Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 9, No. 3, 748-759 2025 Publisher: Learning Gate DOI: 10.55214/25768484.v9i3.5321 © 2025 by the authors; licensee Learning Gate

The farming community in Jatinangor: A case study of business community on facing development challenges

Zaenal Muttaqin1*, Wahyu Gunawan2, Iwan Sukoco3, Suhal Kusairi4

¹Department of Business Administration, Universitas Padjadjaran, Bandung, Indonesia; zaenal.muttaqin@unpad.ac.id (Z.M.). ²Department of sociology, Universitas Padjadjaran, Bandung, Indonesia; wahyu.gunawan@unpad.ac.id (W.G.). ³Department of Business Administration, Universitas Padjadjaran, Bandung, Indonesia; iwan.sukoco@unpad.ac.id (I.S.). ⁴Department of Management, Telkom University, Bandung, Indonesia; suhalkusairi@telkomuniversity.ac.id (S.K.).

Abstract: Jatinangor has undergone a change in administrative status from a village to a city. This change is driven by the increasing development of community culture. This developmental challenge is strongly felt in the agricultural sector. This article aims to explain the continuous efforts of agricultural communities in facing various changes in Jatinangor to maintain the existence of agriculture in the area. The concept used is a change in development and the business community, which is reviewed from Giddens' structure. The method employed is a qualitative case study. This article finds that the existence of agriculture is still maintained despite the rapid changes in Jatinangor. In addition to local farmers, there are also immigrants who are interested in engaging in agricultural business and making a real contribution to the community, both in the development of agricultural technology and the supply of agricultural products to provide food for the community.

Keywords: Business community, Farming community, Indonesia, Jatinangor, Structuration Theory.

1. Introduction

The business community faces numerous challenges due to the rapid pace of change in development. These challenges span various dimensions, including economic, technological, and organizational aspects. Businesses must navigate the pressures of economic development and growth, which require new systems, strategies, and methodologies to manage inherent tensions [1]. Technologies like AI, IoT, and blockchain are transforming traditional business models, requiring businesses to align their strategies with these advancements to remain relevant [2]. Effective change management is crucial for organizations to adapt to new challenges [3]. The business community must continuously adapt to the dynamic landscape of development.

As an educational area, Jatinangor is experiencing very rapid changes. There are several universities in Jatinangor that are pushing for this change, such as: Padjadjaran University, Bandung Institute of Technology, Indonesian Cooperative Institute, and Institute of Domestic Government. These changes take place in diverse aspects. The shift from a rural to an educational area has resulted in changes in land use and a significant increase in population. This growth has attracted various investors, leading to the development of high-rise buildings to accommodate the influx of students [4]. Similar to other regions experiencing educational expansion, Jatinangor has seen a dynamization of the real estate market and an increase in urban mobility demand. This mirrors trends observed in non-metropolitan cities in Brazil, where the establishment of educational complexes has significantly altered intraurban dynamics and urban structures [5].

Agriculture in Jatinangor remains largely traditional and is primarily focused on fulfilling daily needs. Despite their relatively low income, local farmers continue to cultivate their land, persevering

© 2025 by the authors; licensee Learning Gate

History: Received: 6 January 2025; Revised: 17 February 2025; Accepted: 19 February 2025; Published: 10 March 2025

^{*} Correspondence: zaenal.muttaqin@unpad.ac.id

through challenges such as limited land availability, financial constraints, and lack of knowledge. This situation raises concerns about the future of agriculture in Jatinangor and whether it will remain the primary livelihood for its residents. Findings indicate that farming in Jatinangor can actually be quite profitable due to high demand. However, the lack of young farmers, small land holdings, and limited control over farmland contribute to their low income. Additionally, many farmers do not own the land they work on, making them predominantly farm laborers. Other pressing issues include the shrinking availability of farmland due to land conversion and challenges in marketing agricultural products [6].

The agricultural community plays a crucial role in addressing development changes, particularly in the context of socio-economic, environmental, and technological shifts. In regions like Africa, public investment in agriculture is essential for economic growth and poverty reduction. However, agricultural spending remains low compared to other developing regions, highlighting the need for increased resource allocation [7]. Agricultural communities often use localized knowledge and practices to adapt to climate change. For instance, in Nepal, farmers employ various adaptation strategies such as diversification of livelihoods and climate-smart agriculture [8]. Communities with sufficient resources and assets are better equipped to cope with the negative effects of climate change, employing unique adaptation tactics that aid policymakers in supporting agricultural practices [9]. The adoption of new technologies in agriculture is pivotal in addressing challenges such as climate change, environmental degradation, and rising food demand. In regions like the Vietnamese Mekong Delta, for example, farmers lead the process of rural innovations, contributing significantly to improved farming and water management practices [10].

This article aims to explain the continuous efforts of the agricultural community in facing various changes in Jatinangor to maintain the existence of agriculture in Jatinangor.

2. Literature Review

2.1. Business Community

Business community refers to a collective of businesses and business leaders who operate within a specific geographical area or industry and engage in collaborative efforts to achieve common goals [11]. The business community plays a crucial role in shaping public policy, societal values, and economic development [12]. Community businesses contribute significantly to the economic and social well-being of their local areas. They create jobs, foster innovation, and support local development initiatives [13, 14]. Modern businesses recognize their responsibility towards the communities they operate in, engaging in corporate social responsibility (CSR) initiatives to support social and environmental causes [14].

2.2. Structuration Theory of Giddens

In 1984, Anthony Giddens wrote a book entitled "The Constitution of Society: Outline of the Theory of Structuration". Structuring theory is the rules and resources used in the production and reproduction of social actions at the same time as a means of system reproduction (structural duality). This theory focuses on the dialectical relationship between structure and agent. In the early stages, Giddens proposed that the main concept of Structural Theory is *the* division¹ *of agents*² *who rationalize actions*³. The Structuring Theory puts forward a stratification model of agents which is described as follows:

¹Invalid source specified. *knowledgeability*) dalam praktek sosial yang berkesinambungan sebagai bentuk refleksivitas (*reflexivity*) dalam praktik sosial. Refleksivitas harus dipahami bukan hanya sebagai kesadaran diri (*self-consciousness*) tapi juga sebagai karakter yang mengontrol arus keberlangsungan kehidupan sosial . Invalid source specified.

²Human beings are *purposive agents* who have a purpose or intention, reason (*reason* = background of action), motive (*motive* = desire to fulfill reason), and the like.

³ Rationalization of actions is the basis of the principle on which the competence of actors is generally evaluated by others.

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 9, No. 3: 748-759, 2025 DOI: 10.55214/25768484.v9i3.5321 © 2025 by the authors; licensee Learning Gate



Figure 1. Agent Stratification Model.

Reflexive monitoring of actions is a chronic feature of everyday actions and involves the behavior not only of the individual but also of others. Actors not only constantly monitor the flow of their activities and expect others to do the same for themselves; they also routinely monitor aspects, social and physical, of the context in which they move. Action motivation is the potential to perform relatively unusual actions and get out of routine.

In addition to human *being*, Giddens mentioned agency, namely: events in which an individual acts as an actor. In the sense that, the individual has acted differently at a phase in a certain sequence of behavior. The difference in actions is based on a descriptive count of the events that took place before. If he misdescribes or calculates events, then he will take the wrong action. However, the mistake cannot be blamed (wrongly punished) in terms of intention. In a sense, the human being does not intend to make mistakes.

In conducting social relationships, humans (agents) involve the element of power, namely: intention or will as the capacity to achieve the desired and intended results. Power determines the structure of the agent. Meanwhile, structuring leads to *rules* and *resources* in social life. Rules are day-to-day activities that are included in the arrangement of many textures of daily life, in the form of production and reproduction of social practices. The interaction of agents and structures in the production and reproduction of social relations is called structural dualism. In a sense, the agent is the result of the structure, as well as the medium that forms the new structure [15]. Structuring Theory has been used to study groups Rosenbaum and Shachaf [16]. Rosenbaum and Shachaf [16] examine Q&A Communities as a group that interacts online with communication among members facilitated by technology and structures and has norms, guidelines and other rules of conduct that reflect the structural elements of the group.

3. Method

This article uses a qualitative approach of Case Studies. The unit of analysis is the agricultural community in Jatinangor, namely: Jatinangor Urban Farming (JUF) and the Forum of Geulis Mountain Communication (FGMC). The Gunung Geulis community represents the indigenous farmers of Jatinangor who continue to work in agriculture by managing the lands around Mount Geulis. JUF represents immigrants who are working in the field of hydroponic agriculture. Data collection techniques are carried out through: interviews and observations.

Semi-structured interviews were conducted with JUF and FGMC figures with core questions including: the history of formation, the elements that bind the members, the structure of the group, activities, funding, and future development plans. Participatory observation where researchers also participate in developing agriculture, both hydroponics and land, marketing, and future development plans of JUF.

4. Results and Discussion

4.1. The Forum Komunikasi Gunung Geulis (FKGG) as a Business Community

Forum Komunikasi Gunung Geulis is a collection of people and groups of farmers and breeders around Mount Geulis which is centered in Jatiroke Village, Jatinangor District. Their motivation to join a community is because they are moved to preserve the forest on Mount Geulis which has been damaged due to land use that does not pay attention to environmental sustainability, so during dry times the mountain looks arid and the surrounding area is experiencing drought.

The organizational structure of FGMC consists of the Chairman (Saepudin), Secretary (Suryani) and Treasurer (Ujang) with members of farmers both individually and in groups who initially oversee 2 villages in Jatinagor, namely Jatiroke Village and Jatimukti Village. FGMK funding comes from member contributions of Rp 5,000 per month per member, assistance funds from the government, PT Kahatex's CSR funds, and from productive efforts of farmer and rancher groups.

FGMC's business activities are generally the production and marketing of agricultural products, in the form of: Coffee, Bananas, Rice, Chili, and Hydroponic Vegetables. In 2021, FGMC is trusted to manage PT kahatex's land at the foot of Mount Geulis covering an area of 40 hectares which functions as conservation land and green open space. So far, FGMC has partnered with the Sumedang Regional Government, PT Kahatex, ITB, UNPAD, and the Citarum Watershed (Watershed) Forum. In the future, FGMC is developing the Gunung Geulis Agroforestry Tourism Education Village together with ITB on the conservation land of PT Kahatex green space and the Development of Planting Schools and local food education with Jatinangor urban farming.

4.2. Jatinangor Urban Farming (JUF) as a Business Community

The forerunner of JUF is the experimental activity of using vacant land since 2012 in the Sayang Village area which aims to build a housing-based food barn considering that many vacant land and housing plots are not maintained. The use of vacant land starts from planting cayenne peppers and vegetables, such as: kale, long beans, tomatoes, spinach, and mustard greens, as well as horticultural crops, such as: cassava, corn, sweet potatoes.

In 2014, the activity developed into a community education program on the use of vacant land. In 2017, the program was adopted as a learning activity for creativity courses and integrated into Community Service activities at Padjadjaran University. In 2019, the movement to use vacant land accelerated with the support of the Jatinangor sub-district government and the Jatinangor Koramil with the movement to plant one million clove trees. To oversee and monitor the program, Koramil specifically formed a community called Babinsa Mitra Cengek (BMC).

In 2020, when the Covid 19 pandemic occurred, the movement to plant cloves was reduced in quantity and scope to 1000 clove trees with an area of RT and running in RT03 RW 12 Sayang Village. From mid-2020 to 2021, the movement to utilize vacant land based on cloves and vegetables experienced profits because the price of cloves (cayenne pepper) surged to Rp 150,000/kg so that part of the proceeds were then donated to the construction of residential roads. In mid-2021, this movement was developed into a community with the participation of several land owners to jointly manage their land to become a center for education and development of food security.

The name JUF was originally short for Jatinangor URAL Farming, the word Ural is an abbreviation for urban and rural where the concept integrates conventional planting activities such as those carried out in rural areas, namely using soil media and planting as in urban areas, namely water media known as hydroponic systems. But with familiarity considerations, finally the word Ural was replaced with the word urban, so that until now the name is Jatinangor Urban Farming.

The center of JUF activities is on land owned by Widia which is located in RT04 RW 12 Sayang village with facilities of 3 hydroponic greenhouse blocks, 2 plots of land for conventional planting and green open space, one café that is under construction and several other plots of land used as conventional agricultural land in collaboration with land owners.

JUF has a vision to become a model for urban area preservation that does not forget the basic human needs for food, education, and health in an urban environment in Jatinangor as a habitat that remains comfortable and maintained. JUF's mission includes: i) carrying out food production and processing on limited urban land by prioritizing efficiency and effectiveness, ii) educating the community and becoming a pilot of simple agricultural technology in urban areas that can be duplicated by the community, and iii) building public awareness with food production and the development of environmental ecosystems that meet health standards. This vision is the binding force of JUF members to commit to farming in Jatinangor.

Although not rigidly, in terms of structure, the JUF has a clear division of duties among its members. There are coaches who have a role in providing direction and ideas in the development of JUF. There is a chairman who directs and is responsible for all JUF performance. There is a treasurer who manages finances, a secretary who is responsible for the administrative process. There are also those in charge of horticultural and hydroponic crops, marketing units, and cooperative development units. In their daily lives, each member helps each other in working on agriculture at JUF.

JUF's funding comes from community self-contributions, most of which are from the founder, Widi. Funding for clove plants comes from Mr. Zaenal. There is also a non-monetary funding scheme in the form of business collaboration with partners in the form of the construction of a hyperproponic greenhouse unit by Rusna on JUF land.

The main business activities of JUF are the production and marketing of vegetables, such as: kale, pakcoy, spinach, and cayenne pepper. To attract the interest of the surrounding community, JUF developed another business, namely traditional food that is open every Sunday. The traditional food is in the form of surabi, which is a typical Sundanese food from rice flour, fried foods, and other snacks.

Due to the hydroponic activities and the arrangement of the area of interest, several partners are interested in working with JUF. The JUF area is a place for education about urban farming in Jatinangor with partners of the Imam Bukhari Islamic Boarding School and the Agribusiness Study Program, Padjadjaran University. This educational activity is in the form of business internships and urban farming field studies.

In the future, JUF is developing its activities with the concept of Scientific farming where JUF will become an urban agricultural education center that integrates environmental planning activities, strengthening social capital, and improving the economy of local communities by involving various scientists from Unpad, ITB, IKOPIN, IPDN and other intellectual communities. So it is projected that JUF will be a place for internships, research, learning, and community service carried out by academics from the university. In addition, JUF is developing the concept of Healthy Food Hiking Tourism in collaboration with FGMC where there are hiking activities to the Geulis Mountain area with several stops and culinary tourism activities of local community products and also health checks.

4.3. Structuring the Business Community in Jatinangor in the Face of Change 4.3.1. The Structuration of Business Community of FGMC

Starting from the feeling of concern that emerged from the initiator of FGMC, Mr. Saepudin about the environmental conditions where he lives around the foot of Mount Geulis where he sees farming and farming activities in the surrounding community that have the potential to damage the environment so that deforestation occurs. His love for plants and the green forest atmosphere and fresh air made Father Saepudin initiate the existence of a communication forum for Mount Geulis in order to make the farming community and breeders around Mount Geulis aware to carry out their activities by paying attention to the preservation of the forest and the surrounding nature. His business has received responses from several farmer groups such as tobacco, coffee and horticultural farmers such as; cayenne pepper farmers. Several groups of farmers and breeders joined because what was conveyed by Pa Saepudin as the initiator of FGMC has made them aware of the importance of preserving the nature of Mount Geulis in every farming and livestock activity for several reasons, such as:

- 1. Mountains and forests are water sources that should be preserved so that the needs of drinking water and irrigation in the agricultural sector can be fulfilled throughout the year
- 2. Mountains and forests are also land for agriculture and livestock that are adjusted to the characteristics of the forest, where the forest on Mount Geulis is a conservation forest so that food crops are very suitable for development in the Mount Geulis area

3. Mountains and forests also provide a variety of organic fertilizer materials, both from weathered leaves and from forest soil that contains a lot of fertile humus to be used as a planting medium.

This awareness is then educated to other communities at regular meetings every Sunday and also FGMC Planting School activities. In the end, many parties support efforts to preserve the mountains and forests of the Geulis Mountain Area with various contributions, such as; support for 27 hectares of conservation land from PT kahatex, support for fertilizers and seeds from the government through the Agriculture and Livestock Office, appropriate technology support from ITB and Unpad academics, as well as various research and service activities carried out by lecturers and students. Some of these supports were then made in cooperation such as PT Kahatek with FGMC and ITB with FGMC and some were carried out directly in the form of interaction of activities in the field after previously communicating either by phone or notification letters and activity permits.

However, on the one hand, the amount of support is an opportunity to strengthen FGMC's vision and mission to preserve the forests around Mount Geulis, but due to the limitations of human resources and also the difference in partners who collaborate with a relatively short time, it is a challenge that until now there is no right solution. So that many of the collaboration programs cannot be carried out sustainably. Despite the fact that there are activities going on, the parties who collaborate are always different. With different parties collaborating with FGMC, they felt difficulties in adapting to the time when the program was implemented. The feeling of boredom or boredom felt by farmers and ranchers in carrying out collaboration programs that are felt to benefit from the increase in their economic income is not as expected. However, the belief and love for mountains and forests owned by the core team at FGMC is so large that it is able to maintain the enthusiasm of farmers and breeders to carry out activities and continue to collaborate with parties who come to FGMC one after another.

The consistency of FGMC itself in planting and preserving the environment with education to the community through the socialization of routine activities every week and the existence of planting school activities finally resulted in the trust of several parties to entrust the program and assets to be managed by FGMC, such as: PT Kahatek with an area of 27 hectares, the Gunung Geulis Terrace program in collaboration with the village government as a village food security program, The Gunung Geulis Agroforestry Tourism Edukasis Village Program (DEWA Gugeuls) collaborates with ITB and PT Kahatex and farmer and rancher groups in Jatiroke Village and Jatimukti Village which are located at the foot of Mount Geulis.

4.4. Agent Stratification Model

4.4.1. Rationalization of Actions

Regarding the assessment from external parties of FGMC such as PT Kahatex, ITB, Unpad, the Agriculture and Livestock Office, students and lecturers who carry out research and service basically they see the actions of FGMC who are considered to have experience in managing forest areas and carrying out agricultural and livestock practices and continue to be consistent in environmental conservation. This creates trust in parties outside FGMC to invite FGMC to collaborate. This trust is realized with the support of PT kahatex in the form of 27 hectares of green open land to be managed by FGMC together with farmers and breeders in the Geulis Mountain Area, then from ITB which has a Water and Biological Resources study program invites Cooperation to arrange the huatan in the Geulis Mountain Area into a conservation forest with the support of appropriate technology, especially in processing garden and forest products such as coffee and other food crops. Likewise, Unpad with the agricultural product technology study program invites cooperation in the development of hydroponic plants and their processing. The Agriculture and Livestock Service also supported by entrusting the seed and fertilizer distribution program to FGMC. Those who consider FGMC as a competent partner also come from lecturers and students who conduct learning, research and service who choose FGG as a learning partner and resource person in their research and service.

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 9, No. 3: 748-759, 2025 DOI: 10.55214/25768484.v9i3.5321 © 2025 by the authors; licensee Learning Gate

4.4.2. Reflective Monitoring of Actions

The existence of trust in the form of financial support, programs, and custody of land assets to be managed and the number of parties who make FGMC as the main resource person is an advantage for FGMC managers as well as challenges and opportunities to carry out these forms of trust so that it has an impact on the achievement of FGMC's vision and mission to regreen the Geulis Mountain Forest area and make Geulis Mountain a food barn for the community. FGMC routinely holds meetings every Sunday to evaluate the implementation of the program at the FGMC Secretariat in Jatiroke village, in addition to meetings and discussions are held directly in the field during the program, such as during land cultivation, planting, fertilization, harvest time, and also post-harvest. However, due to the many variations of programs from various parties and the limited human resources available, FGMC has difficulty in measuring the effectiveness and efficiency of the programs implemented, often overlapping programs from these diverse parties occur which results in confusion on the part of FGMC to claim the success rate of each program implemented. Moreover, the nature of the programs run by these diverse parties is often not carried out in a sustainable manner. In the end, these programs are felt by FGMC and the farmers and breeders involved only as educational and social programs that have not had an impact on improving their economy from the results of farming and raising livestock. From this, boredom arises which implies a lack of enthusiasm for farmers and breeders and part of the FGMC team if there are diverse parties who come to carry out activities with FGMC, but the chairman of FGMC as the initiator of forest conservation in the Gunung Geulis area always motivates farmer and livestock groups and FGMC members to see the benefits of the existing collaboration for intelligence and the realization of prosperity in the villages around Mount Geulis. The patience and enthusiasm shown by the chairman of FGMC made the members of FGMC and farmer and rancher groups able to survive in collaboration efforts with these diverse parties.

4.4.3. JUF Community Business Structure

The existence of vacant land that is not managed and then the emergence of awareness from land owners to manage it so that it is useful in the form of the availability of plants that can be consumed daily. The idea was then followed up by cultivating unmanaged land conventionally planted with several food crops such as; papaya, mango, banana, guava and cassava. Along with time and intense discussions between the landowner and several parties who had the same concept, it was agreed to carry out hydroponic planting and a Greenhosue was created for the planting of several hydroponic plants such as; kale, spinach, pakcoy, and lettuce. The joining of one conceptor who offers the concept of nanosociopreneur cloves further enriches the concept of unmanaged land utilization so that it was agreed that planting activities on the land with the shape and type of plants are named as Jatinangor urban farming abbreviated as JUF. The parties who collaborate in JUF are all immigrants in Jatinangor who have a vision that Jatinangor is the right place to develop a sustainable food program based on education, so that JUF is then designed as Scientific farming, which is an agriculture that fundamentally involves a scientific approach from various parties in carrying out its food activities. JUF then developed into a place for student internships, research and service of academics, regular meetings of the surrounding community in environmental planning, and also the opening of several JUF businesses such as Surabi Culinary and Wine café.

Based on the description above, the structure of the JUF can be described, as follows:

Agents: Draftsmen (Academics), Landowners, Cooks, Marketing teams, Production partners

Agency: Cultivation, Planting, maintenance, Harvesting, post-harvest, crop planting education

Structure: Routine Saturday-Sunday meetings, evaluation and reflection, consistency and persistence of JUF (Kebun-Dapur-Café) Business, Cooperation agreement between draftsman, landowner, cook, and marketing.

4.5. Agent Stratification Model

4.5.1. Rationalization of Actions

External parties want to collaborate with JUF because JUF shows its consistency and persistence to be committed to fulfilling family food. With a small scope but carried out continuously by having a clear and logical concept and long-term, it is considered by other parties to collaborate. The existence of religious values owned by the landowner with the background of the owner of the Noble Generation Foundation where the owner aspires to build a noble generation with food fulfillment attracts other parties, especially JUF's sustainable business draftsman, local residents and other strategic partners to collaborate with JUF. The joining of the village government with its BUmdes in the food security program shows the village government's trust in JUF which further adds to the strength and opportunity of JUF to grow and develop into a pilot area in carrying out family and regional food security. Likewise, the campus, especially the Unpad campus through the Agribusiness and FTIP study programs and Business Administration, collaborated on activities because they saw JUF's consistent track record in developing a sustainable food business using the Scientific farming approach. Activities at JUF related to land cultivation, planting, maintenance, harvesting, sales activities that have become a cycle and the development of concepts at JUF so that JUF activities look dynamic and always present a new atmosphere in the circle of JUF giving confidence to other parties that JUF is growing in a healthy and neat concept and worthy of visiting and being used as a place of learning, culinary and sustainable food activities. With garden facilities for learning, kitchens for cooking, cafes to enjoy JUF-style culinary dishes as well as several hut facilities and a beautiful natural atmosphere, it is the reason for visitors, both academic visitors, consumers of the community in general, and residents around them to always visit JUF.

4.5.2. Reflective Monitoring of Actions

Efforts to continuously improve and develop are carried out by JUF through several activities, such as; regular meetings on Saturday and Sunday. In the meeting, which was packaged by enjoying surabi culinary, bala-bala, whining and hot tea which was held every Saturday and Sunday, it was often discussed related to the progress of JUF's business development, competent human resource support, financing, and also how to integrate environmental management with social harmony and economic improvement of JUF members and the surrounding community. Often the Saturday-Sunday meeting is used as a place for casual discussion while enjoying the beautiful and inspiring dishes and atmosphere of JUF to understand the values and concepts that are being carried out at JUF to the visitors. The routine activity became a place to exchange ideas and also add to the dynamism of the atmosphere at JUF.

The impact of regular meetings with the concept of enjoying Surabi culinary, bala-bala, cloves and hot tea presents an interesting story for consumers so that they are interested in trying to come again and enjoy the atmosphere of JUF on the weekend with its signature dishes. In addition, because there was a light discussion related to the concept of JUF, the value of philosophy, and the way how JUF grows and develops, visitors know the direction and goals of JUF which not only offers a comfortable place and atmosphere but is part of an effort to jointly educate the community which can ultimately prosper the community through sustainable food activities. With such education, consumers become intelligent and finally feel the importance of a business activity in order to meet daily food needs while making them aware that an orderly environment, a harmonious society and an ever-increasing economy can be maintained and developed.

The planting cycle from land cultivation, planting, maintenance, harvesting activities, crop processing and marketing activities that generate sales continues to be pursued at JUF to provide learning and concrete evidence of how a food business can occur that is measurable and inspiring. With an uninterrupted business cycle, JUF can present to visitors and consumers JUF a variety of rides that can be used as educational tools so that food security is maintained.

The activities of regular meetings, continuous planting cycles, and interesting education about the concept of JUF which is followed up by the progress of the JUF environmental arrangement further

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 9, No. 3: 748-759, 2025 DOI: 10.55214/25768484.v9i3.5321 © 2025 by the authors; licensee Learning Gate

bring confidence to external parties that JUF is a business entity that is growing and has profitable prospects in the future. Such a large external trust further strengthens the commitment and confidence as well as the enthusiasm of JUF members in carrying out their activities. In the end, external trust and internal awareness running in JUF are a strength in itself to achieve food security which is not only realized in JUF but with its educational pattern can inspire similar activities in other regions or villages. Based on the above presentation, the structure of JUF and FGMC can be seen in the following table:

Items of structuration	JUF	FGMC
Rationalization of Agent/community and division actions (division of labor)	Values; Religious values, building a noble generation with food intake	Value: Love for nature and forests
Action Motivation	Realizing Scientific Farming	Realizing the Gunung Geulis Agroforestry Tourism Education Village (Dewa Gugeuls)
reflective monitoring	 Farming activities that are expected are not interrupted in cycle, but due to the lack of focus of some members who have other jobs, resulting in disruption of the farming cycle The limitations of human resources in processing, maintaining, and managing the results have an impact on the income received by JUF 	 3. Efforts to preserve nature and forests together have received little support from the surrounding community and the government on a sustainable basis 4. Boredom due to a lot of activity but economically does not give the expected value of the results
consequences of unintended actions	Scientific farming is considered a mere utopia, because the background of JUF managers is not from the agricultural sector. Many parties still doubt the technical ability of the managers to carry out the agricultural process	The naming of Dewa Gugeul is considered to be able to bring shirk to the religious beliefs embraced by the surrounding community. Concerns that the mountain is becoming a place of purification rather than a place of worship
Unrecognized conditions of the action	 There is a good photo spot with a mountain background, the environment is beautifully organized. Disruption of privacy of local residents close to JUF due to visitor activities The Village came and asked JUF to accompany the Sayang Village Food Security House 	 Fresh air in the surrounding environment, Bringing in the trust of external parties (Co. PT Kahatex entrusts the management of 27 ha of green open land to FGMC)

Table 1.

(Con	ipai	rison	Table	of FGI	MC and	JUF	Structu	ring.

Even though they are in Jatinangor and both face the challenges of change, the restructuring experienced by JUF and FGMC is different. *First*, the difference in values that are the basis for rationalizing actions occurs due to differences in background or idiosyncretic from community members, especially founders or figures. JUF is more based on religious values in carrying out its actions, such as the belief that cultivating vacant land to plant food crops is part of worship, also presenting halal food is part of the implementation of God's command to build a healthy and noble character and also the Prophet's command to plant even though tomorrow will be the apocalypse. These values and beliefs are the strength for JUF to carry out continuous actions in its agricultural activities. while FGMC bases its actions on what the founders and members have been getting from the environment where they live, namely the green nature and forests that have been their source of

livelihood. The love for mountains and forests that they realize has given them a livelihood makes them take various actions including forest conservation by planting annual food crops, such as; mangoes, coconuts, durian, chocolate, and coffee, also manage the land in between by planting horticultural crops, such as; chili, tomato, cucumber, legumes. The existence of mutual benefits between the existence of mountains and forests that provide livelihoods and efforts to take care of mountains and forests by FGMC allows the emergence of a routine of kindness in agriculture around Mount Geulis. In the midst of the changes in Jatinangor whose development is more oriented towards the residential and shopping industry, what JUF and FGMC are doing is like the growth of an oasis in a barren desert.

Second, the difference in motivation for action. The founder of JUF sees the potential in Jatinangor as an Educational Area so that the character of JUF is more emphasized on the existence of a sciencebased urban agricultural activity so that the term scientific farming was chosen to be the identity of JUF which is continuously communicated to various parties in the hope that there will be various collaborations that further confirm that JUF is scientific farming in Jatinangor. Meanwhile, FGMC sees more potential forests and villages that can be used as tourist areas for the people of Jatinangor, of course, because Jatinangor itself has been inaugurated as an Education District, education is a way to attract and make people aware of the potential possessed by the people around Mount Geulis. The birth of the Gunung Geulis Agroforestry Tourism Education Village program, abbreviated as DEWA Gugeuls, is the answer to this potential which is expected to grow the economy and prosperity of the villages around Mount Geulis. There is a difference in the character of JUF and FGMC where JUF represents the character of urban agriculture by utilizing narrow land and technological support, while FGMC represents rural agriculture by utilizing large land and abundant human resource support.

Third, the difference in terms of reflective monitoring occurs due to differences in work and time as well as motivation for actions where JUF carries out routine farming activities with the hope that the community will participate in doing what JUF does so that home-based food security can be realized, but in practice in the field the challenge is to maintain a continuous farming cycle while the managers have different time and work. Activities at JUF are still carried out after the managers have completed their work as educators in universities, Foundation managers, and material employees so that the farming cycle is still experiencing obstacles. At the same time, when looking for human resources who have the same vision and commitment to solve these obstacles, it is still a difficulty in itself. Meanwhile, in FGMC, agriculture is the livelihood of its members so that the farming cycle is still relatively maintained even though in terms of improving the economy is still constrained, there are various activities carried out related to the entry of government programs, collaboration with academics, and also from company partners on the one hand to increase income opportunities, but in fact these activities are busy with farmers not on improving farming skills and managing their products, but a lot of time is taken up by social interactions, such as many meetings, socializations, and ceremonies that make them bored with these various activities, let alone the increase in their income has not been felt.

Fourth, the difference in terms of the consequences of unintended actions occurs because the managers have declared JUF as Scientific farming even though the background of the managers is not agricultural education, only has the spirit and commitment to advance agriculture so that at the technical level planting often experiences obstacles, such as in land cultivation, planting, maintenance, facing changes in climate and unexpected pest attacks. It takes time to prove and cost to create support from various parties so that JUF's activities continue to be sustainable. Meanwhile, FGMC with its DEWA Gugeuls program still received a minor response, especially from the naming of the program which was abbreviated to be sensitive to the religious beliefs of the surrounding community which is majority Muslim, even though if the term is explained in length, it is clear that the potential and a very appropriate way to build the economy of the village community around Mount Geulis is clearly visible. These barriers of terminology and communication need to be resolved by FGMC so that the shamans of agricultural activities that strengthen forest and mountain conservation can run smoothly.

Fifth, the difference in terms of unrecognized conditions from the action occurs because the JUF area is very close to residents' houses because JUF is located in a densely populated urban settlement so

that its activities can interfere with the privacy of homeowners. There needs to be an effort to communicate and invite the collaboration of homeowners to be involved in JUF activities so that the number of visitors is not a nuisance but an opportunity to increase prosperity. In addition to things that are considered minor, JUF's routine activities also give birth to positive and unexpected things, namely the surrounding environment changes to be beautifully organized and can be developed into a good selfie spot, especially since the background of Mount Geulis is very clearly visible in the JUF area. JUF's routine activities were also finally recognized by the Sayang Village government, so they came to JUF and asked JUF to assist the Village program in building the Sayang Village Food Security House. Meanwhile, FGMC because of its existence far from settlements does not experience social obstacles. Planting activities carried out by FGMC for many years have changed the deforested lands around the mountain to be filled with shady green trees and add to the fresh air around the mountain. FGMC's routine is also a concern for a Textile Company around Mount Geulis to then entrust the management of its 27 hectares of green open land to be managed by FGMC.

In the end, a routine that is carried out with certain values with awareness and trust both from actors and from other parties who help will be a force in efforts to carry out sustainable development and of course have an impact on environmental conservation, social harmonization and improvement of the community's economy. Therefore, this structuring with agent stratification provides a framework for how an action is carried out and efforts to control the action are made so that various conditions and consequences arising from such actions can be anticipated and directed positively to accelerate the achievement of common goals in an effort to increase the prosperity and welfare of the community in a sustainable manner.

5. Conclusion

This paper finds that the existence of agriculture is still maintained despite the rapid changes in Jatinangor. In addition to local farmers, there are also immigrants who are interested in doing business in agriculture and making a real contribution to the community, both in the development of agricultural technology and the supply of agricultural products to provide food in the community. sustainable development and of course has an impact on environmental conservation, social harmonization and improvement of the community's economy. Therefore, this structuring with agent stratification provides a framework for how an action is carried out and efforts to control the action are made so that various conditions and consequences arising from such actions can be anticipated and directed positively to accelerate the achievement of common goals in an effort to increase the prosperity and welfare of the community in a sustainable manner.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Copyright:

 \bigcirc 2025 by the authors. This open-access article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<u>https://creativecommons.org/licenses/by/4.0/</u>).

References

- [1] A. L. Macnaughton and J. Stephens, "Achieving sustainable development: Meeting economic development, environmental protection, and quality of life goals through effective stakeholder management systems, strategies, and methodologies," *Corporate Environmental Strategy*, vol. 11, no. 3, pp. 3–19, 2004.
- [2] S. Maydanova and I. Ilin, "Strategic approach to global company digital transformation," in *Proceedings of the 33rd International Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020*, 2019.

Edelweiss Applied Science and Technology ISSN: 2576-8484 Vol. 9, No. 3: 748-759, 2025 DOI: 10.55214/25768484.v9i3.5321 © 2025 by the authors; licensee Learning Gate

- [3] M. Mallinger and D. Goodwin, "Recognizing organizational culture in managing change," *Graziadio Business Review*, vol. 12, no. 1, pp. 1-10, 2009.
- [4] S. Djoeffan, H. Burhanidin, and W. Weishaguna, "Effect of high rise building against transportation in campus area," in *Proceedings of the Annual Conference of Science and Technology 2018 (AnCOSeT 2018), Malang, Indonesia*, 2019.
- [5] R. Máximo, "Spatial effects of educational policies: Recent expansion and internalization of federal education in nonmetropolitan cities in Ceará," *urbe. Revista Brasileira de Gestão Urbana*, vol. 12, p. e20190080, 2020. https://doi.org/10.1590/2175-3369.012.e202002
- [6] S. Judawinata and A. Hutagalung, "Challenges in agricultural marketing and land conversion: A case study in Indonesia," *Journal of Agricultural Economics and Development*, vol. 4, no. 2, pp. 33-45, 2017.
- [7] T. Mogues and S. Benin, Introduction. In Public Expenditures for Agricultural and Rural Development in Africa. New York, United States: Routledge, 2012, pp. 1–7.
- [8] S. Rijal, P. Gentle, U. Khanal, C. Wilson, and B. Rimal, "A systematic review of Nepalese farmers' climate change adaptation strategies," *Climate Policy*, vol. 22, no. 1, pp. 132-146, 2022. https://doi.org/10.1080/14693062.2021.1991249
- [9] M. T. Sohail, S. Mustafa, M. M. Ali, and S. Riaz, "Agricultural communities' risk assessment and the effects of climate change: A pathway toward green productivity and sustainable development," *Frontiers in Environmental Science*, vol. 10, p. 948016, 2022. https://doi.org/10.3389/fenvs.2022.812728
 [10] T. A. Tran, T. H. Nguyen, and T. T. Vo, "Adaptation to flood and salinity environments in the Vietnamese Mekong
- [10] T. A. Tran, T. H. Nguyen, and T. T. Vo, "Adaptation to flood and salinity environments in the Vietnamese Mekong Delta: Empirical analysis of farmer-led innovations," *Agricultural Water Management*, vol. 216, pp. 89-97, 2019. https://doi.org/10.1016/j.agwat.2019.01.020
- [11] M. De Socio, "Marginalization of sunset firms in regime coalitions: A social network analysis," *Regional Studies*, vol. 44, no. 2, pp. 167-182, 2010. https://doi.org/10.1080/00343400802662615
- [12] S. MacDonald, Peacebuilding and the private sector. In Integrated Peacebuilding: Innovative Approaches to Transforming Conflict. New York, United States: Taylor and Francis, 2018, pp. 127–150.
- [13] L. Tuckerman, J. Nelles, B. Owalla, and T. Vorley, "Exploring the evolutionary boundaries of community business," Nonprofit and Voluntary Sector Quarterly, vol. 53, no. 5, pp. 1205-1229, 2024. https://doi.org/10.1177/08997640211024208
- [14] P. Pradhan, S. C. Parida, and B. P. Rath, "Corporate social responsibility in the globalised business environment: Community relations at NALCO," *Indian Journal of Social Work*, vol. 66, no. 2, pp. 211–222, 2005.
- [15] M. Syahri, *Strukurasi anthony giddens*. Malang, Indonesia: Airlangga University, 2015.
- [16] H. Rosenbaum and P. Shachaf, "A structuration approach to online communities of practice: The case of Q&A communities," *Journal of the American Society for Information Science and Technology*, vol. 61, no. 9, pp. 1933-1944, 2010. https://doi.org/10.1002/asi.21340