-4800

The Multidisciplinary Approach of Rural Studies - Research article

Towards more and better markets for farmers: The case of family Farming Agri-processing in Rio Grande Do Sul, Brazil

Sergio Schneider[1,*], Alexander Cenci[2]

[1] *Federal University of Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil*
[2] *Official at the State Secretary of Agriculture, Livestock and Rural Development of Rio Grande do Sul, Brazil*
*Corresponding author. E-mail: schneide@ufrgs.br

Abstract. Recent studies on markets and their role in development processes have highlighted the crucial importance of market access as well as of power relations. In this article we argue that it is necessary to take a step forward regarding the notion that markets are collective action devices that can be mobilised in favour of the actors who build and govern them. We support the hypothesis that there are multiple markets that coexist and establish disputes, which lead to the emergence of different types of markets. At the same time, we will show that markets are structured differently, depending on the context in which agents participate in commerce. The article draws on empirical data on market diversification by family farming's agri-enterprises in the State of Rio Grande do Sul, Brazil. Findings highlight the kinds of markets that are most desirable or recommended for family agri-enterprises and what kind of policies would better benefit such rural enterprises.

Keywords: market diversification, social construction, family farmers, South Brazil.
JEL codes: Q13.

HIGHLIGHTS

- There are increasingly precise and forceful diagnoses of how markets are structured and work under capitalism.
- Beyond being socially constructed, markets are structured differently in different contexts and social spaces.
- A market types based on characterization of the different marketing channels that are created and used to transact products and goods by suppliers is needed. The type will make it possible to describe the market structures.
- To understand the structure and functioning of markets, it is essential to understand and analyse how the process of social reproduction of exchange relations takes place in certain social and economic contexts.

1. INTRODUCTION

Recent studies on markets and their role in development processes have underscored the crucial importance of two aspects: the challenge of accessing markets and power relations. The issue of access to markets is related to the subordinate role of sellers and buyers in relation to large product distribution chains, whether they are digital commerce platforms, supermarkets or distribution companies operating in the agri-food sector. The problem with access to markets splits into hindrances related to asymmetries of power within the markets. In a globalised world, neither sellers nor buyers are content with the reduction in their negotiating capacity. After all, a promise of capitalism, the one that competition between sellers and buyers would be rewarded through comparative and competitive advantages to the most efficient agents, has failed spectacularly. Despite efforts to achieve allocative efficiency, throughout the process many agents realize that they live and fight in an environment full of imperfections and asymmetries, in which the winners are not always those who invest the most effort.

In recent decades, economic sociology studies have been particularly assertive in demonstrating the correctness of Karl Polanyi's (2000) assertions about the distorted functioning of markets in societies that allow their self-regulation. There are, today, precise and conclusive diagnoses on how markets are structured and function under capitalism. There is a consensus that commercial exchange relationships are always socially constructed and, therefore, subject to imperfections inherent to human action, such as self-interest, opportunism, falsehood and deception. Therefore, markets' functioning, much like individuals in society, requires rules and regulation in addition to surveillance mechanisms that anticipate and curb distortions. Thus, the understanding that markets are socially constructed by agents who participate in their architecture and require regulatory institutions has become consensual.

The importance of discussing markets in the current context of rural development is also evident in the work by Ventura *et al.* (2010: 321). According to the authors, new emerging markets have gained centrality in debates due to the changes that have occurred in the political economy of global agriculture. It is through these markets that agriculture begins to respond to new social needs and, thus, the establishment and functioning of food and agricultural markets becomes the main object of socio-political struggles.

However, some gaps remain in the studies which require better understanding, for example, the issue of diversity and heterogeneity of markets. The recognition that markets are social constructions is important, but it says little about how they work in practice, how the actors who participate in their construction are organized, what power relations are like between agents and what the game of who wins and who loses is like in these relationships. Furthermore, it is reasonable to assume that there is no homogeneity in commercial exchanges and that they may vary according to criteria of size, scale and intensity. Therefore, we need to deepen our understanding about the diversity of markets.

In this article we will argue that it is necessary to take a step further regarding the notion that markets are collective action devices that can be mobilized in favour of agents. We intend to show that, in addition to being socially constructed, markets are structured differently in different contexts and social spaces. Basically, we will argue that there is a diversity of markets which corresponds to their ways of structuring and functioning that depend on the context in which agents participate in commerce.

Our analytical hypothesis draws on the idea that there are multiple coexisting markets, which dispute and struggle with each other, leading to the emergence of different types of markets. In view of this, we propose a typology of markets based on characterization of the different marketing channels that are created and used by suppliers to transact products. This typology will therefore enable us to describe the structure of markets.

In this sense, to understand this specificity, we will analyse the process of market diversification taking family farming's agri-enterprises located in the State of Rio Grande do Sul, southern Brazil, as an empirical case. Family agri-enterprises are small enterprises that transform, benefit, process and commercialize agri-food raw materials such as dairy products, meat, fruits, sugar cane, among others. We intend to show how they are structured and what markets are used to sell these family farming products, by identifying the channels they use. Data presented demonstrate that many production units sell their products through various marketing channels and that the diversity of forms of this marketing is based on different mechanisms for control and regulation, some tacit and informal, others manifest and formal.

In the conclusions, we specify which markets are most desirable or recommended for farmers. Contrary to what conventional and mainstream views about markets claim, access to different marketing channels and diversification of buyers' portfolios can represent an important advantage for sellers. After all, we argue, the greater the choices and sales possibilities, the greater the margin of manoeuvre and "market power", understood as the capacity of an agency to cope with the objective cir-

cumstances faced. In short, we will support the idea that farmers need more and better markets.

2. INSTITUTIONS AND THE SOCIAL CONSTRUCTION OF FAMILY FARMING MARKETS

Institutions, as social phenomena that condition human behaviour, have instigated the work of various authors from different theoretical perspectives. Geoffrey Hodgson (1994), for example, when discussing the relationship between the economy and institutions, highlighted the importance of the environment in which the individual is embedded. However, Hodgson notes that the institutional environment does not completely determine what actors do or decide to do. In studies on markets as institutions, the author highlights that exchanges of goods are facilitated and structured by these institutions – markets are understood as organized and institutionalized exchanges[1]. For Hodgson, beyond issues related to conveying information on products' prices and quantities, market institutions contribute to conditioning the acts and dispositions of agents, influencing their choices, preferences and prices.

> In a subtle way, through the functioning of market conventions, routines and rules, the individual in the market is, to a certain extent, "coerced" into a certain type of behaviour. Therefore, and precisely contrary to what many orthodox economists claim, the market can never be completely "free" in the classical liberal sense and does not necessarily represent the epitome of freedom for the individual (Hodgson, 1994: 179-180, authors' translation).

Hodgson (1994) also states that issues such as price and product quality are partially legitimized by the expectations and legitimizing and informative functions of institutions, which differ from those of the "equilibrium price" proposed by neoclassical theory. Thus, when discussing prices in the institutional context, Hodgson (2003: 898) claims that this mechanism depends, to a certain extent, on ideas and habits and that a theory of prices must therefore be "a theory of ideas, expectations, habits and institutions, involving routines and processes of valuation."

For Milone and Ventura (2016) markets can be conceived as an institution holding particular social norms that constitute the basis for enabling exchange relations, since such norms lead to the definition, for example, of products' characteristics and forms of use, as well as of consumer preferences. The authors point out that today, especially through the neo-institutional approach, the market is no longer considered a pure and abstract entity, free from the influence of commercial agents. Thus, different economic, political and social factors interact to determine the outcome of a transaction.

In the same sense, Cassol and Schneider (2022), point out that "*markets are social institutions, to the extent that they obey [or are embedded in] local characteristics of food production, marketing, handling and consumption, which are oriented by and based on the values shared by the actors who work in its construction*" (p. 5, authors' translation) For the authors, "*economic exchange and commercial transactions are guided and based not only on criteria of price, quantity and liquidity, but also on the particular values and norms that govern the interactions of those who participate in such exchanges.*" (p. 5, authors' translation)

Mark Granovetter (2007) initially focused on networks of interpersonal relationships, making it possible to delve deeper into how behaviours and institutions are affected by social relationships. According to Granovetter, the utilitarian tradition, originated from classical and neoclassical economics, "*presupposes rational and self-interested behaviour minimally affected by social relations, thus invoking an idealized state not far from that of these thought experiments*" (p. 3, authors' translation). In contrast to this view, the author proposes an approach based on "embeddedness", according to which "*the behaviours and institutions to be analysed are so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding*" (p. 3, authors' translation).

Regarding the context of social embeddedness of economic behaviour, Cassol and Schneider (2022,) suggest that the analysis of agri-food systems should not be limited to the social networks approach, as "*previously to entering a network (connecting interpersonally with other actors), agents already share certain contextual cultural values that guide their choices*" (p. 5, authors' translation). According to the authors, "it is the choices stemming from values that shapes social interaction and business networks and defines the positions of actors in the field."

The institutional context involving social construction of markets is also echoed in Neil Fligstein (1996). Viewing markets as a political field, Fligstein argues that a first issue to be raised for developing a sociology of markets should be the theoretical proposition of the "*social institutions necessary as preconditions to the existence of such markets*" (p. 658). The author suggests that institutions – such as property rights, governance struc-

[1] In his work, Hodgson (1994) emphasizes market institutions that help regulate and establish consensus on prices, as well as communicate information about products, prices and quantities to potential buyers and sellers.

tures, conceptions of control and rules of exchange – are essential for enabling actors to organize themselves in the markets to compete, cooperate and exchange. The author justifies the importance of state participation, considering that organizations, groups and institutions that make up the state in modern capitalist societies claim the formulation and enforcement of rules that govern economic interaction in a given geographic area.

The interweaving of social relations in the economic system, proposed by Karl Polanyi (2000), is another aspect to be considered in the institutional approach to social construction of markets. Garcia-Parpet (2021: 124) notes that the research work undertaken by Polanyi on the genesis of the economy and of the markets system has marked the thought of contemporary social sciences. The author points that Polanyi's work on the origins of economic institutions showed that the economy does not exist separately as a system in those social organizations, but rather it is embedded in other institutions, such as kinship, religion, political system, among others.

For Polanyi, under very specific conditions, the self-regulating market does not fail to take place. The dominance of the economic system by markets has overwhelming effects on the entire organization of society, since society comes to exist as an extension of markets. Thus, according to Polanyi, "instead of the economy being embedded in social relations, it is social relations that are embedded in the economic system, and the other social domains become subordinate to market movements" (Garcia-Parpet, 2021: 127).

Polanyi (2000: 98) uses the terms double movement and counter-movements, stating that "while on the one hand markets spread all over the face of the globe and the amount of goods involved grew to unbelievable dimensions, on the other hand a network of measures and policies was integrated into powerful institutions designed to check the action of the market related to labour, land, and money." For the author, human society could have been annihilated if it were not for the protective counter-movements that mitigated the action of the self-destructive market mechanism, defined by the author as a "satanic mill".

Schneider and Escher (2011), discussing Polanyi's contribution to sociology of rural development, argue that for the Polanyian perspective the central problem is the subordination of human society and its alienation through the "logic of the market", what ultimately undermines the ability to shape the economy according to social objectives through politics.

Discussions on family farming markets are also enriched by the nested markets approach, also referred to as territorial markets or embedded markets (Polman *et al.*, 2010; Ploeg, 2016). The latter author defines these markets as "markets that are embedded within broader markets, [forming] part of large markets, but that differ from these latter with regard to their dynamics, interrelations, forms of governance, price differentials, mechanisms of distribution and overall impact." (Ploeg, 2016: 23)[2].

In this perspective, in a recent work, Milone and Ventura (2024: 6) say that nested markets depend crucially on the social relations in which they are embedded, highlighting aspects such as trust, reciprocity and reputation. For the authors, exchanges are a consequence of actors' behaviour patterns in relation to their social and natural environment – a behaviour that is strongly rooted in the territory. In the case of nested markets, the authors highlight sustainable practices that incorporate elements of solidarity, generated through exchanges between producers and consumers linked by common and shared goals and objectives.

In turn, Schneider (2016) suggests a typology that seeks to contemplate the understanding of markets as a locus, as a principle of social ordering and as a social construction, stratifying four types of markets: proximity markets; territorial markets; conventional markets; public and institutional markets. According to the author, proximity markets are linked to the local context and exchange relations are based on reciprocity and mutual knowledge, so that trust and friendship dominate the regulation of established social relations. Territorial markets have a regional scope and are characterized by a greater quantity of production that is predominantly intended for sale. The forms of regulation are based on both trust and reputation, as well as on indicators of origin and price. Conventional markets are characterized by a competitive structure and are guided by price and contracts between buyers and sellers, in addition to the fact that the spatial scope is national and above all global. In turn, public and institutional markets are those that presuppose sales to the public or governmental authorities through institutional purchasing

[2] The authors consider the propositions presented by Polanyi to be central for three reasons: First, because his ideas express the crucial role of social regulation on the economy and the role of institutions as mediators between socioeconomic structures and individuals as social actors. Secondly, because, in the current context, transnational companies and their articulations of expansion constitute a hegemonic force in the control of agri-food systems and can be deemed as the equivalent of the "satanic mill" of "self-regulated" and destructive capitalism described by Polanyi, operating as true "Food Empires". Finally, because in rural areas, especially in Brazil (but not only) a myriad of forms of social and economic ordering and interaction exist, which are established according to principles studied by Polanyi, such as reciprocity and redistribution, and generally subordinate and little known. These rural establishments represent the basis for devising "another way" for rural development (Schneider, Escher, 2011: 185) .

schemes. In this sense, these are markets that are heavily regulated by laws and contracts that do not prioritize competition between agents, but rather compliance with technical and regulatory requirements that are guided by legal instruments, such as public calls for bids and legislation.

Milone and Ventura (2024) point out that nested markets show hybrid forms of governance, combining a socially constructed network and coordination mechanisms, which lean on sharing knowledge and collaborative values by the actors who participate in the network. These reciprocity and complementarity relationships can reduce coordination costs, besides fostering new forms of autonomy.

Understanding marketing channels is a key element in markets' analysis. As Brandão *et al.* (2020) observe, understanding the particularities of marketing channels is relevant because "*together with markets geographic reach and classification of producers, they form the basis for market categorization*" (p. 442, authors' translation). The authors highlight that the greater the number of marketing channels, the more complex the transactions and relationships established throughout the channel.

Marketing channels can be defined as the commerce, distribution or marketing channels as the sequence of steps followed by the agricultural product until it reaches the final consumer. Such steps configure the organization of intermediaries – each of whom performing one or more marketing functions – and the institutional arrangement that enables market relations in agri-processing production chains. (Gereffi *et al.*, 2005; Porter, Kramer, 2011; Waquil, Miele, Schultz, 2010)

Coughlan *et al.* (2013), in turn, define marketing channels as the routes used to sell products and services in markets. For the authors, a marketing channel is "*a group of interdependent organizations involved in the process of making a product or service available for use or consumption", that is, it is not about a single enterprise acting independently, many entities are usually involved and "each channel member depends on the others to do its job*" (Coughlan *et al.*, 2014: 2-4)".

For Kotler (2018), marketing channels perform the task of "*transferring goods from manufacturers to consumers, filling the gaps of time, place and possession that separate goods and services from those who need or want them*" (p. 459). Kotler (2018) also discusses the extent of marketing channels represented by the number of intermediaries, classifying the channels into four levels, namely: zero level, one-level, two-level and three-level channels. Zero level channel, also defined by the author as direct marketing channel, comprises the cases of direct sales from manufacturer to final customer. One-level channel has a single sales intermediary, such as a retailer, while the two-level channel has two intermediaries, usually a wholesaler and a retailer, and the three-level channel is made up of three intermediaries (Kotler, 2018: 550-551).

Deggerone (2021: 167-168), drawing on the typology proposed by Kotler (2018), offers examples of each level, restating that zero-level channels occur when products are sold directly from producer to consumer. One-level channels occur in the presence of a retailer such as supermarkets or grocery stores. In the case of two-level channels, a wholesaler such as a distribution centre, for example, and a retailer are involved. Finally, three-level marketing channel situations occur in the presence of a food processor, such as a cooperative or an agribusiness, a wholesaler and a retailer.

Regarding the factors that influence the choice of marketing channels by small farmers, Djalalou-Dine *et al.* (2014) argue that farmers can be swayed by issues related to availability, attributes, product prices, geographic distances and transportation costs, in addition to issues related to the quality and cost of information. The authors also highlight the relevance of factors such as trust between the parties and asymmetrical power relations, in addition to producers' level of experience and know-how. Other aspects underlined by the authors refer to the influence of product quality and compliance with standards and regulations.

Finally, in relation to the diversification of marketing channels, these can be classified into three categories (Deggerone, Schneider, 2022; Cenci, Schneider, 2023): exclusive, when production units access only one marketing channel; diversified, when production units access two to three marketing channels; and super-diversified, when they access four or more channels. For the authors, the matter of diversity and diversification refers to "ways of producing and ordering available resources and technologies that, in heterogeneous social contexts, require devices of efficiency, coordination, cooperation and control". Thus, the matter of diversity and diversification of family farming is related to the way "individuals and heterogeneous social groups organize themselves and build mechanisms for resources distribution" (Schneider, 2010: 64).

3. FAMILY AGRI-ENTERPRISES AND INTEGRATION INTO MARKETING CIRCUITS

In the context of family farming in Brazil, studies on the relevance of transforming and processing production on the farm began to take shape from the

1980s onwards, and mainly in the 1990s (Cenci, 2022). Thus, the debate on rural agri-processing – as the process of processing agricultural produce within the farm, by farmers and their families themselves, came to be called – emerged as a new path for rural development and for coping with problems of supply, food security, exodus and exclusion of marginalized areas. In Brazil, as in other Latin American countries, from the 2000s onwards, rural agri-enterprises became an integrating factor between the agricultural sector and the processing and service sectors, thus assigning a new value to the role of peasantry in rural modernization and development (Boucher, 1998)[3].

According to Pellegrini (2003: 51), the artisanal processing of food has a cultural and historical character, constituting a practice inherent to family farms. By means of agri-processing and the establishment of small processing facilities in rural areas, some farmers' family members succeed in building strategies to remain in rural areas by adding value to agricultural products and, hence, increasing family income. Mior (2003: 178) defines family agri-enterprise as the "form of organization through which a rural family produces, processes and/or transforms part of its agricultural and/or livestock produce, aiming mainly at generating exchange value by means of marketing". For the author, the experiences of product transformation involving thousands of family farmers formed the "root of the so-called rural agri-enterprises" that emerged from the 1990s onwards. Hence the need for public policies to support the various forms of agri-processing, which range from the informal market to niche markets, organic products and quality products.

Gazolla and Schneider (2015: 181) point out that four factors contributed to the creation of family agri-enterprises in Brazil: (i) the crisis in the modern pattern of regional agriculture, which excessively commodified family farming; (ii) farmers' historical knowledge about artisanal and differentiated processing and conservation of food were most important for the constitution of family agri-enterprises; (iii) the search by farmers for alternatives, as they were excluded from the existing regional markets and the long supply chains; (iv) the intervention of public policies and differentiated rural development programmes that supported the creation of various regional experiences. Examples are the Family Agri-processing Program (PAF) in the state of Rio Grande do Sul (RS) and the National Program for Strengthening Family Agriculture (PRONAF), in its agri-processing modality.

Family agri-enterprises show diverse profiles and are quite heterogeneous in several aspects. According to Cenci (2022), heterogeneity is present in issues related to the types of products, amounts produced, production processes, legal status, revenue, facilities, equipment, the number and gender of family members, the way raw material is obtained, geographic location and, finally, accessed marketing channels.

One of the most sensitive topics in the study of rural family agri-enterprises refers to integration into markets. Since these enterprises gained prominence in the rural areas of southern Brazil, the issues of certification and adequacy of enterprises to the formal legal guidelines that govern industrial food production have become controversial. Traversed by disputes and disparate ideological views, the procedures for regularizing family agri-enterprises are subject to different legislation and public policies, which vary according to the government levels – municipal, state or national. Formalization of family agri-enterprises is also closely related to access to new marketing channels, since these channels can be either the reason for formalization or even an outcome of such process (Cenci, 2022). It is worth highlighting, however, as suggested by Wilkinson and Mior (1999), that an informal status should not be confused with an illegal one. Many products and producers in family agri-enterprises may not have required qualifications or comply with legislation to sell and circulate their goods, but this does not mean that the processing of such products on the farm is prohibited or illegal, as long as it is for their own consumption.

Studies conducted by Caldas and Sacco (2010) showed that many family-based enterprises gave up on the initiative due to the impossibility of adapting to the standards applicable to the sector, dominated by large corporations that influence regulations on the trade of agricultural products. The most important hindrances concern food safety, tax and social security legislations. More recently, obstacles have also arisen regarding the compatibility of projects with environmental legislation. According to the authors, besides the standards strictness, which are not always justified from a health perspective, there is also the inability of public agents to offer feasible alternatives to support small agri-enterprises in adapting for compliance with standards.

In a work that analysed the influence of economic, institutional and social factors on the formalization of family agri-enterprises, Santos Jr and Waquil (2012) highlighted that the economic and the institutional

[3] According to Boucher (1999), at the beginning of the 1980s, a movement for development of rural agri-enterprises emerged in Latin America and the Caribbean, when institutions such as the International Center for Tropical Agriculture (CIAT) in Colombia and the Centro Nacional de Ciencia y Tecnología de Alimentos (CITA) in Costa Rica initiated post-harvest transformation projects involving peasant groups. Seemingly the term "rural agri-enterprise" was firstly used by CITA in Costa Rica, when it started its MAIR project (Rural Agroindustrial Models).

dimensions have similar and preponderant sway over agri-enterprises' integration into markets. According to the authors, these influences are at least twice as large as that of the social dimension. The authors draw attention to the clearly evident influence of institutions and the market on the integration of agri-enterprises, for example, by inducing the "rules of the game" that lead to the standardization of products in order to meet formal standards. While, in the short term, this may encourage the integration of agri-enterprises into markets, in the long run it can cause these establishments to lose their competitive asset: differentiation.

Viana, Triches and Cruz (2019) found that informal agri-enterprises often sell their products through short face-to-face supply chains, while the formal ones expand their scope to short supply chains of spatial proximity and to long supply chains, thus losing, in part, the craftsmanship of their products. A study by these authors on the inclusion of artisanal cheeses into formal markets showed the quality assessment focus on the sanitary aspect (cleanliness, hygiene, etc.). When cheeses (especially the "colonial" type) circulate in informal marketing channels, the most valued quality aspects refer to attributes such as taste, culture, tradition and nature. Thus, according to Cruz (2020), even though there have been some legislative advances towards aligning and adapting norms to the characteristics and production scale of family farming, they end up moving artisanal production to industrial scales. Therefore, in order to meet the set of requirements, family agri-enterprises end up submitting to the rules of large industries in the agrifood sector (Cruz, 2020).

The dynamics and challenges related to the processes aimed at formalizing family agri-enterprises has led, since the mid-1990s, to the emergence in Brazil of several public policies to support the sector. In the case of the state of Rio Grande do Sul, particularly, the creation of the Family Agri-processing Program (PAF) aimed to facilitate formal integration into markets of products processed by family farmers[4]. More recently, the government of the state of Rio Grande do Sul created the State Policy for Family Agri-processing (Law nº 13,921, 17/01/2012) and the Family Agri-processing Program of the state of Rio Grande do Sul (PEAF) which established the certification seal "Sabor Gaúcho".

The creation of public policies for family agri-enterprises allowed the visibility of these enterprises in rural areas to increase and expanded their access to markets. In fact, as shown by Gazolla (2012), agri-enterprises got to expand their participation insofar as they were able to innovate in the construction of markets and in opening new marketing channels, especially those related to short supply chains. In a comparative study between Brazil and Italy on the construction of markets and marketing channels, Gazolla, Schneider and Brunori (2018) showed that Brazilian family agri-enterprises differ from Italian ones. In Brazil, the emergence of these enterprises was motivated by both the crisis in "modern" agriculture and the state support through public policies for the sector. In Italy, family agri-enterprises emerge on account of the potential for adding value to raw produce and the potential offered by new markets. Regarding the construction of markets and marketing channels for family agri-enterprises, the authors highlight the existence of short food circuits as the main marketing strategy in both Brazil and Italy – in both cases around 20% of produce circulates through these markets.

Another important aspect in the discussion on integration of family agri-enterprises into markets concerns the changes in the internal dynamics of these farms when they access certain marketing channels. Dorigon (2008) drew attention to the fact that, as family agri-enterprises progressively increase the number of points of sale, their scale of production increases. This aspect is important and deserves to be observed because change in production scale aiming to adapt the enterprise to a certain sales channel could entail profound changes regarding technology, production practices and organizational formats, which could even change the enterprise's identity from family agri-enterprise to corporate agribusiness, bringing it closer to the conventional food industry.

However, in a recent study that sought to understand how social interactions dynamize commercial relationships between actors within a family agri-enterprises chain, Albarello, Deponti and Brose (2020) found that most commercial relations established by the researched family agri-enterprises are based on the logic of trust, reciprocity, kinship and affection. The authors also highlight the strong intertwining of commercial relations between family agri-enterprises in the territory and that "*the sale of products from agri-enterprises is mostly to always the same customers and intermediaries*" (Albarello *et al*., 2020: 308). Based on the literature reviewed so far on the main elements related to interfaces between institutions, markets and family agri-enterprises, in the following section we intend to analyse and discuss some empirical data on marketing circuits

[4] According to Boucher (1999), at the beginning of the 1980s, a movement for development of rural agri-enterprises emerged in Latin America and the Caribbean, when institutions such as the International Center for Tropical Agriculture (CIAT) in Colombia and the Centro Nacional de Ciencia y Tecnología de Alimentos (CITA) in Costa Rica initiated post-harvest transformation projects involving peasant groups. Seemingly the term "rural agri-enterprise" was firstly used by CITA in Costa Rica, when it started its MAIR project (Rural Agroindustrial Models).

of products from family agri-enterprises in Rio Grande do Sul, Brazil.

4. MARKETS AND MARKETING CHANNELS FOR FAMILY AGRI-ENTERPRISES

The State of Rio Grande do Sul (RS) is located in southernmost Brazil, comprises 497 municipalities spread over a territorial area of 281.7 thousand square kilometres and has a population of 10.8 million inhabitants, being the sixth most populous state in Brazil (IBGE, 2022). In 2022, economic production of RS contributed 6% of the national Gross Domestic Product (RS, 2022). According to data from the last Agricultural Census conducted in Brazil (IBGE 2017), the country has 5,073,324 farms, 76.8% (3,897,408) of them are family farms and 23.2% (1,175,915) are non-family farms. Rio Grande do Sul has 365,094 rural farms, which is equivalent to 7.2% of the country's farms, with 293,892 categorized as family farms (80.5%) and 71,202 non-family farms (19.5%). The number of farms that include rural agri-processing in Brazil is 852,639, 84.5% of which are family farms (720,644) and 15.5% are non-family farms (131,995). In this category, RS has 140,462 farms that include agri-processing, representing 14% of the country's farms; 121,649 of them are family farms (86.6%) and 18,768 non-family farms (13.4%). Data on farms and rural agri-processing in Brazil and RS can be seen in Table 1.

As for family agri-processing in RS, data from PEAF (Family Agri-processing Program of the State of Rio Grande do Sul) reveal that, by April 2023, the state had 5,500 family agri-processing connected with the program, 3,830 of which were registered agri-enterprises and another 1,670 were agri-processing farms included in program. Such farms are concentrated in the northern half of the State, as can be seen in Figure 1.

By comparing data on family farms that conduct agri-processing activities in RS (121,649) with data on family agri-processing farms linked to PEAF (5,500) a considerable quantitative gap is perceived, revealing a significant mismatch in adherence to the program by farms in RS[5]. In this sense, it is worth highlighting that networks of relationships play an important role in the social construction of markets by family agri-enterprises, since the relationships they establish during the marketing of products allow them to carry out these operations, in many situations, without the need for formal contracts. This relationship of trust is manifested, for example, in the fact that non-formalized family agri-processing farms are contacted by customers who want to purchase products (Cenci, 2022).

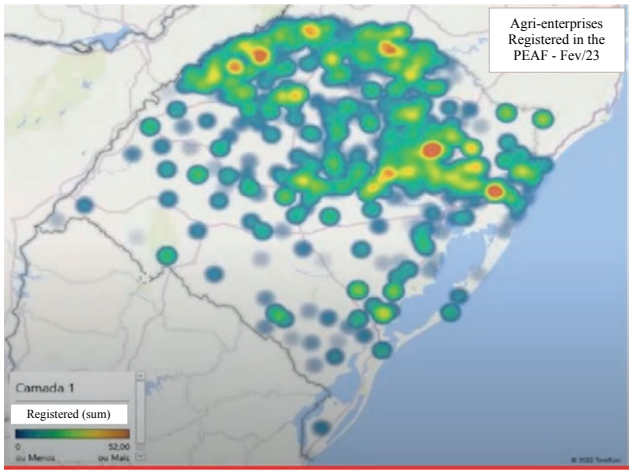
Regarding the formalization of family agri-processing in order to commercialize their products, despite a number of initiatives aimed at supporting and promoting it, these farms are mostly unable to adequately and quickly overcome many of the barriers imposed by legislation, especially those related to products regulations established by the Ministry of Agriculture, Livestock and Supply (Cenci, 2022). Such regulations are more consistent with large farms. This shows that legislation is not neutral and can favour certain types of enterprises,

Table 1. Farms and rural agri-processing in Brazil and State of Rio Grande do Sul.

Type of farm	Brazil (units)	Rio Grande do Sul (units)
Farms	5,073,324	365,094
Family farm	3,897,408	293,892
Non-family farm	1,175,915	71,202
Farms with rural agri-processing	852,639	140,462
Family farms with rural agri-processing	720,644	121,649
Non-family farms with rural agri-processing	131,995	18,768

Source: IBGE (2017).

Figure 1. Localization of family agri-enterprises registered in the PEAF.



Source: Santos (2023).

[5] Data currently available does not allow us to precisely define the reasons for the reduced adherence to the PEAF by farms that include products processing in RS. Among the hypotheses to explain this phenomenon, the high costs for formalizing enterprises (Gazzola *et al.*, 2016) and the existence of consolidated informal markets (Cenci, 2022) are suggested.

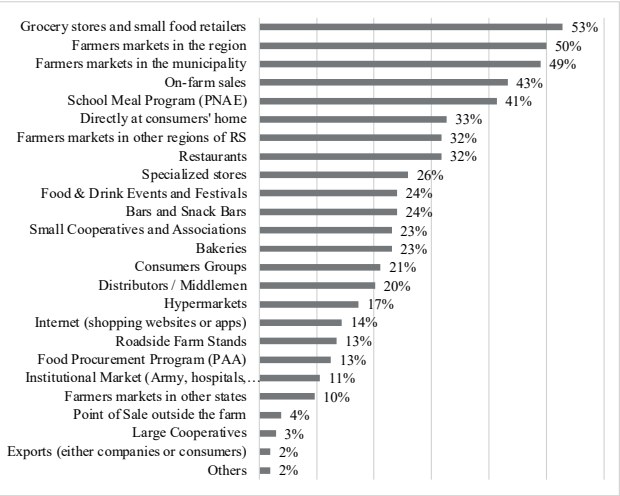
what circumstantiates the discussion about the existence of political disputes over the content of laws and their applicability to certain enterprises and markets.

As to the combination of marketing channels used by family agri-enterprises in Rio Grande do Sul, it is possible to notice the predominance of short marketing circuits and public procurement, as shown in Figure 2.

In addition to highlighting the establishment of exchange relationships, primarily through marketing channels, short marketing circuits and public procurement, this scenario also reveals the coexistence of channels used by family agri-enterprises. The indication of small food retailers and grocery stores as the most frequently used marketing channel, added to farmers markets at regional and municipal levels, demonstrates the territorial nature of product marketing. It is interesting to note that during the Covid-19 pandemic the participation of small food retailers and grocery stores in the sale of products from family agri-enterprises increased, which can certainly be explained by restrictions imposed during the health crisis, when consumers could not or preferred not to go to supermarkets (Cenci, 2022; Cenci, Schneider, 2023).

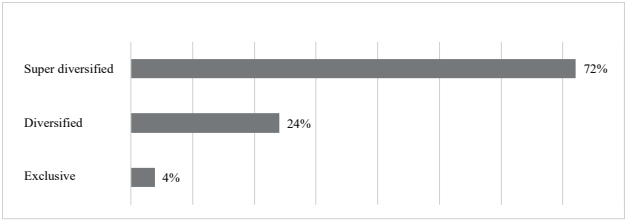
In turn, the lower integration of family agri-enterprises into marketing channels linked to long chains and those that privilege aspects related to economies of scale, as in the case of large supermarkets, demonstrates that the business model of family agri-enterprises is not well-adjusted to the demands of these channels. In this sense, although a certain expectation for greater participation of family agri-enterprises in these marketing channels appears in the actors' speeches, it would be advisable to evaluate whether the transaction costs involved in implementing such commercial relationships compensate for the effort required for that implementation to the detriment of other actions that can increase the turnover of family agri-enterprises in short marketing circuits.

Figure 2. Marketing channels used by family agri-enterprises.



Source: Cenci (2023).

Figure 3. Level of diversification of marketing channels by family agri-enterprises.



Source: Cenci (2023).

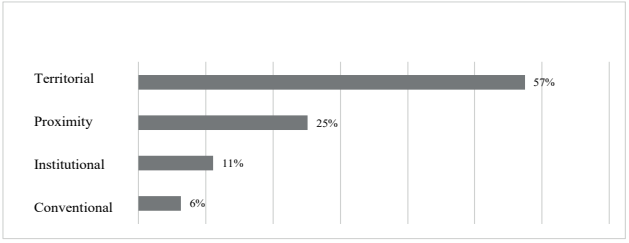
Regarding the analysis of the level of diversification in marketing channels used by agri-enterprises, a clear predominance of super diversified channels can be seen in Figure 3.

In this aspect, it is worth highlighting that family agri-enterprises that have an exclusive marketing channel sell their products either at farmers markets in the region, at on-farm point of sale or to the School Meal Program – PNAE (Cenci, 2023). This reveals that the vast majority of family agri-enterprises are not restricted to an exclusive marketing channel. The greater use of diversified and super diversified marketing channels tends to minimize risk of adverse events related to products marketing such as, for example, the loss of a contract with a large retailer chain (Cenci, 2022) and the recent occurrence of the Covid-19 pandemic (Cenci, Schneider, 2023).

Regarding the classification of marketing channels used by family agri-enterprises and its relationship with the types of family farming markets[6] presented by Schneider (2016), this study shows a clear predominance of

[6] The marketing channels of family agribusinesses based on Schneider's (2016) typology were classified as follows: (i) Nearby Markets, including farmers markets in the municipality, direct sales at consumers' homes, sales to groups of consumers and on-farm sales; (ii) Territorial Markets, including bars and snack bars, distributors/middlemen, gastronomic events and festivals, farmers markets in the region, farmers markets in other regions of RS, farmers markets in other Brazilian states, specialized stores, bakeries, small cooperatives and associations, small retailer stores or grocery stores, points of sales outside the farm, restaurants and roadside "colonial" product stalls; (iii) Conventional Markets, including exports of products to companies or consumers, large cooperatives, large supermarkets and internet sales through websites or shopping apps; (iv) Institutional Markets, including sales to the army, hospitals and universities, sales to the Food Procurement Program (PAA) and sales to the School Meals Program (PNAE).

Figure 4. Types of family farming markets used by family agri-enterprises in relation to the marketing channels.



territorial markets (57%) followed by proximity markets (25%), as shown in Figure 4.

The predominance of territorial and proximity markets, which together represent 82% of the total marketing of products from family agri-processing, reveals profile and business models strongly embedded both locally and regionally. According to the typology of family farming markets proposed by Schneider (2016), in territorial markets, forms of regulation based on trust and reputation predominate and commercial interactions between buyers and sellers value the origin of products and their price. Proximity markets, in turn, are connected to the local context and the exchange relationships are based on reciprocity and mutual knowledge, which means that trust and friendship become predominant in the regulation of exchange relationships.

In this sense, understanding the regional context in which these businesses take place becomes a critical element both for families who own agro-enterprises and for public agents and agricultural development organizations.

5. DISCUSSION AND CONCLUSION

In this article we presented elements that contribute to improving mechanisms for promoting farmers' access to markets. The evidence of multiple and coexisting markets used by family agri-enterprises, which are embedded in different institutional environments, requires attention from the group of actors working in rural development processes.

In this context, aspects related to informality in marketing of products from family agri-processing seem to be intrinsic to the dynamics of exchange relationships established by these production units, which prompts reflections on the models of public policy aimed at these establishments. In this sense, we welcome the ongoing efforts to formalize family agri-enterprises and to strengthen institutional markets, as is the case with public policies like PEAF, PNAE and the Food Procurement Program (PAA). However, as the findings of this study demonstrate, there are other markets (grocery stores and small food retailers, for example), which have quite specific and diverse dynamics, are far more present in the commercial dynamics of family agri-enterprises and deserve special attention from the group of stakeholders.

Another finding of this study is the significance of short marketing circuits, especially channels linked to territorial markets. In view of this, deepening knowledge of this environment, which includes small retailer stores and grocery stores among the marketing channels, is strategic for proposing more and better markets to family farmers who practice agri-processing.

Finally, we highlight the alignment of the findings presented in this article with discussions proposed by the unforgettable researcher Flaminia Ventura. The importance of agri-processing on family farms for rural development of RS becomes evident in the actions proposed by organizations and governments, which mobilize resources and efforts, thus appearing as protagonists in the social construction of these markets. In the same sense, the predominance of territorial reach in commerce of products from family agri-enterprises, in many aspects, use hybrid forms of governance through socially constructed networks.

Therefore, we are pleased to be able to conclude that the research findings and field work that we conducted in Brazil bring us closer and lead to conclusions very similar to those that Flaminia Ventura and other colleagues from the University of Perugia have reached in their studies, some of them presented in the articles that comprise this Special Issue. The integration of family farmers into different types of markets and the use of a diverse portfolio of marketing channels become key elements for their social reproduction. Greater control and governance over markets becomes decisive in increasing farmers' power in exchange relationships, allowing them to decide whom to sell to and whether or not to accept the price offered. It seems too little, but this is highly significant and relevant in a globalised, non-transparent world dominated by monopolies. Creating and building spaces for manoeuvre through more and better markets is an important strategy due to the eventual economic gains that farmers can obtain, but not only. It is also, and perhaps above all (something we will research in the future), a resource or asset that improves the self-esteem and confidence of both sellers and buyers, who can be proud to do business without that terrible feeling of being betrayed or suffering a loss in the exchange relationship.

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AUTHOR CONTRIBUTIONS

Conceptualization, Methodology, Writing, S.S. and A.C.; Field work, Data preparation and investigation, A.C.; Funding and Translation, S.S.; Read and Agreed to the published version of the manuscript, S.S. and A.C.

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The Multidisciplinary Approach of Rural Studies - Research article

The evolution of policy instruments for European rural development

Angelo Frascarelli

Department of Agricultural, Food and Environmental Sciences, University of Perugia, Perugia, Italy
E-mail: angelo.frascarelli@unipg.it

Abstract. This article discusses the evolutions that have taken place in agricultural and rural policy instruments since their first implementation in 1999. In particular, it will be underlined how the evolutions have been influenced by the concept of multifunctionality and the emergence of the new paradigm of rural development. Rural development represents an alternative to the agro-industrial and post-productivist paradigms. The consequence is the introduction of a territorial and multi-sectoral approach to rural development, starting from the centrality of agriculture as the main user of space, but focusing on the interrelationships between agriculture, the other socio-economic activities and the territory's natural and environmental resources with a view to the co-production of all the actors (material and immaterial) involved. The second pillar of the CAP on rural development, introduced in 1999, has evolved from focusing primarily on economic objectives during its initial programming periods to incorporating a greater emphasis on environmental and social measures. It now serves as a bridge, linking agricultural policy with other policy areas. The second pillar remains a relevant policy today for two key reasons: the enduring importance and interest of European citizens in rural areas, and its ability to adapt to emerging economic, environmental, and social challenges.

Keywords: rural development, CAP, multifunctionality, coproduction.
JEL codes: Q18.

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ORCID
AF: 0000-0002-8910-7044

HIGHLIGHTS

- A territorial and multisectoral approach to rural development.
- Interrelationships between agriculture, other socioeconomic activities, and the natural and environmental resources of the territory.
- The centrality and interest of European citizens in rural areas.
- The ability to adapt to new economic, environmental, and social challenges.

1. INTRODUCTION

This article examines the evolution of the objectives and instruments of European rural development policy since its initial implementation in

1988. It specifically explores how this progression has been shaped by the concept of multifunctionality, the emergence of the new rural development paradigm, and advancements in rural studies. Rural development offers an alternative to the agro-industrial and post-productivist paradigms. This shift embraces a territorial and multisectoral approach to the development of rural areas, acknowledging agriculture as the primary land user. However, the focus shifts to the interconnections between agriculture, other socioeconomic activities, and the natural and environmental resources of the region, emphasising the co-production of all actors, both tangible and intangible, within the territory (Ploeg, 2006, 2015; Milone, Ventura, 2012).

The aim of this paper is to analyse the key stages of this evolution, focusing on how rural studies and policy have intersected and diverged. Specifically, this paper draws on the work of Flaminia Ventura, whose contributions to the interpretation of rural development theory provide a foundational framework for understanding the ongoing changes in the Common Agricultural Policy (CAP). The intention is to outline the evolution of rural development policy; to connect theoretical concepts, such as multifunctionality and rural vitality, with empirical policy instruments; and to evaluate critically how European policy has responded to rural challenges through a comparative analysis of its phases. By linking these objectives to Ventura's elaborations on rural economies and the "peasant" model, this paper explores how rural policy adapts to the changing socio-economic and environmental landscape. This study adopts a qualitative approach, relying on both historical policy analysis and a literature review of key theoretical frameworks related to European rural development.

The first part of this paper briefly analyses the rural development paradigm as an alternative to the agroindustrial and post-productivist models. The second part traces the evolution of policy instruments using a chronological method, structured around major reforms of the CAP. Data are primarily sourced from European Commission reports, the rural studies literature (e.g., Ploeg, 2006; Ventura, Milone, 2012), and policy documents such as the Cork Declaration and Agenda 2000. In addition, the research employs a comparative analysis of the rural development phases (1988-2023) to assess how theoretical principles, such as multifunctionality and the rural development paradigm, have materialised in practice. In the third part, the ability of European rural development policy to respond to the challenges and prospects of rural areas, as identified in the new rural studies paradigm, is discussed (Ploeg *et al.*, 2000; Ventura, Milone, 2007; Ploeg, Ventura, 2014; Ploeg in this special issue).

2. RURAL DEVELOPMENT AS AN ALTERNATIVE TO THE AGROINDUSTRIAL AND POST-PRODUCTIVIST PARADIGMS

The productivist paradigm is defined as an agricultural model characterised by the use of a high quantity of inputs, primarily aimed at maximising the production obtainable per unit of surface area involved in the production process (Beacham *et al.*, 2023). This was the predominant model in the 20th century, leading to the industrialisation and "commodification" of agricultural production as a full application of the Fordist model to the primary sector (Goodman, Redclift, 1991; Wilson, 2001), allowing companies to achieve economies of scale (Bowler, 1992).

The productivist paradigm was mainly[1] conceptualised in the United Kingdom by scholars such as Bowler (1992), Lowe *et al.* (1993), and Ward and Lowe (1994), who argued for the central and undisputed role of agriculture in rural society as the predominant activity capable of maintaining employment and stabilising incomes. The achievement of the above two goals is possible through the use of an intensive agricultural model, applied, according to rural sociologists (Wilson, 2001), to move as far away as possible from the conditions of poverty and destitution experienced in the English countryside in the post-World War II period (Newby, 1985; Bishop, Phillips, 1993). Agricultural production within the productivist paradigm thus undergoes a process of industrialisation (Marsden *et al.*, 1993) and specialisation (Ilbery, Bowler, 1998), leading to increased labour productivity due to the spread of mechanisation (Ilbery, Bowler, 1998) but with a consequent reduction in the workforce (Whitby, Lowe, 1994). However, by increasing the consumption of synthetic factors of production (fertilisers, pesticides, etc.), the pressure on natural resources also intensifies, resulting in greater environmental impacts than before World War II, when agriculture was mostly low in input (Potter, 1998). There is a lack of dynamism in rural areas, which, in this context, are considered a passive backdrop to agricultural activity (Lowe *et al.*, 2019).

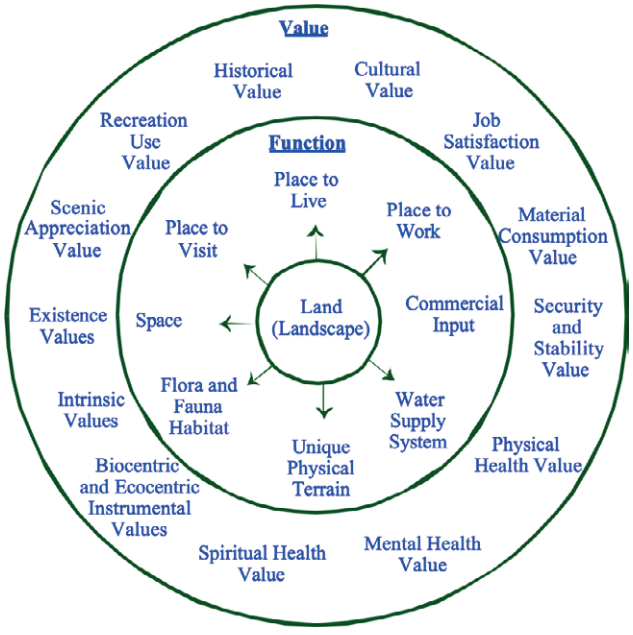
Parallel to the productivist paradigm, an antithetical paradigm known as post-productivism has also mainly developed in the United Kingdom (Ward, 1993; Mather *et al.*, 2006; Beacham *et al.*, 2023). As reported by Bergstrom (2002) and Mather *et al.* (2006), post-productivism is characterised both by the presence of a series of

[1] The advancement of technical progress, the spread of innovations, and the increase of productivity in agriculture are issues that have also been addressed previously (Hayami, Ruttan, 1970; Bieri *et al.*, 1972; Nguyen, 1979).

activities in rural areas, diversified from the mere production of commodities, and by the growing demand for goods – by users of these areas – that are not appreciated by the market, such as landscape and amenities. Moreover, according to the same authors, post-productivism is distinguished by a series of values linked to rural areas, including historical, scenic, and recreational value, as shown in Figure 1.

Wilson (2001), while highlighting the lack of a clear definition of which activities can certainly be considered post-productive, nevertheless summarised the contributions of British rural sociologists, who include post-productivism non-intensive agricultural activity (Pretty, 1995; Potter, 1998), practices for the protection of compromised habitats (Mannion, 1995), and the partial replacement of physical inputs with technical knowledge (Winter, 1997; Ward *et al.*, 1998). More importantly, agriculture loses its role as the central activity carried out in rural areas if it is framed solely as a set of practices aimed at the production of foodstuffs (Lowe *et al.*, 1993; Ward, 1993). Thus, rural areas are no longer the exclusive centre of activity for "pure" farmers, although their role as key actors in rural development remains significant (Van der Ploeg *et al.*, 2000). From a political perspective, as goals and priorities change, institutions have started to discuss remuneration for the production of environmental public goods, payments for ecosystem services (Mather *et al.*, 2006), and multifunctionality (Wilson, 2001).

Figure 1. Values and functions of rural areas and landscapes.



Source: Bergstrom (2002).

The fundamental difference between the post-productivist paradigm and the rural development paradigm lies in the role assigned to the farmer: the post-productivist paradigm represents a specific ideology developed in response to the excesses of the Fordist model applied to the agricultural sector, which focuses primarily on sustainability and multifunctionality (Ward, 1993; Wilson, 2001). On the other hand, the rural development paradigm adopts a broader and more integrated approach (Marsden, 1999). The latter paradigm aims for the balanced development of rural areas, including economic, social, and environmental aspects, and promotes the active participation of local communities in these territories, creating networks among the stakeholders involved (Milone, Ventura, 2012). Rural development can thus be understood as a long-term strategy that must necessarily interconnect the various natural, human, artificial, and social components of the capital present and generable in rural areas (Arzeni *et al.*, 2001; Sotte, 2006).

In fact, human and social components characterise the vitality of rural areas, which is considered to be an environmental public good in every respect (Cooper *et al.*, 2009) that must be preserved and enhanced. To ensure its provision, farmers who adopt a "peasant" model, which is not based on economies of scale but rather on economies of scope (Milone, Ventura *et al.*, 2015), play a key role. The "repeasantisation" of agriculture is thus one of the main trajectories of the rural development paradigm, a trend towards the re-emergence of traditional agricultural practices and the values associated with small-scale farming, in opposition to industrialised agriculture oriented towards the global market (Van der Ploeg, 2009).

This phenomenon is closely linked to a rethinking of agriculture and rural development, in which farms and local communities seek to regain autonomy, sustainability, and resilience through strategies that reduce dependence on external inputs, especially those provided by agribusiness and financial markets. In this "low-input" approach, farms become multifunctional units capable of interacting in new ways with society and the environment (Milone, Ventura, 2012), fully integrating the production of commodities and non-commodities (Ventura, Milone, 2005). In the rural development paradigm, the response to agricultural challenges and crises necessarily materialises through the development of appropriate economic and ecological models (Horlings, Marsden, 2014). Consequently, agriculture transforms into a more integrated process rooted in the territory, where the diversification of activities and the enhancement of local resources become key elements in building a more sustainable and resilient agricultural model capable of

responding to global challenges while maintaining a strong connection with local communities and the surrounding environment (Wilson, 2007).

3. RURAL DEVELOPMENT IN THE CAP: FROM STRUCTURAL SUPPORT TO INCLUSIVE AND SUSTAINABLE GROWTH

Initially, the CAP was established with three main objectives[2], but it was later adjusted and reformed to address the needs and challenges of the historical period, with an evolution that altered its guidelines and operational tools (Sotte, 2006; Frascarelli, 2020). Among the most significant adjustments to the CAP are the increasingly important role attributed to rural development (Van der Ploeg *et al*., 2000). This component, initially overlooked in the first and second Mansholt Plans, progressively moved away from solely supporting agricultural prices and income, adopting a more integrated and multifunctional approach (Fanfani, Brasili, 2003).

In the 1960s, during its early stages, the CAP was essentially based on price support (the European Agricultural Guidance and Guarantee Fund [EAGGF] Guarantee). However, the specific needs of underdeveloped agricultural regions led agricultural policy to incorporate, in 1964, a modest structural fund (the EAGGF Guidance) aimed at improving the competitiveness of farms and food industries in these regions.

During the 1970s, the first attempt was made to implement an organised intervention in the structural field, through the issuance of three directives related to the modernisation of farms (Directive (EEC) 72/159), early retirement (Directive (EEC) 72/160), and socio-economic information and professional qualification (Directive (EEC) 72/161). However, these directives were not fully implemented by the Member States, nor were they accompanied by significant financial resources, which undermined their effectiveness.

In this initial phase, rural development policy was conceived as a response to the general needs for farm restructuring (Van der Ploeg *et al*., 2000). Over the years, rural development policy has made room for substantial changes in the models of interaction between society and business and has actively adapted because of the numerous actors, social movements, and/or state apparatuses involved (Van der Ploeg *et al*., 2015).

Only after 1985 the notion of rural development emerged through sociopolitical debate concerning rural areas and the need to reform the CAP (Knickel, 1990). This led to the dissemination of reflection papers such as the Green Paper on the "Perspectives of the CAP" (1985)[3] and the document on "The Future of Rural Areas" (1988)[4], in which the European Commission outlined the foundational principles of a policy based on a territorial logic (Table 1).

Table 1. The phases of rural development.

Year	Phase
1988	The Future of Rural Areas – Communication from the European Commission (COM(88) 501 final)
1989-1993	Objective 5b – Development of Rural Areas
1989-1993	Leader I
1992	Accompanying Measures of the MacSharry Reform
1993	Creation of the Cohesion Fund
1994-1999	Objective 5b – Development of Rural Areas
1994-1999	Leader II
1996	The European Rural Charter
2000-2006	Rural Development Regulation (Reg. 1257/1999)
2000-2006	Leader+
2007-2013	Rural Development Regulation, includes Leader (Reg. EC 1698/2005)
2014-2020	Rural Development Regulation 2014-2020 (Reg. 1305/2013)

Source: Authors' elaboration based on the consulted literature.

In the Single European Act (1986), rural development became one of the five objectives of cohesion policy, laying the foundation for a wide range of rural development measures supported by three different funds: the European Social Fund (ESF), the European Regional Development Fund (ERDF), and the EAGGF Guidance Section (Oostindie *et al*., 2010). However, it was only through the 1988 reform of the Structural Funds[5] that rural development interventions were established for the first time (Fanfani, Brasili, 2003). This reform introduced key concepts, such as the shift from a sectoral to an integrated approach, which had already been mentioned in the Mediterranean Integrated Programmes (MIPs), making the European Union's (EU's)

[2] The three main objectives were ensuring food security, supporting farmer income, and stabilising agricultural markets. These objectives immediately brought about issues of overproduction and environmental pressures.

[3] Communication from the Commission of the European Communities, dated July 15, 1985, "Perspectives for the Common Agricultural Policy" (COM(85) 333 final).

[4] Communication from the Commission of the European Communities, dated July 29, 1988, "The Future of the Rural World" (COM(88) 501 final).

[5] This reform outlined for the first time a coordination of interventions from the three structural funds (Social, Regional, and EAGGF Orientation) for integrated development actions, also in collaboration with the European Investment Bank (EIB), laying the foundation for the implementation of genuine integrated interventions covering all economic activities, services, and infrastructures.

efforts to reduce socioeconomic disparities between European regions more coherent and effective, aiming for multilevel governance with the involvement of member states and regions (Sotte, 2023). The 1988 reform of the Structural Funds was a pioneer of future rural development policy and spanned two programming periods: 1989-1993 and 1994-1999. Its implementation occurred through three instruments: (1) Objective 5a, called "Improvement of Agricultural Structures", which continued the old logic of structural improvement of farms; (2) Objective 5b, "Development of Rural Areas", aimed at supporting the economic and social development of struggling rural areas through various interventions (rural infrastructure, economic diversification, improvement of social services, and support for sustainable agriculture); and (3) Community Initiative Leader I and Leader II[6] (Sotte, 2023). These instruments were part of the EU's structural policy and are significant because they represent the early stages of the new rural development policy that emerged after 2000.

In 1992, with the MacSharry Reform, another instrument within market policy was introduced: the so-called "accompanying measures of the CAP", which focused not only on income[7] but also, in part, on rural development (Povellato, Velazquez, 2005; Sotte, 2023).

The growing awareness of the strategic role of rural areas in European integration led the EU Commission to organise the Cork Conference in 1996, which laid the foundation for the CAP reform for the 2000-2006 period, known as Agenda 2000. Following the path set by MacSharry, Agenda 2000 represented a significant reform both for agricultural policy (with the creation of the two pillars of the CAP) and for the structural policy of the EU, redefining objectives, tools, and intervention methods. Structural and cohesion policies were reformulated to better target the available funds, focusing interventions on a smaller number of objectives than did the 1988 and 1993 reforms[8], with particular attention given to economic and social cohesion. Rural development gained relative autonomy from other cohesion policies[9], which were implemented through separate programmes from those of the other structural funds (Storti, 2016).

Agenda 2000 began to promote multifunctional agriculture, which considered not only food production, but also the sustainable management of natural resources, landscape conservation, and recreational activities related to the land. This reform increased attention to environmental, social, and economic challenges in rural areas and increased local assets and resources (Van der Ploeg, 1999). Agenda 2000 marked a key turning point in the rural development paradigm and policy (Ventura, 2001; Van der Ploeg *et al*., 2000), in which farmers redefined the boundaries of their businesses. This new model led to a redefinition of the social actors targeted by agricultural policy: a multifunctional entrepreneur producing both marketable goods and services, as well as nonmarket-oriented products valued by sectoral policy (Van Huylenbroeck, Durand, 2003; Sotte, 2023). The impact of the new paradigm on European agriculture promoted the diversification of agricultural activities and the integration of environmental policies. In Italy, farmers particularly benefited from the new opportunities offered by multifunctionality, with an increase in rural tourism, educational farms, direct sales of agricultural products, and the provision of services to public administrations (Henke, 2004). With Agenda 2000, rural development policy evolved from a simple tool aimed at addressing structural problems to a set of support measures that focused on and enhanced the multiple roles that agriculture plays in society (Marsden *et al*., 1993; Van der Ploeg, 1999).

A crucial moment in the evolution of rural development policy was the establishment of the European Agricultural Fund for Rural Development (EAFRD) in 2005, which came into effect in 2007[10]. This fund consolidated the second pillar and provided a more structured and coherent framework for the implementation of rural development policies across the EU, incorporating the LEADER approach[11].

[6] The LEADER (Liason Entre Actions de Développement de l'Économie Rurale) program is a methodological approach aimed at coalescing different projects, actors, and resources at a local level into a Local Action Plan (LAP), managed by a local partnership (Local Action Group [LAG]), operating in a delimited rural territory.

[7] The measures were partly designed to compensate for the support of the CAP, in an attempt to break the link between production levels and subsidies, reduce incentives for overproduction, and more directly reward agriculture's contribution to public services (Oostindie *et al*., 2010).

[8] Objective 1: targeted regions lagging in development with a per capita gross domestic product (GDP) below 75% of the community average; this objective aimed at promoting convergence and reducing socioeconomic disparities. Objective 2: grouped industrial and rural areas in decline that required economic and social restructuring; it included former Objective 2 (declining industrial zones) and former Objective 5b (declining rural zones) outside Objective 1. Objective 3: focused on training, education, and employment, funded by the European Social Fund (ESF); it covered regions not included in Objectives 1 and 2, aiming at modernising training systems and improving access to employment.

[9] The only exception was Objective 1 areas during the 2000-2006 period.

[10] Regulation EC 1290/2005 of June 21, 2005, on the financing of the CAP, established two new agricultural funds, replacing the EAGGF: the European Agricultural Guarantee Fund (EAGF), which finances the first pillar of the CAP, and the EAFRD, which finances the second pillar. Today, these two agricultural funds remain in place, with minor modifications introduced by Regulation EU No. 1306/2003 (programming 2014-2022) and Regulation 2021/2116 (the 2023-2027 programming).

[11] At the same time, the widely shared success of the LEADER Community Initiative suggested that the pioneering experience should be incorporated into the mainstream of rural development policy.

The designation of the EAFRD as the "European Agricultural Fund for Rural Development" is a paradox, both conceptually and scientifically, because it includes both the terms "agricultural" and "rural development", even though it is clear that "rural development" encompasses "agricultural development". There are two explanations for this contradiction. On the one hand, the evolution of European policies regarding agriculture and rural development aims to integrate two related objectives: supporting agriculture as a key economic sector in rural areas while simultaneously promoting broader rural development that involves the environment, economic diversification, and the well-being of rural communities. On the other hand, this represents a political and strategic compromise rather than a mere contradiction: retaining the term "agricultural" within the EAFRD's name was a necessary compromise to gain the consensus of Member States, particularly those with a strong agricultural tradition (De Filippis, 2005). Rural policy was placed directly under the umbrella of the CAP, and rural development thus became one of the main objectives of the CAP (Oostindie *et al*., 2010). Moreover, this has helped justify the CAP's budget over the years and continues to do so today.

Since 2007, the second pillar has focused on three thematic areas (or axes)[12], each corresponding to specific rural policy objectives, complemented by the LEADER axis, which promotes the design and implementation of rural policies from the grassroots through Local Action Groups (LAGs).

The 2007-2013 programming period, rooted in the Fischler reform of the CAP, can be seen as a "bridge period" between the past and future rural development policies. The goal was to reposition agricultural policies from a still-sectoral framework based on public spending oriented towards financing-status-related attributes[13] to a new structure, where sectoral aspects closely align with territorial ones, strengthening their content and improving their overall effectiveness[14] (Sotte, 2013). Owing to its greater territorial sentiment, aligned with the objectives of Lisbon and Gothenburg, this policy, compared with the old CAP, allows for the effective pursuit of the ambitious economic, social, and environmental objectives required by the EU (Camaioni *et al*., 2013).

The 2007-2013 programming was born out of the need to proactively respond to new social demands and the need to safeguard and enhance the quality of rural life. Agricultural practices could be adapted to provide positive rather than negative externalities. Based on this premise, service-oriented policy tools aimed at strengthening agricultural and rural development were adopted. The distinctive qualities of food, the recognition of agriculture's contribution to public goods (such as nature and landscapes), cultural heritage, and rural/regional identities have become increasingly important elements of service-oriented rural policies (Oostindie *et al*., 2010).

The political compromises that made the Fischler reform possible and the relatively limited resources compared with those committed to the first pillar constrained the innovative potential of rural development policy (Sotte, 2013). Moreover, according to some authors, the limited effectiveness of the spatial allocation of EAFRD expenditures towards rural areas and the tendency to favour more central and urbanised regions of the continent undermined the positive link between rurality and EAFRD spending (Shucksmith *et al*., 2005; Crescenzi *et al*., 2011; Camaioni *et al*., 2013), neutralising one of the cornerstones of cohesion policy (Brunori *et al*., 2018).

In the 2014-2022 programming period[15], the role of the EAFRD was further consolidated, with enhanced coordination and integration with the European Structural and Investment Funds (ESI)[16], placing greater emphasis on environmental sustainability. New tools were introduced to promote sustainability and improve environmentally friendly production methods and innovations. Additionally, the LEADER approach was strengthened, extending its scope to all rural areas and adopting a multi-fund approach (Mantino, 2013).

Access to EAFRD funds by Member States and European regions is achieved through the preparation of a multiyear Rural Development Programme (RDP), which contributes to the implementation of the EU's strategy for sustainable and inclusive growth. To this end, each of the European structural and investment funds supports 11 thematic objectives derived from the Europe 2020 strategy and a single programming docu-

[12] Axis 1: improving the competitiveness of agriculture and forestry; Axis 2: supporting land management and enhancing the environment; and Axis 3: improving the quality of life and encouraging the diversification of rural economies.

[13] Possession of formal requirements and entitlement to acquired rights for past behaviour, such as in the case of the decoupled single payment activated with the Fischler reform.

[14] The goal was to transition to an intervention capable of selectively incentivising and supporting behaviours, that is, individual (business) or collective (interbusiness, territorial) development projects and programmes.

[15] The programming period was initially planned for 2014-2020, then extended to 2022 (Reg. EU 2022/2220), due to delays in approving the new CAP.

[16] The main characteristic of these financial instruments concerns the methods of programming and implementation, which are carried out from a multilevel governance perspective, that is, managed locally by the States and Regions based on a partnership agreement signed with the European Commission.

ment: the Partnership Agreement (PA). The set of regulations for the 2014-2020 CAP introduced several types of changes, which can be summarised into five major categories[17]. At the same time, a series of measures were introduced to attempt to increase synergy between the first and second pillars of the CAP, such as the so-called "flexibility" between pillars. The goal of the second pillar measures is to steer development by acting on productive structures and both tangible and intangible infrastructure while simultaneously aiming to create a coherent and sustainable framework that can safeguard the future of rural areas. This is based particularly on the capacity to provide a range of public services that go beyond the simple production of food and on the capacity of rural economies to create new sources of income and employment while protecting the culture, environment, and heritage of rural areas.

A further evolution occurred with the 2023-2027 programming, which outlined three fundamental objectives: (1) promoting a smart and resilient agricultural sector; (2) supporting care for the environment and climate action; and (3) stimulating growth and employment in rural areas. These three general objectives are broken down into nine specific objectives: competitiveness, farmer income, fair distribution of value along the supply chain, climate change, biodiversity, protection of natural resources, generational renewal, bioeconomy, rural area vitality, health, and nutrition. Additionally, a cross-cutting objective includes the transfer of innovations, advisory services, training, and digitisation, aiming to create an Agricultural Knowledge and Innovation System (AKIS).

Ecological transition and innovation are two new features of the 2023-2027 rural development policy, aligned with the transformation of consumer society and the increased availability of digital technologies. In addition to this new governance of the CAP, Regulation (EU) 2021/2115 allows Member States to outline a rural development framework with great flexibility through the new delivery model (De Castro *et al*., 2021).

In the evolution of rural development, there has been an important contribution from the conferences held over the years, which have developed various synergistic objectives, as outlined in Table 2. The first conference officially dedicated to rural development, which defined the principles for the following years, was held in Cork in 1996. This was the moment when the essential role of rural areas in the future of the EU was recognised, highlighting the need for more integrated and multisectoral rural policy approaches involving a wider range of rural actors (Oostindie *et al*., 2010). The path set by the conference, although slow and complex, was immediately followed by the creation of the two pillars of the CAP (Mantino, 1996; Saraceno, 1999).

The Salzburg Conference in 2003 emphasised the importance of territorial cohesion and the bottom-up approach and the separation of the Guarantee and Guidance sections of the EAGGF into two different funds, the EAGF and the EAFRD, respectively, to support the two pillars of the CAP. This new arrangement changed the EAFRD's status as a structural fund, which meant that integration with the other structural funds (ESF and ERDF) was no longer guaranteed.

Next, the Limassol Conference in 2012 reinforced the idea of an integrated and multifunctional rural development policy, emphasising the need to adapt policies to territorial specificities and to promote innovation, and highlighted the importance of the resilience of rural communities in the face of global challenges such as climate change and market volatility.

The second Cork Conference, held in 2016, substantially confirmed and extended the guidelines drawn from the first conference, reaffirming the importance of agricultural multifunctionality and sustainability (Sotte, 2023). The final declaration emphasised the need for a more focused and flexible approach to rural development policies capable of responding to the specific needs of rural areas and promoting inclusive and sustainable growth.

4. IS RURAL DEVELOPMENT POLICY STILL RELEVANT?

Over its more than 60-year history, the CAP has adapted to the evolving socioeconomic conditions of agriculture at the EU and international levels, societal changes, and advances in scientific studies. In some cases, the CAP has reacted late, subordinate to external pressures[18]; in other cases, however, it has anticipated and accelerated changes. Rural development policy, which only began in 1988 with limited financial

[17] The five categories of desirable changes for rural development are (Mantino, 2013):
1. Creation of a common programming structure that includes both cohesion policies and rural development, with the aim of strengthening integration and coordination between them.
2. A new strategic approach also within rural development policies.
3. Emphasis on cooperative and partnership approaches in various fields of intervention, not only for local development (LEADER), but also for supply chains, business networks, and environmental interventions.
4. New emphasis on innovation and its transfer to agricultural systems.
5. A more selective approach in defining the beneficiaries of interventions, both for rural areas and individual beneficiaries (small businesses, medium-sized farms, start-ups, etc.).

[18] The most emblematic case was the 1992 reform, which was driven by global trade conflicts and the Uruguay Round negotiations.

Table 2. Conferences on rural development.

Year	Conference	Targets
1996	Cork	- Raise public awareness of the importance of a new start for rural development policy - Make rural areas more attractive as places to live and work - Support programme (consisting of 10 points) cooperation as partners in the realisation of each of the objectives contained in the declaration - Play an active role in promoting sustainable rural development
2003	Salzburg	- Maintain a "living countryside" - Preserve the diversity of Europe's rural territory and strengthen the natural landscape - Rural development policy applied to all rural areas of the EU - Rural development policy must concern rural society as a whole and not just those working in agriculture - In rural development policy, partnership between public and private organisations and civil society as a whole must be developed as part of the preparation and implementation of programmes, based on the principle of subsidiarity
2012	Limassol	- Strengthen the idea of an integrated and multifunctional rural development policy - Adapt policies to territorial specificities and promote innovation
2016	Cork 2.0	- Increase public awareness of the potential of rural areas and resources in meeting a wide range of economic, social, and environmental challenges and opportunities for the benefit of all European citizens - Invest in the identity of rural communities and the potential for rural growth and make rural areas attractive places - Further develop agricultural and rural policy towards a simple, flexible, and result-oriented approach that is based on partnership and reflects the EU's objectives as well as local needs and aspirations - Systematically review other macro and sectoral policies from a rural perspective, considering the actual and potential implications and impacts on jobs, the growth and development prospects in rural areas, social welfare, and the environmental quality of these areas and communities - Support the conference programme (consisting of 10 points) and integrate its perspective and orientations into future policy-making

Source: Authors' elaboration from the consulted literature.

resources compared with market and income support policies, has grown in importance, now accounting for 50% of CAP support (including national co-financing), establishing itself as an essential component of Europe's future and the main tool of the entire CAP (European Commission, 2021).

Within the CAP, the second pillar of rural development remains relevant for two key reasons: the centrality and interest of European citizens in rural areas and their ability to adapt to new economic, environmental, and social challenges (De Castro *et al.*, 2021). The role and decisions of rural development policy have confirmed original political milestones, such as the 1988 communication 'The Future of the Rural World' and the 1996 Cork Conference, but the policy has not stagnated. Each new programming period, including the 2023-2027 period, has managed to innovate in regard to strategies and themes (Sotte, 2023).

The EU's rural areas are a fundamental part of the European way of life, as highlighted in the Cork Declaration (1996): "European citizens are increasingly paying attention to the quality of life in general, and issues of quality, health, safety, personal development, and leisure in particular, and […] rural areas are uniquely positioned to meet these interests and provide the foundation for an authentic, high-quality modern development model". Even today, many Europeans are concerned about the erosion of rural infrastructure and services (health care, social services, and education), the reduction in job opportunities, declining rural incomes, and limited transport and connectivity. Rural areas play an active role in the EU's green and digital transition. The European Commission is committed to a long-term vision for the EU's rural areas until 2040, focusing on four areas of intervention (European Commission, 2021):

– stronger rural areas: active community participation, access to services, and social innovation;
– more connected rural areas: digital connectivity, transport links, and new mobility;
– more prosperous rural areas: diversification of economic activities and sustainable food production;
– more resilient rural areas: resilience to climate change, environmental resilience, and social resilience.

In summary, rural development policy remains central in the long term. However, has it been and will it continue to be capable of adapting to new challenges and visions? Its capacity for adaptation has already been demonstrated in the past, as rural development policy has evolved alongside rural studies.

From the birth of the CAP until the late 1990s, rural development activities focused heavily on creating

new opportunities for generating income and employment. At the time, the concept of rural development was specifically used to describe (and group) activities that improved relations between agriculture and society as a whole. Later, it became clear that rural development did not mean a departure from agriculture. While it was recognised that the rural economy was much broader than agriculture, it was also believed that agriculture could be transformed and become an indispensable (although not dominant) part of the rural economy (Oostindie *et al*., 2010). Thus, various but closely interrelated elements emerged that define the concept and practice of rural development. Among these, creating new connections with society as a whole was central: new goods and services have to be produced to meet the needs and expectations of today's citizens. Consequently, rural development was defined as "responding to the growing demands for higher quality, health, safety, personal development, and leisure, and improving rural well-being" (Cork Declaration, 1996).

Another key element was the transformation of agriculture to meet new needs and expectations (and to generate additional income and employment). Rural development required a reconfiguration of rural resources, and agriculture was reshaped according to a new logic along these lines: multifunctionality, reduced dependency on external resources, improved and more sustainable use of available internal resources (especially nature), new ways of mobilising resources, and new forms of cooperation, which became important expressions of this new rural development logic, based on socially innovative governance, of which a virtuous example are the LAGs (Georgios, Barraí, 2023)

Rural development policy has maintained a certain "ambiguity" between agricultural development and authentic rural development, but this vagueness has allowed for a balance between the characteristics of European agriculture, which has a dual structure – both economies of scale and economies of scope – although[19], in practice, there is and will continue to be considerable overlap and nuance (Oostindie *et al*., 2010). Consider, for example, the 2023-2027 rural development policy, which includes a wide range of interventions aimed at achieving economies of scale and enhancing the competitiveness of businesses through support for the modernisation of agricultural structures and integration along long supply chains while simultaneously supporting the agrienvironment, multifunctionality, and local partnerships.

Rural development policy has successfully reconciled EU-level regulations with subsidiarity, taking into account local specificities and needs and thus encouraging or rewarding specific behaviours aimed at addressing territorial needs with selective measures, in line with the principle of subsidiarity (Bartolini, Viaggi, 2013; De Castro *et al*., 2021). This is especially true for small farmers, who have been able to adopt a multifunctional approach thanks to these measures (Vecchio *et al*., 2021). The success of technological innovations in competitive and sustainable agriculture also strongly depends on the involvement and active collaboration of a wide range of actors, including investments in multi-stakeholder networks (Bojkova *et al*., 2024).

Despite inevitable compromises between political groups and national visions, rural development policy has followed the evolution of rural studies. In fact, political choices regarding the CAP's second pillar have been much more influenced by scientific studies than those of the first pillar. Rural studies, emerging as a new paradigm in the fragmented representation of the countryside, agriculture, and the processing and distribution of food – an area to which Flaminia Ventura has made significant contributions – have played a decisive role in shaping and advancing rural development policy (see Ploeg in this special issue).

5. CONCLUSIONS

This paper concludes that the evolution of rural development policy in the EU has closely followed the theoretical advancements in rural studies, particularly the concepts of multifunctionality and territorial development. The CAP has successfully integrated these principles, especially through instruments such as the LEADER programme and the EAFRD funds. However, the implementation of rural development policy still faces significant challenges, such as balancing the needs of diverse rural areas and addressing socio-economic disparities.

The analysis in the third part of this article – an exploration of the implications of these results in relation to rural development theory – confirms that the evolution of rural development policy reflects broader shifts in rural development studies, particularly in its embrace of multi-sectorality and sustainability. This study demonstrates that European policy has increasingly moved towards integrating local economic, social, and environmental systems, a trend central to Flaminia Ventura's work (Ventura, Milone, 2005; Milone, Ventura,

[19] Oostindie *et al.* (2010) highlighted the dual structure of European farms: multifunctional farms (economies of scope) produce traditional goods along with a range of new products and services, aiming to avoid heavy reliance on external inputs and credit, while highly specialised farms (economies of scale) are strongly integrated into markets, particularly on the input side of the farm (including the capital market).

2012). As mentioned before, scientific studies have highly influenced the second pillar of the CAP but have only marginally addressed the first pillar, which is strongly influenced by path dependency.

Several challenges remain, particularly regarding the uneven distribution of EAFRD funds, which continues to favour more urbanised areas over peripheral rural zones. This finding aligns with critiques from the rural studies literature (Crescenzi *et al*., 2011), which argue that rural development policy has struggled to balance economic competitiveness with inclusive growth.

While this study provides a comprehensive analysis of policy evolution, it is limited by its focus on EU-level interventions. Future research should investigate the localised impacts of rural development policies, particularly in regions where agricultural decline and rural depopulation persist. Additionally, the role of digitalisation and innovation in rural areas, though explored in the 2023-2027 policy period, deserves further empirical study to assess its long-term sustainability.

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The Multidisciplinary Approach of Rural Studies - Research article

Contested ecological transitions in agri-food: emerging territorial systems in times of crisis and insecurity

Terry Marsden

Cardiff University, Cardiff, United Kingdom
E-mail: Marsdentk@cardiff.ac.uk

Abstract. The paper will assess the extent to which sustainable transitions are occurring with reference to Europe in the 2020's. Here, re-assessing the relationships between science, policy and politics is critical given the 'polycrises' which are impacting upon our food systems. Do these interlinked crises and disruptions suggest opportunities for sustainable and more territorial transitions in agri-food to gain traction and scale out? This is a possibility, but we have to critically assess the revised power configurations that are emerging in a more variegated and diverse agri-food policy and political landscape. Established theories of sustainable transitions need adjusting to take account of a changing science-policy-political landscape, and one which will have to integrate (rather than fragment) the new drivers of net- zero, necessary health and diet shifts, food poverty and security concerns, as well as sustainable and regenerative farming and land-use practices. This gives more opportunity, it will be argued, for integrated territorial management which encourages multi-stakeholder policies and politics. The routes to this are, based upon our recent empirical evidence far from linear; rather they are often inert rather than capable, competing rather than collaborative. As such we need to devise political and policy frameworks at devolved regional and territorial levels. The paper will explore examples of how and where this might be taking place, and what lessons can be learned for re-theorising agrarian transitions.

Keywords: transitions, polycrises, land use practices, sustainable and regenerative farming.
JEL codes: Q18.

HIGHLIGHTS

- Re-understanding agrarian transitions
- Re-theorising transitions towards more sustainable agri-food systems
- The role of science /policy interfaces
- The role of neo-liberalised governance in the case of the UK.

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ORCID
TM: 0000-0003-0503-2039

1. INTRODUCTION: BIMK SYSTEM

This paper considers the processes of agri-food transitioning in a period of polycrisis. The 2020s represent perhaps a surprising but disturbing upturn in the volatility and vulnerability of European agri-food systems; embodied as they are in current and ongoing wider macro-economic and geopolitical convulsions. This comes also at a time when more rationalist scientific and policy thinking has become highly normative around the macro-concerns and indeed imperatives of reaching 'net-zero' targets regarding carbon emissions and de-carbonisation, restoring natural forms of bio-diversity, 'sustainable intensification' and significantly improving consumer diets. Yet as we see here with empirical reference to longstanding and longitudinal research on two agri-food regions in the UK, there are significant gaps and fissures developing between this growing scientific and policy rationalism and yet the diverse and embedded empirical realities, which display highly contested, somewhat inert and differentiated pathways of transition.

These empirical realities and relationalities point to the systemic relevance of focussing and understanding the sociological Bio-physical-Innovation-Market-Knowledge Systems as transition mechanisms which are engrained in agri-food production and processing systems (BIMK-systems)[1]. The paper first outlines the contours of the polycrisis, and then through a comparative empirical lens, looks at the diverse realities of transition and adaptation in BIMK systems now occurring in the agricultural systems as part of their role in wider food systems. In conclusion we ask the question: what does this mean for our theorising of more sustainable agri-food transitions?

2. TRANSITIONS AMIDST POLYCRISIS

The current global food system exhibits a series of combined negative and interconnected sustainability issues associated with biodiversity loss, water pollution, soil degradation, climate change as well as diet-related health problems. Agricultural contributions to greenhouse gas emissions and food waste are also concerns particularly relating to intensive animal production. Changes to the agri-food system is critical so as to align environmental (food, energy, water) and health goals. Also, global demand for food by 2050 will require dietary change and significant reductions in food waste, whilst current technological and yield increases will be insufficient to meet these demands. These problems are being exacerbated by a series of interconnected political and market power asymmetries associated with ongoing land concentration, supermarketization, financialization and digitalization which are concentrating the ownership and management of food systems in few hands. Also today, at the agricultural level as we shall see, these environmental vulnerabilities and volatilities have been joined by growing market-based impacts and perturbations associated with the onset of global geopolitical crises (trade wars and restrictions, wars), the threats of variant animal and human diseases, and the incidence of severe and regionalized floods, droughts and fires which are challenging the levels of food security in many countries. As such it is necessary analytically to now embed our discussions of agri-food transitions very much within the more unpredictable context of polycrisis. It might be argued, as we shall suggest in the conclusion to the paper, that polycrisis makes the notion of agri-food transitions as any form of assumed linear dynamic all that more difficult, more diverse and unpredictable.

Nevertheless, it is increasingly recognized that to address these interrelated challenges will require system-wide changes. However, so far and despite sustainability discourses becoming common-place in scientific circles for over two decades, agri-food systems are showing only slow or inert levels of transition (see Lamine and Marsden, 2023). This inertia I will argue needs to be critically explored and is related to the long-standing socio-natural distinctiveness of agri-food production, markets and exchange, their power asymmetries, and more specifically, how embedded power and BIMK relations within agri-food systems are enacted and re-configured over time and space. Unlike other socio-technical systems (such as industrial manufacturing, transport, digital or energy systems, agri-food systems depend upon combinations of BIMK systems for their sustainability over time and space.

In this sense, it is worth in summary, reminding ourselves of the broad distinctive and interconnected features of BIMK systems in agri-food production, for it is significant shifts in these which are necessary if we are to achieve wider more sustainable transitions in agri-food systems. There are four interconnected realms.

(i) Bio-physicalities: Food production, to be sustainable over time and space, needs to arrange local and regional bio-physical systems (ecologies, water, micro-climate, soils and vegetational systems)

[1] I use the term agri-food system here throughout the text to locate the relationships between agricultural production practices and its links with the wider food system. This is the focus of the paper. This is a subset of the wider concept of food system which incorporates the whole nexus of relationships including food consumers and consumption realms.

in particular ways which rely upon complex and spatially embedded systems of land practices. Of course, it can never completely control these elements; only managing to 'fix' systems within sets of practices created by past and established innovation and knowledge systems. These systems then produce a recombined series of bio-physical entities -food commodities themselves- which in turn come with their own bio-physical novelties and attributes-qualities, durability, DNA and nutritional qualities. They are elementally embedded in their socio-natural and spatial contexts because it is these which give sustenance to sustaining production and exchange.

(ii) Innovation systems: farmers, farmer networks, corporate agri-business, governments, R and D bodies and Universities, provide a constant flow and interchange with this bio-physical system as a means of intervening and modifying their ecologies. This is a process of constant intervention, trial and error and social and technical learning; pleated histories and techniques over time and space.

(iii) Market conditions: some of these innovations and products enter into complex market and exchange relations and this leads to:

(iv) Particular and defined knowledge systems being created and sustained in agri-food; for instance, as associated with productivist conventional farming, organics, agro-ecology and a growing variety of nature-based farming practices as well as consumer and market driven systems associated with, for instance vegetarianism, veganism, protein and plant-based 'lab' based systems etc. There are multiple feedback loops between these realms.

As such, any radical changes in such agri-food systems needs to address the adjustments in BIMK systems. We begin to attempt to do this in two case study regions in the UK below. Indeed, it is we can argue, at the regional level that the current sustainability challenges and transitions need to be addressed.

So far, research has tended to focus upon the macro and abstract level with regard to plotting sustainable transitions in the agri-food sector. At the macro-scale, the multi-level perspective (MLP) (Geels, 2004; Geels and Schot, 2007) has been adapted to the specific type of consumption-production systems that are food systems. This approach has been refined by including food practices in the focus of research (Spaargaren, Oosterveer and Loeber, 2013), and highlighting specific transition mechanisms such as the combination of the action of diverse "niches" (rather than one singular niche) which generates wider changes in visions and practices (Bui *et al.*, 2016). While MLP is increasingly used at the scale of specific food industries (Magrini *et al.*, 2016; Rossi and Bocci, 2018), or specific agricultural segments such as the organic sector or geographical indications in the UK (Smith, 2006; Belmin, Casabianca and Meynard, 2018), there are few applications at the scale of regional food systems.

This body of work considers both multiple regime dynamics and multiple niche-innovations (Bui, 2021) in addressing whole system reconfigurations. This calls for a change in the conceptualisation of transition dynamics towards a more distributed, multi-source view of change (Geels, 2018). This suggests more granulated accounts of anchoring processes, of the non- linearity and contingency of transition pathways, and of the contested visions of transitions.

Despite this progress we can argue that at least two key dimensions of agrifood system transitions are still partially overlooked: *the role of specific socio-ecological settings and that of power relations*. Power relations have begun to be debated in the transition studies community (Avelino and Wittmayer, 2016; Haxeltine *et al.*, 2017; Rossi, Bui and Marsden, 2019). Yet it is rarely related to the particular and embedded bio-physical distinctiveness of regionalised agrifood systems. The bio-physical distinctiveness relates to both the intrinsic characteristics of food production-consumption systems (i.e. the high variability and uncertainty due to their reliance on bio-physical processes, not least climate, soil quality, and variability in fertility and plant nutrition) and to the specificities of some contexts in regard to others – whether at the national or regional scales. *How do bio-physical features interact with the other key components of the agrifood systems, i.e., knowledge, innovation, market, regulations and policies?* To address this question creates a basis, it is argued, for a deeper and more nuanced understanding as to why sustainability transitions are so difficult and slow to achieve. It is suggested that a focus upon the biophysical-innovation-market-knowledge (BIMK) relational-nexus approach is necessary to characterize these interactions. How are power configurations redefined along the (re)design of these arrangements? How do the articulations between BIMK arrangements and power configurations allow to characterize agrifood systems trajectories and the transition mechanisms at play?

The objective of this paper is to explore these different questions. First, by contrasting two trajectories at the regional, scale, which will allow us to analyse the impact of different power configurations on these trajectories. Second, by contrasting different regional trajectories, which will allow us to analyse the impact of different articulations of such power configurations with specific (contextu-

alised) biophysical-innovation-market-knowledge arrangements. This will finally lead us to demonstrate the layered nature of successive arrangements and the related articulations with successive power configurations.

This defines the analytical building blocks for our analysis of regional trajectories. For the territorial trajectories, we will explore the role of some key territorial bio-physical features in supporting the emergence or redesign of specific biophysical-innovation-market-knowledge (BIMK) arrangements. To build these analyses, we rely here on place-based longitudinal studies, conducted by the author and their research colleagues involving combinations of ethnographic, documentary and interviews over at least 25 years.

The conceptual approach applied to transitions here combines but also extends insights from the MLP with those from political ecology and endogenous rural development that have more specifically explored power relations and the territorialization of markets (see Milone, Ventura and Ye, (2015) and Ventura et al, 2010). From the former, we can incorporate the focus upon global drivers and the rise of niches and their influence on the consumption-production system, which will help us address our first research question about the processes of stabilization, destabilization and inertia in national food systems. From the latter, we can borrow the critical attention to the agro-industrial system, the related controversies and alliances, and the "situated" and embedded power configurations articulated though combinations of political, market and civic/public processes. BIMK systems also incorporate the regional bio-physical systems which emerge and are managed through combinations of innovation, market and knowledge systems. These are themselves regionalized and spatialized as we see below. These partly explain the differences between the two regional trajectories, demonstrating the need to address the articulation of bio-physical, innovation, marketing and knowledge systems as a dynamic and spatialized process as part-and-parcel of the transition process over agrarian times and spaces.

3. REGIONAL CASES

3.1. Carmarthenshire (Wales)

Before the post-war modernisation and productivist period, Carmarthenshire had a diversified production system with livestock grazing farming for red meat (mainly sheep and beef) and dairy production as well and local forms of horticulture. Wheat, bread and fruits such as apple and pear had long been part of the landscape (and BIMK) until the middle of the 20th century. This system was based upon relatively small family farms which were increasingly family owned as former tenants were able to buy their farms from former landed estates especially from the First World War onwards. In the post-war modernisation period, and especially from the 1980s onwards, both the dairy and meat sectors begin to lose their traditional locally-based productive and processing infrastructures because of the increasing dominance of retail and manufacturing corporate concentration and their links to mass UK markets and associated long-distance supply chain logics.

This period was dominated by strong policy incentives both through UK and then EU production subsidies to produce standard food inputs into the mass markets with little or no regional branding or certification. Steadily these markets became dominated by oligopolistic and corporate food processing and retailing firms. Interestingly this incentive system of production subsidies did not extend to horticulture. Whilst red meat and dairy production remained the staple production systems in the region, horticultural production was vanquished as a result of the incentives to produce more red meat and dairy, and the rise of corporate retailers who sourced horticultural products at concentrated scale. As a result, horticulture witnessed a significant decline in land area. Both the beef and sheep sectors have been since the 1980s affected by a series of intensive livestock diseases (mad cow disease, foot-and-mouth disease, and bovine tuberculosis) which has periodically affected market volatilities, and indeed led to further concentration of production into fewer and larger units.

However, from the mid-1980s onwards, we can witness the emergence of a more 'regionalised food regime' based upon the 'quality' production and marketing of red meat (lamb, beef), dairy products (mainly milk and cheeses). This was based upon the development of farmer-based cooperative organisations, which begin to share input purchasing, coordination of self-defined quality standards and, especially, marketing and local branding strategies. A much smaller but emerging horticultural sector, based on other kinds of initiatives and actors (collective farms, new entrants, CSAs etc.) also began to emerge. Of significance here was the use of EU regional development funding and the role of the devolved Welsh government (post- 1998) in stimulating regional branding and food processing.

Thus, for the 2008-2015 period, longitudinal studies in South West Wales (Marsden and Morley, 2014; Rossi, Bui and Marsden, 2019) analysed the emergence of 'regionalised food regimes' in the pasture-based agricultural economy based upon the 'quality' production and marketing of red meat (lamb, beef), dairy prod-

ucts (mainly milk and cheeses), and a much smaller but emerging horticultural sector. Over the past decade then the multifunctional development of a more spatially and 'quality-driven' agro-food sector in the region has grown. This has been partly a response to the overall crisis which has afflicted the 'conventional sector' in terms of market volatilities associated with diseases, relatively lower farm-gate prices associated with corporate market domination of the downstream sector, and the costs of credit and other inputs. Both the dairy and beef sectors have been historically affected by a series of intensive livestock diseases (mad cow disease, foot-and-mouth disease, and bovine tuberculosis), whilst also losing their traditional locally-based productive and processing infrastructures because of retail and manufacturing corporate concentration. New shorter-supply chains based upon the distinctive bio-physical characteristics of the region have multiplied.

The growth in this multi-functionality and diversification can be very much seen as a shift in BIMK systems based upon the need to 'exit' from conventional supply chains and markets; to innovate organisationally and in terms of quality production conventions; and in re-creating more cooperative and collective knowledge systems. In most cases there were varying degrees of autonomous control and innovation pursued in the science-innovation and bio-physical matrix, such as 100% pasture-raised dairy or beef, and/or short-supply chain innovations. These, in turn, led to a re-capturing of 'market-power' by producers and local processors, benefitting both the producers and, more in general, the region. This is a shift towards more regional re-valorisation.

The significant empowerment of the new or revised scientific-technical and bio-physical elements, when matched with the regeneration of spatially and socially distributed local infrastructures, demonstrates how the building blocks for more regionally-based food clusters can gain transformative potential at regional levels. Many of the producer groups examined here attempt to create a regional and bio-physical niche in this context. The meat sub-sector in South Wales is one such case. This is typified by a strong industrial element with many of the producers servicing mainly UK and EU markets. It is also setting new additional rules and standards with regard to the embedded quality of the products, and also increasingly entering global market demands for regionally based products (in both lamb and beef). The producer groups do not restrict their routes to market. Rather they seek forge a more innovative and diverse range of markets, including re-creating regional livestock markets and local abattoirs.

Since 2020 and the Covid epidemic, local authority food partnerships have also been created to further stimulate a territorial approach to agri-food transitions. As a response to the effects of the pandemic, Carmarthenshire Association of Voluntary Services (CAVS) facilitated the creation of grass-root networks which marked a milestone in the consideration of food security and poverty issues at a local scale. The principal aim of the association was to bring organisations, businesses, community groups and individuals together to share ways of tackling food poverty, and to further relocalise regional supply chains. It constitutes the starting point of another territorial network called the Carmarthenshire Food Network (CFN) in 2021. Since the beginning, the CFN has brought individuals, community groups, businesses, and organisations clustered into four groups (community growers, community Food Providers, private Sector, Wider Support) to develop a healthy regional/ local food system. In 2021, the county obtained funding from the Wales Poverty Alleviation fund aiming at working and increasing access to fresh food at emergency food services across the county. At the same period, a new steering group besides the CFN's one was created. This steering group was led by the County Council and the aim was to provide a strategic vision (while the CFN is more focused on actions and coordination). This parallel partnership is called Bwyd Sir Gâr Food (BSGF). CFN and BSGF are thus two complementary organisations. While CFN works with grass-roots operators and coordinates actions, BSGF thinks in term of strategy. In 2022, BSGF became part of the wider national Sustainable Food Places membership which covers many local authorities and city governments across the UK. This recognition helped the territory to get Welsh Governmental support, provided by the the Ministry of Social Justice, for the development of the local multi-sectorial food partnership. The strategy is still in development and is being discussed with the Public Services Board, which is an innovative way of conducing food policy at the national scale. Part of this work is also in creating a regenerative demonstration farm by converting what was formerly a county council owned dairy and beef farm. In Carmarthenshire, post Brexit and post covid local governance innovations are assisting sustainable food transitions, and a new post Brexit sustainable farming scheme is planned for introduction in 2026 based upon principles of regenerative farming and decarbonised food systems.

3.2. Cheshire – Shropshire

Cheshire and North Shropshire in England represent a largely flat but fertile bio-region of land which originated from the glacial and alluvial lake and out-

wash of the last glacial period. This provides rich and cultivable soils. Much of it called geologically: the 'Cheshire Plain' but extends across most of the counties of Cheshire and the Northern parts of Shrophire to its south. Traditionally, and from the industrial revolution in the 19th and early 20th centuries, it was an agriculturally- productive region for arable and especially dairy and cheese production, serving the neighbouring and growing urban agglomerations of Liverpool, Manchester and Stoke-0n-Trent. For instance, 'Cheshire' Cheese was and remains a regional brand. And Shropshire 'blue' cheese also represents another. Major transport routes- canals, roads and rail links provided the means for transporting ever increasing foods from the region to these expanding urban areas.

The region developed an advanced, innovative and increasingly intensive/ productive agriculture built upon large owner-occupied and tenanted farms, many of which were originally tenanted to large private estates. Some of these estates still remain (such as the Grosvener Estate), but along with the rest of England, the 20th century saw a continual rise in family farm owner-occupation, now the major form of land occupancy. The region thus developed a very innovative, and lucrative farming infrastructure during the late 19th and early 20th centuries, based upon the provision of expanding urban markets around its perimeter.

We can identify three more recent periods in the territorial food system's trajectory.

1960-1985 a Mass and Export-Oriented Agriculture

Post-war agricultural policies incentivised the further intensification and specialisation of its production systems. By the 1980s, the region was a nationally specialised region for intensive dairying and potato production, also holding significant food processing facilities in these sectors. There were numerous and large livestock markets. Now livestock markets have been reduced and concentrated in towns like Market Drayton, Shrewsbury and Oswestry, which also hold large food processing and retailing industries. The overall logic was to increase the 'economies of scale' and to replace farm labour with machinery and associated technologies was particularly prevalent in the dairy and potato sectors. Continued 'cost-price' squeeze pressures forced most farmers down this route, and it also led to the reduction of the number of working farms.

1985-2008 Emergence of Regionalised Food BIMKS

The reductions in price support linked to the CAP reforms, UK neoliberal policies (abolition of milk marketing board, privatisation of state supported farm advice etc.) and the rise of retailers' power have reinforced the previous trends: dairy processing became further concentrated and the food processing and retailing in general more oligopolised. Symbolic of this period is the establishment of the Muller dairy in Market Drayton in 1992.

In this period there was a steep and continuous decline in the number of farms and amalgamations, especially in dairy. The number of farms dropped from a total of 8500 in 1985 to 4545 in 2007, of dairy farms down from 1000 in 2002 to 716 in 2007. There have been further declines and amalgamations since.

State supported farmers' advice was privatised, although in this period the AHDB (Agriculture and Horticulture Development Board), a levy board funded by farmers' contributions, still promoted the marketing of food products. On the other hand, the region hosts the Organic Food and Gardeners organisation, created in 1973, which became in 1992 the first OF certifier in the UK, and now certifies over 30% of the UK organic sector. Environmental issues have also risen on the agenda (water pollution due to intensive dairy farms) but not generated profound changes until the late 2000s.

2008 – 2024 Fragmentation and Contestation of Narratives and Models

From the 2000s on, the region has faced increasing population growth as ex-urban groups wish to move to rural or suburban locations and there are considerable pressures on further urban growth on highly productive agricultural land (suburbanisation of the countryside), despite relatively strong land use planning policies. Linked with these new demographic trends, more alternative forms of farming and food networks have developed despite a continuity in intensification and specialisation and a larger supermarketization trend.

The growth in supermarket procurement led the farmers to increasingly being committed to retail-led preferred supplier contracts which have to obey to retailer's guidelines and protocols. The continuing cost-price squeeze in the conventional sector also encourage more innovation and transition. Some farmers specialised in meat production and developed an orientation toward short circuits, with thriving butchers' shops in market towns and agricultural markets, in towns like Market Drayton, Oswestry and Shrewsbury. Some are developing a richer tapestry of differentiated farming practices based upon improving the quality of production practices and adapting to more differentiated market demands

In the last decade, consumers demand for organic food and environmental issues have generated new dynamics towards multifunctionality, rather connected to the national food markets than to local ones. Organic

oat production and milling is developing so as to meet the growing demands for oat and plant-based milks and bread products. Some large arable producers are returning to more mixed and rotational methods of rich herbal lay undersowing and pasture-based livestock production. Due to these diverging trends, a more bi-polar spatial model of farming practices seems to be taking hold, which involves new insertions of 'sustainable intensification' on the one hand, and restorative and/or agro-ecological farming on the other (see for example the two cases below).

The Royal Show (a large agricultural event) long organised in Stoneleigh stopped in 2009, while The Groundswell regenerative farming event started in 2016 in nearby Hertfordshire; focused on Conservation Agriculture and regenerative systems. Still strong intensive productionist interests ally with high- tech sustainability solutions, based on 'hands free' farming and robotics, precision farming; many being trailed at the regional Agricultural university Harper Adams.

This University played an important role in these recent evolutions by creating an agroecology Master, a School of sustainable food and farming (2023), by establishing partnerships with various farmers organisations (Nature Friendly Farming, Holistic farm management, etc) and with large players (eg. Jordan Farm Partnership launched in 2020 and involving the Shropshire Wildlife Trust Morrisons Sustainable Network launched in 2024 and focused on net zero farming), also by launching a paludiculture program aimed at developing a modern 'wet' agriculture in the region; which is experimenting with re-introducing wetland and marshland eco-systems.

Since 2021, the Shropshire Good Food Partnership brings together food chain actors (producers, retailers and consumers "with a vision to create a local food system more resilient, sustainable and fair").

In organic farming itself, contrasted BIMK tendencies and models can be acknowledged, as exemplified by two farms: the Fordhall Organic Community Farm and the N. Taylor organic farm.

Fordhall Organic Community Farm, an extensification model based on a strong socio-ecological anchorage
Located in North Shropshire, Fordhall organic farm is a 128 acres farm property surrounded by 2 rivers and a main road on the outskirts of local market town Dayton. Following the intensification period of the Second World-War, the Hollins family decided to orient its farm production toward 'compost-based production'; a chemical-free and pasture-based production which rears cattle of sheep, pigs and beefs. In 2006, Fordhall turned into a "community owned company" to face agricultural land development pressure of the mid-1990's from large-scale dairy company Muller. The Fordhall Community Land Initiative is owned by 800 shareholders which finance, vote and decide the agricultural and economic orientation of the farm, which tends to diversify its production by developing agro-tourism, catering events, and social initiatives. Fordhall Farm is led by one tenant farmer, while the community land initiative employs 30 people part-time and 1 person full-time. The production is local-based and sold directly to the public through farm-shop, online shops, farmers markets or outside catering. The current dynamics of the farm development is being debated with the shareholders, the prevailing view being that of supporting the viability of the farm by extending the land property (as the tenant also rents land to produce animal feed and maintain the farm's autonomy).

"It's not about getting bigger now, it's about getting smarter": intensification through digitalisation of Taylor organic farms in North Shropshire.
Taylor organic farm describes itself as a large-scale farming family business covering 2,471 acres of plain and fertile agricultural lands. Until the beginning of the 1990's, agricultural production was conventional and specialised in pig, dairy and vegetables. As means to be competitive, the owner of the farm turned organic and intensified vegetable production from the mid-1990's onwards whilst progressively shelving livestock and developing mechanisation on farm in order to increase the production and show that "organic could feed the world". This farm uses a 7-years based rotation system on one-third of its production. All carrots and potatoes produced are sold to main distributors and supermarkets of England. This commodified organic production tends to get more intensified through mechanization and digitalisation. The owner wishes to develop mechanics assisted by artificial intelligence on the farm, to supplement the 10 full-time farm employees and face a shortage of farm labour. Whereas intensive agriculture is still the main type of agriculture in Cheshire and Shropshire regions, Taylor organic farms appear to be an innovative but relevant example of current new digitalisation movements.

Interestingly, the two farms' strategies are led by an entrepreneurial ideal and the wish to produce affordable organic food, even though they illustrate two different visions of organic agriculture both in technical terms and in the relation to the local region and communities.

Brexit had an important impact in many farms that relied on seasonal work of European migrants. In terms of farm scheme, most large estates are subject to environmental greening as a result of the post-Brexit transition to English Environmental Land management scheme (ELMS).

Finally, and like in other regions, new initiatives and networks were launched in the last years to address the increasing food poverty and accessibility issues. The Shrewsbury Food Hub was started in 2016 as a charity, that brings together 60 partners, and runs two restau-

rants, kitchens and a food share system. The Shropshire Food Poverty Alliance was created in 2018, bringing together various civil society organisations and charities and the Shropshire Council. A Cheshire East Food Network was also created and actively worked to impose a Right to Food Strategy within the Cheshire East Council (2022). The Harper Adams Agricultural University also started to tackle food justice and waste management issues by putting in place a community fridge aimed at distributing surplus food and assessing changes in practices. It also started to work with allotments in various towns across the region.

However, in this region, local public institutions such as counties have minimum policies or no role at all in food and agriculture at least in comparison with other case studies such as Carmarthenshire in Wales. Most county farms have been sold off or are abandoned, and charity or civil society organisations supply to the absence of public action.

It is important to recognise that whilst the basis of this productivist region may now be changing and indeed diversifying, productivism is still a very strong feature of the region. This has now, however become more diversified with more innovation in the areas of agro-ecology, organics and what is being termed 'regenerative farming'. Thus, the BINK systems are very much under transition, but is a very diversified and multiple-pathways way.

Also the region, as a result of its contiguity with its large urban neighbours, faces increasing suburbanised population growth, as demand for housing in and around many of the attractive former market towns expand. There are considerable pressures on further rural and suburban growth on highly productive agricultural land. Planning policies are coming under considerable pressure from developers; and many farmers are diversifying their land use into recreational and residential conversions as a way of enhancing their farm incomes. In all this agricultural and rural land prices and values continue to increase, making development gain and increasing incentive for many farmers and land owners.

The region now represents a complex layering of more multi-functional agri-food and rural-urban transitions. These include: (i) pre-productivist (the large estates and tenant farming system feeding the industrial neighbouring hinterlands); (ii) productivism and specialisation; (iii) post-productivist dimensions and the rise of ex-urban populations; (iv) now more regenerative multi-functionality and multiple transition pathways based upon new innovation and knowledge systems linked both to agri-food and wider forms of multi-functional rural development.

4. COMPARATIVE INTERPRETATION OF THE TWO REGIONAL CASES

In both case study regions here we can begin to see in the most recent periods the development of re-territorialisation as an active, contingent and indeed multiple pathway process. At the territorial level of analysis, innovations, short circuits, and more community-based initiatives and agro-ecological networks are also proliferating. Thus, at the territorial level we witness *a contested layering of food production BIMK systems-both conventionally linked to the corporatist-environmental regime, and the more autonomous clustering of more embedded more sustainable production practices.*

More generally, the post 1980s the dominant UK political culture and governance of economic liberalism has rendered matters of food and farming, and especially questions of food security and diet, as matters that need to be resolved 'by the market'; when in fact as we have seen, this 'market' is neither functioning openly, and it displays high levels of both financialised economic concentration and asymmetrical power relations. Underneath, or perhaps we should say alongside this dominant 'regime', we see here, especially in the most recent period of polycrisis (post 2020) increasing numbers of producers and smaller food businesses who are progressively detaching themselves from these logics and creating renewed and revised BIMK systems. These may provide more autonomy and overall resilience for farm business. Our comparative regional analyses above thus show how transformations in BIMK agri-food systems are contrasted, embedded and are evolving in each region, as a result of the articulation of bio-physical, innovation, market, knowledge (BIMK) arrangements and power re-configurations.

Biophysical elements strongly determine agrifood transitions both in terms of reversibility and potential ecologisation. Some regional agroecosystems are more damaged than others. For example, soil quality and biodiversity have been durably impacted by intensive agriculture in Cheshire and Shropshire; some structural features prevent or favor the potential ecologisation, like the size of plots or presence or not of hedges, cannot be changed in the short term. In our case study regions, we see significant evidence of new innovative ways to relate to regional bio-physical features being experimented and then established. These biophysical features, that used to be/are still considered as « obstacles », « limiting factors » etc. in the modernisation/intensification period and models, are increasingly considered in terms of carrying capacity and valorisation of diversity in some current narratives and initiatives, giving way to potential ecologisation pathways through new BIMK arrangements. In

some regions like South West Wales, this leads to re-designing plant and animal production around redefined local and regional features, such as local cattle breeding and processing, wine growing, organic production of local vegetable or cereal varieties, thus leading to « systemic » redefinitions of innovative BIMK arrangements. In other regions like Shropshire/ Cheshire, biophysical features are considered in terms of resource preservation and reduction of impacts and support less systemic redefinitions of such arrangements.

Of course, such redefinitions do not happen alone or independently. They require the (re)emergence of knowledges and farming or processing techniques; and in turn this need then relating and articulating to both agricultural and rural development actors and market actors. Sometimes the new arrangements can be given a 'helping hand' by local and regional public policies such as food procurement initiatives in the UK or territorial food projects like the emergence of local food partnerships in Carmarthenshire. In other cases, as in Shropshire and Cheshire it is very much left to the networks of farmers and processors themselves to promote their new brands and to re-empower themselves through collective and cooperative actions.

This takes us onto another key feature of these transitions; that of the power re-configurations, which are to be tackled in terms of both their multifunctional nature and their multiple processes (power over what, and how power balances are redefined).

Power relations are reconfigured along with the new arrangements that articulate biophysical features with adapted market options and knowledge and innovation. A feature of the regional transformations is for farmers and small food businesses to attempt to escape the asymmetrical market power of external price-setting by the no-farm corporate actors (corporate retailers, farm input suppliers – e.g. fertilisers, machinery – and food processors). This occurs in some farm businesses as we see in Cheshire and Shropshire. Developing short supply chains so as to deviate from the powerful market rules applied by the retailers is one way to do this, as is reducing external inputs use to avoid input suppliers and their increasing costs. To do so and develop ecological more autonomous practices, these actors also need to take more control over their agricultural knowledge and innovation system. We see in our case study regions an increasing number of farmers opting out of the conventional power and technological frameworks – although they are still in existence on the larger, more intensive farms. In both our case regions examined here we see then the evolution of adjusted BIMK systems as the vehicle to articulate and enact transitions.

5. CONCLUSION: CREATING TRANSFORMATIVE POTENTIALS IN AGRI-FOOD SYSTEMS

Whilst our comparison of the two regional trajectories has shown that despite many similar trends linked to shared global drivers, different power and BIMK configurations increasingly explain dynamics and differences. Analysis of regional cases has also shown that transitions in territorial agri-food systems are currently occurring as a result of the following key transition mechanisms:

(i) Partly as a response to polycrisis, the re-incorporation of place-based biophysical elements within newly forged or reforged biophysical-innovation-market-knowledge (BIMK) arrangements, i.e., particular recombinations of relations between biophysical features, forms of innovation, market orientations and knowledge exchange processes.

(ii) The reconfigurations of power relations, particularly in changing market relations, in their multifunctional nature (as they impact the different components of the agrifood systems and of the BIMK arrangements) and through the growing 'quests for autonomy' associated with multiple farm strategies. We see in both cases study regions farm businesses creating new forms of autonomy and power relations around managing their bio-physical complexes, in re-establishing 'shorter' market exchange relations and in harnessing new knowledge systems linked to new networks.

(iii) These new and revised BIMK systems are significantly challenging and in fact denuding the conventional notions of a 'dominant regime'. They are enacting this through a greater variety of BIMK systems and arrangements. In this sense this suggests the absence of any notion of a 'grand transition' in agri-food systems; but rather a diffuse undermining of former more dominant systems by a growing variety of spatially interconnected BIMK systems whereby combinations of bio-physicality, innovation, market and knowledge systems form a rich archipelago of colliding productive forms and practices.

These explorations suggest the absence of both a linear or 'grand transition' from conventional productivist farming to more sustainable and/or agro-ecological models. Rather, and indeed re-enforced by more recent polycrisis, farm businesses are creating diverse transitional pathways by modifying their BIMK systems and attempting to create more empowered and resilient systems in the context of higher levels of vulnerability and volatility. This shows all the signs of eroding the old

dominant productionist regime, 'from within'; particularly in a national neo-liberalist governance context which is at best reluctant to prescribe any dominant or strongly interventionist 'post war' type policy regime on its farmers. In addition, the reluctance by government to intervene in food markets, especially the corporate retail dominated 'markets', means that it is left to farmers, food processors and civic society and consumers to reform market relations in adaptive and new ways.

It is thus not only the nature and succession of (different) BIMK arrangements that characterize transition pathways but also their articulation with specific configurations of power relationships in the agrifood system. BIMK arrangements and power reconfigurations are reciprocally interlinked and their resulting articulations are layered, i.e they do not totally replace previous ones: rather they are partially and variably super-imposed (as palimpsest) in the regions.

In current agri-food systems this comparative approach shows the significant empowerment of formerly powerless actors in new or revised biophysical-innovation-market-knowledge arrangements. These regional empowerments in the most recent period (post 2010, and especially during polycrisis ensuing during the the 2020s.), are not just about the creation of more regional diversity. They represent discrete regional transition trajectories in agri-food, not least because of the enhanced and place-based bio-physical nature of agro-ecological transitions. They are also reliant upon creating more local, regional and bio-physical autonomy from (former) prevailing supply chain power configurations. For instance, in the construction of short and re-localised supply chains as a way of generating autonomy from prevailing asymmetrical corporate retail and food processor-led chains. Also, changing consumer demands, active civil societies, new forms of multi-actor networks and public policies (such as the emergence of the Carmarthenshire food partnership) also play a key role in opening up power spaces for action and innovation, with different degrees and balances in different regions.

However, we should recognize that all EU countries and regions are exposed to combinations of global drivers and different elements of the polycrisis as well as developing their own variable responses and strategies to these drivers. In all regions there are competing and fragmented alliances and networks which are claiming and creating divergent pathways (and indeed highly variable and territorial BIMKs) towards more sustainable food systems. As we outlined in the introduction to this paper this territorial variability is both a cause and a consequence of the reconfiguration of BIMK systems. As such this begins to partly explain explain and indeed open up the possibilities for both the relative complexity and diversity of more sustainable agri-food transitions.

This is highly spatially variable with different BIMK alliances and networks becoming more influential in one place or another, and wider system change being inhibited by still established power relations in governments and corporate firms which attempt to marginalize and dilute these networks. For instance, there is still a knowledge-system strong reliance upon narrow "technical-fix" solutions in climate smart-farming and food processing (such as the use of gene-editing) emanating from the conventional regime. These trends tend then to reject and oppose more radical agroecological place-based initiatives that are indeed taking hold and "anchoring" in some regions (as in parts of Wales in the UK).

It is necessary given this territorial variability and contingency to conceptualize the most recent polycrisis and volatile period as also pluri-versal. How this unfolds is also reliant upon changing and segmented food, producer, consumer and market shifts, not least the growing pressures for health-related diets and reduced, or at least more extensively produced, meat production and practices. This paper and its empirical approach has concentrated upon the agricultural/agri-food system as part of the necessarily wider overall food system. It has shown the centrality of their BIMK systems in evolving transition pathways. These are not divorced, however from wider systemic processes. Consumer concerns are indeed playing an increasingly important part in power re-configurations. Yet institutionally and indeed politically these are still largely conceptually detached from the more land-based agricultural and environmental policies currently being formulated. Current food governance mechanisms and institutions have yet to fully embrace and recognise this pluri-versal challenge, or to appreciate that in setting aggregated and 'top-down' targets for objectives such as net-zero, bio-diversity restoration, or healthier diets, requires a more nuanced understanding of the grounded and spatialised relational interactions explored here as indeed vehicles in bringing about sustainable transitions in agri-food.

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Review article

Policy mixes in rural areas: a scoping literature review

Naomi di Santo[1,*], Teresa Del Giudice[2], Roberta Sisto[3]

[1] *Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro, Bari, Italy*
[2] *Department of Agriculture, University of Naples Federico II, Naples, Italy*
[3] *Department of Social Sciences, University of Foggia, Foggia, Italy*
*Corresponding author. E-mail: naomi.disanto@uniba.it

Abstract. While public policy guidelines emphasise the need to consider sustainability issues as interconnected, policymakers often focus on specific problem areas. The concept of "policy mix" was introduced to highlight that adopting a single policy instrument is insufficient for effective territorial development and socio-technical transition. Starting with the need to foster a transition to sustainability and considering the synergies of a policy mix and the fundamental role of rural areas, this study aimed to explore the existing literature to determine the main topics on policy mixes in rural areas, the commonly used methodologies, the key features of policy mixes, and the suggested future research directions. This study was conducted using a scoping literature review and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology; it included 78 articles. This review revealed important gaps, such as the lack of ex-post evaluations of policies and assessments of governance impacts on policy mix implementation. This paper contributes to advancing the literature by helping the scientific community and policymakers understand the importance of implementing policy mixes.

Keywords: sustainability transition, policy mix, rural areas, rural ecosystems, scoping review.
JEL codes: O20, R58, P25.

HIGHLIGHTS

- Complex issues need a systemic approach to implement a policy mix of interventions.
- The role of rural areas stresses the need to consider a policy mix in this context.
- The area of interest, policy processes, and evaluation were used to rank policy mixes.
- The results were compared with the 17 SDGs and the goals of the CAP.

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ORCID
NDS: 0000-0002-5525-4126
TDG: 0000-0001-9417-7816
RS: 0000-0002-1112-0919

1. INTRODUCTION

The United Nations has set forth a comprehensive vision in the 2030 Agenda for Sustainable Development, encompassing a range of interconnected objectives. These Sustainable Development Goals (SDGs) are founded on principles that demand a multifaceted and collaborative transformation to address the complexities of the world's challenges. By combining goals of environmental management, economic prosperity, and social equity, the policy documents aim to achieve these ambitious objectives by fostering a holistic global transformation. Consistently, the European Commission wants to achieve sustainability objectives encompassing the three interconnected dimensions, through various initiatives. One of these is the European Green Deal, which seeks to facilitate a prosperous and inclusive transition within the European Union (EU) by establishing an equitable society, promoting a circular economy, supporting resource-efficient rural and regional development, and incentivising the reduction of carbon dioxide (CO_2) emissions (Filipović *et al.*, 2022).

In Europe, achieving these goals requires implementing a sustainability transition, particularly given the potential impact of rural areas, which are key players in this transition (Bock, 2016). The urgency to implement a transition towards sustainability has driven academic research to analyse this issue. For example, Köhler *et al.* (2019) conducted a literature review on sustainability transitions and found that early publications primarily focused on electricity and transportation. At the same time, the authors of more recent studies (Köhler *et al.*, 2019; Li, 2017; Miller, Belton, 2014) have examined a broader range of societal domains, including food, water, heating, housing, urban development, and waste management. While these aspects are generally studied individually, they are rarely examined together and within the rural context, which remains underexplored in the literature. This aspect is crucial because sustainability issues should not be considered in isolation. Conversely, as suggested by Cozzi *et al.* (2020), it would be more appropriate to integrate these aspects into the broader macro context, using a systematic approach to consider their synergies or potential conflicts.

In 2018, rural territories encompassed over 341 million hectares, which is equivalent to 83% of the total EU territory. Moreover, approximately 30.6% of the EU population resides in rural areas (European Commission, 2023). Scholars such as Zang *et al.* (2023) have highlighted that current global challenges, including managing resources, land, and waste, are accentuated in rural regions, calling for a deeper emphasis on addressing these concerns. In this intricate and multifaceted landscape, Vávra *et al.* (2022) analysed the pivotal role of rural areas in promoting territorial development. This is evident in various European initiatives such as the Long Term Vision for Rural Areas (LTVRA), which has been developed to shape a new vision for rural regions by 2040 and to foster a shared perspective on the evolving role of rural areas (Ahlmeyer, Volgmann, 2023).

To overcome rural issues and to enhance the role of rural areas, it is crucial to address them in an interconnected manner. While policy documents emphasise this need, policies and policymakers often focus on isolated problems. As Niemeyer, Vale (2022) pointed out, inappropriate sectorial policies conducted to the detriment of the environment, such as deforestation, inadequate soil use, and massive exploitation of natural resources, have led to food and water insecurity. These negative results highlight the need to implement comprehensive strategies that address various issues (Wilts, O'Brien, 2019). Such strategies require transformative shifts in technology, policies, and societal dimensions to effectively tackle pressing environmental challenges. This new approach requires the implementation of multi-actor, multidisciplinary, and long-term processes (Geels, 2019), introducing the concept of a "policy mix" within this framework. Specifically, there is increasing awareness that environmental and social issues are correlated and must be addressed together. Moreover, a multidimensional, long-term perspective is essential for managing the complexity of heterogeneous actors and issues. In fact, using specific policy instruments to achieve single solutions is widely considered inadequate for capturing all elements of complex systems (Quitzow, 2015). In this context, a policy mix can provide a transversal approach to explore the potential benefits of interactions between multiple instruments (Trotter, Brophy, 2022). However, it is crucial to consider not only the direct influence of each instrument, but also their synergistic effects (Edmondson *et al.*, 2019; Lindberg *et al.*, 2019; Milhorance *et al.*, 2020).

The impacts of a policy mix have been analysed by various authors in different fields, for example, in biochemistry (Vonhedemann *et al.*, 2020), energy (Zhenghui *et al.*, 2022), innovation studies (Howlett, Rayner, 2007), and decision sciences (Kivimaa, Kern, 2016). On the contrary, this perspective remains relatively unexplored in the context of rural development. Thus, starting from the need to implement a transition to sustainability, also considering the synergy of a policy mix and the fundamental role of rural areas, the present study aimed to review the existing literature and to identify future research areas necessary for a comprehensive understanding of the relationship between policy mix

and rural territories. This study explored the relationship between policy mixes and rural areas, using the seminal work of Rogge, Reichardt (2016) as its theoretical framework. To achieve this, a scoping literature review was performed to investigate the key topics and issues, focusing on three aspects. First, it is important to examine the long-term plans and policy objectives addressed in the literature. Additionally, this study analysed the processes and evaluation methods associated with policy mixes to provide a comprehensive understanding of the concept. Finally, this review identified the most commonly used methodologies and the future research directions for studying policy mixes in rural contexts. This review has provided a detailed framework for understanding the relationship between policy mix and rural areas and has identified research fields requiring further investigation. Finally, the results have been be compared with the 17 SDGs and the objectives of the Common Agricultural Policy (CAP) to assess alignment or to identify gaps between the scientific literature and policy agendas. This paper is structured as follows: Section 2 outlines the theoretical framework of the policy mix, Section 3 details the methodology and data, Section 4 presents the main results and discussion, and Section 5 offers concluding remarks.

2. THEORETICAL FRAMEWORK

In the 1960s, the concept of "policy mix" was introduced in the economic policy literature as a combination of both monetary and fiscal policies. This new vision emphasises the idea that the adoption of a single policy instrument is not sufficient for achieving effective territorial development and socio-technical transition (Quitzow, 2015), as well as the need to explore the potential interactions and advantages of combining different policies (Trotter, Brophy, 2022). However, this approach is rather complex and far from a simple process: a policy mix integrates the strengths of different policies using several policy instruments and balances the weaknesses of each individual instrument, resulting in increasing advantages (Milhorance *et al.*, 2020).

Policy mix is often described as an elusive and fuzzy concept, and an explicit definition has not yet been defined. On the one hand, some authors have described policy mixes as an appropriate combination of policy instruments (e.g., Vlačić *et al.*, 2018). On the other hand, many authors have described policy mixes as a coordination of different plans across different government levels to achieve a common goal (e.g., Tønnesen *et al.*, 2022). This paper has adopted the perspective that policy mixes should be considered not just as a combination of instruments, but also as implementation of policy strategies, the definition of policy processes, and the combination of various characteristics that build an adequate policy mix for each territory (Rogge, Reichardt, 2016). Specifically, in different territories, such as rural areas, a range of policies are already in place, each addressing specific challenges. However, the concept of policy mix emphasises the importance of an integrated and coordinated approach to policy formulation, which implies establishing a framework where these policies do not operate in isolation, but rather harmonise and intersect synergistically to achieve multidisciplinary goals. Indeed, sometimes there is an overlap of policies that may even conflict, generating confusion rather than optimal outcomes (Scordato *et al.*, 2018). Therefore, the policy mix view promotes a more structured and coordinated approach in which policies are designed and amalgamated into a coherent "mix" that can address rural challenges and efficiently use available resources (Uyarra *et al.*, 2016).

The policy mix approach is not just suggested to manage the complexity of an issue; it is often the most effective strategy to address their multi-dimensionality, particularly when pursuing sustainability goals. For example, Flanagan *et al.* (2019) reported various scenarios where a policy mix approach could be applied. Specifically, technological change, in its stages of innovation or diffusion, may encounter a range of market, system, and institutional failures, necessitating multi-faceted policy interventions. Moreover, new types of innovation policies emphasise that instruments originally designed to meet different policy objectives can and should be "co-opted" to support innovation policy goals. Furthermore, the adoption of a policy mix reflects a growing recognition that modern states are increasingly characterised by the dispersion of power (Flanagan *et al.*, 2019). This shift is not exclusive to innovation policy; rather, it is part of a broader transition from traditional models of government and public administration to multi-level governance and new public management frameworks. Thus, the policy mix approach is beneficial (i) to address the complexity of issues, (ii) to manage new and more sophisticated policy instruments, (iii) to expand the scope of innovation policy, and (iv) to accommodate increasingly complex governance systems involving a wider array of actors (Borras, 2019; Flanagan *et al.*, 2019). Despite its advantages, the policy mix approach can also have negative impacts. Indeed, when designing policy mixes, there may be a need to harmonise different policies to limit the number of instruments moving towards a simpler policy mix. This approach could lead to compromises

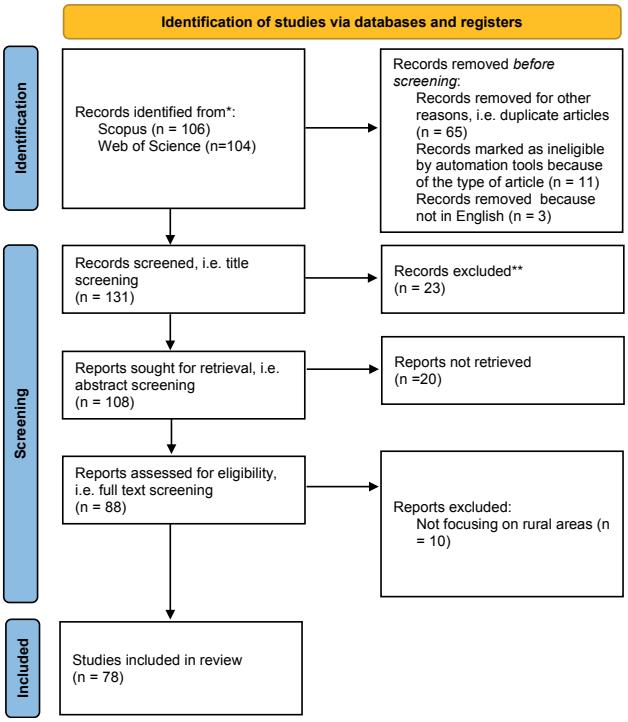
and support token actions, such as (i) discouraging the application of a policy mix, as it may become difficult for policymakers to evaluate, compare, and align policies, and (ii) inaction from policymakers, who may defend their approach even when the overall effectiveness of the policy mix is disappointing (den Bergh *et al.*, 2021).

3. MATERIALS AND METHODS

A scoping literature review was carried out using the major online scientific search engines, namely Web of Science and Scopus. The main keywords – "polic* mix*" OR "polic* portfolio*" OR "polic* package*" – were combined, through the use of Boolean operators, with the following terms related to rural territories: "rural development" OR "territorial development" OR "rural area*" OR "territor* transition*" OR "rural territor*" OR "rural growth" OR "territorial growth" OR "ecosystem*" OR "rural ecosystem*" OR "knowledge* ecosystem*" OR "innovation* ecosystem*". Specifically, keywords were selected for query formulation by distinguishing two main topic areas. The first area concerned the analysis of policy mixes, including most of the synonyms used in the literature to examine this topic. However, the term "instruments mix" was deliberately excluded because it could lead to results far from our goal. In fact, during the article selection phase, it was noted that most articles that used the term "instruments mix" were already included in the search because of the mention of "policy mix" in the abstract, keywords, or title. The second area concentrated on the development of rural and territorial areas. Using keywords such as "rural development", "territorial development", or "rural area*"; important documents dealing with topics such as "rural development tools" were included. In summary, the query included broader keywords to cover all possible facets of the research topics.

The process for selecting articles is summarised in Figure 1, reporting the scheme suggested by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) extension for scoping reviews. This approach contributes to the robustness of the review. The PRISMA flow chart, originally developed as the Quality of Reporting of Meta-analyses (QUOROM) statement, was adapted to its current form for this study (Liberati *et al.*, 2009). This adaptation aims to enhance the objectivity and relevance of the research findings and to ensure accessibility to readers (Page *et al.*, 2021). The reliability of this procedure aligns with the goal of improving the quality of research findings and making them accessible to readers (Page *et al.*, 2021). This tool

Figure 1. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow chart of the article selection process.



Source: Adapted from Page *et al.* (2021).

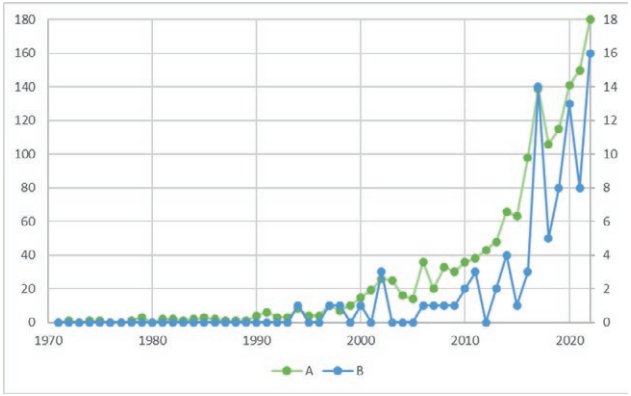
was developed by experts, including review authors, methodologists, physicians, medical editors, and consumers (Liberati *et al.*, 2009). It was later extended to the social sciences, demonstrating its utility in studies characterised by broadly framed questions. By utilising this flow chart, it is possible to assess the existing literature and to identify unexplored areas of study, thereby reducing the risk of arbitrary selection or author subjectivity and establishing a robust and scientifically approved methodology (Page *et al.*, 2021).

From the initial database search, 210 articles were identified, of which 65 were removed because they were duplicates (resulting from both Scopus and Web of Science databases). In addition, only articles published in peer-reviewed journals were included; this led to the exclusion of an additional 11 articles. Finally, it was decided to include only articles written in English, so 3 articles were eliminated. Next, the relevance and conformity of articles were assessed through the analysis of titles and abstracts. At this point, 88 articles met the inclusion criteria and were included in the next step, that is, full-text reading. Those articles were read to further evaluate their eligibility. This led to the exclusion of 10 more articles because they did not focus on the analy-

sis of rural areas (but rather mainly on entrepreneurship aspects). The final review included 78 articles (the full list is in the Supplementary Material – Table A).

After selecting the articles, a deductive analysis was chosen over an inductive approach. Deductive analysis supports the examination of how documents align with findings from other contexts and is typically based on established theories, conceptual models, and literature reviews. This approach contrasts with inductive analysis, which uses open coding to explore documents, to develop new categories, and to identify macro-codes that were not previously defined (Azungah, 2018). Consequently, based on Rogge, Reichardt (2016), in this paper policy mixes have been categorised according to three key concepts: goals, policy plans, and the evaluation methodology.

Figure 2. The number of published articles on policy mix (green line) and policy mix and rural areas (blue line).



4. RESULTS AND DISCUSSION

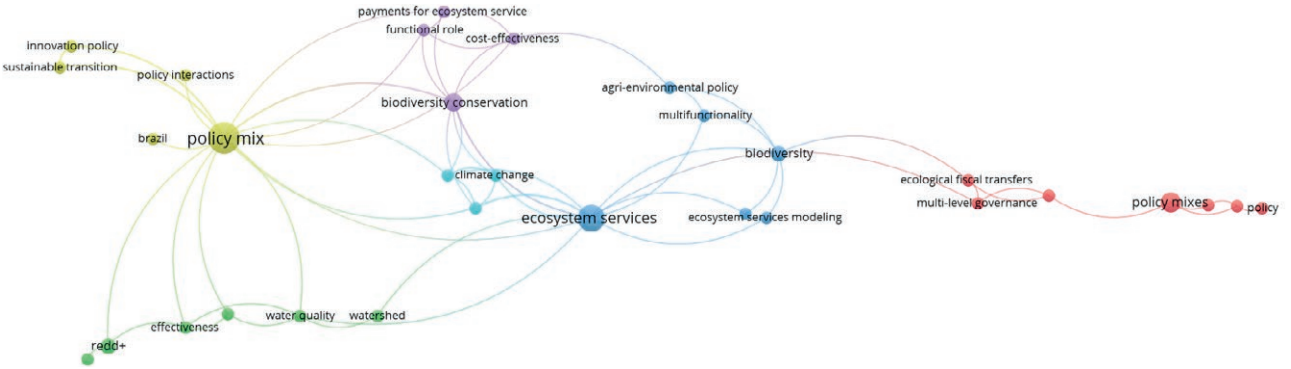
4.1. Descriptive overview

Figure 2 shows the publication trends of the articles on the topic of policy mix (green line) and the articles included in this review on policy mix and rural areas (blue line). The included articles (blue line) were published between 1994 and 2022. Both trends have shown a notable increase over time. Indeed, since 2000, there has been an increase in the number of articles that include the term "policy mix" in their titles, abstracts, or keywords. At the same time, the trend related to the included articles (blue line) has also increased: since 2010, the literature on this topic has grown. This may be due to the objectives of various policy documents highlighting the importance of the issue, in particular referring to rural territory analysis and the need to implement policy mix. Alternatively, this increasing trend may reflect the consistently growing volume of publications in Web of Science and Scopus.

Next, the articles' keywords were analysed to obtain a preliminary segmentation of the main strands in the literature. Given the large number of collected keywords, the VOSviewer software was used to split and group the keywords into clusters. Figure 3 displays the six clusters into which the VOSviewer software categorised the keywords based on their frequency. Specifically, the co-occurrence number was set to two, meaning that clusters were formed by grouping keywords that appeared together at least twice. From this segmentation, it can be seen that the keyword "rural areas" does not appear, but there are keywords such as "biodiversity", "multi-level governance", and "water quality". This finding underscores the fragmentation in the literature and a gap in topics concerning rural areas, highlighting the need for additional studies on the issue.

To answer the research questions, Table A (in the Supplementary Material) was created based on the literature analysis. This table reports the goals, research methodology, setting, number of citations, connection to the policy mix concept, and future research strands of each included article.

Figure 3. The keywords of the selected documents, generated by using the VOSviewer software.



4.2. The goals of policy mixes

Table 1 summarises the main goals investigated in the included articles. Specifically, the objectives are categorised into macro areas, which reflect long-term goals as outlined by Rogge, Reichardt (2016).

The macro areas most commonly addressed in the selected articles are *biodiversity loss* and *persistent environmental degradation*. Specifically, 16 articles analysed and justified the use of a policy mix to manage these multifaceted issues. Some authors, such as Zabala *et al.* (2022), only suggested implementing policy mixes because of the weaknesses of a single policy for the management of complex topics, such as the forest environment. On the other hand, other authors (Droste *et al.*, 2017; Kubo *et al.*, 2019; Ngan, 2022) pointed out that biodiversity conservation requires an appropriate combination of regulatory tools. Still other articles (e.g., Meinard, 2017; Venturini *et al.*, 2019) highlighted different types of tools that can be combined into policy mixes: regulatory tools, such as licenses and standard-setting; economic tools, such as taxes and fees; and information tools.

Regarding *environmental impacts* and the level of *environmental degradatio*n, many of the included articles focused on the status of forest areas (e.g., Rezende *et al.*, 2018; Scullion *et al.*, 2016; Wong *et al.*, 2017). In this regard, the Reducing Emissions from Deforestation and Degradation (REDD+) projects have been highlighted as an effective policy mix strategy (Albert *et al.*, 2020), which is based on the idea that environmental and social objectives are not distinct goals. Thus, the primary objectives (reduction of deforestation and forest management) are connected with objectives such as poverty reduction and economic development of rural areas (Sarker *et al.*, 2022). Among the instruments found in REDD+, some are aimed at defining property rights, introducing incentive-based instruments, and sharing the benefits from the implementation of REDD+ projects. In addition, when considering the influence of other sectoral policies, such as low-emission development strategies, it is important to consider the redundancy of some aspects, which very often results from a lack of consciousness of the related issues (Scullion *et al.*, 2016).

Table 1. The principal goals of policy mixes.

Principal goals	Number of articles
Environmental degradation, environmental impact, and Biodiversity loss	16
Provision of ecosystem services	10
Conservation	10
Sustainability and sustainability transition	8
Competitiveness, innovation, and digitalisation	8
Climate change	7
Agricultural support policies	7
Land use	5
Resource management	4
Drought and water resource management	3
Energy security	3
Multifunctionality	3
Rural area growth and countering depopulation	2

The second macro area that has been investigated frequently in the literature concerns the *provision of ecosystem services*. Indeed, many authors have pointed out that ecosystem-based adaptation (EBA) represents a specific type of policy mix that can drive a sustainability transition. According to Scarano (2017), EBA is a specific policy mix that integrates socio-economic policies with conservation and land use policies. For example, tools for protected area management and biodiversity conservation plans are included in policy mixes related to income generation and infrastructure development. On the other hand, payments for ecosystem services (PES) are part of a more comprehensive policy mix directed towards ecosystem management (Barton *et al.*, 2017; Cook *et al.*, 2017; Montoya-Zumaeta *et al.*, 2019). The link between PES and rural areas emerges from the inclusion of these payments in national rural development strategies. For example, PES can interact with various poverty reduction policies and can coexist with conditional cash transfers (CCTs) in regions where both programmes are implemented (Izquierdo-Tort, 2020).

Another issue analysed in rural area management is *conservation*. Among the articles that have analysed this issue (Lopolito, Sica, 2022; Meinard, 2017; Niemeyer, Vale, 2022; Tønnesen *et al.*, 2022), the results reported by Kubo *et al.* (2019) are very interesting. The authors suggested two important considerations for implementing a policy mix. First, it is essential to summarise all existing policy instruments without forgetting the emerging and potential ones. Sharing feedback with stakeholders is also essential to reduce the negative impacts that can be created when employing policy mix, such as overlap or contrast (Scordato *et al.*, 2018).

As highlighted previously, the concept of policy mix was introduced in the social sciences with the aim of promoting a transition towards sustainability, encompassing the economic, social, and environmental spheres. Consistently, *sustainability* and *the sustainability transition* have been investigated in the literature (Bhandari, Jana, 2010; D'Adamo *et al.*, 2022; Trotter, Brophy, 2022). According to Jeannerat, Crevoisier (2022),

it is important to consider strategies that include social innovation in a policy mix designed to develop rural territories. Specifically, to support the achievement of sustainable goals, a targeted spatial development intervention should consider an inclusive policy mix. Moreover, it is crucial to base policy cohesion strategies on pillars such as co-innovation, common value creation, and collaboration (Braito *et al.*, 2020; Jeannerat, Crevoisier, 2022; Urgenson *et al.*, 2013). Thus, due to the complexity of the challenges in rural areas, it is necessary to create common values that can foster sustainable development. From a territorial perspective, for example, firms should change their vision from short-term economic maximisation to economic and social responsibility based on a long-term vision (Costa, Matias, 2020; Henderson, Roche, 2020; Tønnesen *et al.*, 2022).

From a goal-clustered policy mix perspective, the impacts of climate change are linked to drought. Although *water scarcity* is not the only effect of climate change, it is one of the most impactful for the management of rural areas. Overall, among the selected articles, 10 analysed the effect of policy mixes in managing this issue (*e.g.*, Farjalla *et al.*, 2021; Fedrigo-Fazio *et al.*, 2016; Reside *et al.*, 2017). Some studies have focused on the analysis of drylands; for example, Milhorance *et al.* (2020) analysed the Brazilian context. Their study is very important from a policy planning perspective because it describes three types of policy mix tools: enabling tools (i.e., the formal prerequisites for policy mix implementation, such as certificates, quality control, and registries), adaptation tools (such as technical assistance to farmers or insurance against damages), and complementary tools (such as tools related to generational renewal).

Furthermore, the literature review revealed that several authors (Hailu *et al.*, 2020; Milios, 2018; Venturini *et al.*, 2019) have analysed policy mixes from the perspectives of *land* and *resource management*. For example, Fedrigo-Fazio *et al.* (2016) classified the variables that can be included in the selection of a policy mix as the long-term view or the success level. They used these variables, along with goals, geographic coverage, data availability, and replicability, to select policy mixes. Following this pattern, they reported several case studies, such as a case in Finland concerning forest and land use. In this case, the policy mix included nature conservation laws, national forest management plans, certification and labelling schemes, subsidies and funding to develop innovation.

The other aspects considered in the included articles concern *multidimensionality*, *energy security*, and *territorial growth*. These areas seem unexplored and underinvestigated; in fact, only eight of the included articles considered these three issues (e.g., Barton *et al.*, 2017; Simões *et al.*, 2021; Venturini *et al.*, 2019).

4.3. The policy processes

The first step of this review was to summarise the main policy mix goals analysed by the literature. Then, an analysis of the plans to achieve these goals – in other words, the policy processes regarding the guidelines, roadmaps and programmes for achieving long-term goals – was carried out (Rogge, Reichardt, 2016). Indeed, Rogge, Reichardt (2016) focused on policy processes for developing and supporting policy mixes, dividing these processes into two main categories: policy-making and policy implementation. Policy implementation involves the practical actions required to execute and enforce policies, relying on robust support systems. In contrast, policy-making focuses on shaping interventions based on past experiences and managing conflicts arising from established interests. The includes articles focused on different types of intervention for example, the Global COVID-19 Humanitarian Response Plan (Mugabe *et al.*, 2022), the National Adaptation Plan (Niemeyer, Vale, 2022), PES (Nimubona, Pereau, 2022; Zabala *et al.*, 2022), the Clean Air Action Plan (CAAP), and the National Strategic Plan for Solid Waste Management (Ngan *et al.*, 2022).

Rather than outlining the individual plans or programmes that currently exist in the political landscape, it is important to emphasise other key aspects in the analysis of political processes: the role of governance and participatory approaches in the implementation of a policy mix in rural areas. Starting with the analysis of the governance, as various studies have shown (Davenport *et al.*, 2017; Könnölä *et al.*, 2021; Mann, Plieninger, 2017; Scordato *et al.*, 2018), it is worth considering that policy mix projects move in a vertical context. In fact, considering the multiplicity of different levels of national, regional and local governance must be a key element for policymakers to avoid conflict between the instruments. However, the true impact that governance has on the effectiveness of a policy mix has received relatively little exploration. Moreover, focusing on the participatory approaches, they are not considered in their full and complete execution. According to Uyarra *et al.* (2016), rural areas are characterised by intrinsic elements, issues, and characteristics. Therefore, the development of a policy mix should rigorously analyse and ensure coherence across different levels of governance.

This scoping literature review demonstrated that innovation strategy could be a successful strategy for promoting change in society's vision. For example, new

business models related to innovation can deliver a simple service and other enabling services that support sustainability goals (Trotter, Brophy, 2022). In addition, policy processes are fundamental for establishing strategies and shifting from long-term goals to feasible actions (Rogge, Reichardt, 2016). Thus, an important focus must be on decision-making processes that identify which instruments to include in policy mixes.

Focusing the attention on the theoretical frameworks on effective policymaking, Tinbergen (1956) defined an efficient policy as a set of individual independent instruments each addressing a specific issue. According to this rule, some multitarget instruments (such as PES) should be considered inefficient. Each policy objective is represented through a linear equation, encompassing uncontrollable, inconsequential, and unidentified variables tied to the policy instruments. Hence, rooted in the fundamental traits of linear equation systems, Tinbergen concluded that an equivalent number of independent policy instrument variables and policy objectives leads to a resolvable model. In cases where the number of policy instrument variables surpasses the number of policy objectives (equations), there are infinite solutions. In contrast, when the number of policy instrument variables is lower than the number of policy objectives, solutions manifest only sporadically.

Considering the objectives of this review, the view of Tinbergen is opposed to the idea behind a policy mix. Indeed, in the policy mix concept, interactions among different instruments can be successful in overcoming the criticism of various issues (Milhorance *et al.*, 2020). From this perspective, the study by Schader *et al.* (2014), which contrasts the Tinbergen rule with the implementation of a policy mix, is important because it highlights how multi-objective instruments, especially those that bring co-benefits, could enhance the effectiveness of a policy mix. Thus, the basic rule is that multi-target instruments can be included in the design of a policy mix if "their average cost-effectiveness over all policy targets is not lower than the average cost-effectiveness of targeted divided by the number of policy targets" (Schader *et al.*, 2014: 189).

4.4. The evaluation of policy mixes

The last characterisation of policy mixes concerns the assessment of their key aspects. The use of a case study is considered an optimal strategy to assess the impacts of policies because the intrinsic characteristics of each area can modify the outcomes and impacts of policies. Moreover, it is crucial to consider the current policies and the different issues faced by rural areas to implement a policy mix effectively. Furthermore, in single policy evaluation, the most commonly used criteria are effectiveness, efficiency, and equity (Barton *et al.*, 2017). However, when considering the interactions between different policies, these criteria should be combined with other indicators, such as consistency, coherence, credibility, stability, and completeness. Consistency concerns the presence of synergies between policies (Kuberska, Mackiewicz, 2022; Trotter, Brophy, 2022). Coherence reflects the "absence of contradictions between instrument mixes and different policies" (Scordato *et al.*, 2018). Credibility concerns the understanding of a policy as a consideration of its feasibility, together with trust between the parties. Stability and completeness do not indicate the rigidity of a policy mix, which can change over time, but rather the concreteness of objectives and completeness at the decision-making level (Rogge, Reichardt, 2016).

Only a few of the included articles focused on evaluation of a policy mix; this represents a literature gap. The first emerging feature is the lack of data or the difficulty of evaluating policies that are distributed differently over time (Mantino, Vanni, 2019). It is also essential to define a systemic strategy for evaluating implemented policy mixes, which does not yet appear in the literature (Fedrigo-Fazio *et al.*, 2016). The diversity of objectives presents another obstacle to measuring the effects of a policy mix. Many of the included articles described policy mixes implemented in specific territories, but they lacked objective results evaluating the entire policy mix. In fact, according to Banerjee *et al.* (2020), a separate assessment of each component of a policy mix is not sufficient and can result in misleading policy advice.

To address this literature gap, many authors have attempted to use methodologies based on future scenario analysis (Lopolito, Sica, 2022; Venturini *et al.*, 2019; Zhang *et al.*, 2019). However, this approach also highlights the lack of objective and commonly accepted indicators in the literature. Thus, these findings suggest a lack of a universal approach – whether qualitative, quantitative, or mixed methods – that can be applied across different territories to evaluate the efficiency of policy mixes. Therefore, to advance research on extrapolation and external validity, further development in this area is necessary (Cartwright, Hardie, 2012).

4.5. Literature gaps

The literature gaps regarding rural areas were analysed by comparing the objectives in the included articles with the 17 SDGs (Table 2) and the CAP objectives (Table 3). These objectives are central to many global policies and instruments aimed at achieving sustainability.

Four of the SDGS were unexplored in the included articles, specifically, Goal 5 (gender equality), Goal 8 (decent work and economic growth), Goal 14 (life below water), and Goal 16 (peace, justice, and strong institutions; United Nations, 2016). Goal 14 was excluded from the query because of the diversity of aims and knowledge needed to analyse "rural areas" and "life below water". However, it could be necessary to implement studies analysing the other uninvestigated goals. Indeed, it seems difficult to think about the implementation of a policy mix in rural areas without considering, for example, the female workforce (Goal 5). In addition, when considering the characteristics of rural areas and the difficulties related to working conditions, it is important to include plans for compliance with working conditions (Goal 8).

Table 3 shows that among the CAP objectives, three of them have been poorly investigated. There has been a lack of implementation of policy mixes, including policies related to knowledge and training of territorial stakeholders on the aims of the policies. In addition, the analysis revealed a significant gap in examining the inclusion of risk management and financial policies in rural areas. Risk management and financial policies are now considered crucial for addressing climate impacts, which cannot be managed by economic policies alone; therefore, awareness of the role of financial instruments is essential.

Over the past decades, governments have invested heavily in immaterial capital, including new architectural designs, training of specific human capital, and investment in market research and scientific research and development. However, adequate evaluation methods for these investments are still lacking. In fact, there have been substantial investments in knowledge sharing and innovations, which are transversal aspects that are very difficult to evaluate. For this reason, many of the

Table 2. Topics of policy mixes relative to the Substantiable Development Goals.

Sustainable Development Goal	Topics covered in the included articles	Level of attention in the included articles
1. No poverty	Rural depopulation, subsistence farming issues, rural poverty	+++
2. Zero hunger	The impact of COVID-19 on food security, agricultural support policies, biodiversity conservation in agriculture	+++
3. Good health and well-being	*Xylella* outbreak, agricultural pollution impact, public health concerns related to environmental degradation	+++
4. Quality education	Digital divide, social sustainability, brain drain	+++
5. Gender equality		0
6. Clean water and sanitation	Water resource management, hydrological ecosystem services, diffuse agricultural pollution	+++
7. Affordable and clean energy	Solar photovoltaic systems for rural electrification, green energy promotion, biogas energy goals	+++
8. Decent work and economic growth	Competitiveness in rural areas	+
9. Industry, innovation, and infrastructure	Ecological economic models, innovation and governance, new technologies in digital industries	+++
10. Reduced inequality	Access to broadband in rural areas, environmental compensation measures to support social equity	++
11. Sustainable cities and communities	Territorial planning for climate challenges, land management, tourism attractiveness for sustainable development	+++
12. Responsible consumption and production	Recycling and reuse in circular economy, policies for regeneration and material reuse, green procurement	+++
13. Climate action	Climate change, rural climate adaptation, emissions reduction from deforestation	+++
14. Life below water		0
15. Life on land	Biodiversity conservation in agriculture, forest conservation and reforestation, natural habitat protection	+++
16. Peace, justice, and strong institutions	Biodiversity support in public policies	+
17. Partnerships for the goals	Multi-stakeholder collaboration in rural policies, partnerships for sustainable resource management	++

"0" means that the goal was not addressed in the included articles. The number of plus signs (+) indicates the extent to which the goal was addressed in the included articles.

Table 3. Topics of policy mixes in relationship to the Common Agricultural Policy's goals.

Common Agricultural Policy objective	Topics covered in the included articles	Level of attention in the included articles
1. Fair income	Support for semi-subsistence farms	+
2. Competitiveness	Competitiveness disparities between countries, rural innovation, support for sustainable competitiveness and innovation	+++
3. Food value chain	Sustainable farming practices, market policies for agricultural products, governance for equity in the value chain	+++
4. Climate change	Climate adaptation and water resource management, forest conservation, land use to counter climate change	+++
5. Environmental care	Conservation of protected natural areas, forest resource management, environmental conservation policies	+++
6. Landscapes	Agricultural biodiversity conservation, protection of natural resources, support for diversified ecosystems	+++
7. Generational renewal	Policies to attract youth to farming,	+
8. Rural areas	Coordinated urban–rural development ideology for rural livelihood, local circular economy initiatives, rural tourism development	+++
9. Food and health	Agricultural pollution and water quality, food quality management, water resource protection	+++
10. Knowledge and innovation	Innovation in sustainable transitions	+

The number of plus signs (+) indicates the extent to which the goal was addressed in the included articles.

included articles evaluated just one policy, because this analysis is easier to carry out. On the contrary, there is a need to assess the joint effects of several policies implemented at the same time, considering that a single policy or instrument can have transversal effects and contribute to different goals. Therefore, it is necessary to evaluate the interconnectedness and sometimes overlap between goals. This endeavour requires a systemic evaluation of the instruments used and the objectives achieved.

5. CONCLUDING REMARKS

This review aimed to investigate several key aspects related to policy mixes in rural areas. Specifically, it explored the main topics addressed in the literature, identified future research directions suggested by the included articles, examined the most commonly used methodologies for analysing policy mixes in rural contexts, and outlined the primary characteristics used to define these policy mixes. There is a growing awareness that environmental and social issues cannot be analysed separately. Furthermore, managing the complex interactions among multiple stakeholders and issues requires a multidimensional, long-term perspective. This approach should account for enabling factors, where the institutional context plays a crucial role. This is particularly important in rural areas, where policy mixes play a key role in mitigating climate change effects and implementing sustainable development strategies. Although the challenge is recognised and acknowledged by various policy documents, the literature on this topic remains limited. From this perspective, a scoping literature review was conducted to explore how to address these research questions effectively.

Several scholars (Borras, 2019; Flanagan *et al.*, 2019) have highlighted that the policy mix approach could be useful for managing complex issues and achieving sustainability goals by using different policy tools. However, it may lead to potential complications in harmonising policies and increase token actions by policymakers, such as resistance to developing efficient strategies, which can reduce its overall effectiveness (den Bergh *et al.*, 2021). Therefore, it is important to explore the policy mix concept to recognise its benefits and to mitigate potential failures.

Based on the work by Rogge, Reichardt (2016), this review categorised policy combinations using three fundamental principles: objectives, policy strategies, and assessment methods. The common objectives identified in the included articles encompass themes such as biodiversity loss, ecosystem services, and climate change. In contrast, the articles addressed topics such as gender equality and the financial considerations associated with climate change insurance less frequently. The overarching takeaway from this analysis is the identification of a significant gap in the existing research: a notable

absence of ex-post policy evaluations and assessments of the influence of governance on implementing policy combinations. Specifically, policy documents are increasingly emphasising the need for a coherent policy mix implementation, while the significance of rural areas is growing in importance for achieving complex objectives such as the sustainability transition. From this perspective, a greater understanding of overall principles that could aid in the drafting of documents and the formulation of policies is required.

This study, envisioned as both a reference and a consultative resource, offers multiple recommendations. First, it offers valuable insights for local businesses and stakeholders in different rural areas. Rural issues and the critical elements required for implementing a policy mix underscores the efficient utilisation of financial and territorial resources. Second, it emphasises the crucial role of diverse stakeholders in developing effective, long-term strategies. Incorporating the findings from this analysis into regional governance could help local actors accelerate and optimise the essential sustainability transition. Third, the results support several suggestions for policymakers. A deep understanding of the essential considerations and potential barriers in adapting policy mixes to contemporary challenges can help mitigate the negative outcomes of conventional policies, such as wasteful spending, inefficient resource allocation, and the failure to achieve long-term goals. From a more practical perspective, there is a critical need to establish good governance that can effectively support the implementation of a policy mix in rural areas. The expected governance should focus on the area's specific characteristics, involve stakeholders, and consider each need to ensure policy consistency and to mitigate the risk of failure. Finally, the policy mix analysis employed in this study can be instrumental in identifying critical factors for policymakers to establish valuable evaluation tools. Furthermore, given the substantial literature gap, there may be a need for a complex approach to evaluate the impact of policy mixes, encompassing both social and economic dimensions.

This study offers an initial perspective on policy mix analysis within rural areas, serving as a foundation for subsequent research to explore various aspects, such as the influence of governance on rural area implementation or the development of measurement indices for diverse policy mixes. It aids the scientific community and policymakers in enhancing and promoting the need for policy mix implementations and reiterates the pivotal role of rural areas. However, this study is not without limitations. It is evident that the results are not applicable because of the lack of a specific case study – the goal of this study was to analyse the current state of the art to direct future research and to identify literature gaps. Nonetheless, this choice paves the way for potential future research. If, through this literature review, more specific objectives on particular topics emerge, it may be beneficial to consider both the academic and grey literature for more comprehensive and detailed perspectives. In addition, future research should include long-term goals that appear to be little explored in the analysis of policy mixes. There is also a need to address the gap in methodologies for evaluating the impacts of different governance levels on policy mix implementation. Furthermore, while the topic is covered very broadly, each rural area has intrinsic peculiarities related to its territory. Therefore, it would be interesting to consider the diversity among countries, as these differences can impact the effectiveness of a policy mix.

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