



## Effect of Farmers' Attitude and Behavior on Farm Succession in the Philippines

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**Abstract** Two of the major problems worldwide are the decreasing number of new farmers and aging of existing ones. These problems correlate to the challenges of the increasing demand on safe food and food production of the growing population. Decreased number of new farmers can be associated with the perception of new generations towards agriculture as most of them do not see farming as a lucrative profession. In addition, farming is also known to be a back-breaking, underrated, and undervalued occupation which leads the current farmers to think twice about handing-over their farm to their successors. In order to change the discernment of the society towards farming and to boost the confidence of farmers to bequeath their farm to their children, this paper aimed to understand and interpret farmers' attitude and behavior towards farm succession. Specifically, this clarified the farmers' actual situation on the ground, their attitude and behavior, and their family's perception about farming. Organic farmers in Laguna, Philippines, were interviewed and observed. Life History Approach (focused on analyzing of the farmers' lives to farm succession) and Grounded Theory Approach (provided guidelines to identify categories and make links and establish relationships between categories) were utilized. Results showed that farmers had varied perceptions in transferring knowledge and motivations to their successors. Upon being acknowledged in the society, most of the farmers' moral were uplifted. They displayed positive attitude and outlook towards agriculture that were reflected through their encouraging behavior to engage their children in farming. Their children were also proud of their farmer-parents. In general, farm succession is one way to ensure agricultural sustainability. In order to do so, situation of farmers on the real ground must be understood through proper interpretation of their attitude and behavior that greatly affect farm succession.

**Keywords** interpretation, attitude and behavior, farm succession, qualitative, GTA & LHA

### INTRODUCTION

Increasing population is synonymous with the significant number of mouths to feed as the food demand also increases. This global problem demands agricultural sustainability to make sure that there will be enough food for all. Agricultural sustainability will not be reached if there are fewer new farmers and an increasing number of aging farmers.

According to FAO (2019), the number of farmers decreased from 41.3% of the world's population in 1995 to 26.7% in 2016. In the Philippines, it decreased from 44.1% to 27.0% in 1995 and 2016, respectively. In addition, Saliot (2013) stated that the food security of the Philippines is at risk, as millions of farmers and fishermen are also aging with an average age of 57 years old. In Japan, one of the greatest factors limiting agricultural sustainability is the shortage of farmers due to the lack of new farmers and the aging of existing farmers, with an average age of 67 years old (Muramoto et al., 2010).

Decreased number of new farmers may be associated with the low morale of farmers as new generations do not see farming as a lucrative profession. In addition, farming is also known to be a back-breaking, underrated, and undervalued occupation, which leads the current farmers to think twice about handing over their farm to their successors. As a parent who endured decades of hardship tilling their land, living in poverty, and being degraded by society, they naturally want their children to have better lives.

Understanding and interpreting farmers' attitudes and behavior can be a possible way to continue farm succession. This study will give the researchers, private, and government institutions the knowledge and understanding of what the farmers need and provide them with the needed technology or innovation. Moreover, policymakers will also be able to make effective and efficient policies and programs.

## **OBJECTIVE**

To change the society's discernment towards farming and boost the confidence of farmers to bequeath their farm to their children, this paper aimed to understand and interpret farmers' attitudes and behavior towards farm succession. Specifically, this clarified the farmers' actual situation on the ground, their attitude and behavior, and their family's perception about farming.

## **METHODOLOGY**

This study is a qualitative research based on the interviews and observations of 17 farmers (doing and did organic farming) and some of their family members in Laguna, Philippines, in August 2017, March, July-September 2018, and July-September 2019. The farmers were selected using Historically Structured Inviting (HSI) and purposive sampling, satisfying the appropriate sample and case requirements. Consent from both parents and children regarding the interviews, observation and the use of data concerning children below 18 years old were acquired. Furthermore, parents were present during the interview.

Life History Approach (LHA), Grounded Theory Approach (GTA), and Trajectory Equifinality Approach (TEA) were utilized. Following Sato et al (2016) TEA, Historically Structured Inviting (HSI) was used as a sampling method, and the Equifinality Points (EFP), and Obligatory Passage Points (OPP) were set. LHA focused on the analysis of the lives of farmers in relation to farm succession. Farmers were asked for their lives' narratives, and these were contextualized, defined, and explained how specific event affects farmers' decisions over time (Hagemaster, 1992). As adopted from Locke (2002) and Glaser (2001), GTA was used in data collection and categorization as it provided guidelines to identify categories, make links, and establish relationships between categories. Trajectory Equifinality Models (TEM) were generated to aid the discussion of LHA. While GTA was used to uncover beliefs and meanings that underlie action and examines topics of behavior from different angles to gain insight and deeper understanding of farm succession.

## **RESULTS AND DISCUSSION**

### **Farmers' Perceptions in Transferring Knowledge and Motivations to their Successors**

Different factors affect farm successions, such as farm's profile (e.g., land size, accessibility, commodities grown) and farmer's profile (e.g., age, educational attainment, farming experiences). Table 1 shows that most of the farmers are from a farm family, but two of them admitted that even they are from a farm family, they had zero background in farming when they first engaged in agriculture. In contrast, the 11 farmers assisted and were involved in their family farms and later took over the farm. The remaining four farmers were motivated to do farming after learning the importance of farming and organic agriculture (OA). Four out of 11 farmers from a farm-family are still using their farming knowledge obtained from their farmer-parents, while seven of them utilizes the information gained through their attendance to trainings. Those farmers that are not from the farmer-family stated that they got their knowledge on farming from different trainings they attended. Most of the farmers were motivated to engage, convert, or continue organic agriculture after attending different trainings provided by their municipalities. It was also noted that 12 out of 17 farmers encourage their children to engage in farming. All of the farmers were motivated and adopted specific technology or innovation on OA once in their farming career as some of the interviewed farmers stopped OA, went back to conventional, or stopped farming.

**Table 1 Distribution of farmers by family background, source of farming knowledge and experiences, and engaging children in farming**

No. of farmers n=17	From a farmer's family		From a non-farmer's family	Total
	with farming experiences	without farming experiences		
• belongs to farm family or non-farm family	11	2	4	<b>17</b>
• that learned their knowledge from family	4			<b>4</b>
• attended trainings	7	2	4	<b>13</b>
• motivated adopt/modify/ innovations learned	11	2	4	<b>17</b>
• that are engaging their children in farming	8	2	2	<b>12</b>

*Source: Field study in July-September 2019*

The results showed that farmers had varied perceptions in transferring knowledge and motivations to their successors. The most common reason that was noted is the safeness of OA to farmers, consumers, and the environment as the farmer-parents want to make sure that their children will be safe in doing farming. Some farmers started farming for their family consumption and chose OA to feed their families with safe food. In time, most of them realized the importance of OA not just for the farmers and consumers but also for the environment. Some also saw the possible opportunity that OA can give them in terms of market and income.

### Factors Affecting Morale and Confidence of Farmers

Low morale in farming, as it is known to be the underrated and undervalued occupation, especially in the Philippines, was noted as one of the factors why the younger generation does not want to engage in farming. In order to boost the confidence of farmers and change how the young generation perceives farming as a career, farmers' importance must be acknowledged in the society. In the research area, it was observed that farmer tends to be motivated by other farmers, they are also confident if farmers, students, teachers, hobbyist, and other actors in the society asked for their help in terms of advice and other farming-related activities. They feel that their opinion matters, motivating them to continue farming and do experiments on their farm. Some of them do OA for their consumers' sake. Upon being acknowledged in the society, most of the farmers' morals were uplifted. They displayed a positive attitude and outlook towards agriculture that were reflected through their encouraging behavior to engage their children in farming.

These results responded to the United Nation's Sustainable Development Goals 2, 3, and 12. Goal number 2 or zero hunger will be reached if yields will be increased and stabilized; goal number 3 or good health and well-being; and goal number 12 or responsible production and consumption will be attained if current and future farmers will avoid the use of synthetic inputs and consumers

will support them. If current and future organic farmers' morals continue to be boosted, these sustainable goals will also be achieved.

### Family Members' Perception in Agriculture

Family perception plays a vital role in boosting the confidence of farmers. Their children were also proud of their farmer-parents. As per the in-depth interview, transcripts from the family members were assessed and help in the understanding of the effects of engaging in OA on the farmer's family. Based on different transcripts, farmers gained positive change in terms of having a better family relationship and gaining self-worth as the farmer can decide on his own and share his experiences and knowledge with others, especially younger generations (Transcript 1 in table 2). Another noted answer focused on the child's personal feelings and preferences, as can be seen in Transcript 2 in Table 2. As a 4-year-old son, he requires the attention and affection of his parents, especially his father that he rarely sees and remembers when his father was still working as a security guard.

**Table 2 Transcripts from the farmers' family members regarding the effect of farming to their family**

Farmers' family members	Transcripts
Trans. 1- Wife of a farmer	"Before, when he was working as a security guard, he usually arrived very late when children were already sleeping. He was also leaving early when his children were still sleeping. He does not even have time to talk and say hi to his children. However, now, it is better. He is his own boss, he manages his own time, and he has time for us. Also, he is free to decide on matters regarding his farm. He is always with us and can still provide for the needs of the family. I also feel proud that students and other future farmers are visiting our farms to learn and to experience farming."
Trans. 2- Son of a farmer	"I like it now. I can always see my Papa. He can play with me now. I can also help him in his work (by weeding and watering plants)"
Trans. 3- Son of a farmer	"I am proud of my mother. I also often do school gardening activities similar to what she's doing on our farm. I can confidently tell my classmates that organic agriculture can be fun and easy if I do what my mom does."
Trans. 4- Daughter of a farmer	"I am happy that my mother is doing better now. She also has more time for us and can help us in school activities."
Trans. 5- Son of a farmer	"Mama is doing better for her customers; she loves farming; even if her body tells her to stop, she will not."
Trans. 6- Grandson of a farmer	"I want to help my Lola (grandmother) in doing activities on the farm, it is fun, but I saw her getting sick because it is hard, so I keep telling my Papa that we should help Lola".

Source: Field study in July-September 2018

Table 2 also shows the interview conducted from a 12-year-old son of a farmer. The grade 6 student is a proud son. During interview, it was observed that the son was shy at first and when ask about the effect of OA to his mother, he positively, and bravely answered that he is a proud son and keeps applying what he learns from her mother to his school's garden (Transcript 3). In addition, a daughter, 10 years old, grade 4 student eagerly answered the effect of OA to her mother (Transcript 4), stating that she is happy for her mom. For these children, they value more the time allotted by their parents with them greatly matters as both parents are working. In addition to the family time that leads to better family relationship, proud children also boost the morale and confidence of their farmer parents.

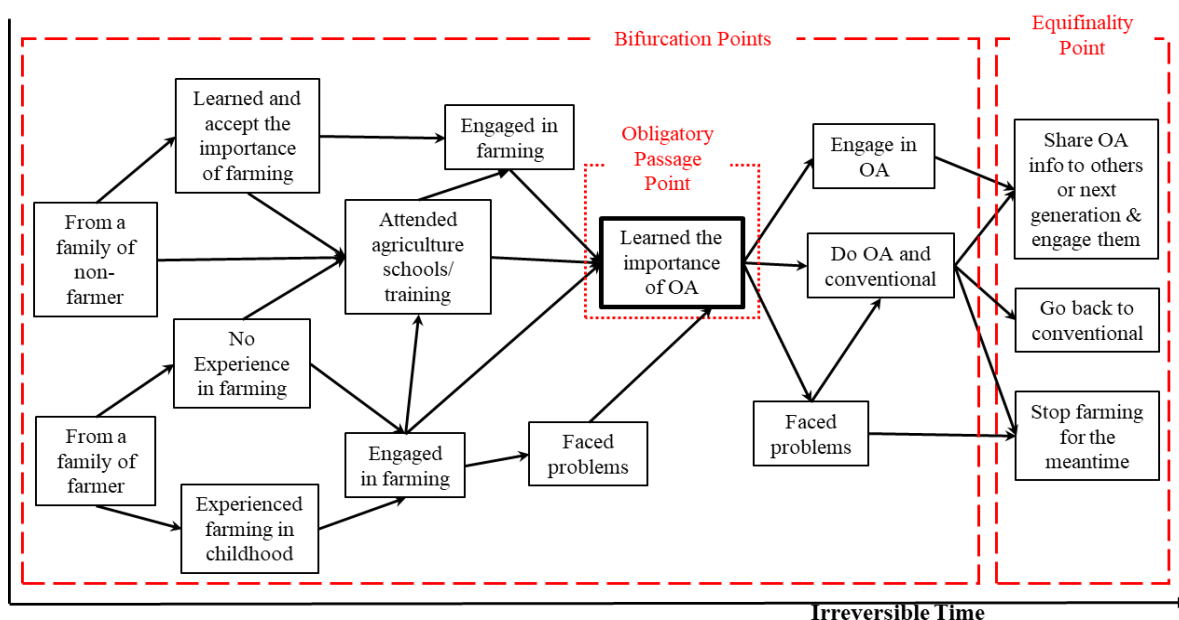
A transcript from a son, 32 years old and a grandson, age 5 were also distinguished. The son focused on how he sees his mother as a hardworking farmer to meet her goal to provide safe food for

her consumer (transcript 5). The grandson's answer, on the other hand, was unique as he saw the hardship of farming (transcript 6) but his grandmother still enjoys it.

It can be concluded that based on the transcripts from the farmer's family members there are significant effects brought by farming aside from providing the needs for their family, farmers particularly improved their family relationships. Moreover, farmers' confidence and morale, were boosted and these improvements were all connected to the positive outlook and support of their family members.

### Life History of Farmers Utilizing Trajectory Equifinality Method

To fully understand and interpret the attitude and behavior of farmers that greatly affect their decisions in farm activities, including farm succession, each of their life history was noted and analyzed with the Trajectory Equifinality Model (TEM) as shown in Fig. 1. TEM is a methodology for describing life within irreversible time which is composed of Bifurcation Point (BFP), Equifinality point (EFP) and Trajectory or the life path (Sato, et al.,2013)



**Fig. 1 Life history of the farmers using the Trajectory Equifinality Method (TEM) of selected organic farmers in Laguna, Philippines**

For this paper, the bifurcation points are the points in farmers' lives that can leads to different path. The equifinality points on the other hand, are the end point or the end-goal of the farmers' farm career such as sharing OA to the next generation and engaging them, going back to conventional, or stopping farming. In addition, the decision points are the turning points on the farmers' lives (learned the importance of OA and faced problems) which affects their decision in meeting their equifinality points. The obligatory passage point (learned OA) is a point which every farmer experienced.

The 17 farmers were grouped based on five categories based on their starting and equifinality points. The first category has three (3) farmers who were from a family of farmers, two of them with no experience in farming and graduated college with a degree of BS Computer Engineering and a Bachelor of Arts in English, both worked in private companies and retire early to engage in farming. The three (3) farmers attended agricultural training at different point of their lives with different reasons and motivations, learned the importance of OA, engaged in OA, and share OA information to the next generation and persuading and encouraging younger generations in OA. They have different life paths and choices that lead to different bifurcation points but started and ended with the same starting and equifinality point.

On the other hand, the second category comprises seven (7) farmers from the family of farmers, with experiences in tending crops and livestock, assisting their parent family on their farm since childhood. Faced different problems and challenges during their farming life that lead to different life paths, but at certain point of their lives, each of them learned the importance of OA and decided to engage in OA and share it with the next generation.

One farmer belonging in this category chose to change his career from being an employee to be his own boss as he also wants to spend more quality time with his children, as per the interview with his wife, she stated that “he was preparing and leaving early for work, our children were all still sleeping, he will be back late at night from work, and our children were already sleeping.” During his childhood, even when he attended an agricultural high school, his father neglected his ideas to be implemented on their farm. After attending OA training, he quit his job and started his own organic farm and executed what he learned from the training and his past experiences. His learnings were shared to his wife and children and later even to students, and other farmers. He also involves his children in farming by allowing them to do simple tasks like watering and weeding. In addition, being unheard and disregarded during his childhood while helping in his father’s farm, he is now making sure that his children can try and voice-out their thoughts while assisting him in their farm.

Farmers on the third category are the two farmers who are from a family of farmers, with experiences in farming, they were doing farming, attended some trainings and learned the importance of OA. Unfortunately, even though they know the importance of OA, they just decided to stop farming when they faced problems while doing organic farming. According to the interview, both have problems managing their time as they were hired in a full-time job. For them, OA is very laborious and time consuming, even they are aware of the health benefits of growing and consuming organic produced, they chose to stop doing it and stated that if there will still be chance for them to do it after their retirement, if their body can still do the farm activities, they might go back to farming.

Likewise, the fourth category involves a farmer who is also from a family of farmers. The farmer’s spouse is also a farmer. Both experienced farming during childhood and later in life engaged in farming, they also attended training related to agriculture and learned the importance of OA, they did OA and conventional, but after trying and experiencing the increased input in terms of labor, they gave up OA and go went to conventional farming. They stated that they tried their best in doing and managing OA, but regrettably, OA is not for them as it is too labor-intensive and requires too much time on the field.

Four farmers constituted the fifth category. They are the farmers who are from the families of non-farmer, learned the importance of farming and/ or attended agriculture training, engaged in farming, learned the importance of OA, engaged in OA, and shared OA information to family members and other actors in the community including the next generation.

These categories gave us a clear picture of the life history of farmers with the aid of TEM. It also gave us background on how each point of farmer’s life affects their decision making in farm activities and farm succession in terms of their attitude towards information sharing and engaging younger generations in farming.

## **CONCLUSION**

Farm succession is one way to ensure agricultural sustainability. Thus, the situation of farmers on the real ground must be understood through proper interpretation of their attitude and behavior that greatly affect farm succession. Common factors such as farm’s profile, farmers’ perceptions in transferring knowledge, and motivations related to farm successors are essential. Different farmers can also be understood through the utilization of TEM. TEM assisted the researchers see each farmer's life history and how each point of life affects their decision to continue and hand over their farms to their successors.

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