Drivers and actions that determine the choice of young farmers in Costa Rica to stay on the family farm

Paper first received: 22 May 2020; Accepted: 06 January 2023; Published in final form: 28 February 2023
https://doi.org/10.48416/ijsaf.v28i2.69

Victor RODRIGUEZ-LIZANO,[1] Mercedes MONTERO-VEGA[1] and Nicole SIBELET[2,3]

Abstract

Succession is essential for the existence and development of family farms and rural areas; however, the generalized aging of farmers is occurring worldwide. The main objective of this research is to analyse the motivations that determine young farmers' choice to remain on the family farm, and their relation to the Generational Integration Process. Traditionally, succession analysis focuses on how socioeconomic conditions influence the probability of a farm being successfully passed on to the following generation. Other approaches focus on the Generational Integration Process (GIP), which is the ability of distinct generations to relate as a family, with the goal of passing on the farm through specific actions involving the participation of both successors and incumbent. The field work was carried out in Zarcero, a horticultural canton in Costa Rica, where 20 semi-structured interviews were conducted with young famers (under the age of 35). Results indicate that the main reasons for staying on the family farm are related to self-management, a feeling of belonging, and family ties. This study generated a tentative framework to consistently analyse the Generational Integration Process and shows the complex nature of family farm succession by highlighting the multiple links between different motivations.

[1] Department of Agricultural Economics, University of Costa Rica, 11501-2060 San José, Costa Rica
[2] CIRAD, UMR INNOVATION, 34398 Montpellier, France
[3] INNOVATION, Univ Montpellier, CIRAD, INRA, Montpellier SupAgro, Montpellier, France

Corresponding author: Victor Rodriguez-Lizano, victorantonio.rodriguez@ucr.ac.cr

Bibliographical notes

Victor Rodriguez-Lizano has a background in Agricultural Economics from the University of Costa Rica. He worked from 2010 to 2012 in the development of rural communities in southern Costa Rica through local enterprises both productive and related to conservation areas. He studied a Master's degree in International Agribusiness and Rural Development at the University of Gottingen in Germany. From 2015 to the present he has worked at the Center for Research in Agricultural Economics and Agribusiness Development, conducting numerous investigations in conjunction with governmental Institutions in relation to rural development, which awakened his interest in mixed-methods approaches since the reality of rurality is quite complex. He has worked as an external advisor to the Inter-American Institute for Cooperation on Agriculture (IICA) on topics related to agricultural market analysis and the development of the bioeconomy in the Latin American region.

Mercedes Montero-Vega completed her PhD studies at the Tropical Agricultural Research and Higher Education Centre, where she focused on the inclusion of small pineapple producers in high value-added agro-chains in Costa Rica. She has worked as a professor at the University of Costa Rica in agricultural economic analysis and has participated in numerous research committees at undergraduate and postgraduate level. She has also worked as an external consultant on issues related to rural development and value chains for institutions such as IICA and FAO. She began her research with a quantitative conception and has gradually migrated to a more qualitative and integral approach due to her recent interest in aspects related to bioeconomics, social mobility in agriculture and food waste.

Nicole Sibelet graduated as an agricultural engineer and focuses her research on the sociological and ethnographic anthropology of rural regions related to forests and other agricultural production. From 1987 to early 1994 she collaborated with institutions related to rural development in France and other countries such as: Compagnie Française pour le Développement des Textiles (CFDT) (Magadascar), Centre pour le Développement de l'Artisanat de l'Industrie et de Commerce (New Caledonia) and the Ministère de la Coopération Française. From 1994 to the present, she has been a researcher at CIRAD where she teaches courses related to qualitative research methods applied to natural resource management. She has extensive experience in rural development, having worked in countries such as Costa Rica, Nepal, Magadascar, Comoros, New Caledonia and Mexico. She is currently a Fellow of the Rural Sociology Society and has published approximately 30 peer reviewed journal articles and book chapters.

Introduction

Most farms in the world are family owned (Corsi, 2004). Lowder et al. (2016) estimate that approximately 75% of agricultural land is held by family farmers. In Central America, family farming contributes to nearly 50% of rural employment (Salcedo and Guzmán, 2014), providing food security through a wide range of agricultural products. Succession is therefore essential for the existence and development of family farms and rural areas.

The exit of youth from rural areas has serious implications for both farms and food production. Emigration of rural youth can lead to cultural deterioration (Matte and Machado, 2017), especially through the loss of the farmer's specific knowledge (Bertoni and Cavicchioli, 2016a) when successors choose to discontinue farming. Other research has found that the farms which do not have a current or potential successor are more likely to enter a period of stagnation or decline in the years prior to the incumbent farmer's retirement (Inwood and Sharp, 2012; Wheeler et al., 2012). Likewise, older farmers usually tend to have less of an inclination to adopt new technologies or sustainable farming schemes (Dabkiene, 2015). This situation makes the involvement of young farmers fundamental in the adaptation of farms to the current climatic, technological and market demands.

Two main approaches to analyse farm succession can be distinguished in the literature. One approach focuses on the correlation of socioeconomic variables to succession, in which most publications use correlation analysis between socioeconomic variables and the succession status of the farm. Most of them focus on family, farm and farmer variables (Bertoni and Cavicchioli, 2016b; Suess-Reyes and Fuetsch, 2016), while others, to a lesser extent, have examined the topic by adding context variables (Creighton et al., 2016; Joosse and Grubbström, 2017). The other approach focuses on the description of the succession process and its stages (Carolan, 2018; Errington, 1998), in order to understand both succession and the strategies farmers employ so that their relatives can either stay on the farm or leave it (Conway et al., 2017; Fischer and Burton, 2014; Inwood and Sharp, 2012). In this approach there are studies suggesting that the Generational Integration Process (GIP) is the principal determinant in family farm succession (Perrachón, 2016: 24). GIP refers to the ability of distinct generations to relate as a family with the goal of passing on the farm through specific actions that involve the participation of both successor and incumbent.

The generalized aging of farmers is occurring in Costa Rica. The same phenomenon is found in Europe, where only 11% of farmers are under the age of 40 (Eurostat, 2016) and in Africa, where there is evidence that younger generations are increasingly reluctant to continue working on the family land (Boafo, 2019). In Costa Rica, the average farmer is 53.9 years old, and 22.5% of farmers are older than 65 (INEC, 2015). According to Costa Rican legislation, senior citizenship is obtained from the age of 65. This situation is a result of few young people entering the sector and incumbent farmers continuing to work into old age.
The main objective of this research is to analyse the motivations that determine young farmers' choice to stay on the family farm. The following research question was asked: based on an analysis of the GIP actions identified, what are the main motivations for young farmers to become successors on the family farm?

Theoretical framework

Extensive research has been conducted to identify the relationship between socioeconomic variables and farm succession, where succession is the product of a combination of convenient factors that are usually analysed using discrete modelling. Some studies show that farms with more capital have a better level of succession (Bertoni and Cavicchioli, 2016a; Nuthall and Old, 2017); others show that more specialized farms (Hennessy and Rehman, 2007; Wolf, 2003) or those with non-conventional production are correlated to better levels of succession (Corsi, 2009; Kerbler, 2012); and yet other studies suggest that being male (Cavicchioli et al., 2015; Kerbler, 2008) and coming from a traditional farming family (Mann, 2007) are characteristics positively correlated to succession scenarios. In addition to this, the literature shows that successors' education can play either a favourable role if their area of study is related to agriculture, or a negative role if it is not (Glauben et

al., 2009). Whereas all of this research has contributed to a better understanding of farm succession, there are other factors in addition to the traditional socioeconomic variables that could provide valuable information in this respect.

The literature suggests that in addition to socioeconomic variables, the incumbent farmer influences succession through concrete actions oriented to the heirs' introduction to farm management, which over time will generate a successor (Dirven, 2002; Perrachón, 2016). Díaz-Méndez (1999) found that children's inclusion in social and work-related activities is determined by the action-strategies taken by their parents, and that in rural areas these are often related to the continuity of the farm on which the entire family depends. These authors suggest that succession is a process rather than a single moment's decision. Dirven (2002:25) defines generational succession in agriculture as a process, during the farmer's lifetime or not, of transferring the use of the patrimony and the management of the farming operations to the next generation. Likewise, Cabrera (1998) mentions that succession is a process that begins even before the successors take over management of the farm.

Perrachón (2016) argues that succession is mainly based on the GIP, which refers to the ability of distinct generations to relate as a family with the goal of passing on the farm. If the integration process is successful, the farm will be more likely to have a successor. Key actions that make up the GIP are:

Communication: communication between incumbent and successor should be based on clearly stating the intention of succession from both sides. Clear communication between incumbent and successor increases the likelihood of effective succession (Dyck et al., 2002). The need for communication between incumbent and successor is a fundamental part of the process as it leads to consistency between the expectations of both generations regarding the succession and the strategy to be adopted. To achieve this congruence, the children will have to accept certain policies of the parents even if they do not fully agree with them, and, in turn, the parents will have to make an effort to adapt to the successor's needs (Cabrera, 1998).

Decision-making: incorporating the successor into farm decision-making. Uchiyama et al. (2008) state that the lack of incorporation of successors into farm decision-making leads to future farmers with little management capacity and puts the continuity of the farm at risk. Gallo and Peluso (2013) argue that one of the factors that most influences the children's decision to leave is the lack of participation in decision-making on the farm.

Payment: giving compensation for work done on the farm. When this remuneration does not occur, it is more difficult for the successor to formally establish themself on the farm because the employment relationship has been maintained informally (Morais et al., 2017). Successors who have been paid are usually the ones who stay on the farm once the incumbent is ready to yield control of the farm (Neiman, 2013). Likewise, paying children from an early age for their work on the farm can encourage them to stay, not only for economic reasons but also for psychological ones (May et al., 2019).

Supporting education: allowing sons/daughters to access formal education. Plana-Farran and Gallizo (2021) indicate that formal education is a factor that can create synergies with innovation, which ultimately favours succession. In this case, there is usually financial support for the successor to pursue their studies.

Land: allowing the heir to independently manage a segment of the farm. This action constitutes a proxy for training the successor on a practical basis. The presence of this action is necessary for the transfer of knowledge and at the same time is a key determinant of agricultural succession (Carolan, 2018). Using this action, the incumbent checks for what Shepherd and Zacharakis (2000) call "performance requirements". The term refers to the future leader's quality of output in specified areas, and to whether that output matches or exceeds certain acceptable levels or benchmarks in order to obtain management control.

Planning: this refers to an incumbent's pre-planned roadmap for farm succession. Succession should not be

seen as a single event but as a carefully planned process that takes place over time (Kirby and Lee, 1996). Bjuggren and Sund (2001) argue that good succession is usually planned well in advanced, prior to the younger generation being of age to assume control of the farm. Having an action plan helps the incumbent farmer take explicit or tacit measures towards succession, in which identifying an heir is usually the first step.

Each of the GIP actions affects the probability of family farm succession through a complex network of relationships that triggers different motivations regarding the decision to continue working on the farm or to leave it. Morais, Binotto and Borges (2017) argue that self-management characteristics such as autonomy in decision making, financial independence, and access to a healthy diet are possible motivations for young farmers to take over the family farm. These authors also suggested that family ties and having family members such as their father, mother, brother, and other relatives living in rural areas, as well as friends and labour unions (e.g. cooperatives), are important factors determining the successor's motivation. In addition, Plana-Farran and Gallizo (2021) show that the ability to take over the farm owing to empirical/formal knowledge and an emotional inclination to continue the family legacy are key motivations among young farmers to maintain the family farm. In this sense, family ties are usually motivations behind farm succession.

Material and methods

The data was collected from Zarcero, a horticultural canton located 67 km northwest of San José, the capital of Costa Rica. The typical Zarcero farm is small (less than five hectares) and family-run (INEC, 2015). Our initial database was provided by the National Ministry of Agriculture and Livestock (MAG), from which we selected young farmers. We considered farmers younger than 35 years old since national institutions use this cut-off age for considering people as young adults (CPJ, 2002).

Processing data from young farmers

INEC (2015) data indicated that there are 28 young farmers in Zarcero. We visited 20 of these farms during our fieldwork. These farmers were already in charge of the family farm or were managing the farm alongside their father and/or siblings.

The qualitative analysis was carried out with results obtained from semi-structured interviews based on the methodology established by Sibelet et al. (2013). The interview had two main sections. The first one aimed to find out how the young farmers experienced each of the GIP actions from a young age until they started managing the farm. The second section was designed to establish why young farmers stayed on the farm.

We conducted three analyses. The first was an in-depth analysis of how each GIP action was experienced by young farmers. The second, a cross-sectional analysis, looked at how many of the six GIP actions were present in each succession process. The third was an analysis of the main motivations for young farmers to continue working on the farm, complemented by a discourse analysis of each young farmer to identify the recurring motives for staying on the farm.

The aforementioned analysis led us to cluster the recurring motives according to affinity and to show the relationship between them, thus achieving a better understanding of how GIP actions are related to succession.

Results

Analysis of the actions that construct the GIP

For younger farmers, the median farm size is 3.5 ha, six of the farms (30%) are organic, 17 of them (85%) do not obtain value added products from their crops, and 18 (90%) grow two or more kinds of crops. The farmers' average age is 29 and the average time working on the farm is 16 years, which indicates that on

average, they started working when they were 13 years old. Seven farmers (35%) continued studying beyond high school. Those who studied at a university, whether they completed their degree or not, stopped working on the farm while they were studying. The actions related to the young farmers' GIP are described below:

Communication

Based on the young farmers' answers, three classifications of this variable were created:

Positive (+): the older farmer clearly communicated to the young farmer that he wanted him to be the successor on the farm

Neutral (o): the young farmer's father supported any decision that his son would take, whether that meant staying on the farm or leaving

Negative (-): the older farmer clearly expressed that he did not want his son to continue working on the farm.

Most cases (70%) fell into the second category: the young farmer's father supported his son's decision either way. As A11 stated: 'My father told us if we wanted to work, here you have enough to work with, and if you want to study and leave, I'll help you out'. This farmer was the youngest of three brothers. There are other cases where there was a lack of explicit communication, but the successor intuitively knew the incumbent farmer (their father) would like them to stay on the farm. For example, farmer A12 added:

> *We haven't actually sat down to talk about it, but I felt that he [his father] hoped we would continue managing the farm. When I told him I wanted to continue working on the farm and build my house here (on the farm) he was very happy. I think that yeah, he has always wanted me to continue the farm.*

This type of tacit communication, where the successor simply knows that the older farmer, in this case their father, desires the continuity of the farm, was discovered by Fischer and Burton (2014) in their study on understanding generational succession through Socially Constructed Endogenous Cycles. In this case, this kind of tacit communication has a positive outcome.

In four cases (20%), the young farmers mentioned that their fathers openly incentivized them to stay on the farm, as farmer A5 mentioned:

> *For me to study agronomy was a dream for my father because he always wanted to study but he didn't have the opportunity. When the time came for me to decide what to study and I told him I wanted to study agronomy, he was really happy. Then when I was finishing college he asked me if I could continue working on the farm.*

In only two cases (10%) fathers encouraged their children to choose another area of work besides agriculture. Farmer A20 mentioned:

> *when I was finishing high school, he always told me "go on and study because we don't know what will happen with agriculture.*

Decision-making

Complete autonomy in decision-making on the farm begins, on average, at age 21. Among the successors analysed, the youngest age at which they began to be an autonomous decision-maker on the farm was 17 and the oldest was 25. Evolution in decision-making is a recurring phenomenon. In the case of 13 young farmers (65%), their fathers assigned them simple tasks; however, over time the incumbent farmer (the father) granted them more important tasks, such as marketing products, choosing what crops to plant, and even buying and selling land. Related to this, farmer A10 said:

> *It makes sense that in the beginning I was just another of my father's hired hands, later when I was a little older, about 15 or 16, my father let me be more in charge, so I made decisions that I knew pretty well that my*

father, who was still in charge, was going to like.

Likewise, farmer A13 mentioned that when they first started working together, he simply obeyed what his father said, but over time this started to change:

At first, I did only what he said, of course, then I got more experience, but really he was the one who managed the farm. Shortly afterwards, I was the one making decisions about where was the best place to sell our products and also which seeds to sow.

These experiences show the importance that evolution in decision-making plays in the process of succession. Furthermore, it is coherent with the concept of the 'farm ladder' coined by Errington (1998) and analysed by Joosse and Grubbström (2017). In other cases, farm management is shared among siblings, allowing younger siblings to be incorporated into the decision-making process, which is facilitated by the older siblings as well as by the father. Farmer A18 mentioned:

The land we bought not long ago, yes, they took me into account, as a kind of business partner'.

In this case (farmer A18) the younger son was fully integrated into the farm management and his opinion counted in decisions that were very important for the farm, such as the purchase of land. Such an increase in the importance of decisions entrusted to successors is one of the key factors identified by Fischer and Burton (2014). Moreover, the faster a young farmer climbs the 'farm ladder', the sooner the farm will benefit from positive succession (Lobley, 2010). Every young farmer in our study who did not experience either of the following situations progressively evolved in the process of farm decision making.

Complete disagreement between the incumbent farmer and the successor about the direction the farm should take. Therefore, the successor acquired no autonomy whatsoever at first and simply followed the incumbent famer's (their father's) orders. They however became independent sooner, and were able to take over part of the farm. An example of this situation is farmer A12:

I left because I was totally against what they were doing, they continued farming conventionally and I went the organic route.

The incumbent farmer gave the successor the part of the farm that had been allocated to him (approximately 3.5 hectares) to continue his organic production independently. The father continued farming conventionally with another son on the rest of the family farm.

Sudden death/disability of the father. Farmer A9 mentioned:

When I was about 14 or 15, my father fell and ruptured his meniscus and ligaments so basically I had to take charge because for about 5 or 6 months my father couldn't do any kind of work in the field. He had to have surgery but because of this situation he gave the responsibility to me and basically from then on, I was in charge.

In all cases, as Inwood (2013) mentions, raising their son/daughter to do farm work from an early age was a key factor.

Payment

In 17 cases (85%) young farmers were paid by their parents for working on the farm, when the farm was still run by the father. Three payment levels were observed:

Incentive: a small amount of money, generally given on the weekend. This can be considered an allowance, but it was given on condition that the farm work was done. This work could even be sporadic. In this case, farmer

A17 mentioned: *'when I was a kid, I got a little bit of spending money.'*

Hourly payment or a fixed salary: this type of payment was given when there was more work. In this case, the incumbent farmer already considered the support of the successor as essential to reach the goals planned for the farm.

Division of profits/losses: this is the highest level of recognition for work done and was given when the farm was co-managed. It implied that the young farmer had reached the highest level of involvement in the farm, and therefore that he/she shared both the profits and the losses, should there be any.

Payment is an evolving process rather than a static one. Results indicate that four farmers experienced some kind of progressive payment process. For example, farmer A16 went from being paid hourly to receiving his share of the profits:

> *Well, as I obviously had a certain amount of knowledge about farming, I was paid by the hour for the work, but now we share the profits. (Farmer A16)*

In the case of farmer A5, he went from an incentive to an hourly wage:

> *He gave us a little bit of money on the weekend and then we got to the point where he paid us by the hour.*

In this case, it went from an incentive to an hourly wage.

Farmer A18 distinguished between the way the hired hands were paid (by the hour) and his own payment, which suggests that an hourly wage could be considered less important than having a regular salary.

> *Yes, they paid me, not much, but it helped...and as they saw that I started doing more, things changed… (Today) I have a salary; we all have a minimum salary. The hired hands are paid by the hour.*

Today this farmer co-manages the farm with his siblings. An evolution in payment was evidenced: in the beginning the farmer received only an incentive, but this progressed to a salary as he was involved more in important decision-making. Farmer A10 represents the three levels of payment. This young farmer received incentive payments in the early years of life, later he received a fixed salary, and finally he began to share the profits/losses with his father. In this regard, A10 mentioned:

> *When I was a boy, my father gave me one dollar every Saturday, it was a lot of money for me. From that age I began to be interested in agriculture. Then as a teenager, when I helped my father, he gave me, I don't know $10 or $20, but to save for high school, and things like that. Later on, when I left for university, I stopped working on the farm for a while, but then, when I returned to the farm, we started making decisions together about what to plant and what not to. That's when things really changed because it was like I was already in charge and my father said to me 'all right, now a percentage of the profits are for you' or 'let's go 50/50'. Later, my father left horticulture farming to raise cattle.*

In this case, the psychological impact of having an economic incentive which is given to the successor when he is young, in exchange for working on the farm, is recognized. This young farmer mentioned that when he started receiving this incentive, he became interested in agriculture. This result is in line with the findings of May et al. (2019), where paying children for their work on the farm from an early age can be an incentive for them to stay, not only for economic reasons but also for psychological ones.

Financial support while studying

Five young farmers (25%) received no financial support while they were studying, whereas 15 (75%) were

fully supported to continue their studies and were given both time and financial resources. Support given by parents to their children so that they could study correlates with the level of education of the young farmers, most of whom finished high school or even went on to university (7 farmers continued studying beyond high school). Lobley (2010) also found that young farmers who succeeded their parents mostly had secondary or post-secondary education, and that often they returned to the farm after studying, with ideas of things they wanted to implement.

Land

It was found that only four young farmers received a parcel of land to work on their own while still helping their father on the rest of the farm. Farmers A11 and A19 had the two largest farms, with 4.9 ha and 40 ha, respectively. By contrast, 17 of the 20 younger farmers did not benefit from this GIP action, which contradicts the hypothesis that giving land to the heir results in a greater probability that positive succession will occur. With respect to the farmers who mentioned this GIP action, farmer A19 mentioned that *'when I began farming, he gave me a parcel of land and said, "you're in charge of this"'*. This young farmer said he even got a parcel of land on which there were greenhouses.

> *In fact, we had greenhouses and they were separate from the rest of the farm. We'd been farming organically for several years.*

This GIP action often became the space in which the incumbent farmer passed on his knowledge to the young farmer and the latter put it into practice more-or-less independently. Carolan (2018) argues that such spaces are ideal for knowledge transfer since they constitute a critical aspect of farm succession.

Planning

Regarding planning, six of the young farmers (30%) mentioned indirectly that since they were young, their fathers had been planning for them to stay on the farm. However, we noted that in the case of 10 farmers (50%), there was initially no formal planning and that from an early age – typically between 13 and 17 – the farmer's son/daughter had the possibility of choosing the path that best suited them: to continue studying or to choose another vocation. These young people started high school or even university, but did not necessarily finish; or they started working in another field, outside of agriculture, and then sometimes returned to the family farm because of the lack of opportunities. For these successors, the planning process began when they decided to return to work on the family farm. In such situations, several young farmers described certain actions that the incumbent farmers considered as part of the planning process, for example: including the successor as a business partner with the incumbent farmer, uncles and brothers (A4, A11, A14, A17, A18 and A20); leaving the farm to their heir to farm full-time and change the farming operations if they wished (A3 and A10); horizontal integration on the farm (A12) or vertical integration on the farm (A20). None of the farmers mentioned an explicit plan for succession drawn up well in advance. Our research revealed mostly tacit actions or explicit but intermittent actions. The ideal roadmap with clear short- and long-term actions was not observed. This result is in line with the findings of Morris et al. (1996), who stated that in successful transitions, succession planning and related control activities are relatively informal.

Cross sectional analysis

Three out of four cases in which the incumbent had positive communication also involved five GIP actions, which suggests that positive communication is usually associated with a better GIP process. On the other hand, neutral or negative communication about succession is strongly correlated with late planning or no planning at all. This is unsurprising, given that the incumbents usually encouraged their sons to study, or left the final decision up to the successor. The decision to stay on the farm was therefore usually made by the successor once he had studied or worked off the farm, in which case planning took place in later years.

The absence of increased decision-making is more common when GIP levels are low. No farmer who had two or fewer GIP actions experienced increased decision-making. Similarly, lack of planning is a recurring

characteristic associated with the absence of increased decision-making. Additionally, the absence of the incumbent at some point due to an unforeseeable event or poor chemistry between the father and his heir leads to low levels of GIP (A2, A4, A6, A9, A17).

In this study, allowing the heir to independently manage a segment of the farm was not common. This could be due to the economic conditions related to the farm as most farms did not exceed 4.9 ha. In such cases, awarding a segment of land to a potential successor for them to have a certain level of independence while continuing the normal production on the rest of the farm could affect the farm's profitability.

Two features were common to most (more than 75%) of the young farmers: 1) they received payment for their work even during childhood and adolescence, and 2) their father usually supported them by financing their high school and university studies. These two patterns hold true at both high and low GIP levels.

Table I: Number and type of GIP actions experienced by each young farmer

Farmer	Communication*	Decision Making	Payment	Financial support	Land	Planning	Number of GIP actions experienced
A1	+	Yes	Yes	Yes	No	Yes	5
A5	+	Yes	Yes	Yes	No	Yes	5
A12	0	Yes	Yes	Yes	Yes	Yes	5
A13	0	Yes	Yes	Yes	Yes	Yes	5
A19	+	Yes	No	Yes	Yes	Yes	5
A16	+	Yes	Yes	Yes	No	Yes	5
A3	-	Yes	Yes	Yes	No	Yes	4
A8	0	Yes	Yes	Yes	No	Yes	4
A10	0	Yes	Yes	Yes	No	Yes	4
A11	0	Yes	Yes	Yes	No	Yes	4
A14	+	Yes	Yes	No	No	Yes	4
A18	0	Yes	Yes	Yes	No	Yes	4
A20	-	Yes	Yes	Yes	No	Yes	4
A7	0	No	Yes	No	Yes	Yes	3
A15	0	Yes	Yes	Yes	No	No	3
A9	0	Yes	Yes	No	No	No	2
A17	0	Father Died	Yes	No	No	No	2
A4	0	No	Yes	Yes	No	No	2
A2	0	Independent	No	Yes	No	Yes	2
A6	0	Father Died	No	No	No	No	0

***Communication: positive (+), negative (-), neutral (0)**

Reasons why young farmers stayed to work on the family farm, and relation to the GIP

We analysed young farmers' recurring motivations for staying on the farm, in relation to the number of GIP actions exhibited by each young farmer (Table II). The main reasons that young farmers gave for continuing to work on the family farm were clustered into three groups: self-management, a feeling of belonging, and family ties.

Table II: Young farmers' main motivations to keep working on the family farm and number of GIP actions experienced

Farmer	GIP actions experienced	Main motivations									
		Self-management			Feeling of belonging		Family ties				
		Financial independence	Autonomous decisions	Time independence	Attachment to farm/ region	Lifestyle	Avoidance of conflict with father	Giving back to the father	Inclusion in decision-making	Continuing family tradition	To support siblings' studies
A1	5	X			X		X				
A5	5							X			
A12	5	X	X	X	X	X	X				X
A13	5	X									
A19	5	X						X			
A16	5				X	X		X			
A3	4		X	X							
A8	4		X								
A10	4				X	X		X		X	
A11	4	X		X							
A14	4	X									
A18	4		X			X			X		
A20	4	X							X		
A7	3	X			X			X			
A15	3				X						
A9	2	X	X		X	X					
A17	2	X									
A4	2							X			
A2	2		X				X	X			
A6	0		X								
Total	72	10	7	3	7	5	3	7	2	1	1
Percentage of farmers		**50%**	**35%**	**15%**	**35%**	**25%**	**15%**	**35%**	**10%**	**5%**	**5%**

The Spearman correlation between number of GIP actions and number of motivations that led young farmers to follow in their father's footsteps is 0.24, which is a low but positive value that reflects a weak association between these two variables. For example, the average number of motivations expressed by young farmers who experienced five GIP actions is 2.83. On the other hand, the average number of motivations expressed by farmers who experienced two GIP actions or fewer, is 2.

The first category and perhaps the one receiving the most attention, concerns self-management. Of all motivations, 49.83% are related to this group. Financial independence is the most important one, which shows that young farmers see farming as a way to earn money in light of a very common study-work dichotomy perception.

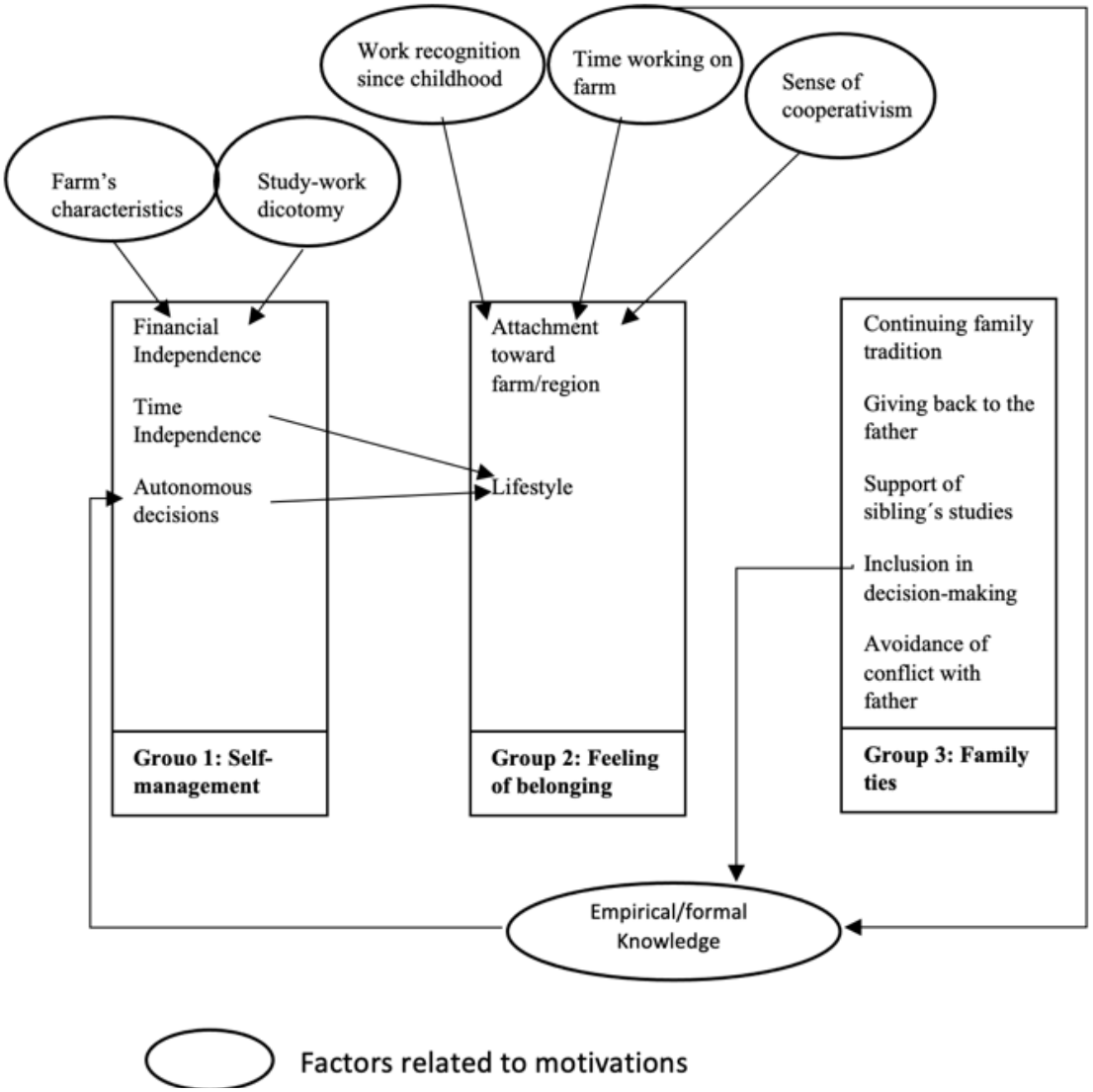
Motivations related to family ties account for 31.23% of the total. 'Giving back to their father' is an important motivation to stay on the farm, mentioned by 35% of young farmers. This result shows the importance of their father's opinion for young farmers, regardless of past GIP actions.

Related to a feeling of belonging, attachment to the farm or region plays an important role since farms are usually passed on from one generation to the next. Similarly, 25% of all young farmers interviewed preferred a quiet lifestyle and being in touch with nature, rather than city life. These kinds of motivations account for 18.94% of the total.

Figure 1 depicts the main reasons to continue working on the farm, and the relationships between them and

other factors. We discuss each cluster in the discourse analysis section.

Figure 1: Diagram of reasons to stay on the farm



Discourse Analysis

Group 1: Self-management

This group exhibits a clear relationship with the GIP action called "payment". Economic independence is the most important factor in this group. It was mentioned by 50% (10/20) of the younger farmers and can be considered an evolving process. Economic independence referred initially to the small amounts of money those young farmers received when they were children or adolescents. These payments were enough to buy inexpensive objects or to spend on leisure activities. Some of the younger farmers mentioned that even when they did not have an active role on the farm but still received a small sum from their father, this influenced their decision to continue working on the farm. For example, farmer A20 mentioned:

> *In my case, during harvest, each week I got some money to do whatever I wanted with.*

Likewise, farmer A11 mentioned:

> *I came to the farm, worked and then got to buy what I wanted, so this kind of economic independence is an incentive to keep learning and keep working.*

The second stage is associated with later phases in the succession process, when the successor already had a family or other kinds of responsibilities. Farmer A14 (married, and wife pregnant), is an example:

> *The money is important, as I saw that I was doing well and that I began to have a good income, I decided to stay. If I had started out poorly, I probably would have left.'*

Additionally, we see that economic independence is related to the 'study-work dichotomy', where many farmers perceive studying and work to be mutually exclusive. Studying is associated with a lifestyle that is much more economically restrictive compared to working on the farm, where one can earn an income much more quickly. Farmer A17 said:

> *When you study, you have many needs, I saw it with my sister, she needed a lot of economic help when she began to study, whereas here, working on the farm gives me money.*

Likewise, farmer A13 mentioned that:

> *Between studying and working on the farm, I was more interested in working on the farm because I started earning money, so I had it to spend on whatever I wanted. That would not have been the case if I'd chosen to study.*

Similarly, farmer A9 mentioned that:

> *Because of the poor economic situation, I was obliged to stay and work on the farm; studying was not an option because I didn't have the financial resources that it required, whereas working on the farm gave me more economic independence.*

One of the young farmers (A7) mentioned that it was impossible to find work in his field, so his only way to make a decent living was to return to work on the family farm:

> *What drove me to stay on the farm was that I couldn't find a job, things were really complicated. I couldn't find a stable job in the field that I'd studied in.*

In this case, working on the farm was the response to the lack of economic independence caused by unemployment in other sectors, which is in line with Kazakopoulos and Gidarakou's (2003) findings. Six farmers (30%) indirectly mentioned decision-making autonomy. In such cases, young farmers mentioned that when they worked with their father or another business partner, they could not make decisions, but when their father stepped down as the incumbent farmer or became too old, they became the new decision-makers on the farm and this motivated them to stay. For example, farmer A3 worked with one of his father's business partners from a young age, and mentioned the following as the main reason to stay on the farm:

> *There's no partner now, I'm not with my father now, now there's no one, so no one can say anything to me about the decisions that I take.*

Similarly, A12 mentioned:

> *What motivated me to stay was organic farming, I had a lot of ideas and things to implement that are different from conventional farming and that was what most motivated me to stay since I could decide what route to take.*

If the successor is not prepared to assume farm decision-making, it could lead to management problems,

We observed how important it therefore was for the successor to be self-confident enough to be able to manage the farm once their father was no longer in charge. Such confidence is related to the level of empirical knowledge acquired during the formal or informal agricultural training process. The more the young farmer is incorporated into the decision-making process, the more training they will have, and so will be more confident about taking over the farm. Twenty percent of farmers (4/20) mentioned empirical knowledge as a determining factor for staying on the farm – something that equally applies to other agriculture-related activities such as food retail and food processing (Levidow, 2018). For example, one farmer mentioned:

> *I feel like I don't do too bad...so this is motivating and makes me think that this is where I should be,*

adding that empirical knowledge was even more important than formal education:

> *… I don't really like to talk to the technicians (company representatives) because often they end up asking me questions and they're the ones who've studied, but I have what they don't have, which is experience, and that's what's most important.' (Farmer A2)*

Farmer A10 explained:

> *…when I decided that I was not going to keep studying, I knew that I could do well in what I'd been doing since I was young, and I still feel that way.*

Another driver in this group corresponds to time independence and was mentioned by three of the farmers (15%). They highlighted the well-being they experienced about not having set working hours, which was a factor that influenced their decision to stay on the farm. For example, farmer A3 explained that:

> *A truck driver [his brother's job] has a difficult schedule, you have to wake up very early, at one or two in the morning, every day. Here, no, I wake up around 6:00 a.m. and if I arrive a little later it's alright.*

These factors are strongly associated with a rural lifestyle, and are in line with those found by Kazakopoulos and Gidarakou (2003).

Group II: Family ties

Among family ties, the most important factor was having their father's approval. Seven farmers (35%) referred to this, which shows the cultural importance of the father in the scheme of family values, and of the perpetuation of the lifestyle that he had established. It also shows a feeling of gratitude towards the father. For example, farmer A2 explained:

> *I stayed in order to give back to my father some of what he has given me; he gave me the best I have, he taught me how to work, and this is worth a lot to me, so it was a way to give back, it was like saying: I'm going to thank him by staying here.*

Another family value reflected in the farmers' answers was the work ethic, which made it 'worth it' to keep working on the farm. The farm was seen as the nucleus of the family business and the source of development not only for the farmer but for the entire family. In this respect, farmer A16 added:

> *... I see it, I see it in them [his parents], so much work they've put into it, so that's what makes me want to stay here, to thank them.*

In the concept of the family, the importance of the father stands out again, as does the desire to take care of him when he no longer has the physical capacity to keep working on the farm. Farmer A19 exemplified this

when he commented,

...family first, that's what I always think. Now that my father's starting to get old, he needs help.

Linked to this feeling of family collaboration, is the continuity of family traditions. Farmer A10 said:

My family has always been farming. When I told my father that I was going to stay, he was so happy that I decided to come back to the farm, which is basically what our family has always done.

This statement not only shows the importance of family traditions, but also emphasizes that of making their father happy by deciding to stay on the farm. It shows how the father's beliefs affect the young farmer's actions, which is linked to symbolic violence first set out by Bourdieu (1977). According to Lukes (2005), symbolic violence generates an effect of domination in the successor since they adjust their actions according to their father's beliefs.

Additionally, making others happy or ensuring the well-being of other family members also includes the young farmer's siblings. Deciding to study or not is considered a family decision rather than a personal one. Investing in academic achievement is a family project, as farmer A12 mentioned:

At one point we decided to help our sisters, who were pursuing university degrees, so we [the young farmer being interviewed and his brothers] really made the effort to keep working so that our sisters could keep studying because there was not enough money for everyone to study.

These results are consistent with those of Conway et al. (2017), who found that young farmers felt they were obligated to act like their father would have, which is also related to symbolic violence. In this case, family ties have negative implications, because they could cause young farmers to continue farming, even if this was not what they wanted.

Group III: Feeling of belonging

The 'feeling of belonging' indicated belonging as much to the place where the farmers grew up as to farming itself. Approximately 40% of employment in Zarcero is related to agriculture (Morales and Segura, 2015), and a great deal of daily life revolves around activities related to it. This is reflected in the following comment: '*...as I grew up in it, I fell in love with farming*' (Farmer A15). As a result, residents in the area have founded agricultural cooperatives that promote local development, something that reinforces the feeling of belonging to the area. For example:

...the CoopeZarcero project influenced me to stay, my father works there now. It started out as a farmers' association then became a cooperative, but ever since I was little, I've seen how the cooperative has been growing and that has encouraged me to want to farm professionally and to be able to collaborate on projects here in the area. (Farmer A5)

Such an environment generates in farmers the feeling of being responsible not only for their own farms but also for local development – a feeling that they transmit to their successors and that increases over time. Likewise, there is an appreciation of farming that also increases over time, as we see in the following excerpts from our interviews with famers A1 and A2, respectively:

As years go by, you get attached to this. Sometimes there's money sometimes there's not, but overall, you like what you're doing.

As the years go by, you end up being passionate about farming and it becomes a way of life as much for the farmer as for the family and here we're getting ahead.

Another type of attachment is that which is related to the family farm, as A7 mentioned:

The farm is part of me, of us [referring to his father and brother] and that's what motivates me to keep going.

This type of motivation was also highlighted by Joosse and Grubbström (2017). Furthermore, family farm history and the sense of belonging to the area, farm and town play an important role in the construction of successor identity, as Conway et al. (2017) argued.

Conclusion

As the average age of the farming population is increasing worldwide, the findings of this research shed light on the complex nature of family farm succession. The most significant contribution of this paper lies in the understanding of how different motivations are linked to one another and their relation to the Generational Integration Process.

This research provides empirical insights on young farmers' motivations to keep working on family farms. As every family situation is unique, a broad range of motivations can be distinguished; however, an in-depth analysis led us further, to clustering the motivations into three groups according to affinity. In addition, this research found the links between the most important motivations according to young farmers' opinions, which is a step forward on the way to understanding family farm succession.

Although the level of GIP has a low but positive correlation with the number of motivations, external factors such as the presence of a cooperative in the area, or internal factors such as the characteristics of the farm, can enhance the incumbent's actions. In this regard, higher levels of GIP can increase the possibility of succession of a farm through both internal and external synergies. Likewise, the fact that a single motivation could be enough for farmers' children to remain on the family farm, means that the more GIP actions (Table II) carried out by the incumbent, the greater the probability of the successor being motivated – which ultimately could represent the difference between having a successor or not.

Findings suggest that self-management-related motivations play a key role in having a farm successor. Self-management can be encouraged in two ways, the first one oriented to financial independence, and the second one linked to decision-making autonomy. Regarding financial independence, adequate payment is crucial to encourage a son or daughter to stay on the farm. When they are still very young, a weekly allowance seems to be a necessary action to encourage them later on to stay on the farm. However, as payment should increase as the responsibility and age of the heirs increase, other kinds of remuneration are used, such as payment per hour, a salary, and a share of profits. Similarly, the incumbent must consider the heir's opinion related to farm decision-making. The lack of inclusion in decision making, along with inappropriate or no payment can jeopardize family farm succession.

While farm characteristics, incumbent characteristics, and context all have essential roles to play in family farm succession, family ties can be the main reason why young farmers decide to follow in their father's footsteps. According to this research, having younger siblings to take care of or honouring the family farming tradition are decisive reasons that can be even more important than self-management.

As a feeling of belonging is an important group of motivations, it is strongly linked to the farm or town where the young farmer grew up. As such, the feeling of being responsible for the wellbeing of the town can play a key role in determining young farmers' decision to stay on the family farm. Local initiatives such as cooperatives or farmers' associations are presented as important elements in the construction of a feeling of belonging starting in childhood. Regarding attachment to the farm, this motivation has profound links to self-management motivations, since autonomous decisions can be made when young farmers are included in farm decision-making – a long-term action that is in turn linked to the number of years worked on the farm.

Analysing farm succession using isolated factors can lead to important but reductionist results, where links between motivations can be missed. The results of the present research can serve as inputs for the generation of new policies to attract young people to agriculture. For example, motivation related to lifestyle and time independence are characteristics of the agricultural sector that can attract young people who are looking for a healthier lifestyle and a job with a more flexible schedule. In addition, long-term motivations related to autonomous decisions, a feeling of belonging, and inclusion in decision-making are strongly linked not only to early childhood but also to the successor's integration as they grow up. As such, policy action oriented towards encouraging family farm succession should not be focused on solving only episodic succession crises. Instead, it must include actions with long-term orientation.

Our findings suggest that family farm succession is not just a financial or business matter; it also implies passion, family pride, connection to the family farm, and a sense of mutual family support. If we wish to keep farmers on the land, public policy should not only tackle economic or financial aspects, but also attempt to address the intangible aspects that can be decisive in the process of becoming a young farmer.

Acknowledgements

We want to thank the University of Costa Rica and the Postgraduate Program in Agricultural Sciences and Natural Resources (PPCARN) for funding this Project.

References

Bertoni D and Cavicchioli D (2016a) Farm succession, occupational choice and farm adaptation at the rural-urban interface: The case of Italian horticultural farms. *Land Use Policy* 57 (1): 739–748. https://doi.org/10.1016/j.landusepol.2016.07.002.

Bertoni D and Cavicchioli D (2016b) Process description, qualitative analysis and causal relationships in farm succession. *CAB Reviews Perspectives in Agriculture Veterinary Science Nutrition and Natural Resources* 11(43): 1–11. https://doi.org/10.1079/PAVSNNR201611043.

Bjuggren P-O and Sund L-G (2001) Strategic Decision Making in Intergenerational Successions of Small- and Medium-Size Family-Owned Businesses. *Family Business Review* 14(1): 11–23. https://doi.org/10.1111/j.1741-6248.2001.00011.x.

Boafo J (2019) Expanding Cashew Nut Exporting from Ghana's Breadbasket: A Political Ecology of Changing Land Access and Use, and Impacts for Local Food Systems. *The International Journal of Sociology of Agriculture and Food* 25(2): 152–172. https://doi.org/10.48416/ijsaf.v25i2.37.

Bourdieu P (1977) *Outline of a Theory of Practice*. 1st ed. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511812507.

Cabrera MK (1998) Factores determinantes del éxito y fracaso del proceso de sucesión en la empresa familiar. PhD Thesis, Universidad de Las Palmas de Gran Canaria, Spain. Available at: https://dialnet.unirioja.es/servlet/tesis?codigo=430 (accessed 11 June 2019).

Carolan M (2018) Lands changing hands: Experiences of succession and farm (knowledge) acquisition among first-generation, multigenerational, and aspiring farmers. *Land Use Policy* 79 (1): 179–189. https://doi.org/10.1016/j.landusepol.2018.08.011.

Cavicchioli D, Bertoni D, Tesser F, et al. (2015) What Factors Encourage Intrafamily Farm Succession in Mountain Areas? *Mountain Research and Development* 35(2): 152–160. https://doi.org/10.1659/MRD-JOURNAL-D-14-00107.1.

Consejo de la Persona Joven (2002) *Ley General de la Persona Joven y sus reformas*. Available at: https://cpj.go.cr/archivos/100Ley%20General%20de%20la%20Persona%20Joven%20y%20sus%20reformas%20(2).pdf (accessed 18 June 2019).

Conway S, McDonagh J, Farrell M, et al. (2017) Uncovering obstacles: The exercise of symbolic power in the complex arena of intergenerational family farm transfer. *Journal of Rural Studies* 54(1): 60–75. https://doi.org/10.1016/j.jrurstud.2017.06.007.

Corsi A (2004) Intra-family succession in Italian farms. *CHILD Working Papers* wp21_04, CHILD - Centre for Household, Income, Labour and Demographic economics, Italy, October.
Corsi A (2009) Family farm succession and specific knowledge in Italy. *Rivista di Economia Agraria* 64(1): 13–30.
Creighton J, Blatner KA and Carroll MS (2016) For the Love of the Land: Generational Land Transfer and the Future of Family Forests in Western Washington State, USA. *Small-scale Forestry* 15(1): 1–15. https://doi.org/10.1007/s11842-015-9301-2.
Dabkiene V (2015) Factors affecting the farm sustainability in Lithuania. *Ekonomika APK* 7(4): 93–100.
Díaz-Méndez C (1999) Estrategias familiares para el tránsito a la vida activa de la juventud rural: modelos de inserción sociolaboral. *Revista española de investigaciones sociológicas* 22(85): 47-66 1. https://doi.org/10.2307/40184098.
Dirven M (2002) Las prácticas de herencia de tierras agrícolas: ¿una razón de más para el éxodo de la juventud? *Serie Desarrollo Productivo.* CEPAL. Available at: https://repositorio.cepal.org//handle/11362/4525 (accessed 11 June 2019).
Dyck B, Mauws M, Starke FA, et al. (2002) Passing the baton: The importance of sequence, timing, technique and communication in executive succession. *Journal of Business Venturing* 17(2): 143–162. https://doi.org/10.1016/S0883-9026(00)00056-2.
Errington A (1998) The intergenerational transfer of managerial control in the farm-family business: A comparative study of England, France and Canada. *The Journal of Agricultural Education and Extension* 5(2): 123–136. https://doi.org/10.1080/13892249885300241.
Eurostat (2016) *Farm structure survey 2016*. Available at: https://europa.eu/rapid/press-release_STAT-18-4298_en.htm (accessed 11 September 2019).
Fischer H and Burton RJF (2014) Understanding Farm Succession as Socially Constructed Endogenous Cycles. *Sociologia Ruralis* 54(4): 417–438. https://doi.org/10.1111/soru.12055.
Gallo A and Peluso I (2013) Estrategias sucesorias en la ganadería familiar: un enfoque de género. *Revista de Ciencias Sociales* 26(32): 17-34.
Glauben T, Petrick M, Tietje H, et al. (2009) Probability and timing of succession or closure in family firms: a switching regression analysis of farm households in Germany. *Applied Economics* 41(1): 45–54. https://doi.org/10.1080/00036840601131722.
Hennessy TC and Rehman T (2007) An Investigation into Factors Affecting the Occupational Choices of Nominated Farm Heirs in Ireland. *Journal of Agricultural Economics* 58(1): 61–75. https://doi.org/10.1111/j.1477-9552.2007.00078.x.
Instituto Nacional de Estadística y Censos (2015) *VI Censo Nacional Agropecuario. Tomo 4: Resultados generales*. San José, Costa Rica: INEC.
Inwood S (2013) Social Forces and Cultural Factors Influencing Farm Transition. *Choices* 28(2): 1–5.
Inwood S and Sharp J (2012) Farm persistence and adaptation at the rural–urban interface: Succession and farm adjustment. *Journal of Rural Studies* 28(1): 107–117. https://doi.org/10.1016/j.jrurstud.2011.07.005.
Joosse S and Grubbström A (2017) Continuity in farming - Not just family business. *Journal of Rural Studies* 50(1): 198–208. http://doi.org/10.1016/j.jrurstud.2016.11.018.
Kazakopoulos L and Gidarakou I (2003) Young women farm heads in Greek agriculture: entering farming through policy incentives. *Journal of Rural Studies* 19(4): 397–410. https://doi.org/10.1016/S0743-0167(03)00022-6.
Kerbler B (2008) The influence of factors of the socio-geographical structure of mountain farms in Slovenia upon farm succession statuses and decisions. *Acta geographica Slovenica* 48(2): 277–303. https://doi.org/10.3986/AGS48203.
Kerbler B (2012) Factors affecting farm succession: the case of Slovenia. *Agricultural Economics / Zemedelska Ekonomika* 58(6): 285–298.
Kirby DA and Lee TJ (1996) Research Note: Succession Management in Family Firms in Northeast England. *Family Business Review* 9(1): 75–85. https://doi.org/10.1111/j.1741-6248.1996.00075.x.
Levidow L (2018) London's Urban Agriculture: Building Community through Social Innovation. International

Journal of Sociology of Agriculture and Food 24(3). 3: 354–376. https://doi.org/10.48416/ijsaf.v24i3.10
Lobley M (2010) Succession in the family farm business. *Journal of Farm Management* 13(12): 39–851.
Lowder SK, Skoet J and Raney T (2016) The Number, Size, and Distribution of Farms, Smallholder Farms, and Family Farms Worldwide. *World Development* 87(1): 16–29. https://doi.org/10.1016/j.worlddev.2015.10.041.
Lukes S (2005) *Power: a radical view.* New York: Palgrave Macmillan.
Mann S (2007) Tracing the process of becoming a farm successor on Swiss family farms. *Agriculture and Human Values* 24(4): 435–443. https://doi.org/10.1007/s10460-007-9087-8.
Matte A and Machado JAD (2017) Tomada de decisão e a sucessão na agricultura familiar no sul do Brasil. *Revista de Estudos Sociais* 18(37): 130–151. https://doi.org/10.19093/res.v18i37.3981.
May D, Arancibia S, Behrendt K, et al. (2019) Preventing young farmers from leaving the farm: Investigating the effectiveness of the young farmer payment using a behavioural approach. *Land Use Policy* 82(1): 317–327. https://doi.org/10.1016/j.landusepol.2018.12.019.
Morais M, Binotto E and Borges JAR (2017) Identifying beliefs underlying successors' intention to take over the farm. *Land Use Policy* 68(1): 48–58. https://doi.org/10.1016/j.landusepol.2017.07.024.
Morales N and Segura R (2015) Distribución de la tierra y su relación con la desigualdad social. Report for Estado de la Nación, June, Costa Rica. Available at: https://estadonacion.or.cr/files/biblioteca_virtual/022/Equidad/SimposioCENAGRO.pdf. (accessed 20 August 2020)
Morris MH, Williams RW and Nel D (1996) Factors influencing family business succession. International *Journal of Entrepreneurial Behavior & Research* 2(3): 68–81. https://doi.org/10.1108/13552559610153261.
Neiman M (2013) La herencia: los(as) hijos(as) y el tránsito entre generaciones en la agricultura familiar de la región pampeana argentina. *Estudios Sociológicos* 31(93): 899–920.
Nuthall PL and Old KM (2017) Farm owners' reluctance to embrace family succession and the implications for extension: the case of family farms in New Zealand. *The Journal of Agricultural Education and Extension* 23(1): 39–60. https://doi.org/10.1080/1389224X.2016.1200992.
Perrachón J (2016) Una Integración Generacional exitosa permite un Relevo planificado. Plan Agropecuario. Available at: https://www.planagropecuario.org.uy/publicaciones/revista/R158/R_158_24.pdf (accessed 11 June 2019).
Plana-Farran M and Gallizo J (2021) The Survival of Family Farms: Socioemotional Wealth (SEW) and Factors Affecting Intention to Continue the Business. Agriculture 11(520). https://doi.org/10.3390/agriculture11060520.
Salcedo S and Guzmán L (2014) *Agricultura Familiar en América Latina y el Caribe: Recomendaciones de Política.* Rome: FAO.
Shepherd DA and Zacharakis A (2000) Structuring Family Business Succession: An Analysis of the Future Leader's Decision Making. *Entrepreneurship Theory and Practice* 24(4): 25–39. https://doi.org/10.1177/104225870002400402.
Sibelet N, Mutel M and Luye M (2013) Qualitative Survey Methods Applied to Natural Resource Management. Online Modules. Available at: http://entretiens.iamm.fr/ (accessed 15 June 2019)
Suess-Reyes J and Fuetsch E (2016) The future of family farming: A literature review on innovative, sustainable and succession-oriented strategies. *Journal of Rural Studies* 47(Part A): 117–140. https://doi.org/10.1016/j.jrurstud.2016.07.008.
Uchiyama T, Lobley M, Errington A, et al. (2008) Dimensions of Intergenerational Farm Business Transfers in Canada, England, the USA and Japan. *The Japanese Journal of Rural Economics* 10(1): 33–48. https://doi.org/10.18480/jjre.10.33.
Wheeler S, Bjornlund H, Zuo A, et al. (2012) Handing down the farm? The increasing uncertainty of irrigated farm succession in Australia. *Journal of Rural Studies* 28(3): 266–275. https://doi.org/10.1016/j.jrurstud.2012.04.001.
Wolf CA (2003) The Influence of Financial, Production and Operator Characteristics on Dairy Farm Transfer Plans. *Journal of the ASFMRA* 2003(1): 1-5. https://doi.org/10.22004/ag.econ.198076.