# Coordination processes of collective action in family livestock farming in Uruguay

Procesos de coordinación de la acción colectiva en la ganadería familiar de Uruguay

Virginia Courdin<sup>a</sup>

<sup>a</sup> MSc. in Environment and Development, Professor, Dpto. de Ciencias Sociales, Facultad de Agronomía, Universidad de la República, Paysandú, Uruguay End. Eletrônico: vcourdin@fagro.edu.uy

doi:10.18472/SustDeb.v12n1.2021.35078

Received: 10/11/2020 Accepted: 10/02/2021

ARTICLE - VARIA

#### **ABSTRACT**

Family livestock farming in Uruguay has a diversity of organizational arrangements, surging from different needs, mutual interests, and feelings and values. Cooperation to obtain individual and collective benefits occurs in several formalization and coordination frameworks. Interviews with representatives from livestock family livestock groups on the Northern Littoral of the country were a basis to assess the processes of coordinating collective action in the region. The results show endogenous or exogenous processes, which reflect shared norms, learning-processes and rules of use, as a means to solve collective action problems.

**Keywords:** Collective processes. Family production. Rural development.

## **RESUMEN**

La ganadería familiar de Uruguay cuenta con una diversidad de expresiones organizativas, generadas en función de diferentes necesidades, intereses comunes, e incluso sentimientos y valores. La cooperación para obtener beneficios individuales como colectivos, se da en diversos marcos de formalización y coordinación. A partir de entrevistas a referentes de colectivos de ganaderos familiares seleccionados en el Litoral Norte del país, se procuró comprender los procesos de coordinación de la acción colectiva en la región. Los resultados dan cuenta de procesos endógenos y/o exógenos, que reflejan las normas compartidas, aprendizajes, reglas de uso, como un medio para solucionar problemas de acción colectiva.

**Palabras claves:** Procesos colectivos. Producción familiar. Desarrollo rural.

#### 1 INTRODUCTION

In Uruguay, livestock farming has been perceived as a disorganized activity, with infrequent collective actions developed in isolation (LARRAMBEBERE, 2009). However, a closer look at the organizational expressions of family livestock farming reveals a great diversity of collectives. These have been generated according to common needs and interests, feelings and values, which make them act jointly and even cooperate, with a greater or lesser degree of formalization and/or intensity, to obtain individual and

collective benefits. In a recent typology (COURDIN; SABOURIN, 2018), we have differentiated four types of collectives – traditional, integral, economic and productive – that in different ways combine functions, resources and coordination structures. This typology accounts for endogenous and/or exogenous processes of collective action that have been occurring in family livestock farming, with greater emphasis in recent decades.

Faced with a scenario of economic, productive and social transformations, as a result of the expansion of large-scale agriculture (ARBELETCHE; COURDIN; OLIVEIRA, 2007; VASSALLO, 2011), the public policy implemented during the Frente Amplio governments (last 15 years) had as a transversal axis the promotion of associative forms to apply differential policies for family production. These were promoted through ministerial programs and projects implemented by the General Directorate of Rural Development (DGDR by its Spanish acronym), and through the allocation of land to groups, cooperatives, etc., by the National Colonization Institute (INC by its Spanish acronym). These are, mainly, the mechanisms that have generated the explosive emergence of new groups of family producers and rural workers to support productive enterprises. Thus, collective processes appear as an alternative strategy to individual production and public policies idealize associativism in the contribution to rural development (ARBELETCHE et al., 2019). This study aims to analyze the functioning and collective action strategies of family farmers' organizations based on the coordination structures among individual actors.

Ostrom (2000) defines collective action as a series of actions carried out by a group of individuals to achieve a common goal or interest. These establish social relationships based on values such as trust, reciprocity, solidarity, or participation structures or management of common goods (OSTROM, 1998).

For this same author, it is not enough for individuals to be organized or associated due to a common objective, but internal processes that value the individuals' ability to organize themselves must be developed, for the coordination of collective action to function (OSTROM, 1992).

Individuals can differ by their voluntary behavior (OLSON, 1992), conditioning social relationships within the framework of collective action but also generating interaction patterns that lead to the establishment of coordinated activity (OSTROM; AHN, 2003), making their actions more efficient by creating networks of social commitment. Those individuals with adaptive behaviors try to achieve their objectives within the limits of the situations in which they find themselves or which they seek. Their decision-making is based on learning and adaptation, preferences and norms that consider others, and on heuristic strategies (basic rules of action); where trust appears as a decisive factor affecting the prospects for collective action (POTEETE; JANSSEN; OSTROM, 2012).

From this theoretical perspective, we used Ostrom's (1992) three categories to analyze the coordination of collective action (a) the delegation of power and responsibility, (b) the ability to elaborate and adequate rules, (c) the mechanisms of the individual or collective learning. For each coordination structure, the respective variables were analyzed a) the legal forms of the collectives, trust, reputation and individual resources (competence, background, etc.) as central links in the delegation of collective responsibility; b) institutional rules, both formal and informal, their compliance and respect, reward mechanisms, punishments and adaptation; c) individual learning, those acquired through common experience, ability building, etc.

#### 2 METHODOLOGY

The research was conducted in the northern coastline of Uruguay (Figure 1), a region historically representative of extensive livestock farming in the country; where important changes have been observed in the productive and socioeconomic dynamics in recent years, due to the expansion of large-scale agriculture, significantly affecting family production (MONDELLI et al., 2012).

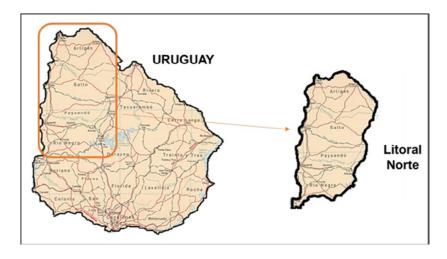


Figure 1 | Location of study area

Source: prepared by the author

The multiple case study was used as the research strategy (MARTÍNEZ, 2006) based on the previous typification and characterization of the family livestock farming collectives identified in the study region. Four Rural Development Societies (SFR by its Spanish acronym) and three Groups of Producers (GP) were analyzed, the former corresponding to the integral type of collectives and the latter to the economic ones (COURDIN; SABOURIN, 2018), as these are the predominant collectives in family livestock farming in the region studied. The SFRs are first-degree entities, members of the National Commission for Rural Development (CNFR by its Spanish acronym- second-degree organization claiming family production), which group family producers (normally around a hundred) from different areas of the country. They carry out both union and promotional actions for the pursuit of the social and economic development of the country. GPs are formal and informal collectives (of about ten members) who mainly develop common economic businesses.

The research design was based on a qualitative approach (VIEYTES, 2004) and the use of the interpretative paradigm (ALVAREZ-GAYOU, 2003), which made it possible to delve into the experiences and meanings that the actors involved elaborate around their reality.

The semi-structured interview (BLANCHET; GOTMAN, 2005) was used as a data collection technique. A total of 28 individual interviews were conducted with members of the analyzed collectives, during July 2017 and August 2018. In all the SFRs (19 interviews in total), a male manager, a female manager, a young manager and two non-managers were interviewed (in one case only one); while, in the GPs (9 interviews), a participant with leadership and two other members without defined roles were interviewed (in one case he was in charge of responsibilities).

The interviews were transcribed and systematized separately, with the help of the NVivo 11® Windows version program (in the Results section, expressions distinguished by the letter E: interview and N°: corresponding to the interviewee will be used). Subsequently, an analysis grid was constructed referring to the attributes of individuals and their relationships, which improve the ability to solve collective action problems, based on the three dimensions of coordination considered by Ostrom (1992).

#### **3 RESULTS**

#### 3.1 DELEGATION OF RESPONSIBILITIES AND POWER: RESOURCE MANAGEMENT

Each of the collectives analyzed in depth has resources of various types (natural, human, capital,

information, etc.) that are managed over time according to the interests of those involved, and whose management is significantly influenced by the profiles of the producers and the collective background of each organization.

The SFRs, as first-degree organizations affiliated to the CNFR, have a formal legal status that obliges them to have a board of directors and a fiscal commission. This has led them to develop operating strategies that make it possible to define roles, assign responsibilities and distribute tasks in a short time; although differences related to the background built by each of the experiences, were observed.

SFRs that have been in operation for several years and have arisen as a result of the producers' motivations to achieve better economic, productive and social development of the land where they are inserted, have clearly defined work objectives, distribution of tasks and decision-making processes, and have been facilitated by the participation of the associates and the formal framework. Something similar happens with the GPs that have these characteristics, despite the lack of a formal regulatory framework.

"We've been working like this for years... now there are grandchildren on the board" (E5).

Through personal recognition (prestige), personal comfort in social relationships, and feelings of belonging to a community, the collective influences the behaviour of producers, encouraging them to hold positions of responsibility and power within the organization. Therefore, some individuals develop greater abilities to act in front of the collective, exercising certain power, and even accumulating it, and promoting the achievement of certain objectives. This leadership ability has led producers to act in favor of the achievement of objectives that they consider to be shared.

"The serious people who have a remarkable background, who are reliable... those are the ones who keep the group going" (E8).

"The responsibilities were set naturally, according to the abilities of each one, and without overloading anyone" (E11).

"Each partner's time or interest to participate are considered and tasks delegated" (E22).

In the SFRs and GPs that have recently emerged from the encouragement of public policies and motivations of producers to access their benefits, the definition of common objectives, assignment of tasks and decision making have been slow and difficult, given the lack of collective interests and the low interaction among participants. In these cases, the structure of social relationships is precarious since there is little connection between the producers, they are less involved with the collective and, therefore, it has been difficult to generate reciprocity and mutual trust.

"Groups formed without knowing each other don't know how to work... because they don't know each other" (E17).

"When there are a lot of people, if the behavior is not established, you start to lose" (E12).

One of the most common conflicts is the designation of responsibilities and power. Generally, those who take on the leadership of these collectives have greater individual social capital. This gives them instruments of knowledge and communication that have facilitated their social integration and individual ability to perform in different social environments. These actions reflect the managers' motivations to obtain benefits (tangible and intangible) that often do not extend to the rest of the community, generating a leadership that determines the emergence of conflicts based on the existence of arbitrary decisions.

For several years, difficulties have been observed for the renewal of leaders, in all the types of collectives studied. Consequently, the same producers occupy positions of responsibility and relevance, based on the need to continue the operation of the organization. This has meant that the decision to delegate responsibilities is subject to the experience of the person within the collective, the role he/she plays, or the predisposition to continue in the position, thus conditioning the replacement.

"We don't have a replacement... they don't feel interested... we don't see who can continue" (E4).

"In organizations where there are women, there are more young people or young people have more space, and that facilitates the replacement" (E26).

However, this difficulty has various consequences within the collectives. In some, the profile of the leaders has led to a unidirectional decision-making system, which generates asymmetries in the collective action coordination and, therefore, the management of resources is conditioned to a few members; remaining the same over time. In others, the leaders' ability based on skills and previous experience has led to a continuous search for the development of operating strategies that encourage the participation of the other members, to favour the integration of the associates and generate a greater commitment to participation. In this way, more democratic decision-making processes have been promoted, to respect the group of people involved and maintain or increase the collective social capital.

"I don't know if it's because of the comfort of the group... I'm very conservative when it comes to decisions" (E8).

"He is like a leader... especially because of the commitment he has with the people" (E16).

"There are several sub-commissions... there is one for the breeding field, the one for women, the one for machinery and roads... there was one for electrification" (E3).

Regarding the decision-making process, although we mentioned two differently functioning profiles, there are operational mechanisms that are common to both. For operational decisions that refer to everyday issues which do not involve the physical presence of people or collective opinions, social networks, such as *WhatsApp*, are used to interact and decide. For decisions that require more discussion and collective consensus, such as structural decisions related to the circulation/investment of money or decisions that put the organization's prestige at stake, such as whether or not to participate in certain activities, meetings are generally held monthly.

"We have a WhatsApp group and that way we can see how things are going" (E13).

"In the monthly meetings, we discuss the topic of expenses, if there are new projects and others" (E20).

In some SFRs, hired human resources (secretaries, administrative staff, etc.) who facilitate the organization's management, carry out some responsibilities, mainly related to the handling of documentation, records, and even financial activity, collection of monthly fees, payments, etc. This resource appears in organizations with a longer background, that have economic solvency and where the learning acquired over time leads to delegate part of the responsibilities for better fulfilment of the operation and support before the associates.

"She is in charge of the internal control, of the monthly payment of the members, she manages the banks, the orders to the veterinarian... it is hard when there are a lot of people" (E6).



# 3.2 MANAGEMENT AND TRANSFORMATION OF RULES: CONSTRUCTION OF COLLECTIVE ARRANGEMENTS

Rules are considered as representations shared with the outside (OSTROM, 1992). According to Ostrom's (2000) classification of rules into constitutional, collective choice and operational rules, bylaws in SFRs and internal operating regulations in GPs refer to constitutional rules, being a set of "fixed" rules at a broad level. They consider aspects related to who has the right to make decisions, which actions are allowed and which are not, which procedures must be followed, etc. These social rules influence the definition of practical rules since they bring into play the particularities of the relationship between individuals, the rights and duties of each one, conditioning activities and results.

Rules of collective choice refer to the decisions made by the directors/referents regarding the functioning of the collective, how the common-use resources should be managed, how to articulate with the environment, what type of activities to develop, among others. The adaptation or modification of these rules has given the flexibility to the collectives through strategic decisions that seek to benefit the collective as a whole. It should be highlighted that these rules are known, used and accepted by all the producers in each of the collectives so that they generate commitment in the members as a way of guaranteeing the functioning and regulation of the activities.

"If the group has a serious commitment, it has to comply with whatever comes" (E17).

Furthermore, the operational rules refer to more everyday aspects, which in the cases analyzed have to do with the management of common resources and the exchange of information generated in this process. In the case of SFRs with collective land, the operational rules refer to the productive practices of the farms, and decisions are taken by a specific commission for the management of the collective good. When necessary, they exchange daily information through the *WhatsApp* social network, which streamlines the processes. In this type of rules, modifications and adaptations are more frequent, since they refer to productive situations, where natural resources that depend on climatic conditions are involved. The same happens with this type of rules and situations in GPs with shared farms.

"Now we have the WhatsApp group, technology has helped a lot... a sick animal appears and immediately the medicine is brought or the veterinarian is consulted" (E3).

It is more common to modify or adapt this latter type of rules in the short term, generating internal changes in the collectives, which in most situations are informal arrangements, with a little record in the SFR or GP documentation.

In one of the analyzed SFRs, a process of change and adaptation in the operation rules was observed, regarding the use of a common resource (rearing field on INC land), which was analyzed, discussed and proposed by the board of directors to the rest of the associates, who demonstrated their ability for adaptation and acceptance. These processes are also observed in the GPs that have common-use resources. These changes usually occur in situations depending on external circumstances or due to internal changes (either in the objective, members, economic aspects, etc.). Unlike what happens in SFRs, in GPs, a smaller number of individuals change a rule or create another one, which makes the process faster and more dynamic.

"There were things rooted, by old operations, that had low efficiency... this change of charging by kilos is more efficient and makes no producer earn more than another... it provoked a change in the thinking... it was well taken" (E5).

Institutional frameworks that develop mechanisms that improve communication and the flow of information, favor the existence of solid rules and norms, generating trustworthy individuals. In SFRs, unlike GPs, the referencing of CNFRs provides pre-established operating rules (bylaws) that constitute

this institutional framework. The bylaws have some general aspects that are similar in all SFRs, and others that are particular to each of them, which have to do with the characteristics of the land and the associates. In the GPs, the lack of an institutional framework means that each is governed by its regulations, which are also operationalized differently. Some GPs establish operating regulations immediately at the beginning of the collective experience, especially when they exploit common goods (INC lands), while others take longer to do so.

"We have an operating regulation that we made on our own... of mutual respect... the INC engineer helped us with some examples" (E12).

Each collective presents particularity in terms of the possibility of creating new rules for agreements and eventual sanctions, depending on the profile of the leaders, characteristics of the participants, some external conditions, etc. Generally, in the SFRs, the bylaws do not undergo modifications as the years go by, as this implies a series of complex internal processes, not only in the SFR itself but also at the central level of the CNFR. Compliance with these, often verified by the CNFR, is key to guaranteeing the transparency of the organization's operations and the complementarity of actions, to build governance.

"Here we are governed by the bylaws... especially for the assemblies and so on... in the farms we have a regulation that is given to each producer when they enter, where it says how to manage the animals, the grazing price and more" (E10).

Although a change in the rules generates uncertainty, whether, of collective or operational choice, it makes the behaviors of individuals and the functional collective routines effortless, since they are generally consensual aspects. Of course, the members of each collective must have the same interpretation of the rules, so as not to generate conflicts. These processes reflect the ability of those involved to adapt their behavior to the functioning of the collective. It is worth noting that the operational rules are the easiest to change since they respond to specific issues in each situation.

"Everything is talked about, discussed in the meetings... and somehow an agreement is reached... this means that every time things happen, more trust is generated and better work is done" (E11).

"Sometimes you have to learn to lose something of yourself for the collective to win" (E27).

Most producers of the analyzed collectives responded voluntarily to the rules, and it was not necessary to coerce them to comply with them. It was not possible to observe an established system of sanctions for non-compliance, and in most cases, there were informal conflict resolution mechanisms, such as unconscious action through behavioral norms. Particularly, a situation was observed within an SFR, where non-compliance with a collective choice rule generated a "subjective censure" behavior, as the producers considered it an incorrect action. As a result, the producer involved distanced himself from the organization (out of embarrassment), thus losing the benefits of participating in the collective. For these reasons, producers try not to engage in these behaviors, seeking alternatives to comply with the established rules.

"He was very active; he was even on the board of directors" (E10).

This type of behaviour is more likely to appear in new collectives or when there are new members, where sufficient mutual trust has not yet been generated. In some circumstances, a combination of factors causes an individual not to respect some of the rules, and the adoption of behavioral norms does not guarantee that these rules will be avoided, thus limiting collective action. The development of strategies to avoid these behaviors was key in one of the cases analyzed.

"If someone cannot go on the vaccination day or other work, they have to send someone in their place or pay the day's wages" (E19).

#### 3.3 INDIVIDUAL AND COLLECTIVE LEARNING: PROBLEM-SOLVING

At the individual level, one of the main lessons that producers learned has been "knowing how to speak", i.e., attempting to speak in front of others, how to do so, how to construct ideas to express, how to generate opinions and therefore how to let others speak. Another learning process is "learning to listen", which refers to listening to other points of view, respecting different opinions, using appropriate terminology, mastering the impulse and waiting for the turn to speak. In both, there has been an incorporation of attributes linked to human values such as mutual respect, recognition of others, responsibility towards other members of the group and, above all, trust.

"I learned not to be afraid, to speak with everyone... I learned to be able to share, to be able to have your ideas... but that we can work together" (E9).

Particularly, for managers or those who have responsibility roles within collectives, the main individual learning has involved developing argumentation skills, forming criteria, listening to/respecting/accepting different points of view, synthesizing information, defining concrete objectives, making decisions, distributing tasks, etc. They have learned these skills by repeatedly carrying out their functions. In the SFRs, managers hold their positions for long periods, which makes it easier for this learning to be incorporated and even perfected. However, this can sometimes lead to a "vicious circle", where the leaders remain in relevant positions for longer periods, thus increasing their abilities, and consequently, persisting in these positions given that their greater skills lead them to better performance within the collective.

"I learned to relate with people, to go to meetings more often... and to reach ideas with several producers, to collaborate among several people to reach an idea" (E6).

"You lose individualism... you learn to work for everyone" (E14).

Another of the lessons learned highlighted by the directors refers to communication and the use of social networks. The experience acquired during the operation of the collective has enabled them to identify the most effective means of communication to ensure the participation of associates in meetings and/or activities. This practical knowledge also has an impact on the management of social networks, to guarantee the circulation of appropriate and timely information, especially in SFRs that involve a larger number of members and have other functions within the rural community. This learning produces instrumental values such as information and knowledge, but also material values such as resource management since knowledge is "collectivized" through individual actions and collective organization.

Collective learning is related to knowing the organization and what the "rules of the game" are. In other words, knowing how the collective works, the objectives, the activities it carries out, the internal procedures, the rights and obligations of each associate, etc. This learning corresponds to a representation of the organization that values the experience and behaviors of the subjects.

"This has left us with the knowledge that the economic result is the sum of a lot of things that come first, commitment, trust, responsibility and seriousness" (E5).

During the constitution of the collectives examined, the social relations that were established enabled interactive practices that allowed the emergence of ideas, discussions and exchanges, constituting the first social learnings.

Even then a process of exchanging personal experiences began to help the collective construction of learning. In these moments, a process of exchange of personal experiences began, which helped in the collective construction of learning. As time went by, other collective learning was acquired that had to do with the resolution of specific situations, which are associated with path dependence (MAHONEY, 2000), since decisions were influenced by the accumulation of common knowledge/routines, which led producers to act in a certain way. These situations, as time went by, built a collective value of dignity and prestige, which has often become a symbolic valuation of resources.

"We realized that we had to work in small groups ... for important decisions only the board" (E19).

The lessons learned from the experiences of the collectives have determined the importance of symmetry in the information exchange among the participating individuals, which contributes to cooperation and thus to the generation of knowledge shared among all. Undoubtedly, this has been favored by the development of an open human relationship, rich in respect and modesty, allowing the creation of bonds among the producers. This cooperation has enabled the development of social relationships with greater intensity, allowing the participants to generate mutual trust and the ability to solve problems, supported by affective values such as friendship, companionship, etc. To the extent that, in more evolved collectives, the lessons learned have been used as tools for the strategic planning of actions, given the common perception of the resources available. In some cases, although the result has not been the expected or the most adequate, the process by which the result was reached has acquired value, constituting a learning process through which human skills are forged, both individual and collective, strengthening the collective.

"We always seek excellence in group work and relationships" (E4).

"We realized that the society was a driving force that encouraged the relationship between producers and provided a reality check" (E16).

"We have learned to share, to respect, to know that there is a place for everyone... and that is what has kept us together" (E18).

Regardless of the type of collective (GP or SFR), there is a significant proportion of learning that happens through trial and error. They are related to operation aspects, such as resource management, financial management, information exchange mechanisms, individual participation, designation of responsibilities, etc. In a certain way, it shapes the particularities of each collective and responds to the subtlety of the producers to solve individual and/or collective problems; influencing the success of the collective action on several occasions.

"One ends up learning from peers, with situations that arise" (E5).

"In this journey, we have realized that everyone has different skills, so what we do is delegate" (E11).



#### **4 DISCUSSION**

# 4.1 LEADERSHIP CONSTRUCTION AND ROLE DEFINITION

Collectives with pre-established normative frameworks, such as the SFR in our case, allow the relationship between its members and the establishment of responsibilities and rights through an internal structure. The process of social cohesion in these collectives is carried out without any conflicts, avoiding opportunistic behaviors (OLSON, 1992) of those individuals who are only interested in their benefit. Thus, more democratic and participatory management of resources benefits the interaction structure and not each member privately. On the contrary, collectives with no normative framework (the GPs), take longer in designating responsibilities and sometimes there are difficulties in establishing common objectives, being more prone to opportunistic individual behaviors in the management of resources, generating collective action dilemmas.

The particularities of the collective backgrounds show, in the experiences analyzed, the organizational ability and operating strategies they have acquired and the influence exerted by the individual backgrounds of the producers. The internal negotiation processes that these collectives go through during their actions lead to the generation relationships between producers, which determine bonds of proximity and reciprocity (SABOURIN, 2003), and therefore the ease or difficulty of undertaking collective action. It is then the common interest and shared perceptions within the collectives that play an important role in generating successful outcomes (NEGI et al, 2018).

Individual characteristics such as reputation, trust, reciprocity (OSTROM, 1998) and others, influence the behavior of producers when holding positions of responsibility and power within the organization. Thus, some individuals develop greater abilities to act in front of the collective, exercising certain power and even accumulating it, and promoting the achievement of certain objectives.

Generally, producers who become leaders of collectives have knowledge and communication skills that enable their social integration. Among them, some personal skills stand out, such as personality traits (being extroverted, sociable, honest), "knowing how to speak and listen", being responsible, and the administrative knowledge acquired through formal education, social behavior and previous experience. Producers who assume responsibilities and positions of power come from families that have constantly participated in activities or integrating social networks, generating habits of collective action (OSTROM, 2000); which are fostered by habits related to values and affections (SABOURIN, 2010), and which are products of unconscious efforts. These cultural practices also allow conscious actions that differentially reflect the possession and legitimacy to take advantage of resources and benefits of the collectives to which they belong, such as holding relevant positions in the organization for long periods.

The differential leadership ability, also favored by the cumulative learning (experiences and knowledge) during the years of participation in the collective, allows producers to act in favor of the achievement of objectives that they consider to be shared. In some cases, it leads them to keep these roles for a longer period, thus generating asymmetries in coordination and unidirectional decisions, which can lead to collective action dilemmas.

#### 4.2 GOVERNANCE MECHANISMS IN THE RULES

The functioning of the collectives evidenced the existence and use of norms and rules, most of which are agreed upon among the producers. This reflects the importance of the institutional conception, i.e., the process of defining a set of rules that the people involved in the collective understand, accept and are likely to follow (OSTROM, 2000). The particularities of the rules and their capacity for transformation give each collective its profile, different from each other.

The three types of rules characterized in both types of collectives, the exchange of information and knowledge, i.e., communication (OSTROM, 2000) have made them work in compliance and operability. Especially, when we refer to the management of common resources, that have been used carefully to avoid deterioration, maintaining and repairing when necessary, to prevent this from happening. Therefore, actions and decisions must be consensual through an orderly process that allows reaching a common agreement seeking collective and individual benefit equally, given that the result will impact everyone (VARUGHESE; OSTROM, 2001). This process shows the innovation ability of the producers' collective, based on the learning generated by the management of rules. In self-management systems, such as those studied, this is an example of the different ways of governing and managing their systems, adapting to users and circumstances (LAVIGNE, 2001), even showing a better performance of smaller collectives (GP) by reflecting different levels of organization and decision-making (AGRAWAL; OSTROM, 2001).

The modification and adaptation of some of the rules are more feasible in those collectives that show a greater social capital of the organization; since the strength of the bonds allowed for greater reliability among individuals, and therefore a negotiation of the rules, which made cooperation possible to guarantee collective action. In turn, if there are consistency and supervision of these rules, opportunistic behaviors can be avoided (OLSON, 1992). Although for Ostrom (2000), opportunistic behaviors are not eliminated, collectives can develop strategies to keep them at acceptable levels. One of these may be social norms that provoke changes in the members' behaviors (shame for non-compliance), generating immediate consequences in specific situations. It is clear that monitoring the producers' behaviors plays an important role in maintaining trust, and therefore in collective action.

The internal rules of a collective generate a governance structure (AGRAWAL, 1996), determining the processes of decision-making, project planning and execution, institutional arrangements and negotiations, the establishment of controls, among others; guaranteeing the functioning of the collective with the participation of producers, the transparency of processes and the achievement of tangible results. Likewise, all the collectives are aware of the importance of those in positions of responsibility providing credibility to the members, so that compliance with rules can occur spontaneously. This places value on an individual's reputation within the community, which can guarantee that rules will be respected (OSTROM, 1992).

## 4.3 LEARNING AND ABILITY BUILDING

The social actions generated in these participation spaces constitute processes of formation and transformation, based on the exchange of knowledge, information and values (COUDEL, 2009), which result in individual and collective learning. Some of this learning is spontaneous, generated unconsciously, and other is acquired from concrete situations.

The functioning dynamics of the collectives leads the producers, mainly those with leadership positions, to changes in their abilities, aptitudes and competencies, given that they are based on individuals with different abilities for expression or work (heterogeneous individuals -OSTROM, 1992-). These changes take place through the socialization of values, the transmission of knowledge, cooperation in practices, etc., These individual learnings reflect cognitive transformations and changes in behavior that allow them to communicate with their peers or other actors, to manage common-use resources, to build action objectives, etc.; in other words, to generate a common perception.

Producers also learn to coordinate and thus cooperate, building in this process a collective identity that allows them to move forward in action (DENNIS; BRONDIZIO, 2020). Collective learning depends on the connections established in the relationship network within each collective, based on the mobilization of the members' abilities and the common language they can build. Many of them are based on ethical values generated through the collective practice that creates horizontal relationships (SABOURIN, 2010), through the face-to-face interaction of producers, enabling the exchange of knowledge and establishing reciprocal relationships.

These learnings, both individual and collective, tend to be transmitted to the next generations as collective work methods within an organization, and even become local knowledge, specific to that community.

#### **5 FINAL CONSIDERATIONS**

The progressive social cohesion observed in the backgrounds of the experiences studied in the northern coastline of Uruguay shows the organizational ability acquired by the collectives over time, based on the voluntary collaboration and reciprocal relationships of family livestock producers, aiming to improve their living conditions. The undertaken actions lead to the strengthening of community social capital, to solidify the network among individuals and capitalize on collective resources. This process is perceived as more solid in collectives that are created from their motivations, with voluntary participation without coercion to join or leave the collective; where the voluntary reiteration of actions over time allows a more fluid face-to-face communication and a more homogeneous circulation of information, from which trust is instituted as a norm of interaction that enables cooperation.

The combination of the three construction or coordination structures of collective action (OSTROM, 1992) in the organizations studied allowed us to analyze the endogenous evolution of the collectives, the social changes that occurred and the interactions with the context, highlighting the adaptability of the grid.

Collective strategies have an articulated dynamic within social relationships that allows individuals who exercise responsibilities and power, favored by their reputation, to comply with commitments, discourage opportunism, assign roles, manage decisions, etc., through an orderly process where agreements are reached for individual and collective benefit equally. In turn, transparency of rules, their ease of interpretation and the visibility of the controls, would contribute to the fact that the people involved in the collective are likely to accept and follow them, thus favoring collective action. In addition to this, individual and collective learning can take place in interactive practices where discussions and exchanges generate formation and transformation processes. This organizational functioning provides transparency, which, when complemented with concrete actions, generates better governance.

We recognize the limitations of a case study with a particular methodology, and consider that our results could make some contributions in the assessment and support of collective action processes, within organizational innovation in the face of new productive dynamics.

#### **REFERENCES**

AGRAWAL, A. Successful collective action among village forest management institutions in the Indian Himalayas. **Himalaya Research Bulletin**, v. 16, p. 19-28. 1996.

AGRAWAL, A.; OSTROM, E. Collective action, property rights, and decentralization in resource use in India and Nepal. **Politics & Society**, v. 29, p. 485-514. 2001.

ALVAREZ-GAYOU, J. **Cómo hacer investigación cualitativa.** Fundamentos y Metodología. México DF: Paidós Mexicana. 2003.

ARBELETCHE, P.; COURDIN, V.; OLIVEIRA, G. **Soja y forestación:** los impactos sobre la ganadería uruguaya. In: JORNADAS INTERDISCIPLINARIAS DE ESTUDIOS AGRARIOS Y AGROINDUSTRIALES, V, 2007. Buenos Aires: CIEA, FCE-UBA. 2007.

ARBELETCHE, P. et al. La experiencia en Uruguay de las Mesas de Desarrollo Rural en territorios de agricultura familiar. **Revista Eutopia**, Flacso Sede Ecuador, v. 15, p. 147-166. 2019. Disponible en: <a href="https://revistas.flacsoandes.edu.ec/eutopia/article/view/3888">https://revistas.flacsoandes.edu.ec/eutopia/article/view/3888</a>>. Acess: oct. 2020

BLANCHET, A.; GOTMAN, A. L'enquete et ses méthodes: l'entretien. Paris: Armand Colin. 2005.

COUDEL, E. **Formation et apprentissages pour le développement territorial:** regards croisés entre *économie* de la connaissance et sciences de gestion. 2009. 443 p. Tesis Doctoral. Centre International d'Etudes Supérieures en Sciences Agronomiques. Montpellier, Francia. 2009. Disponible en: <a href="https://tel.archives-ouvertes.fr/tel-00371589">https://tel.archives-ouvertes.fr/tel-00371589</a>>. Acess: oct. 2020.

COURDIN, V.; SABOURIN, E. Continuidad y renovación en la acción colectiva de los ganaderos familiares del litoral noroeste de Uruguay. **Revista Eutopia**, Flacso Sede Ecuador, v. 13, p. 11-32. 2018. Disponible en: <a href="https://revistas.flacsoandes.edu.ec/eutopia/article/view/3290">https://revistas.flacsoandes.edu.ec/eutopia/article/view/3290</a>>. Acess: oct. 2020.

DENNIS, E.; BRONDIZIO, E. Problem farming influences linkages among network of collective action situations for water provision, wastewater, and water conservation in a Metropolitan Region. **International Journal of the Commons**, v. 14, n. 1, p. 313-328. 2020.

LARRAMBEBERE, F. Enfoque complementario: el Grupo Francia Navarro. In: MORALES, H.; DIEGUEZ, F. (Ed.). **Familias y campo.** Rescatando estrategias de adaptación. Montevideo: Instituto Plan Agropecuario, 2009. p. 185-195.

LAVIGNE, P. **Pour des systèmes irrigués autogérés et durables:** façonner les institutions. Paris: GRET Groupe de travail périmètres irrigués, 2001.

MAHONEY, J. **Path Dependence in Historical Sociology.** Theory and Society. University of California at Davis, v. 29, n. 4, p. 507-548. 2000. Disponible en: <a href="http://webarchiv.ethz.ch/soms/teaching/OppFall09/MahoneyPathDependence.pdf">http://webarchiv.ethz.ch/soms/teaching/OppFall09/MahoneyPathDependence.pdf</a>. Acess: oct. 2020.

MARTÍNEZ, P. El método de estudio de caso. Estrategia metodológica de la investigación científica. **Pensamiento y Gestión: revista de la División de Ciencias Administrativas de la Universidad del Norte**, Colombia, v. 20, p. 165-193. 2006. Disponible en: <a href="https://www.redalyc.org/pdf/646/64602005.pdf">https://www.redalyc.org/pdf/646/64602005.pdf</a>>. Acess: oct. 2020.

MONDELLI, J. et al. Los cambios en la ganadería por la competencia por el recurso tierra. In: CONGRESO DE CIENCIAS SOCIALES AGRARIAS, I, 2012. Montevideo: Facultad de Agronomía. 2012.

NEGI, S. et al. Role of community and user attributes in collective action: case study of community-based forest management in Nepal. **Forests**, v. 9, n. 3, p. 136. 2018. Disponible en: <a href="https://www.mdpi.com/1999-4907/9/3/136">https://www.mdpi.com/1999-4907/9/3/136</a>>. Acess: oct. 2020.

OLSON, M. La lógica de la acción colectiva: bienes públicos y la teoría de grupos. México DF: Limusa Noriega Editores. 1992.

OSTROM, E. **Crafting institutions for self-governing irrigation systems.** San Francisco: ICS Press, Institute for contemporary studies. 1992.

OSTROM, E. A behavioural approach to the rational-choice theory of collective action. **American Political Science Review**, Cambridge University, v. 92, n. 1, p. 1-22. 1998. Disponible en: <a href="https://www.jstor.org/stable/2585925?seq=1">https://www.jstor.org/stable/2585925?seq=1</a>. Acess: oct. 2020.

OSTROM, E. **El gobierno de los bienes comunes.** La evolución de las instituciones de acción colectiva. Colección Económica. México DF: FCE, UNAM. 2000.

OSTROM, E.; AHN, T. Una perspectiva del capital social desde las ciencias sociales: capital social y acción colectiva. **Revista Mexicana de Sociología**, Universidad Autónoma de México, v. 65, n. 1, p. 155-233.

#### Virginia Courdin

2003. Disponible en: <a href="http://www.scielo.org.mx/pdf/rms/v65n1/v65n1a5.pdf">http://www.scielo.org.mx/pdf/rms/v65n1/v65n1a5.pdf</a>>. Acess: oct. 2020.

POTEETE, A.; JANSSEN, M.; OSTROM, E. Trabajar juntos. Acción colectiva, bienes comunes y múltiples métodos en la práctica. Colección Económica. México DF: Unam, Ceiich, Crim, FCPS, FE, IIEc, IIS, Puma, lasc, Cide, Colsan, Conabio, CCMSS, FCE, UAM. 2012.

SABOURIN, E. Mudanças sociais, organização dos produtores e intervenção externa. In: CAROT, P.; SABOURIN, E. (Ed.). Camponeses do Sertão: mutação das agriculturas familiares no Nordeste do Brasil. Brasília: Embrapa, 2003. p. 145-178.

SABOURIN, E. Manejo dos Recursos Comuns e Reciprocidade: os aportes de Elinor Ostrom ao Debate. Sustentabilidade em Debate, v. 1, n. 2, p. 141-158. 2010.

VARUGHESE, G.; OSTROM, E. The contested role of heterogeneity in collective action: some evidence from community forestry in Nepal. World Development, v. 29, n. 5, p. 747-765. 2001.

VASSALLO, M. Dinámica y competencia intrasectorial en el agro. Uruguay 2000-2010. Montevideo: Dpto. Publicaciones Facultad de Agronomía. 2011.