



Journal of Social and Political Sciences

Soedarwo, V. S. D. S., Zuryani, N., & Jha, G. K. (2025). Rational Actions of Women Farmers in Subak Bengkel-Bali: Integrating Agriculture and Tourism. *Journal of Social and Political Sciences*, 8(2), 53-64.

ISSN 2615-3718

DOI: 10.31014/aior.1991.08.02.571

The online version of this article can be found at:
<https://www.asianinstituteofresearch.org/>

Published by:
The Asian Institute of Research

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Rational Actions of Women Farmers in Subak Bengkel-Bali: Integrating Agriculture and Tourism

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Abstract

Subak encompasses not only cultivated land and its irrigation system but also the intertwined social and religious activities, particularly involving women farmers. These resilient Balinese women support their families while preserving agricultural heritage and engaging in tourism post-Covid-19. Their cultural roles in daily life have evolved alongside significant changes, such as the conversion of agricultural land to tourism facilities. In this village, women farmers have pursued equitable wage practices in tourism, positively affecting their children and enhancing tourism's value. This study aims to analyse the rational actions of Subak Bengkel-Bali women farmers in creating added value through agriculture and tourism. Employing a qualitative approach with explanatory descriptive research, interviews were conducted using the snowball principle, alongside observation and documentation. Data underwent reduction, verification, and condensation to yield recommendations. Results indicate that women farmers not only farm but also work in tourism-related sectors like restaurants and villas. Keywords: rational actions, women farmers, subak, bengkel-bali, agriculture, tourism

Keywords: Rational Actions, Women Farmers, Subak, Bengkel-Bali, Agriculture, Tourism

1. Introduction

1.1 Subak and its Challenges

Subak is a community organization (known as *sekhe Subak*) or institution that manages irrigation water and rice cultivation mechanisms within rice field landscapes. The water source is linked to temples and operates autonomously based on the philosophy of *Tri Hita Karana* (THK). The meaning of THK encompasses three ways to promote the happiness of beings, God, and the environment. The first component, *parahyangan*, refers to creating harmony between humans and God; the second, *pawongan*, signifies harmony among humans; and the third, *pelemahan*, represents harmony between humans and the natural environment, all harmonized through rituals (Sriartha et al., 2017). This illustrates a bond that encapsulates the philosophy of human life.

For the Balinese community, rice fields are regarded as sacred spaces, termed *Taman Sari* (sacred gardens), where deities and other holy beings interact. This reverence is understandable, as rice is a primary energy source for daily activities. Consequently, numerous myths exist surrounding rice fields and rice cultivation as a staple food (*manik galih*), revered as Dewi Sri Goddess (Wardi et al., 2014). Furthermore, Tabanan has been designated as Bali's 'rice barn'. Discussing Subak involves not only its agricultural fields and irrigation systems but also the deep social and religious life intertwined with it (Lestari & Ginting, 2021). The religious life associated with subak is evident from planting to harvesting, accompanied by various ritual ceremonies. These ceremonies often involve women, especially in preparing offerings for temples or ritual sites within Subak. Balinese women are renowned for their resilience in supporting family economies while preserving agricultural heritage. To this day, women's roles in agricultural culture remain significant (Subekti, 2021). There are terms like *sekhe nandur*, *sekhe mejukut*, *sekhe manyi*, and *sekhe napinin*, where the majority of members are women. Linguistically, *napinin* refers to the process of cleaning rice husks (Pemerintah Desa Bengkel, 2022). This indicates that women farmers are involved from planting to harvesting, including those around Subak Bengkel, Tabanan, Bali.

Most farmers are reluctant to sell their agricultural land, viewing it as ancestral heritage that should be preserved and passed down. The Subak customary institutions play a significant role socially, culturally, and economically. This is evidenced by the positive correlation between these roles and farmers' perceptions of maintaining Subak as a form of local wisdom in Bali's agricultural sector. (Prastyadewi et al., 2020). But in reality young people and women are starting to change their jobs from agriculture to tourism. Apart from that, several Subak areas are starting to change function to become tourist areas. As well as several Subak in Bali are international cultural heritages, including Subak Bengkel.

Bengkel Village, located in the Kediri District of Tabanan, has 80% of its population engaged in farming. This village possesses the largest subak area in Kediri with stunning natural potential, and its agrarian and cultural activities remain well-preserved. It is situated not far from tourist destinations such as Tanah Lot (Kemenpar, 2022). Subak Bengkel consists of 18 Subak temples, covering an area of approximately 375 hectares with around 900 members (*kerama subak*). Since 1991, there has been the conversion of Subak land for tourism facilities (hotels), estimated at 90 hectares. Before the construction of the hotel (in 2013), local farmers (former landowners) were permitted to cultivate the land as rice fields and for grazing cattle (Wardi et al., 2014). Research in the nearby Pangkung Tibah village, also in the same district, indicates a "threat of land conversion," where investors have employed various tactics, including involving local authorities to compel residents to surrender their land. Not all land owned by residents can be acquired by investors. Currently, some land owned by locals remains unacquired by investors, resulting in land that is isolated due to unclear access. Indigenous communities also express discomfort with the development of tourism accommodations along the coast (Purba et al., 2020).

Recent data from a preliminary survey conducted from June 8 to 10, 2023, in Subak Bengkel shows that approximately 40 hectares of land have undergone conversion. Despite discrepancies in data, UNESCO recognizes Subak as a world cultural heritage that must be preserved (Yujana et al., 2022). The cultural landscape of Subak in Bali was designated as a world cultural heritage in June 2012. In May 2024, Subak Bengkel will become an eco-hydrology model. This highlights the value of Subak Bengkel as a world cultural heritage that needs conservation, amid the ongoing phenomenon of land conversion and the youth, including women, shifting to non-agricultural jobs.

As time progresses and changes occur regarding land conversion from agricultural areas near Subak into tourism facilities, women are increasingly transitioning to or supplementing their income with non-agricultural jobs. The phenomenon of job transition among women in Subak Bengkel presents a compelling area for study. It is understandable the fact that women farmers in the area of study need to do income generating activities (*das sein*) and at the same time they have multiple burden as housewives and normative community members (*das sollen*) This research aims to analyse the rational actions of women farmers in Bengkel village concerning with integrating agriculture tourism.

1.2 Literature Review

Research on Balinese women in the agricultural sector has been extensive, including studies that illustrate the high involvement of women farmers in the activities of Subak Begawan Kelod - Tabanan, reaching a significant 83.33%. This involvement is attributed to the primary occupation of the village community as farmers, coupled with a lack of job opportunities outside agriculture, leading them to work as laborers on others' farms (Sukanteri & Lestari, 2017). Another study examining gender roles in the management of Subak in Bali, particularly in Subak Taman Bali, indicates that both men and women participate in subak management. However, the nurturing theory still prevails, highlighting existing role differences between male and female farmers, resulting in varied participation and responsibilities.

Women's participation remains limited, and they do not enjoy equal rights with male farmers due to the Purusa-Pradana concept, which prioritizes men as landowners. Relating to the six functions of Subak, women are more dominant in conducting ritual activities (Damayanthi et al., 2020). In contrast, in Songan-Bali village, women farmers contribute significantly to improving agricultural quality. They are efficient workers, often producing neater results than men. Women are also capable of creating opportunities in agriculture, such as experimenting with new crops to diversify agricultural outputs (Yani & Indrayani, 2021).

In a study on the changing role of women in the agricultural sector in Tandawang village, the increasing role of women in the agricultural sector is due to economic factors. However, their roles are subordinated because of patriarchal culture and religious dogma. The majority of women do all roles in agriculture but have less access to resources and decisions making. Many landlords use women as farm laborers because they can be paid in lower wages than male laborers. On the other hand, women have a double burdens because they have to work in the domestic sector too (Amalia et al., 2022).

Nevertheless, the role of women is considered positive in the image of Balinese culture because it is carried out according to customs and the assumption that working is an obligation to carry out *dharma* according to Hindu teachings. It is undeniable that the main factors for women working in the agricultural sector are economic factors and educational factors. On average, women with elementary or junior high school education look at the agricultural sector as easier to achieve for these graduates (Widiastri et al., 2024).

Other research in the tourist village of Pujon Kidul indicates that women and housewife farmers engage in activities beyond farming, such as selling processed food and beverages (Soedarwo et al., 2022). This phenomenon is commonly observed in nearly all agrarian village communities in Indonesia, including Subak Guama in Tabanan, Bali. Research on the accessibility of economic capital for female farmers in Subak Guama, Tabanan, Bali, highlights their involvement in trade, which aligns with their roles as housewives, where they typically engage in domestic tasks and sell vegetables, side dishes, and snacks (Astiti & Sarjana, 2020). In Subak-Guama, women farmers generally have less access to resources than men, so the women formed the KWT Suka Makmur forum. The forum is a means of communication and empowerment for women farmers through education and entrepreneurship training to improve the family economy (Astiti, 2017). The increase in both physical and non-physical activities in agriculture underscores the significant presence of women in farming, leading to the phenomenon known as "Feminization of Agriculture." Feminization of agriculture refers to the movement aimed at increasing the number of women and enhancing their roles in agriculture (Maulana et al., 2022).

Feminization is also linked to globalization and advancements in communication and transportation, which encourage people to migrate temporarily or permanently abroad or return to their hometowns in search of better livelihoods. One consequence of this migration is the increasing feminization of agricultural labor, with more women participating. Additionally, the regeneration of the workforce has led to a predominance of women in agriculture, as the younger generation is less interested in farming. Young graduates from vocational schools and tourism diploma programs in Bengkel-Bali are opting to work abroad on cruise ships or directly engaging in jobs at villas, restaurants, or glamping sites on nearby beaches. Choosing to work in the non-agricultural sector is an example of instrumental rationality.

Instrumental rationality (*zweckrationalität*), as proposed by Max Weber, is understood as an action taken with rational considerations to achieve a goal, even using alternative means such as market systems. Weber further

explains that economic actions within market systems are characterized as instrumental rationality (Goodman and Ritzer, 2018). Actors will consciously choose actions based on a “cost-benefit” analysis aimed at achieving their objectives.

Women farmers in Bengkel village also act as instrumental rational agents, contributing to the economic sustainability of their families. Economic actions, such as seeking a livelihood, consider all aspects of the actors and resources, as highlighted by Coleman and Homans (in Favell, 2005), which are key terms in this research on female farmers. Rational choice theory emphasizes two elements: the actor and the resources. Here, the actors are women farmers who have specific goals to maintain family economic resilience, especially during the pandemic or when agricultural land is increasingly threatened by expanding tourist destinations. It is reasonable for a woman farmer to choose to contribute to her family's welfare.

Homans (in Hidir, 2024) discussed the profit and loss rewards in the realm of exchange, highlighting the exploitation of women's labor on a micro level. Thus, the core of this theory also lies in resources. This theory places emphasis on the actor, defined as an individual taking action regarding the resources they possess. These actions are expected to lead to social change. When women farmers choose to work under any conditions, their survival strategies are rational choices, reflective of actions taken by individuals.

The rational actions of the actors and their resources are questioned by Zeitlin (in Harris, 2024) critiquing Homans on whether these can lead to changes in the actors' lives, particularly in challenging seasons. Actors indeed play a central role in taking action. Each choice made by women farmers to contribute economically to their family needs is considered rational, with the resources including rice fields, vegetable plots, and other workplaces. This implies that women farmers, in addition to working in Subak for rice or vegetable crops, are increasingly aware of their equality with men and aspire to combat their oppression by actively participating as earners while fulfilling household responsibilities.

Balinese women are entering the economic sphere with the aim of improving welfare and alleviating the economic burden on heads of households (Indrayani & Musmini, 2020). The economic independence of Balinese women is reflected in their involvement in agriculture as well as in social and religious activities while seeking added value in the tourism sector.

From the above description, several studies on Subak agricultural actors in Bali illustrate the intertwined social, economic, and religious lives of both male and female farmers and their children. However, there has yet to be an analysis of the activities of female farmers as actors in the tourism sector. The novelty of this research leverages rational action theory, focusing on the rational choices of women farmers, particularly the added value of their work in both agricultural and non-agricultural (tourism) sectors, as their children increasingly choose careers in various fields.

2. Method

This research employs a qualitative approach with a descriptive-explanatory research type. The study is located in Subak Bengkel, Bali, chosen for its status as a UNESCO site and its commitment to preserving nature and culture through upstream-to-downstream agricultural practices. The subject selection technique is based on snowball sampling. In the snowballing principle, subject limitation ends when new data is not obtained or is saturated. This method begins with selecting one subject, guided by key informants, to become the first subject, and then rolling to the second subject and so forth to expand data sources. This technique involves choosing women farmers designated by the village head (Perbekel) and then identifying other women farmers based on the first subject's recommendations and so on. These women farmers not only work in rice agriculture but also cultivate other crops (such as mustard greens, shallots, ornamental flowers, and seasonal plants like sweet potatoes, potatoes, carrots, peanuts, red beans, and corn) or engage in tourism activities.

Here our interview activities with some subjects, first subject is KA. She was born on 9 November 1985, village: Bengkel Gede. She planted green vegetables, because the rice had not started to be harvested. The vegetables

planted were mustard greens planted in 3 rice fields and then sold to collectors and sometimes also sold to Blitar meatball customers. also watered the green mustard plants. If job opportunities are closed, Mrs. KA is not allergic to returning to work in the agricultural sector. Since 2021 - 2023, she currently worked at the Sari Darma shop, near the house near the T-junction as a cashier. And then, she was a Freelance worker at the Fiona villa housekeeping in Legian, working on Tuesdays and Fridays. There are many guests from the Netherlands and Australia.

Second subject is NWS. She was born in Bengkel Gede, on 8 Februari 1990. NWS helps work (mature fields, not rice) planting onions, experienced as an onion farmer for 4 months, the results from NWS's garden are sold (transactions) with the stall owner. also had time to: sell canang for 2 months, applied for a job 2 times but did not pass, open a stall since February 2023, and in 2020 had time to sell ice next to his father selling meatballs.

Previously, NWS's father was a construction worker (2009), after that he was fully farming in the fields, the results per 100 days were 5 tons and that was divided into two for the workers and the landowner. After the change function of Subak, NWS work as selling food and drinks near BTN Puri Damai housing near the carver. As a mother, NWS has enjoyed her present time, she is active in many activities such as garbage cadres, PKK, temple odalan, likes to help in Banjar (socialization of antibiotic use). TPS cadres, 3R (reduce, reuse, recycle) are also active in PMI. Always active in hamlet and village activities.

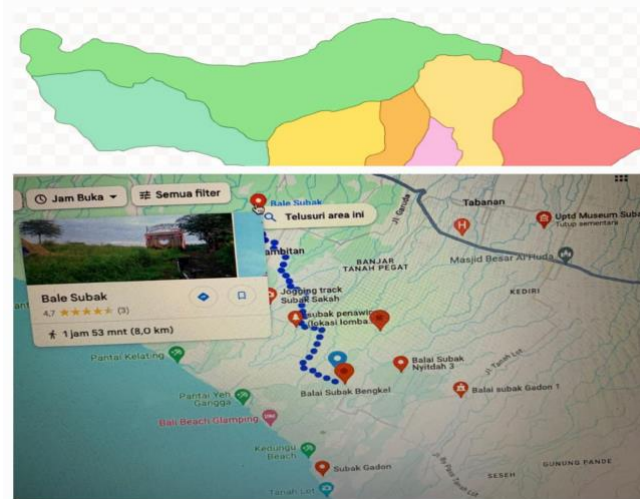
Data collection techniques in this research include: first, interview related to work while living in the village and why they moved to tourism and also with village officials to gather general data related to both rice and secondary crop activities. Additionally, open-ended interviews are conducted to obtain data on the daily activities of farming communities. Second, collected data through observation. The things observed were the location of the Subak-Bengkel and the daily work of female farmers through researcher involvement for one month. Third, documentation, the things documented are the location of the Subak-Bengkel and interview activities, and also data from the Central Statistics Agency of Bali Province. There are several several stages of data analysis: first, data reduction, followed by data display, data condensation, and verification or conclusion drawing. The data reduction stage involves simplifying, abstracting, and transforming the "raw" data gathered from field notes. Data reduction occurs continuously throughout the research, even starting before the researcher determines the conceptual framework, research issues, and chosen data collection approach. This process continues post-field research. The data display stage presents a structured collection of information that allows for conclusions to be drawn, formatted as explanatory narrative text. Initially, the information appears as scattered text, which is organized from less coherent to more coherent after the researcher simplifies complex information into a comprehensible narrative structure. The verification stage or conclusion drawing is part of a holistic activity. The conclusions are verified throughout the research, making the principles of this data analysis stage circular. To reduce data bias, triangulation of data sources was carried out on a subject's daughter who has high mobility regarding with her work abroad, her name is A.

3. Results

Bengkel Village is a strategically located area for introducing rural tourism and various Subak activities, along with other cultural attractions that have persisted (Prihantari et al., 2023). According to village data from 2020, the population of Bengkel Village in Kediri District, Tabanan Regency, was 2,314 people, with 759 households. The majority of the residents are Hindu, with only 0.82% adhering to religions other than Hinduism. As is common in Bali, each hamlet in Bengkel Village has its own Banjar Adat, with each banjar having its own village temple (pura pengulun desa) and cemetery (setra).

There are four Banjar Adat in Bengkel Village: (1) Banjar Adat Buduk, (2) Banjar Adat Bengkel Gede, (3) Banjar Adat Bengkel Kawan, and (4) Banjar Adat Telengis (Soedarwo et al., 2024). Each of these Banjar Adat has its own kelian adat, chosen through deliberation among the community members. Interestingly, all four Banjar Adat belong to one customary area, the Pekraman Bedha Customary Village, which encompasses several Banjar Adat spread across various administrative village areas (Sumaryani et al., 2023).

As mentioned earlier, in addition to the Indigenous community, there is also a Village Community Institution (LKD) in Bengkel Village in the form of Subak, specifically Subak Bengkel. The area of Subak Bengkel falls within three administrative village regions: Pejaten, Bengkel, and Pangkung Tibah. It is named Subak Bengkel because the largest area of Subak is located in Bengkel Village. The community of Subak primarily consists of farmers. For a visual representation of the location, please refer to the following map:



Picture 1 : Google map compilation (Nazrina Zuryani : 2024)



Picture 2 : Subak Bengkel and Balai Subak (Primary Documentation)

Subak Bengkel was chosen as one of the UNESCO sites, where Subak Bengkel is a subak that still maintains the sustainability of nature and culture through agriculture from upstream to downstream. The rice fields irrigated by Subak Bengkel cover an area of 335 hectares, yielding a dry grain harvest of approximately 7.5 tons. The total cultivated area is 375 hectares, but about 40 hectares have been sold and converted for other uses (interview with the village head of Bengkel on May 10, 2023). Tabanan is designated as Bali's 'rice barn,' so it is hoped that the rice fields will not be converted for other purposes. The planting pattern in the Subak area in Bali is called Kertamasa and Gadon. Kertamasa is a simultaneous planting pattern for all Subak areas, involving long-duration rice varieties planted during the rainy season. Gadon refers to a planting pattern for short-duration rice varieties during the dry season. The crop rotation in these rice fields follows a pattern of rice-palayam (secondary crops) and then rice again.

According to informant in a data survey, the income of Subak generally comes from Subak-related businesses, member contributions, penalties for violations, fines as 'uang pengampel' or 'pengohot' related to adat awig-awig or written regulation of each village, government assistance, or aid from other parties. This income is typically used for religious ritual ceremonies and the maintenance of Subak infrastructure.

Ritual ceremonies are deeply ingrained in the community's life, including daily activities related to the Subak system. Based on interviews with the head of Tempek Umujero, Mr. WWS, several types of religious ritual ceremonies are commonly held by members of Subak Bengkel. First, the Mapag Toya ritual, which is conducted when the water is first channelled from the source. Second, Ngaturang Pেকেlem or Mepelabuh is a ritual ceremony conducted by a combination of Subak at the water source (lake or sea), while Pengerit is held by a single Subak led by the pekaseh (Subak leader) to select an auspicious day. The meaning of this ritual is to pray for safety so that crops are protected from pests and diseases.

The holy water obtained from these rituals is distributed to each plot of land belonging to Subak members. Third, the Nunas Pekuluh ritual is conducted to request holy water from the temples surrounding the Subak, as it is believed to be connected to soil fertility. The significance of this ritual is to maintain the sanctity of the rice fields and protect them from pests by sprinkling holy water on each farmer's field. Fourth, the Nangluk Mrana ritual is held by Subak members at the beach to prevent plant pest infestations. Fifth, the Neduh Alit ritual is performed at the temple (twice a year) to ensure smooth planting and harvesting of rice without pest attacks. Sixth, the Ngusaba Pari Wayah ritual is conducted when the rice turns yellow and is ready for harvest, as an expression of gratitude to God for granting the success of the rice crops to the farmers. Seventh, the Ngusaba Nini ritual is performed to thank Dewi Sri, the goddess of fertility, for her blessings and to request safety (Ardhana, 2017).

All these ritual ceremonies related to Subak and the planting and harvesting of rice form an inseparable part of the life of Balinese farmers. Therefore, they become a strength and foundational capital in maintaining cultivated land as a center for rice production and as a national and world cultural heritage.

4. Discussion

One of the female farmer research subjects is referred to as KA. Before getting married, she worked in the tourism sector for about 20 years. She married in 2007 and has two daughters: the first, AGGN, is in 12th grade, and the second, AMK, is in 8th grade. The absence of a son (who traditionally continues the father's lineage) allows KA to prepare her daughters for opportunities abroad. An invitation from her friend's husband from Germany has been postponed for a year because AGGN did not have an ID card last year. According to KA, when AGGN is ready to marry, she will look for a partner. If AGGN does not find a match, it will be passed on to her younger sister. For KA, if AGGN finds a suitable life in Germany, it is possible that AGGN will seek schooling with the help of her German sponsor. KA encourages AGGN to explore tourism in the village and urges her to learn foreign languages, which are essential. Currently, AGGN is learning German through YouTube, in addition to studying English.

KA's history of learning foreign languages began when she worked in tourism long before the Covid-19 pandemic. She once worked at the Legian Hotel on Jalan Melasti and as a waitress at a Russian-owned villa in 2021. When the pandemic hit, she was laid off for a year without severance pay, despite having worked there for 8 years (since 2012). During this time, KA's husband continued to work as a security guard at the airport, albeit with a salary cut. In 2022, when her husband fell ill, someone else worked on their rice fields. At that time, KA also planted green vegetables since the rice had not yet been harvested. She planted mustard greens across three rice plots, which she sold to collectors and occasionally to a regular customer who sells bakso (meatballs) from Blitar. Her income from agriculture was around IDR 800.000. KA also planted durian and clove trees. This research subject has truly returned to farming, engaging in activities like sowing mustard seeds, watering, and harvesting, reflecting the traditional "tumpeng gilir" farming practices common among farmers in Bengkel Village.

Since 2021-2023, KA has worked at Sari Darma store near her home as a cashier. She continues to grow mustard greens because the marketing is good, with a regular customer from the meatball trade buying from her. Additionally, she works freelance in housekeeping at a villa in Legian, focusing on Tuesdays and Fridays, serving international tourists, including guests from the Netherlands and Australia whom she has known for a long time. In 2024, KA will work as an admin for a high-end laundry service in Canggu while still taking on villa jobs twice a week. She truly wishes to return to working in a restaurant, as she enjoys that work because the income from tourism sector is more than farming. From this description, it can be analyzed that she rationalizes her actions by

working as both a farmer and outside agriculture, consciously considering the economic benefits she can gain, especially after the pandemic caused economic stagnation in every sector, particularly tourism.

Another research subject is NWS, who describes her experience working at Tanah Lot (a golf sport location) and successfully passed the selection from hundreds of applicants through training, despite not having a tourism background. During the first three months of training, mental resilience was heavily emphasized. Of the hundreds of applicants, only 30 passed. After working for three years on the golf course, she moved to a hotel due to the long commute, then transitioned to a mini-market as a cashier, where she was laid off in 2022. Subsequently, she returned to the village to cultivate her family land of 60 are. She helped cultivate (non-rice fields) by planting shallots, gaining experience in onion farming for four months, selling the produce through transactions with a local vendor. In 2023, NWS opened a small shop, while her husband works full-time as a farmer, producing 5 tons of rice every 100 days from their fields.

The next research subject is a member of the Women Farmers group, referred to as NLPS, who not only farms but also makes ritual supplies associated with Subak activities, including crafting canang from young coconut leaves in a square shape. In addition to helping her husband in the rice fields, she creates various canang that are sold at ritual events. The profits from making canang are not particularly significant; however, NLPS feels that crafting canang is an integral part of their life, closely tied to their ritual and spiritual practices. She is the mother of a daughter who is pursuing a Diploma 1 education, and through snowball sampling, she brings a new understanding of the daughters of Subak farmers in Bengkel Village. Her eldest daughter, NPWS, has been working at the Glamping site in Tampih beach for three years.

The 24-year-old NPWS intends to maintain her job in the tourism sector, thanks to her knowledge and education in vocational studies focusing on culinary arts. For NPWS, even though marriage means she will join her husband's family, she still wants to work and build a career in the tourism sector. Similarly, another young woman, WCS, living on Jalan Raya Subak Bengkel, has completed her Diploma II in hospitality and has been working at a well-known restaurant in Sanur while awaiting graduation. WCS's mother is also a canang seller, and her father, besides having cultivated land, has a motorcycle repair shop on the main road of the village. Another subject is the second daughter, KR, who is pursuing a diploma in culinary arts. She works in restaurant service on Berawa beach while aiming to sustain her career in tourism. The fourth young woman, NPP, also holds a Diploma II in tourism and enjoys her current job. NPP's mother is a skilled chef at a villa on Kedungu beach.

The results from several interviews indicate that, within the Subak system in Bali, women's roles are highly significant, particularly in carrying out religious rituals and managing Subak organizations. Women actively participate in rituals associated with agriculture and have authority in certain decision-making processes. This aligns with (Martiningsih, 2011) assertion that in Subak Wongaya Betan, female members organize processing of organic red rice tea and coffee, as well as engage in product marketing and maintain buyer relationships. Women's involvement in Subak management remains applicable in other locations, although still limited. (Astiti & Suamba, 2023) describe that women's engagement in managing Subak organizations is normatively taught from childhood. This indicates that although women possess abilities that are not yet on par with men in managing Subak, they are often not fully involved in agricultural activities or agricultural extension services. Balinese women from farming families play a crucial role in the Subak system, both in ritual aspects and organizational management. This aligns with research conducted by (Sudarta et al., 1987). However, challenges remain in ensuring their full and equal participation in all aspects of Subak management. This is also reflected in the roles of Subak Bengkel women farmers in encouraging their daughters to pursue higher education and careers beyond just the context of Subak agriculture.

In Bengkel Village, there are approximately 23 boys working on cruise ships. Only one girl, Geg C, works on a cruise ship because her father passed away five years ago and her mother remarried two years later. Geg C decided to work on the cruise ship for one year and has now committed to working there until 2025. Another research subject, MH, works in America, with both parents being farmers with extensive cultivated land. MH's parents have received economic benefits in the form of monthly remittances from their son, ranging from \$600 to \$1500 for the past seven months. This money has been used to construct rental rooms behind their old house. If MH continues

his job at the hotel in America, his parents have prepared a plot of land near the beach for him to build tourism facilities.

Made WN is a male research subject who has been working on a cruise ship for nearly five years and is currently 27 years old. While waiting for his ship to depart again, Made WN has purchased land for a house and plans to build an *angkringan* (a type of street food stall) in front of his house. He has a three-year-old daughter, and his wife works as a cashier in a store. Their plan is to continue working separately for now to save capital for their business, and once they reach 40, they will start a joint venture. Made WN's mother works as an agricultural laborer because their land is very limited. However, Made WN's sister is a hardworking woman who often asks their mother to prepare ceremonial supplies and snacks for the villa where she works. Made WN's sister's house is not far from their parents' home, allowing their parents to assist with her business activities and care for Made WN's young daughter while he and his wife work.

The research subjects made the decision to change jobs based on their own rational considerations, which aligns with Coleman's theoretical framework where individuals are actors who engage in actions. These actions are expected to bring about social change. When subjects choose to add or change jobs in the non-agricultural sector related to tourism, this is seen as a rationally chosen action. Rational choice theory emphasizes that the actor is a key component in taking action. Here, the actor can be understood as individuals making choices to achieve their interests and maximize their benefits, allowing social change to occur naturally.

This is done by actors making choices that they believe will yield results to achieve their interests. Similarly, young research subjects take actions to work in non-agricultural fields to increase their income and enrich their personal experiences. The core of rational choice theory consists of two elements: the actor and resources. The actors are the subjects as farmers and their spouses and children, while the resources include agricultural land such as rice fields and the availability of tourism facilities, especially Subak. However, other resources that the subjects utilize strategically are efforts to gain additional income and work experience in non-agricultural sectors, which informs their rational decisions.

Women farmers who possess foreign language skills for direct or indirect communication certainly influence others outside of themselves. This external influence can take the form of actions from others or rewards obtained from changing jobs. This aligns with the success proposition outlined by Homans in social exchange theory, which results in rational actions among female farmers in Bengkel Village, Bali. The women around Subak shift jobs because, firstly, their actions can bring rewards, which Homans refers to as the success proposition. Secondly, the shorter the time interval between the behaviour of taking on a new job and receiving rewards, the greater the likelihood that the subjects will repeat that job. Intermittent rewards are more likely to reinforce behaviour than consistent rewards. For instance, in new jobs at restaurants or hotels, there are bonuses or rewards that come intermittently, unlike working in rice fields. The next proposition is the stimulus proposition, which indicates that jobs that yield many rewards will encourage further engagement.

As Homans stated, "A fisherman who casts his line into a murky pond and successfully catches a fish will want to fish in that murky pond again" (Homans, 1974: 23). Thirdly, through the concept of the value proposition, it can be analysed that the research subjects repeat their actions in non-agricultural jobs because they assess the outcomes as more valuable than those obtained from agricultural work. Fourthly, the rationality proposition suggests that when choosing among various alternative actions, subjects will select the one they perceive at that moment as having value in terms of results and maximizing utility. The most desired reward is one that is highly valued and likely to be achieved, while the least desired reward is one that is of little value and unlikely to be obtained. Homans also argued that large-scale structures can be understood if we comprehensively understand basic social behaviour. According to Homans, the exchange process is identical at the societal level, where there are more complex fundamental combinations. These four propositions from Homans are very relevant for understanding the behaviour of subjects in changing jobs. Therefore, it is in line with the actor and resources that Coleman discussed before.

This indicates that female farmers are capable of producing added value in both agriculture and tourism. Female farmers also bear the responsibility of managing their households to ensure their families are safe, peaceful, and prosperous. They are highly involved in pursuing the welfare of their families, managing household tasks, participating in work, and educating their children. Women exhibit high levels of creativity in creating business opportunities. Indirectly, female farmers in Bengkel Village apply values from feminist teachings, as they are given opportunities to work and achieve economic independence.

In the context of Subak management, according to Indrayani & Musmini (2020), policies are needed to ensure that women retain rights and access to agricultural land, especially given the ongoing phenomenon of land conversion. Policies aimed at strengthening family economies based on Subak are also necessary, such as developing processed products from harvests that can be marketed as tourism products. This is expected to enhance culture and add economic value to Subak products.

5. Conclusion

Women in Bengkel Village are accustomed to working in agricultural fields, largely due to familial factors, as their parents have lived as farmers but most importantly their husbands are farmers. Generationally, the farming community in Bengkel has pursued this livelihood and relies on agricultural land for their sustenance. From a young age, children become familiar with the crops cultivated on family-owned land or fields. They are taught how to manage agricultural resources early on.

In addition to familial influences, education also plays a role in women's participation in farming. Female farmers in Bengkel typically attain education only up to elementary school, unlike the younger generation, which fully participates in the mandatory 12 years of education.

Generation X women (born between 1965 and 1980) have limited qualifications and most of them cannot finish 12 years of education as previously it was mandatory only 9 years of schooling. Unless they got the certificates (like home schooling package learning of B and C), it can be used to obtain jobs outside of farming in certain sectors. However, over time, some areas around them have developed into tourist destinations. This presents promising opportunities for female farmers to work in tourism. Unfortunately, the Covid-19 pandemic, which significantly impacted the world, forced these women to return to their villages and resume their agricultural activities as farmers.

It is important to note that this reality has resulted in positive outcomes, with improved agricultural product quality attributed to the diligent and skilled efforts of female farmers. The research subjects and women farmers in Bengkel Village work hard and willingly contribute, driven by a strong sense of responsibility towards their families and the sustainability of their agricultural practices. This demonstrates that the skills they possess are effectively utilized to sustain their livelihoods, allowing them to easily switch jobs between agriculture and non-agriculture, especially during the COVID pandemic. The act of changing jobs reflects instrumental rationality based on Weber's concepts as well as rational choice theory from Coleman.

Although, this research has not yet incorporated psychological factors that drive the motivation behind the job transitions of female Subak members. Nonetheless, a rational decision is not entirely absolute in its rationality. When choosing or switching jobs, there are certainly other aspects or factors involved, not solely economic considerations. Therefore, it would be beneficial for future research to examine these issues from a psychological perspective to provide a more comprehensive analysis of similar realities. Otherwise, an empowerment program is needed for women in agricultural areas so that they continue to work in the agricultural sector and maintain Subak as a cultural heritage because it has been declared an international cultural heritage site by UNESCO.

Author Contributions: Conceptualization, Vina Salviana Darvina Soedarwo; Methodology, Vina Salviana Darvina Soedarwo; Validation, Vina Salviana Darvina Soedarwo., Nazrina Zuryani and Gautam Kumar Jha; Formal Analysis, Vina Salviana Darvina Soedarwo; Investigation, Vina Salviana Darvina Soedarwo and Nazrina

Zuryani; Writing – Original Draft Preparation, Vina Salviana Darvina Soedarwo and Nazrina Zuryani; Writing – Review & Editing; Vina Salviana Darvina Soedarwo and Nazrina Zuryani; Visualization, Vina Salviana Darvina Soedarwo.

Funding: This research was funded by University of Muhammadiyah Malang by Applied Research Scheme Program.

Conflicts of Interest: The authors declare no conflict of interest

Informed Consent Statement/Ethics approval: Not Applicable

Acknowledgments: We would like to express our deepest gratitude to the Research and Community Service Institution of Universitas Muhammadiyah Malang for providing material support for the research activities conducted in the Subak Bengkel region of Tabanan-Bali. Additionally, we would like to thank the village head of Bengkel for providing the necessary secondary data and various access for the research team.

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