

**Becoming an Organic Farmer and Market Participant: A
Case Study of Small and Marginal Coffee Farmers of Araku
Valley**

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**DOCTOR OF PHILOSOPHY
IN
ANTHROPOLOGY**

By
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17SAPH06



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DECLARATION

I, **P. SREENU**, hereby declare that the research embodied in the present dissertation entitled, "**Becoming an Organic Farmer and Market Participant: A Case Study of Small and Marginal Coffee Farmers of Araku Valley**" is an original research work carried out by me under the supervision of **Dr. George Tharakan C**, Department of Anthropology, University of Hyderabad. This dissertation has not been submitted for any other degree at this university or any other university.

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Date: 05 /03 /2024

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CERTIFICATE

This is to certify that Dissertation entitled "**Becoming an Organic Farmer and Market Participant: A Case Study of Small and Marginal Coffee Farmers of Araku Valley**" submitted by **P. SREENU** bearing Reg. No **17SAPH06** has carried out the research work embodied in the present in partial fulfillment of the requirements for the award of Doctor of Philosophy in Anthropology, Department of Anthropology, School of Social Sciences, is a bonafide work carried out by him under my supervision and guidance.

This thesis is free from Plagiarism and has not been submitted previously in part or in full to this or any other University or Institution for award of any degree or diploma.

Further, the student has the following publication before submission of the thesis/monograph for adjudication and has produced evidence for the same in the form of acceptance letter or the reprint in the relevant area of his research:

A. Published in the following publication:

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Table of Contents

List of Tables	ii
List of Figures	v
List of Maps	vi
List of Plates	vii
Chapter-1: Introduction.....	1-34
Chapter-2: Ethnographic Profile of the Study Area	35-73
Chapter-3: Becoming an Organic Farmer: Land, Organic Practices and Recognition.....	74-137
Chapter-4: Creating Organic Markets Through Quality, Imaginaries and Aspirations.....	138-175
Chapter-5: Emerging Socio-Economic Changes in Araku Coffee Farmers.....	176- 207
Chapter-6: Summary and Conclusion	208- 226
PLATES	227-232
BIBLIOGRAPHY	233- 264
ANNEXURES	

List of Tables

S.No	Table	Page number
1	Table 2.1: Agro-Climatic Zones of Andhra Pradesh State and Their Major Crops	38
2	Table 2.2: Land Utilisation in Andhra Pradesh State for the Year 2023	41
3	Table 2.3: Cropping Pattern in Andhra Pradesh According to Agricultural Seasons	42
4	Total Operational Landholdings According to Farmer's Class (as Per Andhra Pradesh State's 2015-16 Land Census)	43
5	Table 2.5: Change of Farmer's Operational Landholding and Farmer's Class (from 2010-11 to 2015-16 Land Census)	44
6	Table 2.6: Mandal-Wise Literates and Literacy Rate, According to the Census, 2011	46
7	Table 2.7: Educational Institutions in the Alluri Seetharama Raju District	47
8	Table 2.8: Season-wise and Mandal-wise Area under Major Principal Crops in Paderu Division, 2019-20	48
9	Table 2.9: Spread of Horticultural Area in Alluri Seetharama Raju District	49
10	Table 2.10: Breakdown of Female and Male Population with Family Names in the Study Area	52
11	Table 2.11: Age-wise and Sex-wise Breakdown of the Population in the Study Area	53
12	Table 2.12: Frequency of Families Based on the Numerical Composition in the Study Area	54
13	Table 2.13: Educational Levels in the Study Area	56
14	Table 2.14: House Types in the Study Area	58
15	Table 2.15: Clan-wise Distribution of House Types in the Study Area	59
16	Table 2.16: Families and Their Religion in the Study Area	60-61
17	Table 2.17: Gender-wise Distribution of Occupations in the Study Area	62-63

18	Table 2.18: Distribution of Kharif and Rabi Farmers According to the Area Cultivated	64-65
19	Table 2.19: Type of Cropping and Operational Landholding in the Study Area	66
20	Table 2.20: Type of Farmers Based on the Operational Landholdings	66
21	Table 2.21: List of Major Crops Cultivated in the Study Area	68
22	Table 2.22: List of Horticultural Crops in the Study Area	68
23	Table 2.23: Agricultural Cycle in the Study Area	69
24	Table 2.24: Pattern of Markets in the Study Area	70
25	Table 2.25: Livestock Availability in the Study Area	72
26	Table 2.26: Agricultural Implements Owned by Farmers in the Study Area	73
27	Table 3.1: Classification of Farmers Based on the Coffee Landholdings in the Selected Villages	91
28	Table 3.2: List of Plants Used as Manures in Coffee Lands	95
29	Table 3.3: Registered Land Documents Granted to the Coffee Farmers, Under FRA, 2006	101
30	Table 3.4: List of NGO Activities in the Study Villages	107
31	Table 3.5: Replica of a Sample Page from A Farmers' Diary Book	109
32	Table 3.6: Showing the Livestock Asset Holding in Transitioning Coffee Farmers Village (K.Puttu Village)	115
33	Table 3.7: Livestock Assets Holding Among the Certified Organic Farmers (G.Guda Village)	124
34	Table 3.8: Similarities and Differences Between Certified Organic and Transitioning Organic Farmer	131
35	Table 4.1: Agencies' Involvement in Shifting from Dry to Wet Processing	145
36	Table 4.2: List of Farmer Producer Organization's Activities in the Study Area	151
37	Table 4.3: Role of NGO (Intermediate) in Establishing the Organic Markets in the Study Villages	153
38	Table 4.4: Role of Promoter Organization in the Study Villages	153

39	Table 4.5: Comparative Table of Processes in the Study Villages	161
40	Table 5.1: Major Participants in Coffee Related Activities	178
41	Table 5.2: Interplay of Major Agriculture Activities with Organic Coffee in the Annual Cycle of Activities	178
42	Table 5.3: The Pattern of Labour Hired for Coffee Activities	181
43	Table 5.4: Market Preferences of Established Organic Farmers	191
44	Table 5.5: Market Preferences of New Organic Farmers	191
45	Table 5.6: New Assets Owned in the Study Area	195
46	Table 5.7: Trend in Increase of Rooms Within House Type	200
47	Table 5.8: Change in Bride-price Payment Among the Farmers	202
48	Table 5.9: Change in Marriage Gifts in the Study Area	204

List of Figures

S.No	Figures	Page number
1	Figure 2.1: Andhra Pradesh State's Major Contributors to its Economy	37
2	Figure 3.1: Pie Chart Showing the Educational Status of Transitional Organic Coffee Farmers	113
3	Figure 3.2: Type of Fertilizers Used by Transitioning Coffee Farmers	119
4	Figure 3.3: Number of Times Transitioning Farmers Used Fertilizers in the Coffee Fields	120
5	Figure 3.4: Type of Fertilizers Used by the Certified Organic Farmers	126
6	Figure 3.5: Number of Times Fertilizers Applied in the Coffee Farm by Certified	128
7	Figure 4.1: Farmers' Intentions and Motivations in the Study Area	150
8	Figure 4.2: Coffee Processing and Collaborative Actions to Cultivate Coffee	158
9	Figure 4.3: Coffee Processing and Collaborative Roles to Cultivate Coffee	160
10	Figure 5.1: Change in Pattern of Debts From 2017-2022 in the Study Area	196
11	Figure 5.2: Farmer's Level of Satisfaction with Organic Coffee Prices in the Study Area	186
12	Figure 5.3: Comparison of Coffee Harvest Between Certified and Transitional Farmers	193
13	Figure 5.4: Income from Coffee and its Intercrop (Pepper) in the Year 2022	197
14	Figure 5.5: Change of Semi-Pucca Houses to Pucca Houses in the Study Area	200

List Maps

S.No	Maps	Page number
1	Map 2.1: Map of Andhra Pradesh (Before Reorganisation of Districts, 2022)	36
2	Map 2.2: Map of Alluri Seetharama Raju District (Reorganised Vishakapatnam)	45

List of Plates

S.No	Plate	Page number
1	Plate 3.0: Organic Manure Preparation Sites in the Study Villages	227
2	Plate 3.1: A Coffee Farmer Preparing the Bio-Fertilizer (Dravajeevamrutham)	227
3	Plate 3.2: Biofertilizer Unit in G.Guda Village	228
4	Plate 4.1: The Dry Process of Hulling the Coffee	228
5	Plate 4.2: Drying the Coffee after Hulling	229
6	Plate 4.3: Accepted Grades of Coffee Fruit by Organic Buyers	229
7	Plate 4.4: A Coffee Expert and Collaborator Utilizing a Device to Check Coffee Moisture and Quality	230
8	Plate 4.5: Segregating the Coffee Fruits into Grades by the Family Members	230
9	Plate 4.6: Wet Method of Processing Using Manual Machines	231
10	Plate 4.7: Centralised Processing Unit Using Heavy Machinery to Perform the Wet Method of Processing	231
11	Plate 4.8: Distribution of Organic Certification to Coffee Farmers at Coffee Board Office, Paderu, Andhra Pradesh	232

ABBREVIATIONS

APCNF	: Andhra Pradesh Community Managed Natural Farming Program
APEDA	: Agriculture Processed Food Export Development Authority
APFDC	: Andhra Pradesh Forest Development Corporation
ASR	: Alluri Seetharama Raju
CBI	: Coffee Board of India
CMSA	: Community Managed Sustainable Agricultural Programme
FAO	: Food and Agriculture Organization of the United Nations
FIBL	: Forschungsinstitut für biologischen Landbau
FNAB	: Federation Of National Agriculteurs Biologiques Eec Regulations
FPO	: Farmer Producer Organization
FRA	: Forest Rights Act
GCC	: Girijan Cooperative Corporation
GCPDC	: Girijan Cooperative Plantation Development Corporation
ICS	: Internal Control System
IFOAM	: International Federation of Organic Agriculture Movements
ITDA	: Integrated Tribal Development Agency
MGNREG	: Mahatma Gandhi National Rural Employment Guarantee Scheme
NABARD	: National Bank for Agricultural and Rural Development
NGO	: Non-governmental Organisation
NPOP	: National Programme for Organic Production
NRPPD	: National Research Programme on Plantation Development
WHO	: World Health Organisation

Chapter-1

Introduction

1. Introduction

Agriculture has been undergoing constant change due to changes in practices, technology, and varying socio-economic conditions/scenarios and political-economical influences (Byerlee et al., 2009; Chavas, 2001; Goddard et al., 1993). This process has resulted in many changes, from low-yield agricultural producers to high agricultural producers, because of the use of technology, fertilizers (inorganic/artificial), capital, and adaptability of new knowledge into the previous agrarian knowledge (Gahukar, 2010; Mishra et al., 2017). However, using modern technology and fertilizers has also brought significant changes to the actors (farmers) and land. The actors have become more resource-dependent and dragged into indebtedness and poverty because of high capital-intensive resources (Singh et al., 2009). Meanwhile, land has become unfertile and non-resilient to local climatic conditions, resulting in crop failures and damage to farmers' livelihoods, particularly after the extensive implementation of the green revolution (Ladejinsky, 1973; Singh & Benbi, 2016). This technocratic solution to the agrarian problem also ruined crop diversity and shifted the diverse cropping patterns to mono-crop cultures, which also had a severe impact on ecological and dietary imbalances.

Horrigan et al. (2002) argues that earlier agricultural (industrial) practices consumed fossil fuel, water, and topsoil at unsustainable rates. He further says "it contributes to numerous forms of environmental degradation, including air and water pollution, soil depletion and diminishing biodiversity" (Horrigan et al., 2002, p. 445). Nicolopoulou-stamati (2016) noted that the use of excessive amounts of chemicals in industrial agriculture has exacerbated the strain on ecosystems and natural resources. He also mentions that farmers and the general public's health have suffered as a result of the abuse of chemicals in agriculture. So, to reduce these impacts and rectify the natural ecosystem and actors, an alternative farming practice, such as organic farming, has been advocated since the early 20th century (Lockeretz, 2007).

Since then, organic farming has gained popularity due to the perception that it offers a comprehensive approach to agriculture by utilizing natural resources, considering the

local environment and ecology, and emphasizing soil fertility improvement. In addition to this approach, it has also been encouraged because of its practices and principles that organic farming protects consumers and gives priority to farmers' socio-economic conditions (IFOAM, 2024). However, to safeguard the rights and interests of farmers and consumers, organic farming employs control mechanisms and procedures through agencies, both private and governmental, which utilize certification as a tool in this process.

Similarly, a certifying agency's recognition and certification are necessary when switching from conventional to organic farming, despite the fact that the early organic movement did not require certification (Schmid, 2007). Farmers benefit from the organic identity obtained through certification in several ways, including high-end, well-paying marketplaces and buyers for their produce (Ranjan Jena & Grote, 2017). Because production practices are inexpensive, they also help farmers with other problems and lessen their economic hardship (Panneerselvam et al., 2012a, 2015). Richards (1993) says agriculture is like a performance in which different actions and agencies of farmers play crucial roles in achieving the targeted goals (Ahearn, 2001; Ortner, 1984, 2006a). Flachs (2017), Galvin (2021) and Besky (2014) argued that organic recognition and conversion to organic farming through certification depends on the performance of farmers under the given social and environmental capabilities of the farmers. Achieving an organic identity is a challenging process that requires farmers to demonstrate their organic practices through their actions (Galvin, 2018).

In the aforementioned context, the current study aims to investigate how Indian farmers are turning organic and what are the methods and mechanisms through which they participate in organic marketplaces to increase their livelihoods and income in various socio-economic contexts. The following sections will discuss some of the organic farming and market literature. It also contextualizes the objectives of the research and the methods and methodology used to conduct the research.

1.1. Coffee Plantation, Small and Marginal Farmers

Coffee plantations have a lengthy history in India, stretching back to the early nineteenth century, and it is believed that coffee plantations were extensively introduced by the Europeans, mainly in south India (Srinivasan et al., 2000). They introduced coffee in south India to develop substantial export crops under their regime

(Richards, 1981). These coffee plantations are continued till today. These coffee plantations have spread to other parts of the country also. They are largely categorized into two types of coffee plantations, namely Traditional coffee areas and Non-traditional areas (Coffee Board of India, 2023). Traditional coffee areas include plantations from the states of Tamil Nadu, Karnataka, and Kerala, whereas non-traditional coffee plantation areas cover the states of Andhra Pradesh and Orissa. In other words, traditional coffee areas can be referred to as pre-colonial and colonial plantations, and non-traditional plantations as post-independence plantations, as they were introduced in the 1960-70's by the government of India. Unlike traditional areas, non-traditional areas' coffee plantations signify a strong intervention programme made by the government. The objective of this intervention is two-fold. One is to address the environmental degradation practices like shifting cultivation and soil erosion; two is to increase the farmers' income and address the poverty issue through cash crop coffee (Uma Devi, 2013). Thus, the coffee plantation in a non-traditional programme was introduced to provide environmentally suitable agricultural practices in place of shifting cultivation.

According to the Agriculture Census Report 2015-2016, the small and marginal holdings taken together (0.00-2.00 hectares) constitute 86.21% in India, while their share in the operated area is 47.34%. It shows that a significant share of cultivation is added from this category, as compared to the census report of 2010-2011. The agriculture report values 44.31% of the share of the operated area. Simultaneously, the economic status of marginal and small farmers lies below the poverty line due to the historical disadvantages of indebtedness, illiteracy, markets, social deprivation, polarization and marginalization (Ghosh, 1998; Jha, 2010; Naschold, 2012). Interestingly, the coffee plantations in India are majorly cultivated by small and marginal farmers. The statistics show that India's small and marginal farmers contribute 98% of coffee landholdings and 70% of produce (NRPPD, 2012). While this is the case of land holding and cropping patterns when it comes to coffee plantation, the Indian government promotes organic farming under the program of *Paramparagat Krishi Vikas Yojan*, which means Traditional Agriculture Development Scheme, Under the banner of the National Mission for Sustainable Agriculture (PIB, 2021; D. N. Reddy, 2022).

The Food and Agriculture Organization (FAO) notes that India is the eighth-largest exporter of coffee by volume. The country exports 70% of its production, and very little coffee is consumed in domestic markets (Indian Ministry of Commerce and Trade, 2023). For the financial year ending March 2023, exports of coffee were valued at US\$ 1.12 billion, about 18% growth from last year. Out of these total exports, organic coffee exports for the year 2023 are marked at 1160.00 million dollars as compared to the previous year, 2022 value of 1112.59 million dollars, with a moving CGAR of 4% (Ministry of Commerce and Industry, 2023).

Subsequently, statistics reveal that India ranks sixth in terms of the world's organic agriculture land and first in terms of composition of organic producers with 15,99,010 in 2021 (APEDA, 2023; FIBL & IFOAM Year Book, 2023). The total organic certified land is 10.17 million hectares as of 2023, which has produced 2.9 million metric tons of production. Indian exports of organic products generated a value of 5525.18 Crores in Indian revenue. Most of the Indian products are exported to the USA, the European Union, Canada, Great Britain, Switzerland, Turkey, Australia, Ecuador, the Korea Republic, Vietnam, and Japan. Out of these countries, the USA (126804.570 metric tons) and the UK (117369.847 metric tons) are the largest importers of India's organic products (APEDA, 2023). At the same time, most of the organic coffee is exported to the USA, followed by the UK (IFOAM, 2024; Willer et al., 2023). From these statistics, it can be interpreted that coffee is an export commodity with the most significant participation from small and marginal farmers. At the same time, they are the highest contributors to the world's organic products and movement.

Since coffee is an export product, as mentioned before, it is subject to market shocks and price fluctuations. These price fluctuations show a direct impact on the income of small and marginal coffee farmers. On the other hand, since most of these coffee farmers live in rural areas, they lack infrastructure, information, capital, and market facilities. This complex influx of market issues and local contingencies makes small and marginal farmers vulnerable to marginalization. Dragusanu (2014) argues that the inadequate structural support to participate in markets by government agencies and local socio-economic problems make it a cumbersome exercise for the farmers (Ambinakudige, 2009; Babu, 2019). As a result, middlemen and intermediaries frequently take advantage of the situation and abuse the farmers by giving poor prices and engaging in unethical actions while buying coffee (Dragusanu et al., 2014).

However, this plight has been changing after structural changes, such as liberalization of the economy (trade practices) and the entry of foreign trade markets into markets by the government of India (Joseph, 2007; Kaviraj, 2005). These structural changes have brought significant marketing changes, such as self-marketing avenues in the form of cooperatives, Farmer Producer Organisations and other direct farmer-buyer trading relationships. These arrangements avoided the role of intermediators and helped farmers to reap the benefits by increasing incomes and livelihood (Ranjan Jena & Grote, 2017). Further, Cruz (1993) noted that neo-liberalization had increased investment in rural villages and basic infrastructure, leading to farmers' participation in global markets due to direct trade relations.

Consequently, small and marginal farmers have become part of the global markets. However, to participate in global markets, they must adapt to international requirements and standards to export their products (Joshi & Sinha, 2014), notwithstanding their social and economic capabilities and constraints. In this context, the current research tries to understand how and what strategies the farmers create to participate in organic markets. In addition, various perspectives on organic farming and market places from the current literature are presented in the following sections. However, before understanding these perspectives, the following section briefly delineates organic farming.

1.2. Organic and Natural Farming: Breaking the Myths

Generally, it is observed that the terms 'organic' and 'natural' farming are used interchangeably because of some of the similarities of their cultivation practices by ordinary people. However, according to philosophies, types of inputs, basis of decision-making, and standards of practice, both of them are different, and yet they also share some commonalities. They both advocate a common objective of sustainability and environmental harmony in agriculture. However, natural farming follows the advocacies of Masanobu Fukuoka (1978), and organic farming follows Lady Eve Balfour's ideas which were synthesized from the original findings and ideas of Sir Albert Howard, who did his research in India between 1873–1947 (Heckman, 2006). Additionally, they are also different from other practices as follows:

1.2.1. The approach of Practice: Natural farming propagates minimal human intervention in agriculture, with an aim to work in harmony with nature and seeks to

mimic natural ecosystems. It focuses on observing and understanding the natural processes and allowing the crops to grow with minimal interference, similar to Kawaguchi's¹ farming principles (Fukuda, 2018; Fukuoka, 1978). The organic farming approach also focuses on environmental concerns but allows for more human intervention in the form of approved organic inputs and practices. Moreover, it relies on the set of standards and regulations that prohibit the use of synthetic chemicals and modified seeds (Balfour, 1943).

1.2.2. Use of Inputs: Natural farming involves a no-till approach, where the soil is left undisturbed as much as possible. It discourages the use of external inputs, such as synthetic fertilizers and pesticides, and promotes the use of cover crops and natural mulches to enhance soil fertility (Thakur et al., 2020; Xu, 2001), whereas organic farming uses certain organic inputs, such as compost, manure, and approved organic pesticides. While synthetic chemicals are avoided, farmers can use specific natural substances that are approved within organic farming standards (Balfour, 1943; IFOAM, 2024).

1.2.3. Certification and Standards: Natural farming practices may not be as standardized as organic farming. Because certification for natural farming is less common and may vary based on local interpretations of the principles. However, organic farming is more standardized and follows established certification programs with defined criteria and standards. Farms that meet these criteria can only be certified as organic farming or cultivation (Lockeretz, 2007a, p. 109).

1.2.4. Decision Making: The decisions followed in natural farming are often based on the observations of natural processes and local ecosystems. On the other hand, organic farming is based on adherence to established organic standards and regulations, and only approved organic inputs and practices are used according to the standards.

Though these two practices have certain overlapping commonalities, it is noted that they can be highly differentiated based on the certification and degree of interventions

¹ The Kawaguchi farming approach holds the view that nature operates in a delicate equilibrium, with each element relying on and supporting others. Consequently, they advocate against the use of fertilizers, whether organic or synthetic, as they believe that living organisms, such as microorganisms and enzymes, should be allowed to operate naturally. According to this perspective, nature naturally creates the most suitable soil for plant growth, although it may take time for any chemical residues to be neutralized (Fukuda, 2018).

of inputs and humans. However, due to similarities, they are often perceived and interpreted as the same techniques in cultivation practices.

1.3. Review of Literature: Historical Perspective and Trajectory of Organic Farming

Organic farming is one of the oldest methods extensively practised in the history of agriculture. It dates back to the neolithic age and can be found in ancient civilizations like Mesopotamia. Behera (2012) argues that it is one of the greatest and oldest farming methods, widely practised in ancient Indian agriculture. He states that Indian literature such as Rig-Veda, Ramayana, Mahabharata, and Kautilya Arthashastra briefly mention the organic farming method.

The Mahabharata (circa 5500 BC) depicts the role of human life, cows, and soil fertility. Kautilya's Arthashastra (circa 300 BC) mentions the usage of manures made from animal excreta and oil cake. The Rig-Veda (circa 2500-1500 BC) and Atharva Veda II (circa 100 BC) also discuss the use of organic manures in farming. Clearly, in the Atharva Veda, it is shown that for the healthy growth and nourishment of plants, people used dung from goats, sheep, cows, water, and meat. Additionally, the Holy Quran (circa 590 AD) also discusses strengthening soil fertility through post-harvest residue methods (Behera et al., 2012, p. 291).

Although the literature has shown strong evidence of the historical presence of organic farming, it could not continue further due to various reasons, such as the growing need for food and the rise in population. Because of these reasons, agricultural methods underwent a drastic shift towards agricultural industrialization. Initial industrial agriculture used abundant land, resources, and labour in the production process. Barlett (1987; p.137) argues that "industrial agriculture is the highly volatile, capital-intensive food production system characteristic of industrial societies" in history. He also says that industrialization is not only capital intensive, which saw a considerable investment in machinery and industrial inputs around the world, especially for developed countries. Apart from these economic impacts, it has also shown other detrimental effects on agriculture practices and actors who perform agriculture.

In addition to these adverse effects, industrial agriculture has also shown a significant socio-economic change among small and marginal farmers around the world. Hendrickson and James (2004) found that farmers have been challenged in managing

land and resources. The farmers are compelled to decide between the environment's destructive and unethical practices and constraints related to land and other resources (M. Hendrickson & James, 2004; M. K. Hendrickson & James, 2005; Stuart, 2009). Harsche (1966) observed that extensive agriculture has highly impacted small and marginal farmers through industrial agriculture, which focuses on farms with an industrial character and necessitates the financial and tactical structures found in modern industrial economies.

Similarly, Gaur (2012) argued that industrial agriculture has increased high production costs, crop failure and indebtedness to the small and marginal farmers. As a result, these farmers have become severely impoverished and debt-trapped (Gaur, 2012). Furthermore, as identified by Saloutos (1962), this form of agriculture has made it difficult for farmers to adjust their production processes to align with the capitalist mode of production and distribution. This mechanism has caused farmers to farm foreclosures, indebtedness and tenancy (Saloutos, 1962). Thus, the learnings from industrial agriculture revealed it had impacted essential aspects of cultivation, such as land fertility, environmental changes, natural resources, health issues, farmer's indebtedness, and suicides (Dasgupta, 1977; Sangalad & Huddar, 2011; S. Singh & Benbi, 2016). Because of these issues and problems, alternative sustainable cultivation practices like natural farming, organic farming, regenerative farming, and biodynamic farming are advocated by scholars and scientists (Carpenter-Boggs et al., 2000; Malik et al., 2014; Reganold, 1995).

Among the previously recommended alternative farming methods, organic farming has gained recognition and attention for its effective management of soil fertility, reduction of the financial stress on farmers, and enhancement of their standard of living. It was clearly noticeable in the research conducted by social and lab scientists and subsequently published in organic farming literature (Lockeretz, 2007b). The evolution, origin, development and growth of organic farming can be divided into three phases, as postulated by Behera (2012).

1.3.1 Emergence Period of Organic Farming (1924-1970)

The literature pertaining to this period shows the systematic inclusion of organic practices into scientific theory. The early proponent of this attempt can be found in Germany in Rudolf Steiner's teachings in 1924. He proposed a course on the "Social

Scientific Basis of Agricultural Development" (Behera et al., 2012, p. 292). His theory proposed a holistic and comprehensive mechanism in agriculture by emphasizing the great importance of equilibrium between humans, the spiritual being and the environment (Behera et al., 2012; Paull, 2011). Using this theory, Pfeiffer has conceptualized biodynamic agriculture, and further, it was firmly developed and spread widely among different countries such as Germany, Denmark, Switzerland, and Netherlands (Kahnt, 1986; Direck, 1986; Herrmann and Plakolm, 1991; Behera, 2012). Following these principles, in Germany, Has Mueler and Hans Peter Rush have prepared the theoretical foundation for organic-biological agriculture (Behera et al., 2012; Lockeretz, 2007b; Rigby et al., 2001). Similarly, Fukuoka (1978), in the 1930s, started natural farming in Japan. He proposed that agriculture should be practised in accordance with nature, where no-tillage and only organic manures should be used for cultivation (Fukuda, 2018; Fukuoka, 1978).

Apart from these initial developments, the actual movement of organic farming was started by Sir Albert Howard in the 1940s based on his experiments and studies conducted in India. His work "An Agricultural Testament," widely referred to as Bhopal practices (Behera et al., 2012; Heckman, 2006; Lockeretz, 2007b). In this, he discusses the significant relationship between soil health (fertility), plant and animal health. In the year 1942, Lady Eve Balfour tested Sir Albert Howard's propositions. Her study comparing conventional farmers and organic farmers asserted that soil fertility plays a significant role in high-yield cultivation (Balfour, 1943). This experiment paved the way for the establishment of the Soil Association in England (Behera, 2012). Between the 1950s and 1960s, this organic movement spread to France, and this expansion in France raised significant awareness among consumers regarding healthy consumption (Behera et al., 2012; Yussefi, 2003). Thus, the emergence period indicates the adoption of organic practices in cultivation. It also reveals the establishment of institutions dedicated to the study of soil fertility and health, indicating that during this period, soil fertility research became a common practice in agriculture. This period marks the initial establishment of independent research bodies and individual organisations with very little involvement from the state.

1.3.2 Development Period of Organic Farming (1970-1990)

The literature of this period, particularly after the 1960s, shows it as an era of solid development in organic farming practices and the expansion of these practices to other parts of the world, from Germany and England to the USA, France, and other countries. As noted by Behera (2012), this was a period of novel concepts, profound shifts in society, protest movements, and the rise of alternative lifestyles. The new ideas surrounding the sustainable development of agriculture—including organic, biodynamic, ecological, and natural agriculture were remarkably advanced in their conceptual research. The concept of new ideas, such as the ecological definition was introduced and applied to organic farming by William Albrecht in the 1970s (Behera et al., 2012; Coleman & Hendrix, 1988).

Furthermore, in line with the advancement of new theories and concepts, practitioners of organic farming went above and beyond to create legally mandated guidelines and quality assurance measures for themselves and consumers. These assurances were achieved by adhering to a logo representing organic farming practices on agricultural products. The group of organic practitioners collaborated and established an international organic body in the year 1972, such as the International Federation of Organic Agriculture Movements (IFOAM), which advocates, controls, guides, and connects organic practices around the world (Niggli and Lockeretz, 1996; Lockeretz, 2007, p. 73).

As the spread of organic farming progressed, new organizations and research institutions emerged in this period, such as the Federation of National Agriculteurs Biologiques (FNAB) and the Forschungs Institute Fuer Biologischen Landbau (FIBL), were instituted during the period 1970-1980. These organizations are the largest organizations in the world for organic farming (Behera et al., 2012; Lockeretz, 2007b; Schmid, 2007). They play a crucial role in "standardizing the production and market of organic products and promoting research and consumer awareness"(Behera et al., 2012, p. 294). Similarly, the United States also adopted and implemented organic regulations for the first time in 1974 in the state of Oregon (Greene, 2001; Schmid, 2007). Subsequently, a landmark study was conducted on a large scale by the United States Department of Agriculture. This study highlighted the status, issues, and problems of organic farming and produced a report titled "Report and Recommendations on Organic Farming" in 1980 (USDA, 1980). Further, this report played a significant role in

framing the United States legislative framework. In the year 1985, France also framed the regulations and adopted them into the legislative framework (Behera et al., 2012).

Before 1980, organic farming did not have a generally recognized definition or body of legislation, according to Schmid (2007). However, significant improvement was only noticed after countries passed laws and expanded the scope of their regulatory efforts to include subsidies for organic farmers (Lockeretz, 2007, p. 152). Therefore, the development period of organic farming is characterized by the formalization of organic methods through the adoption of legislative frameworks, standards, and regulations, as well as the emergence of new public and private entities dedicated to organic farming validation.

1.3.3 Period of Growth in Organic Movement (Since 1990)

Organic farming expanded between the end of the 1990s and the beginning of the 21st century. With widely recognized norms and laws, it expanded to numerous nations during this time as domestic markets began interacting with the international market. Extensive standards and certification organizations for organic trade and practices were also established in this time frame. Both governmental and non-governmental organizations were key drivers of the movement. Schmid (2007) claims that in the early 21st century, many countries framed national public regulations, rules, and specific logos for organic standards, which have been utilized to foster consumer trust. In subsequent years, the development of the organic movement became dependent on government regulations at the international and transnational levels.

In 1991, the European Union implemented a notable regulation to safeguard consumers as well as organic producers. The EU regulation EEC Regulation 2092/91, propagates protection for consumers from "pseudo-organic products" and guards producers from unfair competition. Interestingly, this resolution recommends strong inspection bodies to control the adulteration of organic practices. If any agreed members violate the norms, they will be punished accordingly. Similarly, in 2002, the United States developed rules and regulations for accreditation bodies to regulate organic products under the National Organic Program. They began allowing only those products that match their standards and certification agencies. Following the same pattern, other countries such as Australia, Japan, and North America have also adopted regulations

and markets for organic products (Behera et al., 2012; Lockeretz, 2007b; Schmid, 2007; Yussefi, 2003).

However, harmonization of rules and regulations pertaining to organic farming and markets across the globe has taken place only after the standard "Guidelines for the Production, Processing, Labeling and Marketing of Organically Produced Foods" proposed by the United Nations Food and Agriculture Organization (FAO) and World Health Organization (WHO) in 1999, under the Codex Alimentarius Guidelines. These guidelines have helped to spread the organic movement to developing nations (Schmid, 2007, p. 157). Schmid (2007) and others have pointed out that over this time, there has been more than just the creation of globally recognized norms; these standards have also demonstrated the ability to adapt these norms to regional, site-specific implementations (Schmid, 2007, p. 158; Shea, 2002). Contrarily, because of differences in regional resources and environment, the debates on international standards about the list of inputs to be used for accreditation of organic recognition were also contested in this period. In this period, the Indian government also legally adopted organic farming under the National Programme for Organic Production (NPOP) in 2001, following the common guidelines proposed by FAO and WHO for organic farming worldwide. This programme is overseen by the Agriculture Processed Food Export Development Authority (APEDA) within the Ministry of Commerce under the Foreign Trade Act of 2001. It distributes incentives, promotes organic regulations, and oversees organic certification agencies through accreditation in India (Kumar et al., 2014; Mitra & Devi, 2016; Thottathil, 2014).

The Coffee Board of India, under the modalities of the twelfth five-year plan, has initiated support for Indian coffee farmers transitioning to organic farming by offering subsidies. Notably, this scheme encourages the formation of farmer groups and provides reimbursement of up to seventy-five percent of the expenses incurred towards organic certification. The Coffee Board² contributes fifty percent towards the subsidies for farmers, while the Andhra Pradesh state contributes forty percent (Coffee Board of India, 2023). Similarly, In the year 2015, Andhra Pradesh state launched a scheme to

² Please visit the website of [Coffee Board of India](https://www.coffeeboardindia.org/). Accessed on August, 2023.

promote organic farming under the title "Creation of viable and sustainable farm livelihoods by promoting Organic Farming and Natural Farming in Andhra Pradesh³".

The literature of this period shows many disagreements and debates about organic farming. Here are some of the key arguments that were brought forth. The first issue is the amount of time spent waiting for the conversion period to be recognized as organic (Lockeretz, 2007b; Schmid, 2007). Initially, the organic certification had a strong stance against pesticide residue on land, yet, subsequently, other perspectives were included in the certification process, including those related to the agricultural surroundings, farmer expertise, and land management. It has caused misunderstandings among standards and certification authorities regarding how to evaluate perspectives in order to grant organic certification to practitioners (Lamine & Bellon, 2009; Lockeretz, 2007b; Schmid, 2007). Second, there are disparities in the risks associated with using conventional and genetically modified seeds in cultivation while upholding the principles of organic farming (Azadi & Ho, 2010; Lombardo & Zelasco, 2016; Schmid, 2007, p. 164). Third is adopting UN labour recommendations for welfare and labour regulations and integrating them into the organic movement. While implementing these safeguards has been challenging due to local constraints, non-governmental organizations are encouraged to do so under IFOAM principles (Schmid, 2007, p. 164).

Therefore, the growth period since 1990 demonstrates a significant change in the development of the organic movement. This development of the organic movement encompasses harmonized rules and regulations along with the establishment of affiliated certification bodies, both public and private. It also reflects the adoption of organic practices in many countries under a legal framework and the enactment of protection laws for consumers and producers. Moreover, during this period, there was encouragement for non-governmental organizations to participate in spreading the organic movement, leading to a more comprehensive and inclusive expansion of the organic movement worldwide.

1.4. Review of Literature on Organic Farming and Markets

The material reviewed in the previous section demonstrates how organic farming practices have changed over time and how standards and certifications related to

³ Please see AGRICULTURE & CO-OPERATION (AGRI.II) DEPARTMENT G.O. RT.No. 451. [::: Department of Agriculture Government of Andhra Pradesh ::: \(apagrisnet.gov.in\)](http://apagrisnet.gov.in)

organic farming have grown in importance, particularly when organic agricultural products are introduced to marketplaces for trade. Although organic farming had no connection to markets when it first began, they have since evolved into opposing sides of the same coin, as noted in the literature review.

In the above context, the studies pertaining to organic farming and markets from the early twentieth century have shown a broad research aspect, such as ecological and environmental, health benefits of organic products, traditional and conservative practices, sustainability and continuity of organic farming, economic costs around organic certification and standards, setbacks of organic conversions, changing market dynamics and their effects on production, and others (Thottatil, 2014). The interaction between actors, agricultural practices and market structures has been the main focus of all these factors. Rhoades (1984) defines cultivation as:

"the relative, natural, and temporary study of the human look at farming action, concentrating on the communications of atmosphere, technology, and lifestyle within local and international meal systems, and it has the realistic goal of sensibly implementing this knowledge to improve the performance and durability of meals and fibres manufacturing" (Rhoades, 1984 and Sarkar, 2017).

According to him, cultivation practices focus on the holistic study of human engagement in agricultural activities and the interaction of local culture within global food systems. The goal is to improve production efficiency and the sustainability of livelihoods as the ultimate endpoint. Thus, farmers' social, economic, and cultural factors have been brought into the ambit of markets and evaluation, wherein organic certification and standards are essential demands. However, organic farming and markets have also shown both positive and challenging aspects concerning farmers' income, livelihoods, and agricultural practices.

In light of the above, it is evident that the organic farming literature discussed extensively the economic benefits and challenges of this farming. Studies show that organic farming has important economic consequences, especially for small-scale and marginalized farmers. Chaudhary (2022) and Lobley (2009) both emphasize the possibility of greater income from organic farming, as Chaudhary citing a rise of 20-50% for Indian farmers. Offermann and Nieberg (2000) and Lampkin (1994) take a larger view, examining the economic performance of organic farms in Europe and the international environment, respectively. Both emphasize the importance of government backing and the possibility of organic farming to address major concerns regarding

agriculture. Lampkin and Padel further argue that organic farming is a separate sector of the economy driven by concerns about food quality and safety, in addition to economic benefits (Lampkin & Padel, 1994). Agriles and Brown (2007) noted that organic farming is an economically viable practice since it uses renewable resources, nutrient recycling, natural pest and disease control, ecosystem sustainability, soil protection, and pollution reduction. They also mention that organic practices promote animal welfare, the use of natural foodstuffs, product diversity, and waste avoidance due to its inclusive and comprehensive use of naturally available resources. However, they suggest that it would only be possible if the government supports farmers through subsidies and incentives for biofertilizers and marketing. This is because, as Chaudhary (2022) notes, the transition period from conventional to organic farming results in low yields and increases the cost of organic output.

Furthermore, studies on Indian organic farmers have shown that lands are most suitable for the adoption of organic farming practices because of their limited use of agrichemicals, particularly in wild and forest areas (Ramesh et al., 2005). Similar to global findings, Indian scholars have also noted significant environmental and health benefits of organic farming (Ramesh et al., 2005; S.K. Saini & Sunita Pandey, 2001). Panneerselvam et al.'s (2012) study on the perception of Indian farmers has found that farmers are more inclined towards organic farming mainly due to the low cost of production and premium price for the products. He also revealed significant constraints such as production and marketing as the main barriers in converting to organic farming. As most Indian farmers are poor and live in poverty, the cost and affordability of organic certification are identified as the foremost concerns (B. S. Reddy, 2010; K. M. Singh et al., 2011). Prasad and Gill (2009) noted that organic certification is a complex and costly process involving interaction with multiple agencies, coordination, and testing of soil and practices. Because of this, many farmers tend to avoid converting to organic farming. It means that in the context of organic farming, farmers' interest is evident, as noted by Pannerselvan et al. (2012). However, the complex certification procedures, testing costs, and involvement of various agencies pose significant challenges for small and marginal farmers. Consequently, they may need to seek external assistance to navigate these challenges and transition to organic farming, as most of India's small and marginal farmers fall below the poverty line.

Since certification and standardization have become prominent factors for selling produce in the markets, government intervention has also significantly increased, with legislative actions being framed and special bodies like APEDA being established to oversee the consortium of certification agencies in alignment with internationally accepted standards for buyers/traders. However, the lack of a single common certification and the presence of multiple standards, such as European Standard certification (EU) and US standards certification, make it much more difficult for newly adopting countries like India. In the recent past, this scenario has been changing due to the emphasis on neoliberal policies and the adoption of new rules of organic certification policies by organic movement bodies (IFOAM, 2024).

Consequently, new rules in the organic movement have increased the spread of organic farming with its openness to adopt local and traditional ecological factors into the organic movement. They have also encouraged non-government organizations and individuals to join and propagate organic movements worldwide. But, because of this recent inclusivity trend in the organic movement and standards, new contradictions have begun among the organic ideals and practices, such as the "reductionism of organic standards, the limitations of private organic certification, and the widespread practice of input-substitution – that emerge through the dynamics of the capitalist market" (Allen & Kovach, 2000). Allen and Kovach (2000) claim that once these changes become dominant and markets act enough to play as capitalist, the organic movement can actually undermine the original environmental principles of organic farming. Not only this but as farming practices and markets have become closely intertwined, farmers have also been creating new strategic plans, such as presenting their produce as "ethically and ecologically" produced goods and depicting it as a "unique" commodity because of their cultivation practices along with organic certification (Blowfield, 1999; Flachs & Panuganti, 2020; Panneerselvam et al., 2012b). These ideas have compelled a complex and dynamic balancing act between organic practitioners and customers, particularly under neoliberal policies, which specify an equilibrium level of satisfaction for producers and consumers at a justifiable value (Besky, 2014). Amidst this situation, the organic movement had introduced a new concept known as "Fair Trade". Lyon (2010) states that this new idea of fair trade within the organic movement originated in the western countries, similar to the origin of the organic movement itself. She notes that fair trade is a product of market behaviour,

which emphasizes consumers' perception of morally responsible consumption of goods supporting food, ecology, and environmental sustainability while benefiting from the health advantages of organic goods (Besky, 2014). Jenkins (2002) suggests that the rise of fair trade within the organic movement was driven by corporate codes of conduct. He argues that these codes involve the globalization of economic activity, the withdrawal of state involvement in business behaviours, an increase in demand for brand and corporate reputation, and international communication.

However, as the commoditization of goods became prominent through fair trade in organic markets, the supply chains and mechanisms of the global market have taken on a significant role in facilitating trade. On the other hand, India is an exporting country, and most of the farmers are small and marginal farmers with limited facilities to export their produce as noted previously. They rely on intermediaries to establish market connections with the help of the government and NGOs. These intermediaries act as mediators to supply goods to markets, diminishing the producer's direct role and connection. Anderson Benedict (1983) termed this gap as the "Imagined Communities" (Anderson, 1983; Seidman & Alexander, 2020), where he notes that producers and consumers are not connected physically but only through mediators such as advertisements and fair trade mirrors, where consumers often discuss at their dining tables (Lyon, 2010a). However, a more robust and closer relationship between farmers and consumers is considered essential. This close relationship in organic markets fosters traceability, stability, and reliability of supply, reduces risk, enhances quality, and helps achieve reputational and marketing goals to attract beneficial prices for their goods (Daviron and Ponte, 2005).

As this wider network of supply chains and international trade grows, Franz and Hassler (2010) argue that it has resulted in a complex network and very fragile mechanisms for producers to trade. He also notes that this global connection has helped connect agricultural food connections between southern and global markets. McCreery (1994) further argues that this global market has transmitted secondary effects of the world economy to large areas of the countryside that previously had little role in total agricultural exports. Roseberry (1996) identified that these global exports have had a positive economic impact on producers and have led to social transformations among farmers. One such study conducted among the Indian coffee farmers by Ranjan Jena & Grote (2017) revealed that farmers have increased their income and livelihoods due to

participation in the global market. He also noted that a significant increase in livelihoods was due to the embrace of fair trade and agrobiodiversity as part of organic cultivation. Hogg and Joseph (2013) further added that these organic markets and the concept of biodiversity among coffee farmers had benefited them by providing seasonal income from non-coffee season products in the event of failure of the primary crop.

However, Little (2004) and Canessa (2005) claim that these changes could only be possible because of the extensive organization of farmer groups and cooperatives in the organic movement. Additionally, a study conducted by Sarah Layon (2010) among Maya small-scale coffee farmers in Guatemala, North America, identified that the introduction of organic certification resulted in addressing local issues such as migration, wages, and land rights through the establishment of farmer cooperative groups.

However, according to Giovannucci et al. (2008), the impact of organic markets depends on the local conditions of smallholders, such as low productivity, insignificant price premiums, poor access to credit, and information from cooperatives. They argue that organic certification broadly helps in material (economic assets) and non-material (information and awareness) gain. It also helped the farmers in organizational capacities like participation in national coffee, credit, and small-business associations (Taylor, 2002). However, the growth in organic cultivation and markets cannot directly be attributed to these positive market opportunities, as Thottathil (2014) noted. This change of growth can be because of increasing awareness of the ecological damage and subsequent declining yields resulting from intensive chemical production methods in cultivation practices (Thottathil, 2014).

While organic and its practices undeniably benefit farmers, they have faced criticism. One notable critique of the organic movement is its perceived failure to extend benefits beyond cooperative members, leaving non-participating producers at a disadvantage (Raynolds et al., 2004). Despite being promoted as an alternative approach to development, the organic market's emphasis on quality, certification, and specialization has drawn scrutiny, with some arguing that it merely serves as a temporary solution rather than fostering meaningful agricultural diversification among the millions of small-scale producers worldwide. Sidwell (2008) supports this viewpoint, contending that organic movement does little to promote economic development and instead

perpetuates the existence of uncompetitive farmers, hindering efforts towards diversification and mechanization in agriculture.

In opposition to the concept of diversification, some coffee estates choose to implement agricultural forestry techniques in response to the emphasis on global goals like ending rural poverty and creating sustainable practices (Hogg & Joseph, 2013). According to anthropologist Daniel Reichman's (2008) research on coffee growers in Honduras, organic markets focused on promoting individual economic empowerment tend to limit community cooperation within the constraints of market interactions. He also discovered a different method of negotiating with organic farmers known as "relational coffee" which follows premium standards and is not dependent on official certificates. It frequently entails cooperation between dealers and local elites (Vicol et al., 2018). However, this approach may result in partiality for some people while ignoring the general advancement of the community. Despite seeking a different strategy in organic markets, Gibbon (2005) concluded that it could worsen specialisation problems, leading to greater differences and the breaking apart of communities. In order to benefit the entire community, Barrientos et al. suggest the idea of "social upgrading," which emphasizes the expansion of workers' rights and entitlements in certified organic cultivation and markets (Barrientos et al., 2011, p. 324).

In addition to diversification, standardization, and specialization issues in organic cultivation and markets, recent studies from feminist scholars have highlighted neglected issues of labour and wages in emerging agrarian practices. They argue that women's labour and contributions in agriculture are greater compared to male labour, yet they are denied land and asset rights (Agarwal, 2014). Addressing these issues will bring justice to labour and reduce inequalities between female and male recognition of labour in agriculture (Besky, 2014; Lyon, 2019).

Amidst all the discussions in organic cultivation and markets, Reynolds et al. (2004) noted that the successful improvement of small and marginal farmers depends on strong ties with local and external consumer market mechanisms, requiring the necessary adaptation of new techniques in agricultural activities and innovative marketing skills to participate in markets (Callon et al. 2002; Bacon, 2005). In addition to these observations, Reynolds et al. (2004) and William Roseberry (1996) argued that the plight of organic cultivation and markets depends on varied multifaceted scenarios such

as prevailing political economics and markets, producers' social and ecological resources, and farmer groups' internal and external organizational ties and connections. Therefore, agriculture is not merely an ecological or economic evaluation of a technology existing in a vacuum but a socio-cultural question of farmers' knowledge guiding their implementation. The ultimate sustainability of agricultural production is thus an anthropological question, hinging on farmers' skill (Netting, 1993) and their ability to adapt that skill in a dynamic environment (Richards, 1993; Leslie and McCabe, 2013; Flachs, 2017). Within this context, the thesis seeks to investigate how farmers become certified organic farmers and participate in international organic markets.

1.4.1. Inferences and Observations from the Review of the Literature

- The extensive literature on organic farming and markets has addressed several issues such as economic benefits, the cost of organic certification, and technical considerations for farmers and methods. Very few studies have focused on the social process, knowledge development, and cultural aspects of organic farming and associated markets.
- The origin and development of organic farming began with realizing the detrimental impacts of industrial agriculture and the green revolution.
- Initially, the primary goals of organic farming were to increase soil fertility and safeguard the environment. They use natural resources while also considering the local environment and ecology.
- Though organic farming and the movement began without certification or standardization of organic techniques, by the end of the 1980s, legislative frameworks, standards, and regulations had arisen in organic farming.
- The land, cultivation method, and farmers (agricultural performers) are evaluated, labelled, and recognized as designated organic farmers.
- Because of regulations, standards, and the certification process, numerous corporate and government agencies are engaged in organic movement. As a result, the cost of certification has dramatically increased. Small and marginal farmers require more assistance and resources, as most are poor and financially disadvantaged.

- In addition to farmers adhering to organic standards and regulations, organic commodities must maintain product uniformity, singularity, and standardization. Thus, organic market participation for small farmers necessitates significant resources, finance, a strong network, and relationships to achieve the features of markets.
- However, organic farming and markets offer farmers higher prices than conventional markets.
- As the organic movement grew, certification agencies reviewed their rules and regulations. As a result, the organic movement and markets became virally popular.
- Individuals, collectives, non-governmental organizations, and government organizations were encouraged to pursue organic farming due to changes in certifying agency and legislative framework regulations.
- In addition to open markets, a new market trend has evolved within organic markets, namely fair trade and relational markets. Thus, organic markets become complex, and they require global linkages, networks, and an intricate cooperative supply chain to participate in organic markets.
- Organic farming and markets are competitive due to the breadth of its benefits. However, they are helping farmers who are part of the organic movement but do little for community development.
- Organic farming and market participation for small and marginal farmers depend on certification and recognition by certifying authorities. In addition to this certification process, they often have other difficulties, such as regional, cultural, and class disparities where they are located.

1.5. Statement of Problem

Organic farming and markets have been popular with scholars since the early twentieth century because of the fundamental principles of environmental sustainability in farming practices. However, the recent incorporation of complicated conversion, certification, and standardization processes into organic practices has sparked several controversies and discussions. They were mostly promoted by economists, bio-scientists, agronomists, and others. Their research concentrated on the technical aspects of organic farming, such as synthesizing the inputs and materials utilized in agricultural

activities. They scarcely mentioned the human and social aspects of the performer (farmers). This, by and large, is the primary intrinsic motivation behind the study that is undertaken.

According to Rhoades (1984), Netting (1993), and Richards (1993), agriculture is an applied science that is dependent on the actor's (farmer's) performance within his social and cultural capacities, not just the technical and economic factors of farming. The farmer and his strategies around cultivation are important in organic farming. Therefore, within the complicated process of certifications and standards, the thesis seeks to study how farmers cultivate, contest, and claim organic identity while utilizing their abilities and constraints to participate in organic markets and prosper the cultivation.

1.6. Significance of the Study

The current study on organic farming provides a scope to understand the recent trends and agrarian changes that are taking place in India. Focusing on the regional/local narratives on organic farming, the study will bring a tacit social and economic factor, mediating for small and marginal farmers to convert from conventional to organic farming. The unspoken notions and opinions on organic farming from the farmers' perspectives provide knowledge to understand the worldview and connotations attached to the "organic" farming method. These perspectives on organic farming will enable us to trace the gap and differences between the organic practices promoted by certified and standard agencies.

Further, the narratives of farmers who live in different geographic settings will help to understand the farmers (actors) and locate their agencies, claims, capacities, and constraints to converting to organic farming. Delineating these socialistic elements will strengthen the current knowledge of agrarian systems. Thus, it helps to expand the scope of anthropological methods to study agriculture and its processes, contributing to the field of agricultural anthropology.

Similarly, the investigation on emergence of organic markets in remote areas, which undergo constant dynamic fluctuations influenced by global and domestic market structures affected by political and economic factors, will allow us to deconstruct the underlined process in markets. This process entails understanding what constitutes these changes and how farmers adapt to participate in organic markets, which require

uniformity and standardization in food commodities, and establishing connections with organic buyers. Understanding these elements and adaptive strategies employed by farmers will facilitate drawing their patterns while participating in organic markets.

Yanagisako (2002), Callon et al. (2002), Galvin (2021), and Appadurai (1996) stressed the significance of human agencies and their role as cultural capital in establishing the businesses and market participation of the individual. The Araku coffee farmers' efforts, negotiations, strategies, and social and cultural capital process add to the previously held opinions of the scholars by signifying the role of human factors in the markets. While also emphasizing the structural changes that had contributed to the ease of establishing the markets. Thus, it further contributes to the literature pertaining to agriculture and markets from a social perspective.

This study also contributes to the ongoing debates surrounding the impact of the organic movement on small and marginal farmers. The emerging changes among the small and marginal farmers (who face various disparities rooted in regional and individual issues) due to the embrace of organic practices signify numerous socio-economic changes in the lives of farmers. Recognizing these new changes will help us depict the transitions happening in the lives of farmers and society, as supported by views expressed by Reynolds et al. (2004), Flachs (2017), and Giovannucci et al. (2008).

1.7. Research Questions

Based on the review of literature on organic farming and its markets, the present study aims to address the research questions of how organic farming is perceived by local farmers and what values, ideas, and practices have propelled them to claim an organic identity. Similarly, it also inquiries about how they become organic, the actors involved in the process, and their roles.

The research questions will also probe the platforms available for marketing/selling organic coffee. How do they create markets for coffee, and what are the key elements involved? What local political and economic structures are available, and how are they contributing to and constraining farmers' participation in the organic markets?

Meanwhile, the current study also tries to inquire about the emerging trends and changes in the socio-economic life of small and marginal farmers due to organic farming and markets. It also tries to locate how organic farming and markets are deliberating to address the local issues of farmers, such as land rights and debts. Lastly,

the study also looks into the roles of the interaction processes among cultural, economic and agricultural systems to minimize the issues pertaining to organic farming.

1.8. Conceptual Framework

According to Richards (1993), cultivation is like a performance of an actor that bases on the embodied capacities of the farmers, like a musician presents his performance with musical capacities such as mastery of the instruments, arrangement of the stage, and control over anxiety or panic. He further argues that such performances are dependent on the "social agent and how agents achieve results" (Richards, 1993, p. 6). That means the individual's agency decides how to present the cultivation performance. Expanding on this perspective, Ahearn (2001) observes that agency and structure both play important roles in the successful completion of performance. He also emphasizes that agency and structure are not two divergent poles but mutually constitutive (Ahearn, 2001, p. 131). Structures are observable physical bodies like land, agricultural settings, methods and sources of manures. Besides, agencies are the capacities of actors that show intentions, motivation, and decisions of utilizing structural resources to perform cultivation.

Furthermore, Ortner (1984) suggests that structures are not rigid but open to minor variations and adjustments to accommodate the completion of an event. It depends upon the existence of different agencies of actors, like agency of conscious intent, agency of power, and agency of unconscious intent (Ahearn, 2001, p. 120; Giddens, 1979; Karp, 1986). In a similar vein, Galvin (2021) proposed the concept of "agrarian agency", in which she argues that becoming an organic farmer involves adjusting and altering one's agricultural methods with a conscious intention to align them with organic certification standards to claim an organic identity, known as "Organic by Design" (Galvin, 2014). Therefore, as the current study also aims to understand how coffee farmers are becoming organic, it used Galvin's "Organic by Design" concept by focusing on sociological logic and assertions about the organic farming of Araku Coffee farmers.

Additionally, as the study also seeks to understand how farmers establish organic connections and markets, it draws upon Appadurai's concept of "human agency" to consider the sociological and human factors involved. This approach differs from the analysis of technical or economic factors typically used by economists and other social scientists. Taylor (2002) and Appadurai (1996) have argued that during transitional

changes in social practices, particularly in neoliberal markets, it is the aspirations, imagination, and negotiations (which are elements of human factors) of people that drive them to connect and participate in the markets. Furthermore, Taylor (2002) suggests that these imaginaries and aspirations can consist of a set of shared beliefs and visions, whether individual or collective, aimed at creating a market economy (Taylor, 2002, p. 92). Similarly, Appadurai (1996) explains that our claims of the future are shaped by aspiration, which is drawn from the imaginaries, intentions, motivations, and images created through daily interactions. Imaginaries, in turn, are formed through interactions across various domains of social life, particularly within dense social interactions (Appadurai, 1996, p. 31). These interactions and negotiations are orchestrated by the farmer producer organizations' collaborators, in the form of buyer-seller interaction events and exhibitions in the study area.

For this purpose, the study also used Callon et al. 's (2002) concept of qualities of goods (here, coffee), in which he argues that qualification and requalification actions are the essential features of markets. Qualification and requalification denote reworking the method and quality of goods according to consumers or markets. That defines the eligibility of the good (coffee) to participate in markets. Further, he says these actions can be single or multiple actors' collaborative strategies towards farmers' market participation (Callon et al., 2002). So, using these conceptual frameworks, the objectives of the study are discussed in the current study.

Objectives of the Study

- 1. To understand the shaping of coffee farmers and becoming an organic coffee farmer by delineating the changing perceptions about organic farming in Araku Valley.**

With an emphasis on tracking the subjectivities built around this process for the farmers, the objective is to understand how farmers started coffee plantations and what regional, historical, and political causes were responsible for starting the coffee plantations in the Araku Valley. Additionally, the study also aims to explain the processes by which these farmers are transitioning to organic coffee farming and the elements that contribute to the organic recognition of these farmers.

2. **To understand how the farmers of the Araku Valley create markets and connections to participate in organic markets for better prices and maintain their livelihood through coffee cultivation.**

The study aims to understand the processes and mechanisms of small and marginal farmers in establishing organic markets and networks. As farmers are remotely isolated from the major markets, this objective tries to find out the locally adopted mechanisms and institutions like formal organizing bodies, cooperative societies, and community groups to meet the certification standards. At the same time, the efforts here are also to locate the roles of these institutions working towards this process.

3. **To understand the socio-economic impact of organic practices and organic markets on small and marginal coffee farmers of the Araku Valley.**

Here, the aim is to understand the impression of organic coffee practices on farmers' economic status. It focuses on highlighting the advancement of tangible assets like agricultural tools. As Netting (1993) notes, change is not an element that is driven by economy or technology alone in a vacuum; it is a matter of the socio-cultural sphere. So, the attempt here will be to understand this social and economic transformation among the coffee farmers of the Araku Valley.

1.9. Area of the Study

The current study was conducted in two villages of the Alluri Seetharama Raju (ASR) district in the state of Andhra Pradesh, India. The two study villages, K. Puttu and G. Guda, belong to two different mandals, namely Paderu and Araku Valley respectively. They represent Araku coffee farmers. The study area falls under the Paderu revenue division of the ASR district and is administered by the Integrated Tribal Development Officer appointed by the Andhra Pradesh state government. The Paderu region, known as the agency area, consists of eleven scheduled tribal mandals and two partially scheduled tribal mandals. Approximately seventy to eighty percent of these farmers' holdings fall into the categories of small and marginal holdings, with an average farm size of about two-thirds of an acre. The population of this region includes tribes of particularly vulnerable tribal groups (PVTG), including the Khond and Gadaba tribes, as well as non-particularly vulnerable tribes, such as the Poorja, Bhagatha, Valmiki, Kondadora, Kotia, Kammara, and Nookadora tribes. The agency area comprises hilly

regions covered by the Eastern Ghats, with an altitude of about 900 meters and several peaks exceeding 1200 meters (Hogg & Joseph, 2013). It receives an average rainfall of about 1,200 mm, which is higher than the state average (940 mm) and that of coastal areas (1,078 mm), making it a suitable location for coffee cultivation for the farmers in the study area. Moreover, studies assessing the suitability of organic farming in Indian landscapes have indicated that the majority of lands are favourable to the adoption of organic farming practices. This suitability arises from the limited use of agrichemicals, especially in wild, forest, and remote areas (Ramesh et al., 2005).

On the other hand, the contribution of Indian farmers to the global coffee market ranks sixth, with small and marginal farmers constituting the largest portion of this contribution. Moreover, India ranks first in terms of composition of organic producers in the world (FIBL & IFOAM Year Book, 2023).

Initially, coffee production was introduced to deter shifting cultivation practised by farmers in the study area and to supplement the prevailing agricultural crops such as paddy, millet, and cereals. Over time, the importance of coffee cultivation has been increasingly recognized by these farmers due to its high returns and income potential. The Andhra Pradesh Forest department initiated coffee expansion from 1960 to 1978, developing 4,100 hectares. Subsequently, it was taken over by the Integrated Tribal Development Agency (ITDA) in 1974, which developed another 60,000 hectares. Recognizing the slow growth rate of coffee plantations under ITDA, the Girijan Cooperative Society was formed in 1985 to oversee coffee cultivation, expansion and marketing. However, its subpar performance led ITDA to resume control of the coffee plantations in 1995. Presently, ITDA is the sole agency promoting coffee cultivation among farmers in the study area (Suneetha & Gangayya, 2014).

Interestingly, in the emerging trend of agriculture, such as organic and natural farming, Araku coffee farmers are showing interest in converting from conventional coffee farming to organic coffee farming. Araku coffee farmers are the only farmers who are moving into organic coffee cultivation by forming their own farmer-producer organizations and cooperatives. They cultivate and market their coffee in organic markets with the help of non-governmental organizations and other actors (Ranjan Jena & Grote, 2017). The Araku coffee farmers were recognized by international organic farming oversight bodies and regarded as emerging producer organizations in the

organic farming movement (APEDA, 2023; Ranjan Jena & Grote, 2017; Willer et al., 2023).

1.10. Research Methodology

The current research study is a qualitative type of study as the above objectives aim to understand the intent, perceptions, opinions, images and meanings of practices and actions performed by the farmers to claim organic identity and participate in organic markets. In a qualitative research approach,

"the inquirer often makes knowledge claims based primarily on constructivist perspectives (i.e., the multiple meanings of individual experiences, meanings socially and historically constructed with an intent of developing a theory or pattern) or advocacy/participatory perspectives (i.e., political, issue-oriented, collaborative. or change-oriented) or both" (Creswell, 2008, p. 18).

It tries to provide a wide scope to inquire about the research objectives with open-ended space to document and draw patterns and meanings to the research objectives. In addition to this approach, the study also used quantitative and secondary resources to support the opinions and meanings drawn from the field data.

Since the study focuses on certified and transitioning organic smallholders, fieldwork was conducted in the study area among coffee farmers currently practising organic farming or aspiring to achieve organic certification. The field survey was conducted in two phases for the study. In the first phase, a pilot study was conducted to identify and locate organic coffee farmers. It was found that organic farming practices were implemented through the formation of farmer-producer organizations and collaboration with non-governmental organizations and private agencies promoting organic farming. As the study aimed to illustrate the process of becoming an organic farmer and participating in relevant markets, it identified two types of farmers: those representing certified organic farmer groups and farmers in transition to organic farming. This distinction was made to avoid potential shortages and to gain a clear understanding of the process of becoming an organic farmer. In the second phase, after completing the pilot study and using the purposive sampling method, the study selected two villages based on the categorization of certified and transitioning organic farmers belonging to different Farmer Producer Organizations and actively participating in organic markets. This study was conducted using the well-established anthropological tools and techniques such as:

1. Household Schedule.

2. Semi-structured Interviews.
3. Interviews.
4. Observational Methods.
5. Case Study Method.
6. Walking Probes⁴.
7. Life Histories Method.

The Household Schedule is a structured arrangement of listed variables divided into multiple sections. The first section collects data related to family details, such as the number of family members in the household, gender, educational status of each individual, marital status, and occupations. These details are collected to get an overview of the households and to analyze qualitative data with these variables, aiding in a better understanding of the research objectives, as highlighted by Bernard (1988). The second and other sections provide quantitative details about the health, economic assets owned by the family members, land and type of land, and major crops cultivated in different seasons. As the study planned to investigate small and marginal farmers, the land details and amount of land holdings were drawn from the above information better to understand the relationship between farmers and cultivation types. These sections were utilized to comprehend the profiles of the selected study villages, as presented in Chapter 2.

George (2022) says that Interviews and Semi-structured interviews are the greatest sources to capture the opinions and responses of the targeted subjects based on the prepared thematic checklist and predetermined themes from the literature review. Since these methods provide scope for open-ended questions, they are used widely in fieldwork. Semi-structured interviews are primarily used in formal meetings conducted with government staff members and non-governmental staff to probe their opinions about the organic methods/practices of the farmers, lands of coffee plantations, and certified organic farming. Meanwhile, the interview method is predominantly employed on farmers and other members of the study villages. As the interview method involves lengthy discussions and in-depth conversations, it was utilized with key informants to understand their intentions regarding organic practices, strategies

⁴ See Flachs, 2018.

employed to collaborate with non-governmental organizations, negotiations within their community and with others to enhance coffee quality and quantity, and to establish connections with organic buyers and markets. All interviews and discussions were conducted with prior oral consent from the respondents.

Observational methods, such as participant observations and non-participant observations, are also used in the process of data collection. The non-participant observation method is used to identify and draft farmers' agricultural agencies, such as the type of land (*podu* or plain) used for coffee plantations, instruments of organic claims like farmers' diaries, manures and organic fertilizers preparations. The participant observation technique is used to draw the contextual opinions of the farmers when they engage in the coffee fruit-picking process and segregate coffee quality. Kimber and Maertens (2023) suggest that in interpreting the meanings of social inquiries, "participant observation helps explore and depict reality as it is experienced by the actors" (Kimber & Maertens, 2023, p. 33).

Patnaik (1990) says that the Case Study method is one of the important tools in anthropological studies to identify the unique and innovative thematic experiences of the respondents, in addition to interviews and participant observations. Case Study methods are used to identify how organic practices and markets are impacting the farmers and their opinions and reflections by participating in organic markets and farming. It is also used to recognize farmers' narratives about their bargaining attempts with various buyers and what types of images and aspirations lead them to seek out organic markets.

Similarly, the study also used walking probes to investigate the farmers' claims and assertions about organic farming practices and their relationship with lands. Flachs expresses "researchers should next accompany respondents to the physical spaces and handle the physical objects relevant to the bodies of knowledge and practice being studied" (Flachs, 2018, p. 8). De Leon and Cohen (2005) argue that "people are likely to remember more and in greater detail when interacting with the spaces and objects in question" (Flachs, 2018, p.8). Walking probes are frequently used while interviewing the key informants and visiting the coffee plantations along with informants. This technique was highly influential in cross-verifying the emerging themes and learned from discussions with key informants from the previous day.

The Life History method was also used in the current research. It is utilized to trace the evolving agrarian perceptions of the farmers resulting from interactions with plantations and changing aspirations. Mandelbaum (1973) proclaims that the Life History method provides an approach to understanding the dynamic and adaptive facets of life experiences, "with the relations between one stage of life and the next, with the cumulative patterns of personal conduct, with the relevance of personal experience to social institutions, and with the impact of personal choice on social change" (Mandelbaum, 1973, p. 178). Additionally, secondary resources were also employed to corroborate the oral experiences shared by the farmers regarding the methods of organic manure and cultivation practices used in the past and present in the coffee plantation lands.

1.11. Limitations

The researcher faced several limitations in the process of carrying out the research. As the study area is identified with tribal farmers and situated in green forests, it is often promoted as a tourist location by the state government. Additionally, many other agencies, such as non-governmental organizations and international organizations, would work in different aspects like health, agriculture and sustainability in the study area. All these organizations regularly conduct surveys and interviews related to agriculture. Due to these periodic surveys in the study region, the villagers were sometimes reluctant to share their opinions. They feared losing the incentives they received from the government and non-government organizations. For instance, in one of the studied villages, when a researcher collected data through household schedules, many of the farmers gave non-factual data regarding the land holding with an apprehension that they would lose their Rythu Bharosa incentive⁵. So, it is often noted that respondents feared sharing these kinds of data might end up at the government officials' tables and result in losing their incentives. However, these issues were often addressed by employing the researcher's data triangulation method.

Another major obstacle to conducting the research was the COVID-19 lockdown. The lockdown restrictions, aimed at minimizing direct interactions with people, resulted in a two-year delay in data collection from March 2020 to December 2021. Consequently,

⁵ Rythu Bharosa is a state government scheme where farmers, who have less than ten acres of land, would get free financial help for crop inputs bi-annually.

when the researcher attempted to gather data from organic certifying organizations regarding the certification process in the field, some certification agency representatives avoided on-site physical interactions. However, in such instances, telephone conversations and exchanged reports were used to supplement the field data.

Despite these methodological limitations, the study also acknowledges constraints related to its objectives. While the inquiry addressed all the stated objectives, it encountered challenges in contributing to broader political economy discussions concerning markets. This limitation stemmed from the limited availability of organic market places in the study area, with many market connections still in progress and yet to be fully established. The researcher suggests that conducting a longitudinal inquiry, coupled with ongoing negotiations in the study area, is necessary to uncover additional themes related to markets and political economy.

1.12. Chapterization of the Thesis

This thesis has been divided into six chapters.

First Chapter- Introduction

This chapter is about contextualizing the current research objectives using the previous literature on agrarian changes pertaining to organic farming and coffee cultivation in India. It primarily discusses the trends and context of organic farming in India while also discussing the emergence and spread of the organic movement and its further developments over a period of time to the present.

Second Chapter- Ethnographic Profile of the Study Area

This chapter provides a brief detail about the Andhra Pradesh State and the district details of Alluri Seetharama Raju, which the current study area belongs to. It also gives a brief profile about the selected study area that contains the characteristics of two studied villages, such as demographic profile of the study area, religion, education, house types, animal husbandry, horticulture, type of crops cultivated, landholding pattern, climatic condition and marketing facilities available.

Third Chapter- Becoming an Organic Farmer: Land, Organic Practices and Recognition

This chapter delves into the process of transitioning from a conventional coffee farmer to an organic farmer. It delineates the intrinsic contexts and interactions between farmers and coffee plantations, lands, and organic manure practices by employing

historical and ethnographic approaches. Further, it also investigates the humanistic factors that are underlined around changing agrarian subjectivity and mechanisms that are followed by a farmer to achieve organic identity from certifying agencies. Additionally, it also discusses the fragility surrounding the achieved organic identity of the small and marginal coffee farmers of the study area.

Fourth Chapter - Creating Organic Markets Through Quality, Imaginaries and Aspirations

This chapter contains an inquiry about how farmers participate in organic markets and create market avenues for coffee after achieving their organic identity. It highlights factors that enabled farmers to envision organic markets, emphasizing the reworking of their existing techniques and methods, as well as the agencies involved with farmers to shape their opinions and decisions to connect with the organic markets. Moreover, this chapter also focuses more on displays of human agencies such as imaginaries, aspirations and images of farmers and alike members that encourage them to rework, reorganize, and cultivate quality coffee to increase the network of buyers and establish the organic markets for the prosperity of farmers, by drawing the capacities and conditions of tribal-small and marginal coffee farmers and agencies associated with this process.

Fifth Chapter- Emerging Socio-Economic Changes in Araku Coffee Farmers

In this chapter, the impact of organic practices and markets on the socio-economic aspects of the farmers in the study area is examined. It details how adopting organic practices for coffee has impacted their previous agricultural activities and its ripple effect on the farmers' families, such as income, education, marriage practices, conflict resolutions, occupations, change in labour organization patterns, change in households, change in local markets relations, etc. It also includes the effects that the farmers and families of the study villages are experiencing as a result of the process of implementing buyer demands and interests, which must be changed through initiatives like labour reorganization, collective actions, and Farmer Producer Organisations for farmers to participate in organic markets. In this process, it highlights skills and opportunities such as new organizational skills like record and book maintenance, collective behaviour, employment (both seasonal and permanent), and negotiating skills with outside buyers that farmers possess.

Sixth Chapter- Summary and Conclusion

This chapter provides the research findings with respect to each objective of the current research by validating and debating with previous research works in the field of agrarian studies in India and others, which have largely focused on small and marginal farmers. This chapter also includes some propositions to the organic farming policy that are drawn from the opinions of the coffee farmers, with significantly focusing on and taking into consideration of regional, political and social conditions of the farmers for the better and longer continuity of the organic practices and participation of these farmers in organic markets.

Chapter-2

Ethnographic Profile of the Study Area

This chapter describes the profile of Andhra Pradesh, the district of study area, and studied villages. A brief explanation of these three has been categorised into three main sub-sections in the chapter. The first section discusses the demography, economy, agriculture, land and geography, type of farmers, cropping pattern, and agro-climatic conditions of Andhra Pradesh. The second section discusses the district's characteristics by including the elements of education, flora and fauna, agriculture, and geography. The third section provides details about the study area, which involves two studied villages that contain 284 households⁶, and also provides its description by including various factors from education, religion, house types, livelihood, and others.

2.1. A Brief Profile of Andhra Pradesh State⁷

Andhra Pradesh state is the eighth largest state in the country in terms of geographical area with 162970 sqkm. It is the second-largest state in the coverage of a coastal line of 974 km in the country. According to the 2011 Census report, it is the tenth most populous state, with 4.09% of the country's total population. The state's literacy rate was at its highest at 67.35 percent in the 2011 Census compared to the 2001 literacy rate of 62.07 percent. The population density is 304 people per square kilometre as compared to 382 people per square kilometre at all India level. The sex ratio is 997, which is higher than India's overall figure of 943. The literacy rate of the state was 67.35 percentage in 2011 as compared to 62.07 percentage in the 2001 Census. Thus, the state's literacy rate is low compared to India's 72.98 literacy rate. However, the state has shown incremental growth in literacy rate with 37 percentage points from 1981 to 2011, that is, from 29.94 percentage to 67.35 percentage. Interestingly, the female literacy rate has shown a significant increase from 52.72 percentage to 59.96 percentage in the span of a decade i.e., from 2001 to 2011 years. The percentage of urban population to the state's total population also grew up to 29.47 percent in 2011

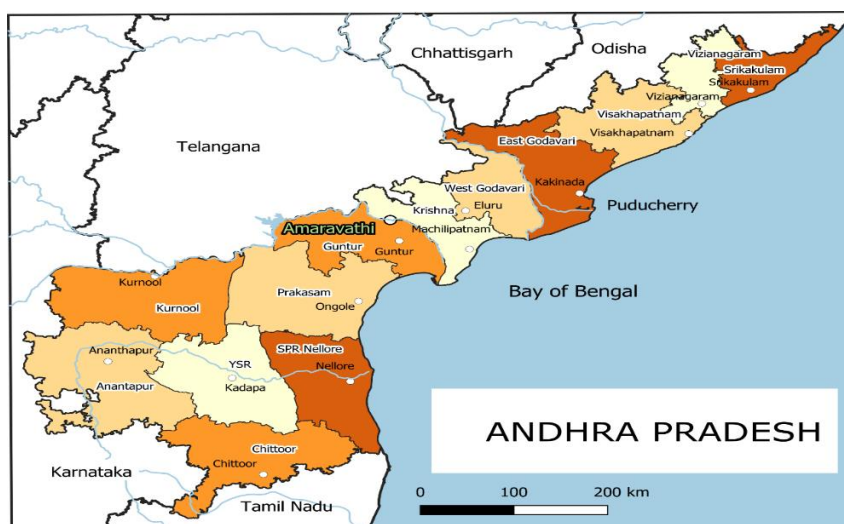
⁶ The households in the study area belong to the Konda Dora tribal community. Their social pattern of living includes nuclear families, but due to the practice of collective agriculture, out of the total households in the study area, the study has identified 104 main households and 184 supplementary households (nuclear), considering the collective agricultural practice. Further explanation on this has been elaborated while discussing the demographic profile of the study area.

⁷ See Socio-Economic Survey, Planning Department, Andhra Pradesh, 2022-23.

compared to 24.01 percent in 2001. Among all the districts, erstwhile Vishakhapatnam holds first place in the list, with 47.45 percent of the urban population.

Similarly, according to the 2011 Census, the state's tribal population is 27.96 lakh people, which is 5.53 percent of the state's overall population. The scheduled tribal population has a 48.83 percent literacy rate. Out of this, the literacy rate for men is 58.37%, and for women is 39.40%. The Scheduled Caste population is 84.69 lakhs which is 17.08 percent of the total population of Andhra Pradesh, and 79.98% of this population resides in rural areas. The literacy rate of the scheduled caste population is 64.47 percent which is lower than the state's literacy rate of 67.41 percentage.

Map 2.1: Map of Andhra Pradesh (Before Reorganisation of Districts, 2022)



Source: Andhra Pradesh Map⁸, Wikimedia Commons, 2023.

2.1.1. Andhra Pradesh's Economic Profile⁹

Andhra Pradesh's economy comprises of mainly three sectors, such as the agriculture sector, the service sector, and the industry sector. The state's economic growth is calculated based on the aggregate economic values generated from each sector within the state's boundaries and specific time periods. The state planning department had estimated a 7.0 % growth for the year 2022-23 as compared to the 2021-22 growth rate of 11.0%.

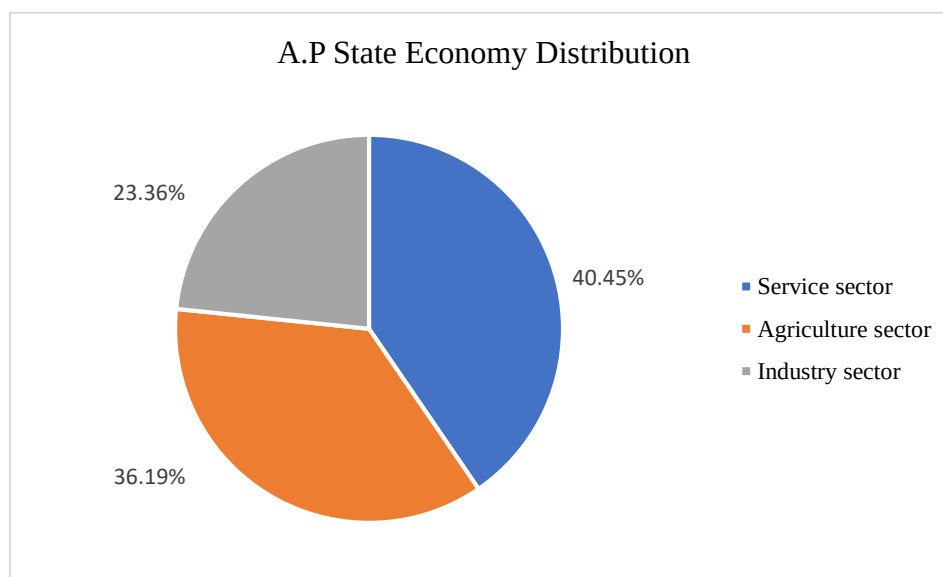
Moreover, towards the state's economic growth rate, the service sector has contributed the highest percentage share with 40 % of the total. The primary components of the

⁸ The government of Andhra Pradesh in the year 2022 divided 13 districts into 26 districts for better administration.

⁹ See Socio-Economic Survey, Planning Department, Andhra Pradesh, 2022-23.

service sector include trade, hotels and restaurants, railways, communication, banking and financing, real estate, public administration and other service sectors, and its growth rate for the financial year 2022-2023 is estimated at 10.05%. It means that the state's service sector growth is almost equal to the country's estimated growth rate of 10.8% in the 2022-23 financial year. After the services sector, the agriculture sector's contribution holds the second position in states' total economic growth with 36.19 percent. The major components of this sector include broad areas of agriculture, horticulture, agri-allied sector, forestry and logging, fishing, and aquaculture. Interestingly, the agriculture sector contributes more to the state's economic growth, but paradoxically, it has a very minimal contribution to India's economic growth, at 18.3%. Other than these prime sectors, another prominent sector is the industry sector which contributes 23.36 percent to the state's economy, with an estimated growth rate of 5.56 % for the year 2023. However, the state's industrial growth rate is low compared to the country's industrial growth rate of 10.08% for 2022-2023. The major contributors in the state industry sectors are mining and quarrying, electricity, water supply, gas, remediation, and other utility services sectors.

Figure 2.1: Andhra Pradesh State's Major Contributors to its Economy



Source: Socio-Economic Survey, Planning Department, Andhra Pradesh, 2023.

2.1.2 Agro Climatic Zones of Andhra Pradesh State

The state of Andhra Pradesh is known primarily for six agro-climatic zones, such as the North Coastal zone, Godavari zone, Krishna zone, Southern zone, Scarce rainfall zone and High- altitude zone. The agro-climatic zones are divided based on the soil types, and these soil types of the state are subject to change upon the influence of factors like climate, altitude, and bedrock composition. However, significant differences in the soil types are observed due to the disproportionate rainfall distribution and excessive heat. Thus, the Andhra Pradesh state soil types are identified with the composition of three basic soil types: sand, silt, and clay.

The North Coastal zone of Andhra Pradesh consists of three districts: Srikakulam, Vizianagaram and Visakhapatnam. This zone receives 700-900 mm of rainfall from south-west monsoons, and due to this rainfall and climatic conditions, the major soil types of this zone comprise red soils with a clay base, acidic soils, and laterite soils. The noteworthy crops grown in this zone are paddy, groundnut, jowar, bajra, mesta, jute, sun hemp, sesame, and black grams. The Godavari zone consists of two abundantly irrigated districts of Andhra Pradesh: East Godavari and West Godavari. It receives 770-870 mm of rainfall from south-west monsoons, and based on the rainfall of this geographical region, the major soil types are deltaic alluvium, red soils with clay, red loams, coastal sands, and saline soils. These lands are considered highly fertile lands. Moreover, due to sufficient irrigation and rainfall in this zone, it is the best area to cultivate both cash crops and other staple food crops. The major cash crops are tobacco, cotton, pepper, sugarcane, and horticultural crops, whereas other crops include paddy, bajra, jowar and groundnut. East Godavari contributes 10% of food production to the state's total food production, and it is said to be the second richest district in India. Therefore, these two districts can be noted as the most prosperous districts of Andhra Pradesh.

Table 2.1: Agro-Climatic Zones of Andhra Pradesh State and their Major Crops

S.No	Name of the Zones	Name of the Districts	Major crops Grown
1	North Coastal zone	Srikakulam, Vizianagaram, Vishakapatnam	Rice, Cashew-nut, Groundnut, Coconut, Mango, Mesta, Ragi, Sugarcane

2	Godavari zone	East Godavari, West Godavari	Rice, Coconut, Cashewnut, Mango, Sugarcane
3	Krishna zone	Krishna, Guntur, Prakasam	Rice, Mango, Cotton, Sugarcane, Chillies, Redgram, Sesamum
4	Southern zone	Chittoor, YSR, SPS Nellore	Rice, Lemon, Sesamum, Mango, Groundnut, Sugar- cane, Redgram
5	Scarc rainfall zone	Kurnool and Ananthapuram.	Groundnut, Redgram, Rice, Batavia, Castor
6	High altitude and tribal zone	High altitude and tribal areas of Srikakulam, Vishakapatnam and East Godavari district.	Coffee, Pepper, Chillies, Rice and Horticulture crops.

Source: Socio-Economic Survey, Planning Department, Andhra Pradesh, 2023.

The Krishna Zone consists of three districts such as erstwhile Krishna, Guntur and Prakasam, and it receives 300-650 mm of rainfall in the south-west monsoons. The soil types of this zone are formed into different types based on the rainfall, such as red loamy soil, sandy loam, and black soil. Like the Godavari zone, it also has the advantage of the best irrigation facility due to the Krishna River, except for some parts of the Prakasam district. Sugar cane, tobacco, chilly, sesame, turmeric, paddy, and cotton are the majorly produced crops in this zone.

The southern zone comprises three districts of Andhra Pradesh such as Chittoor, YSR, and SPS Nellore. It receives 300-500 mm rainfall from south-west monsoons. Out of these three districts, the Chittoor and YSR have the coastal border in the state geographical border. The soil types formed in this zone are red loamy soil and moderate to shallow deep soils. The predominantly cultivated crops in this zone are paddy, ground nut, cotton, sugar cane, millets, and some horticultural crops.

The Kurnool and Ananthapuram districts, also known as the "scarce rainfall zone," (as the name indicates, they receive less rain than any other zones in Andhra Pradesh) receives only 300-400 mm of rainfall in the south- west monsoons, and because of

insufficient water, it is considered a drought-prone area of Andhra Pradesh state. The soil types of this zone are red earth with loamy soils (Chalkas), red sandy soils, and black cotton soils in some little pockets. Among these soil types, the desert favourable crops like Millet, cotton, korra, sorghum, groundnut and pulses are the major cultivating crops in this zone. Lastly, the high altitude and tribal zone of A.P. covers some of the northern borders of Srikakulam, Vishakapatnam and East Godavari. This region receives the highest rainfall in the south-west monsoon, with 800-1000 mm. It covers the most significant green cover in the Andhra Pradesh state and the landscape of this region is hilly and not favourable for extensive agriculture. However, this region can be identified with staple crops like Millet, paddy, and cash crops: coffee, cashew, pepper, turmeric, ginger, and other horticultural crops.

2.1.3. Land Utilisation in Andhra Pradesh¹⁰

The land utilisation in the state of Andhra Pradesh shows that it has only 60.38 lakh hectares of net sown area to its total geographical area of 162.97 lakh hectares, which is 37.37 percent of the total geographical area. The gross cropping area and net area sown in the state have revealed that the efficiency of the agricultural performance has been constant and not changed from previous years. The agricultural efficiency indicator, i.e., cropping intensity, is 1.23 for 2022-23 like the 2021-22 cropping intensity¹¹.

Under land utilisation, forest land has been the same without change from 2015- 2023. It contributes the largest share to the state's net area sown geography. Similarly, the Barren and Uncultivable lands were shown no change from the last three consecutive (2019, 2020, 2021) years. However, in the total land utilisation of the state tree crops and groves have increased from 1.53 lakh Hectares to 1.54 lakh hectares of land. It means the wastelands were converted into cultivable lands from 4.02 lakh hectares to 4.05 lakh hectares. Out of all districts of A.P, Ananthapur and Kurnool have the highest net sown area, with 9% and 8.7%, respectively. The table below shows the overall share of different land utilisation categories and their contributions to the total land utilisation geography for 2023.

¹⁰ See Socio-Economic Survey, Planning Department, Andhra Pradesh, 2022-23.

¹¹ See Socio-Economic Survey, Planning Department, Andhra Pradesh, 2022-23.

Table 2.2: Land Utilisation in Andhra Pradesh State for the Year 2023

S. No	Land Utilisation Pattern	Area in lakhs of 2021-22 (In Hectares)	Percentage of share in the total geographical area of 2021-22
1	Forest Land	36.8	22.59
2	Barren and Uncultivable	13.35	8.19
3	Land Put to non-agricultural uses	20.80	12.77
4	Cultivable waste	4.04	2.48
5	Permanent Pastures and other Grazing lands	2.03	1.24
6	Land under Miscellaneous tree crops and Groves not included in Net Sown area.	1.52	0.93
7	Current Fallows	14.60	8.96
8	Other Fallow lands	8.84	5.42
9	Net Area Sown (including fishing ponds)	60.87	37.37
10	Total	162.85	100

Source: Statistical Abstracts, Directorate of Economics and Statistics, Andhra Pradesh, 2021-22, p.106.

2.1.4. Cropping Pattern in the State of Andhra Pradesh

Andhra Pradesh is an agricultural-dominant and dependent state. It has a highly favourable advantage of irrigation availability and monsoon season. Thus, it produces varied agricultural products due to scattered rainfalls around the state and the formation of different soil types. It produces crops like paddy, jowar, bajra, sugarcane, ragi, other millets, pulses, and vegetables. The total food production estimation of the state is 169.30 lakh tonnes for the year 2023 as compared to 2022 production of 154.85 lakh tonnes. The production of food crops from 2022 to 2023 has shown a growth of 8.53 percent. However, it is identified that in the total area of food crops, the 2022 year occupied 41.3 lakh hectares, whereas 2023 occupied 39.53 lakh hectares, which implies

that the current 2023 year has shown efficient and high production estimates even though the previous year had more area than the current year.

Moreover, the state's composition of food crops and non-food crops revealed that in the state's total production, more than 70 percent of contributions come from food crops and 30 percent comes from non-food crops. It can be observed from the following table drawn from A.P.'s annual report for 2020-2021.

Table 2.3: Cropping Pattern in Andhra Pradesh According to Agricultural Seasons

S. No	Type of Crops	2020-2021			
		Kharif area in lakh hectares	Rabi area in lakh hectares	Total	Percentage of Share to Total Crops
1	Food crops	29.08	24.07	53.15	71.76
2	Non- Food crops	18.52	2.40	20.92	28.24
3	Gross area sown	47.6	26.47	74.07	100

Source: Agricultural Statistics at Glance, Directorate of Economics and Statistics and Statistics, Andhra Pradesh, 2020- 2021, p.06.

The above table shows the Kharif season occupies the larger share of the area with 47.6 lakh hectares, whereas the Rabi season occupies 26.47 lakh hectares of area in the year 2020-21. Paddy is the most cultivated crop during the Kharif season, whereas millets and pulses are the most grown crops during the Rabi season.

2.1.5. Sizes of Landholding in Andhra Pradesh

The land census of 2015-2016 has shown that the state has a total of 85.24 lakh landholders of different class sizes belonging to Marginal, Small, Semi-medium, Medium, and large. These different size groups hold a total of 80.04 lakh hectares of operational landholding¹². The state's average operational land is 0.94 hectares per individual, which implies that many of its farmers come under the "marginal" class size

¹²Operational landholding is defined as "all land which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone or with others, without regard to the title, legal form, size or location." See Land Census report of, Planning Department, Andhra Pradesh, 2015-16.

category, and they hold 29.18 percent of operational landholdings in Andhra Pradesh. It means that the marginal farmers are the highest operational landholders in the state. The table below provides the details of farmers according to different class sizes in the category of total operational land holdings in the state.

**Table 2.4: Total Operational Landholdings According to Farmer's Class
(as Per Andhra Pradesh State's 2015-16 Land Census)**

S. No	Landing holding class	Number of Farmers in lakhs	Area-operated Land in Hectares	Percentage of share in the total area operated land.
1	Marginal	59.04	23.36	29.18
2	Small	16.6	23.34	29.16
3	Semi-Medium	7.70	20.20	25.24
4	Medium	1.89	1.38	12.97
5	Large	0.15	2.76	3.45
6	Total	85.24	80.04	100

Source: Socio-Economic Survey, Planning Department, Andhra Pradesh, 2022-23, p.371.

Moreover, from the 2011 and 2016 land Census surveys, it is understood the state operational land holding and number of farmers in each category has changed. The farmer classification has shown a negative vertical change. The class size of "Small" farmers decreased by -1.57 percent, and Semi-Medium size farmers decreased by -1.41 percent from the 2011 land Census to the 2016 Census. These reduced farmers from Small and Marginal farmers are observed into the "Marginal" farmers category. Similarly, the operational land holdings among all categories also showed a change. Out of all farmer categories, the "Medium" size landholders lost the most operational landholding percentage to -2.86, which is 15.83% to 12.97% from the 2011 Census to 2016. In contrast, the table below shows that the medium and large farmers categories have shown no significant change compared to small and semi-medium farmers. This insignificant change of operational landholding in medium and large size farmers in the state also shows a weak and failure of the land ceilings act, implemented between 1950-72 by the government of India (Balagopal, 2007; Bandyopadhyay, 2001). The table

below shows changes in operational landholdings among the farmers of Andhra Pradesh.

**Table 2.5: Change of Farmer's Operational Landholding and Farmer's Class
(from 2010-11 to 2015-16 Land Census)**

S. No	Farmers Size	Percentage of Farmers		Percentage of Change from 2011 to 2016	Percentage of Area Operated		Percentage of Change from 2011 to 2016
		2010-11	2015-16		2010-11	2015-16	
1	Marginal	65.40	69.26	3.86	26.68	29.18	2.5
2	Small	20.88	19.31	-1.57	27.80	29.16	1.36
3	Semi-Medium	10.44	9.03	-1.41	25.94	25.24	-0.7
4	Medium	3.02	2.22	-0.88	15.83	12.97	-2.86
5	Large	0.26	0.18	-0.08	3.75	3.45	-0.3
6	Total	100	100	Net change = -0.08	100	100	Net change = 3.86

Source: Socio-Economic Survey, Planning Department, Andhra Pradesh, 2022-23, p.371.

2.2. The District Profile: Alluri Seetharama Raju (reorganised Vishakapatnam)

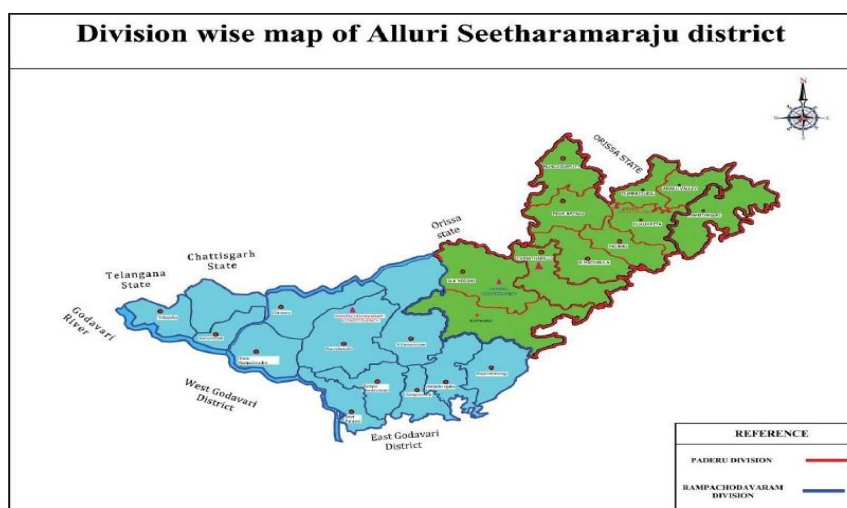
2.2.1. Physical Aspects

Alluri Seetharama Raju district is in the state of Andhra Pradesh. This district is one of the sunrise districts of the Andhra Pradesh state. It situates between 17° – 17' and 18° – 21' of Northern latitude and between 80° – 53' and 82° – 50' in Eastern longitude. It is surrounded by Odisha, Chhattisgarh, and Telangana in the north; by Anakapalle, Kakinada and East Godavari districts on the south; it shares borders with Vizianagaram district on the east, and, with the Godavari River on the west.

This district has very distinct features with rich greenery and dense forest cover. It has Eastern Ghats with an altitude of 900 meters dotted by several other peaks exceeding 1200 meters above mean sea level. It is divided into two revenue divisions: Paderu and Rampachavdavaram. Out of these divisions, the studied villages come under the Paderu division. Paderu division consists of 11 mandals, namely G. Madugula, Munchingput,

Araku Valley, Ananthagiri, Chintla Palli, Koyyuru, G.K Veedi, Hukumpeta, Peda Bayulu, Dumbriguda and Paderu. Similarly, the Rampachavdavaram division also has another 11 mandals.

Map 2.1: Map of Alluri Seetharama Raju district (Reorganised Vishakapatnam¹³)



Source: Alluri Seetharama Raju district Hand Book, 2022.

2.2.2 Demographic Characteristics of ASR district

The demographic profile of the Alluri Seetharama Raju district (divided Vishakapatnam) shows that its population is 9.54 lakhs, with an 11.6% population growth rate, and its population accounts for 1.9% of the total state's population, according to the 2011 Census. The geographical area of this district is 12253 Sq. Km. Out of the total district population, 4.46 lakhs are male, and 4.88 lakhs are female. At the same time, the sex ratio of its district shows 1046 females per 1000 males. It implies that the sex ratio of the district is notably better than the state's sex ratio of 997.

The composition of the district population shows that the scheduled tribe's population is 82.67%, and the scheduled caste population is 2.49%. This composition shows that it is a tribal dominant district and less diversified than any other districts of A.P. The district's literacy rate is 48.34% against the state literacy rate of 67%; out of district literacy, the male literacy rate is 57.60%, and the female literacy rate is 39.54%. The district literacy rate is low compared to the state. However, out of its literacy rate, males

¹³ Andhra Pradesh state has divided erstwhile Vishakhapatnam district into two larger districts, under the district reorganisation plan of 2022. Post reorganisation of the district, Paderu and Rampachavdavaram divisions are created into Alluri Seetharama Raju district.

have more literacy rate than females. Thus, it can be understood that the district's skewed educational levels and the gender gap in education. The table below of mandals representing the study area Paderu and Araku Valley will provide an understanding that Paderu mandal has the highest number of literate persons with 60.01 per cent, as compared to the Araku Valley Mandal literacy rate of 53.45 percent. However, both mandals have higher male literate persons than female literates, which clearly shows similarities with its district literacy, where the educational gap in both genders is high. Therefore, a systematic emphasis on educational schemes is needed to reduce the gender gap in education by the state government.

Table 2.6: Mandal-wise Literates and Literacy Rate, According to the Census, 2011

S.No	Mandal Name	Literates			Literacy rate		
		Persons in lakhs	Male in lakhs	Female in lakhs	Persons in %	Male in %	Female in %
1	Araku Valley	26433	15555	10878	53.45	65.02	42.62
2	Paderu	31274	17867	13407	60.01	71.03	49.73

Source: Alluri Seetharama Raju district Hand Book, 2022, p.23.

2.2.3 Educational Institutions in ASR district

The ASR (Alluri Seetharama Raju) district situates in rural and hilly region. The state government runs most of the educational institutions. Since more than 80% of its population are tribal families and predominantly fall below the poverty line, they cannot afford the private education. Therefore, to increase education levels in the district and support the tribal population, the state government has constructed many schools under the primary, upper primary and higher schools' category. There are about a total of 2124 primary schools, which includes both govt and private. Out of the total primary schools, 2075 are govt schools, whereas in the Upper primary school category, there are 155 schools, and in the high school category, there are 180 schools. In all these educational institutions, the teacher-student ratio is one teacher per twenty students (See Alluri Seetharama Raju district handbook, 2022, p.190). In addition, the studied

mandals in Paderu and Araku Valley have also shown a teacher-student ratio of 1:20 ratio. Thus, it is understood that the district has less student-teacher ratio and is above the prescribed standards and guidelines of the Right to education act, 2009, in all the schools¹⁴. This shows a positive approach of the state in the development of primary and upper primary education in the district. The table below has been presented to understand the educational institutions in the ASR district based on the district handbook of 2022.

Table 2.7: Educational Institutions in the Alluri Seetharama Raju District

S.No	Category	Central Govt	State Govt	MPP/ZPP	Municipality	Private Aided	Private Un-Aided	Total
1	Primary schools	0	682	1393	0	37	12	2124
2	Upper Primary Schools	0	65	73	1	5	11	155
3	High Schools	1	125	31	0	3	20	180
4	Total	1	872	1497	1	45	43	2459

Source: Alluri Seetharama Raju district Hand Book, 2022, p.187.

Moreover, the above table infers there are no upper primary and primary schools of the central government, and very few (88) private and private aided schools exist. Apart from the schools, the district has 14 Degree colleges (including govt and private), 37 Junior colleges, 2 B.Ed. training institutions (including govt. and private), and 3 Polytechnic colleges, both private and government. Notably, there are no engineering, medical or pharmacy colleges. The aspiring students must travel to neighbouring cities like Vishakapatnam or Vijayanagaram to pursue medical and engineering education.

¹⁴ See Section 25 of Right to Education Act, 2009, India. It specifies that primary schools should maintain 30:1 Pupil teacher ratio and should be 35:1 in upper primary school.

2.2.4. Agriculture in Alluri Seetharama Raju district

The ASR district population depends on agricultural activities. Most of the households of the district cultivate paddy as the primary crop and follow other crops such as Ragi, Maize, Bajra, Korra, Niger Seed, Rajma Beans, Red gram, Chillies, Turmeric, Ginger and Jowar. Since their major cultivation is paddy, it is considered as the region's primary crop and staple food.

It is noteworthy that their crops and agricultural activities are dependent on rainfall and natural resources. Other than the natural rainfall, it has no proper irrigation facilities. Some other sources include the mountain springs which provide an alternative but with minimal water support for the cultivation of the farmers of this district. Moreover, the district's irrigation system shows 40% of the cultivable lands are supported by minor irrigation systems like Check dams and 60% of cultivable land is cultivated on rainfall only. However, the ASR district receives more rainfall (1200-1500mm) than state rainfall (800-1000 mm) which gives more advantage to the farmers.

Table 2.8: Season-wise and Mandal-wise Area under Major Principal Crops in Paderu Division, 2019-20

S.No	Mandal Name	Paddy area (In hectares)			Jowar area (In hectares)			Bajra area (In hectares)		
		Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif	Rabi	Total
1	Munchingi Puttu	5006	190	5196	0	0	0	0	0	0
2	Peda Bayalu	4932	270	5202	0	0	0	0	0	0
3	Dumbriguda	3420	356	3776	2	0	0	0	0	0
4	Araku Valley	4208	151	4359	0	0	0	0	0	0
5	Ananthagiri	2851	171	3022	157	0	157	12	0	12
6	Hukumpeta	6842	124	6966	0	0	0	0	0	0
7	Paderu	3734	214	3948	0	0	0	4	0	4
8	G.Madugula	3586	162	3748	2	0	2	0	0	0

9	Chinthapalli	4565	62	4627	5	0	5	1	0	1
10	G.K Veedhi	3034	75	3109	12	0	12	0	0	0
11	Koyyuru	1300	80	1380	6	0	6	1	0	1
	TOTAL	43478	1855	45333	184	0	184	18	0	18

Source: Alluri Seetharama Raju district Hand Book, 2022, p.71.

From the above table, it can be understood that 95% of the area is covered with paddy cultivation and 5% of crops with bajra and jowar crops as the major principal crops. Moreover, it also shows that the rabi season is the non-cultivation season for all crops, except for the major principal crop, paddy; paddy is cultivated with spring water in the smaller areas as compared to the Kharif season area. Thus, the district's agriculture is largely dependent on the Kharif season and rainfall.

2.2.5. Horticulture in the ASR district

As previously stated, ASR is a hilly region with a thick canopy of greenery and receives the most rainfall (1200–1500 mm) of any district in the state of Andhra Pradesh. Because of these advantages, the state govt. promotes horticultural crops widely in the district. Apart from the staple crops like paddy, bajra, and jowar, the state has introduced horticultural crops such as coffee, pepper, and cashew crops in the district.

Table 2.9: Spread of Horticultural Area in Alluri Seetharama Raju District

S.No	Category	Total area (in hectares)	Percentage of share
1	Forest land	384622	64%
2	Area sown with Agriculture Crops	120152	20%
3	Area under Horticulture Crops	68000	11%
4	Barren and uncultivable land	27810	5%
5	Total Geographical area	600584	100%

Source: Compiled data from the office division of Coffee, ITDA, Andhra Pradesh, 2022.

From the above table, it can be inferred that the horticultural crop area occupies eleven percent of the total geographic area of the ASR district. Forest land occupies 64% of the total geographical area in it. It implies that the availability of a larger share of forest land can become an advantage to the state to convert into horticultural crops: coffee, cashew, and pepper. The following section on flora and fauna provides more details about the flora in the district.

2.2.5. Flora and Fauna in the ASR district

ASR district is one of Andhra Pradesh's prominent districts and is home to some of the state's most abundant flora and animals. It is a dry and moist deciduous forest that covers more than one-third of the district. The most noticeable species available are Guggilam, Tangedu, Sirimanu, Kamba, Yagisa, Nalla Maddi, Gandra, Vepa and others. In this district, *podu* cultivation was prevalent practice, but because of this practice, the forest cover was reduced drastically until 1955-56¹⁵. Therefore, to rejuvenate the forest area, the state government has initiated a horticultural program which is raising Teak, Silver Oak trees and Coffee plantations as a tool to regrow the forest cover. Because of this, the forest's extent has been on the rise significantly since the coffee rejuvenation programme in the ASR district. Currently, the coffee plantation occupies 1,00,000 acres of land which have spread across major compartments of the Chinthapalli, Minimuluru and Ananthagiri regions (See ITDA, Coffee division, 2022). This coffee plantation has also been considered a soil conservator. The primary official bodies involved in managing the coffee plantation are Andhra Pradesh's state coffee department and the Coffee Board of India.

Moreover, the ASR district has a total livestock of 20.95 lakhs as per the 2012 livestock Census. Among this livestock, cattle are 5.11 lakhs, Buffaloes 0.65 lakhs, Sheep 1.26 lakhs and Goats 3.18 lakhs. Apart from the domesticated livestock, the district also has wild fauna such as Wild Boars, Bison and very few numbers of Cheetahs and Tigers.

¹⁵ See Socio-Economic survey, Planning department, Andhra Pradesh, 2022.

2.3. Profile of the Study Area: K. Puttu and G. Guda Villages

The study area includes two villages of two different mandals from the ASR district. Since the ASR district is a tribal agency area, the administration of the district is maintained by the specific project officer, who is of an IAS cadre, and his office is in Paderu town.

Among the two selected villages, the first village, G.Guda village, is 52 km away from the district headquarters and comes under Araku Valley Mandal. In contrast, the second village K.Puttu is approximately 7 km from the district headquarters and comes under the Paderu Mandal. These study villages are situated adjacent to the Shandy market area. The nearest market facility to the G.Guda village is Araku, and for K.Puttu village, Paderu is the nearest market. For these two villages, the Shandy market locations are the primary nearest destinations to get general provisions, hospitals, education, and to sell their agricultural produce.

The study area's population is identified with Konda Dora scheduled tribe community. Konda Doras are Dravidian-speaking community. The term Konda denotes hill, and Dora means the lord. They believe and claim to be the descendants of Pandavas¹⁶. So, they prefer to refer themselves as the Pandava Rajus or Pandava Doras. Most of the Konda Doras in the study area speak Konda and Telugu languages. However, most of the younger generations do not speak Konda Dora because of the influence of the Telugu language. But, most of the elderly population and few of the younger generations speak both Telugu and Konda Dora languages. Moreover, Konda Doras are majorly divided into two segments: Pedda Konda and Chinna Konda Dora. Pedda Konda Doras are considered superior to the Chinna Konda Doras and the marriage between these sections is prohibited since they are endogamous. However, in recent days, the marriages between these two can be observed when there is no suitable bride/bridegroom within the same sections¹⁷. The Konda Doras are subdivided into different clans, such as *Adari, Amsaru, Antadi, Antalu, Bidika, Boini, Budra, Chintadi, Dalei, Dandapeti, Dipali, Dubi, Dimbari, Korra, Cheekati, Janni, Pangi, Surra, Kuda, Masada, Turre*, etc. They keep clan names as a prefix to their names to trace their

¹⁶ Pandavas- According to Hindu mythological text Mahabharata, Pandavas are the five legendary brothers Yudhishtira, Bhima, Arjuna, Nakula, And Sahadeva. The Konda Dora claim they are the offspring of these brothers.

¹⁷ See SC and ST Development report on Konda Doras, Govt of Odisha, 2015, p.15.

identity and lineage. In the study area, out of the clans mentioned above, clans such as Boi, Burde, Cheekati, Dasri, Dippala, Dolya, Janni, Korra, Kuda, Masada, Turre, Pangi and Surra were observed in the study area.

2.3.1. Demographic Profile of the Study Area

The total population of the study area is 536, and there exists a total of 286 families with 104 joint families with 182 nuclear families¹⁸. Among these nuclear families, 99 belong to K.Puttu village, and 83 belong to G.Guda village. They all practice collective agricultural practices, although extended families live in nuclear families. The following population table of the study area provides the details of the Konda Dora community of both villages.

Table 2.10: Breakdown of Female and Male Population with Family Names in the Study Area

Family Name	Female		Male		Grand Total	
	Persons	Persons	Persons	%	Persons	%
Boi	62	12%	68	13%	130	24%
Burde	4	1%	6	1%	10	2%
Cheekati	3	1%	3	1%	6	1%
Dasari	2	0%	1	0%	3	1%
Dippala	11	2%	11	2%	22	4%
Dolya	3	1%	4	1%	7	1%
Janni	16	3%	15	3%	31	6%
Korra	38	7%	46	9%	84	16%
Kuda	72	13%	73	14%	145	27%
Masada	10	2%	13	2%	23	4%
Pangi	11	2%	12	2%	23	4%
Surra	20	4%	28	5%	48	9%
Turre	2	0%	2	0%	4	1%
Grand Total	254	47%	282	53%	536	100%

Source: Field Survey, 2022.

¹⁸ Joint family members' sons who recently got married and moved into a separate house close to the main house have considered supplementary nuclear families. However, they practice collective behaviour when it comes to day-to-day activities.

In the study area, as mentioned above, there are 13 sub-clans of the Konda Dora community in the villages. Of the total population, fifty-three percent is male, and forty-seven percent is female. The study area has more male population than female population. Of all the families, those represented by Boi and Kuda clans occupy the larger share of the population by 24 % and 27%, respectively. There is not much difference among these families when compared to the female and male population. After these kin groups, the Korra clan has sixteen percent, and the Surra clan has nine percent of the population with 536 members. These four families are the dominant population, and families represented by other kin groups are numerical less, as seen in Table 2.10.

Moreover, it is noted that about 34% of the population in the study area is under the age category of 21 years. Usually, members under this age group are considered as the school/college going section. And, 51% of the population is under the age category of 21-50 years, which is considered as an ‘active/working’ and important age group for heavy labour activities in the communities' day-to-day life. Within this ‘working’ age category, the female population is more than the males with 57% and 46%, respectively. It means that the female population contributes more active hours than males to the work group category in the villages. The following table of the age-wise breakdown of the female and male population in the study area provides further details.

Table 2.11: Age-wise and Sex-wise Breakdown of the Population in the Study Area

Age categories	Females		Males		Grand Total	
	Persons	%	Persons	%	Persons	%
1-10	29	11%	49	17%	78	15%
11-20	46	18%	57	20%	103	19%
21-30	67	26%	57	20%	124	23%
31-40	41	16%	46	16%	87	16%
41-50	38	15%	28	10%	66	12%
51-60	20	8%	27	10%	47	9%
61-70	12	5%	13	5%	25	5%
71-80	1	0%	4	1%	5	1%
91-100		0%	1	0%	1	0%

Grand Total	254	100%	282	100%	536	100%

Source: Field Survey, 2022.

The above table shows that the population under the age category of 51-60 years is 9%, and they act as the elderly and resource persons in the community. Similarly, the category of 61-70 age shows 6% of the population, they are not usually welcomed and considered for heavy labour activities but can be found in some works like cattle grazing and livestock maintenance and in the study area.

2.3.2. Family sizes in the Study Area

The family sizes in the study area play an important role in the agricultural activities of the Konda Dora community. The family size is directly proportional to the operational landholding (See Table 2.12). Out of 104 families in the study area¹⁹, about sixty-four (64) percent of families come under the size category of 5-10 members in the family. Similarly, the family size category of 1-5 family members is about thirty-four (34.62%) percentage in the study area. Under this category, the Surra and Korra families of the two villages are the largest family groups. There is only one family in a family size of more than ten (10) members, and it belongs to the dominant populous family of 'Boi' clan from G. Guda village. According to some key informants, it is mentioned that Boi and Kuda clan were the initial settlers in the villages. In contrast, other clan families like Burde, Cheekati, Dasri, Dippala, Dolya, Janni, Korra and Turre are the followers of these initial settlers in the village. The following table shows the number of families for the corresponding family sizes in the study area.

Table 2.12: Frequency of Families Based on the Numerical Composition in the Study Area

Type of family size	No Family size	Percentages
1-5 members	36	34.62%
5-10 members	67	64.42%

¹⁹ These 104 families include the 182 supplementary families and are considered as a single-family unit because they practice a collective agricultural practice.

10&above	1	0.96%
Grand Total	104	100%

Source: Field Survey, 2022.

2.3.3. Education Status in the Study Area

The villagers in the study area show prime importance to education. Key informants from G.Guda village shared their attempts and efforts to construct a primary school in the village. They said that when there was no school in their village, all the villagers formed a village-level community forum and elected the chief of the forum. The chief used to travel to the district headquarters, which is located 50 km from the village, to represent and request government officers to construct a school for their village children. Even after so many efforts, the government officers did not take the initiative to construct the primary school. So, the forum planned to construct the school from their own collected funds. However, later, the government intervened and completed the construction of the primary school. Thus, it is clear that the villagers show great interest and take sincere efforts towards their children's education and building the future for their next generations.

Notably, both the studied villages have government primary schools and Anganwadi centres. The primary schools are always crowded, and the teacher and student ratio is high. The primary schools have employed Vidya volunteers in both villages because of the high teacher-student ratio and the high burden of the teachers in disseminating the subjects. The working Vidya volunteers in both schools are from their own villages only. Moreover, it was observed that more than ninety (90%) of the families send their children to govt primary schools situated in their villages, and very few families especially those who have bikes and can afford to autorickshaw fares were observed sending their children to private schools, specifically for English medium education, as mentioned by some of the parents. The villages have no upper primary and higher schools. Therefore, most of the families join their children in the nearest tribal Ashram schools for upper primary and higher schooling. After the 10th standard, for the intermediate and degree courses, the children were sent to Araku Valley or Paderu because they are nearby to the govt operated colleges. However, some of the families

have joined their children in Visakhapatnam City, especially for the courses like B.Tech, vocational courses, nursing and degree courses.

It is noted that the majority of men in the study area have chosen to enrol in higher education programmes like B.Tech. and vocational training programmes, whereas the majority of women have chosen to enrol in programmes like nursing, diploma, and Teacher's training programmes. However, the dropout rate among females is higher than males because they are often married right after their intermediate education in the study area. The following table provides the educational status of males and females in the study area.

Table 2.13: Educational Levels in the Study Area

Educational level	Female		Male		Total	
	Persons	%	Persons	%	Persons	%
1- 4 class	25	10%	38	13%	63	12%
5 - 10 class	56	22%	90	32%	146	27%
Intermediate	16	6%	38	13%	54	10%
Degree (BA or B. Com)	31	12%	37	13%	68	13%
B.Tech	2	1%	6	2%	8	1%
Diploma	1	0%	0	0%	1	0%
Vocational/ ITI	1	0%	7	2%	8	1%
Never attended school	110	43%	65	23%	175	33%
Nursing	9	4%	0	0%	9	2%
PG	2	1%	1	0%	3	1%
Polytechnic	1	0%	0	0%	1	0%
Grand Total	254	100%	282	100%	536	100%

Source: Field Survey, 2022.

Moreover, from the above table, it can be understood that the literacy rate of the villages is sixty-seven (67%) percentage, and thirty-three (33%) percentage of the population has never attended school. The male literacy rate is fifty-three (53%) percentage, and the female literacy rate is forty-seven (47%) percentage. Among the literates, only eighteen (18%) percentage of people have attended school up to the 4th class, and forty (40%) percentage of them have studied up to 5th to 10th standard. Similarly, among the illiterate, the female population has the highest rate than the male. It indicates that the

literacy rate of the study area is equal to the state's literacy rate. However, the female literacy rate is more than the state's female literacy, and in the higher education category, females and males have the same literacy rate. After the completion of high school, the female dropouts are more than males. As mentioned by some of the informants, the primary reason for school dropouts is the lack of direct public transport to the nearest town and the non-availability of proper accommodation in private colleges (if they want to join them in hostels). Moreover, those who had completed their education upto a degree has stopped their education and started helping their families in agriculture activities. Only a few people, exactly two females and one male, have pursued their education upto post-graduation.

2.3.4. House types in the Study Area

The Konda Doras construct their houses in the traditional ways with mud walls and grass roofs traditionally. However, in the study area, most of the people have changed their house materials to concrete walls and asbestos sheets. They construct their houses at the foot of the hills, where the water streams are available for the whole year so that they can continue their primary occupation of agriculture. The houses in the study area can be found in linear and sectional forms. Most families have more than two houses; the first house is considered as the main house which is used for living and storing grains. These primary houses are generally constructed with brick and concrete walls. The second houses are tiny in size and are usually seen next to the main house. These tiny houses are constructed with traditional housing methods using the materials of mud walls and grass. These small houses are usually used as kitchens, but due to the availability of cooking gas and stoves nowadays, most of the households arrange their kitchens in the main houses and second houses are used for livestock. All the houses have both front and back verandas. The front verandas are used to shelter their guests and spend their leisure time, whereas the houses which have rear verandas are used for kitchen gardens.

In the study area, there are primarily four types of house types. The construction materials used are the basis for categorisation. Semi-pucca houses are those with four concrete walls and a roof made of asbestos sheets, whereas kutcha houses have four mud walls and a grass roof. Those with four walls and concrete for the roof and walls are known as Pucca house types. And 'Other' type houses are any that do not fall into

one of the three categories mentioned above. The following table shows all house types in the study area and the number of rooms to the corresponding house type.

Table 2.14: House Types in the Study Area

House Types	No of rooms								Grand total	
	1		2		3		4		Families	Percentage
Kutch house	2	2%	6	6%	4	4%		0%	12	12%
Others		0%		0%	1	1%		0%	1	1%
Pucca		0%	14	13%	11	11%	3	3%	28	27%
Semi pucca	10	10%	36	35%	12	12%	5	5%	63	61%
Grand Total	12	12%	56	54%	28	27%	8	8%	104	100%

Source: Field Survey, 2022.

About 61% of the families have Semi-pucca houses, 27% of the families have Pucca houses, and 12% have Kutch houses. It implies that most of the families have transformed their houses from traditional mud houses to concrete Semi-pucca and Pucca houses. Informants mentioned that the study area receives an average of 1200 mm of rainfall every year, and if they continue in the mud houses, their houses will be at risk. Therefore, all the households want to convert their kutch houses to pucca houses. It is also noted that more than 90% of the families received house grants from the state govt. to construct their houses. Moreover, out of all house types, 54% of houses have more than two rooms, and about 35% of houses have three or more than three rooms in each house type. The following table shows the families and types of houses in the study area, and it also shows the number of rooms that each house type consists of.

Table 2.15: Clan-wise Distribution of House Types in the Study Area

Families	Kutchha house				Others		Pucca				Semi pucca					Grand Total	
	No of rooms				No of rooms		No of rooms				No of rooms						
	1	2	3	Total	3	Total	2	3	4	Total	1	2	3	4	Total	Families	%Houses
Boi			1	1			2	1	1	4	3	10	7		20	25	24%
Burde											1	1			2	2	2%
Cheekati	1			1			1			1						2	2%
Desari							1			1						1	1%
Dippala		1		1			3			3						4	4%
Dolya												1			1	1	1%
Janni								1		1	1	2	1		4	5	5%
Korra	1		1	2	1	1	3	4		7	2	1	2	1	6	16	15%
Kuda		4		4			3	2	2	7	1	15	1	1	18	29	28%
Masada											1	2		1	4	4	4%
Pangi			2	2									1	2	3	5	5%
Surra		1		1			1	3		4	1	3			4	9	9%
Turre												1			1	1	1%
Grand Total	2	6	4	12	1	1	14	11	3	28	10	36	12	5	63	104	
Percentage	2%	6%	4%	12%	1%	1%	13%	11%	3%	27%	10%	35%	12%	5%	61%		100%

Source: Field Survey, 2022.

The pucca and semi-pucca houses are the most prominent house types. From the above table, it can be inferred that the families of Boi, Korra, Kuda and Surra have the highest houses in the pucca house type category. Though the Boi family are considered superior and the most populous family group in the studied village, they have fewer pucca houses than other groups. However, among the Semi-pucca house type, the Boi family group have the highest household, and the next dominant family group of Kuda follows them.

2.3.5. Religion in the Study Area

Konda Dora community are the believers of animism and Hinduism. Traditionally, they are Polytheists, and their important religious tribal goddesses is Ammathalli/Sankulama. Ammathalli is believed to be the guardian of their community, and it is installed on the village outskirts under the sacred grove. However, it was identified that many of the families had converted to other religions, such as Christianity, Islam, and Buddhism. As mentioned by some of the key informants in the villages, the conversions into other religions can be linked to missionary school establishment and free admission to their children in it and some of the developmental activities undertaken in the villages. However, all the religious people still practice local rituals and respect each other. But Christians and Muslims avoid celebrating Hindu festivals like Dusshera, Sankranthi and Deepawali. Similarly, Hindus also avoid celebrating both Christian and Muslim festivals. The following table gives the religious status of the study area according to different families in the villages.

Table 2.16: Families and their Religion in the Study Area

Families	Buddhist		Christian		Hindu		Muslim		Grand Total	
	Persons	%	Pers ons	%	Person s	%	Person s	%	Person s	%
Boi	4	1%	63	12 %	50	9%	13	2 %	130	24%
Burde		0%		0%	10	2%		0 %	10	2%
Cheekati		0%		0%	6	1%		0 %	6	1%
Daseri		0%		0%	3	1%		0 %	3	1%
Dippala		0%		0%	22	4%		0 %	22	4%
Dolya		0%		0%	7	1%		0 %	7	1%
Janni		0%	24	4%	7	1%		0 %	31	6%
Korra		0%	31	6%	53	10 %		0 %	84	16%
Kuda		0%		0%	145	27 %		0 %	145	27%

Masada		0%	7	1%	16	3%		0 %	23	4%
Pangi		0%	23	4%		0%		0 %	23	4%
Surra		0%		0%	48	9%		0 %	48	9%
Turre		0%		0%	4	1%		0 %	4	1%
Grand Total	4	1%	148	28 %	371	69 %	13	2 %	536	100 %

Source: Field Survey, 2022.

In the study area, about 69% of the population associates with their tribal goddesses and Hinduism, and Boi and Kuda families are the largest population in it. Christians are 28% population, Muslims are 2%, and Buddhists are 1% population out of 536 members in the villages. Among the Christians, the families of Boi, Korra, Janni and Pangi hold 12%, 6%, 4%, and 4%, respectively. In the Muslim religion, two households practice it; under Buddhism, only one household practices it. Interestingly, only the Boi families are noticed in the Muslim and Buddhist religions.

Moreover, there is one Church and Mosque in the study area. For the construction of the church, a converted Christian family member from the Boi group donated the land, and some Christian group families and missionaries contributed funds for the labour charges and materials. All the Christian groups gather on Sundays from morning 9 am to 12 pm for regular prayers. Similarly, for the Mosque, one of the Boi family groups had donated a constructed house that has one big hall for their religious gatherings. However, unlike other religious groups, Muslims do not hold religious gatherings regularly, but only when their religious preacher comes to the village since there are only two families. The Hindus had no temple like these other religions, but recently they have also started the construction of a Hindu temple with the idols of Hanuman and Sri Rama in it²⁰. Some of the informants mentioned the local political leaders and their aids from the Hindu conservation association of Simhachalam²¹ temple are sponsoring the temple construction, and the community head had donated the temple

²⁰ Ideals of Hanuman and Sri Rama belong to mainstream Hindu gods. The belief and practices are followed based on the mythological text of Ramayana.

²¹ Simhachalam temple is a temple of Hindu God, Sri Varaha Lakshmi Narasimha Swamy. The chief of this temple had visited one of the villages from the study area and promised funds for the construction of the temples of Lord Sri Rama and Hanuman.

site. Thus, it is evident that the villagers are showing interest in joining mainstream religions, and it also signifies their Omnism. However, all types of religions are trying to establish their dominance or superiority by constructing their temples.

2.3.6. Livelihood and Occupations in the Study Area

The livelihoods of the studied villages primarily depend on agricultural activities and collection of minor forest produce such as honey and *Adda Aakulu* (leaf plates). Most of the families practice seasonal agricultural labour (for cash and kind), livestock rearing, seasonal hunting in the months of March and April and collection of fuel wood, roots, and mushrooms from the forest. However, in addition to these livelihood practices, the villagers expanded their sources of livelihood primarily because of education, awareness, exposure, and close contact with the outside community. Often, it was observed that one individual is occupied with multiple and diversified activities for their livelihood. The following table shows gender-wise distribution of occupations in the villages.

Table 2.17: Gender-wise Distribution of Occupations in the Study Area

S.No	Occupations	Female		Male		Grand Total	
		Persons	%	Persons	%	Persons	%
1	Agriculture	140	26%	97	18%	237	44%
2	Anganwadi Teacher	1	0%		0%	1	0%
3	Anganwadi Worker	2	0%		0%	2	0%
4	Asha Worker	2	0%		0%	2	0%
5	Auto Driver		0%	7	1%	7	1%
6	Business		0%	6	1%	6	1%
7	Carpenter		0%	6	1%	6	1%
8	Construction Work		0%	12	2%	12	2%
9	Cook	1	0%	1	0%	2	0%
10	Driver		0%	3	1%	3	1%
11	Electrical		0%	2	0%	2	0%
12	Govt Job	3	1%	5	1%	8	1%
13	Kirana Shop	1	0%		0%	1	0%

14	Ngo Worker		0%	9	2%	9	2%
15	No Work ²²	95	18%	115	21%	210	39%
16	Nurse	2	0%	1	0%	3	1%
17	Paster		0%	1	0%	1	0%
18	Photography		0%	2	0%	2	0%
19	Private Employ	5	1%	3	1%	8	1%
20	Teacher		0%	5	1%	5	1%
21	Village Volunteer	1	0%	2	0%	3	1%
22	Watchman		0%	4	1%	4	1%
23	Welding Works		0%	2	0%	2	0%
24	Grand Total	253	47%	283	53%	536	100%

Source: Field Survey, 2022.

The occupations in the study area can be understood that 40% of the people are centered around agricultural labour and its related activities as the primary occupation. Within this category, 26% are females, and 18% are males. The diversity in the occupations of females (47%) is less than males (53%) because females have a higher school dropout ratio than males (See Table 2.13). Therefore, the majority of females are seen in agricultural activities. However, about sixteen (16) members of the females are working in different occupations such as Anganwadi teachers (1), Anganwadi workers (2), Asha workers (2), Cook in the private hotel (1), Govt jobs (3), Nurse (2), Kiran shop (1), Private employee (5) and Village volunteer (1). In contrast, males have more diversified occupations. Unlike females who feared and were not encouraged to work outside of their villages, the males were encouraged to migrate to pursue various occupations by the family members. It resembles the patriarchal nature of their society²³. Among the males and their occupations (other than agriculture), around twelve (12) members are working in the construction occupation. They work around their own and neighbouring villages on daily wage labour and sometimes with the agreement of labour. There are seven (7) Auto drivers who run daily services between their villages to the nearest town, as the studied villages do not have a public transport facility. Apart from these major occupations, there are five govt teachers, nine NGO workers, two welding workers, one

²² No work category includes people who are studying both in schools, higher education and who are of old aged above 65 years.

²³ See report on Konda Doras by Govt. of Orissa, 2015.

pastor, Six carpenters and two photographers. Thus, the diversity in occupations among the villagers shows progress in achieving their livelihoods and the proper utilization of their education by securing government jobs and private employment. However, the less gender occupational disparity can give wider scope for exploring more occupations and livelihoods for both males and females in the study area.

2.3.7. Land and Agriculture in the Study Area

Agriculture is the primary activity of the study area. They practice cultivation on the landscapes of hills and below the foothills, where water streams or springs are available. The cultivations on the hills include konda paddy, millets, ginger, chilly, coffee, pepper, and kidney beans, etc. Whereas on the foothills, they predominantly cultivate Paddy, Sesame seeds, Ginger, vegetables, and Turmeric. Their cultivation and operational use of land depends on irrigation facilities. Since it is a high-altitude area, they follow rainfed-fed cultivation. The major agricultural seasons are Kharif and Rabi seasons²⁴. The Kharif season is the busiest and most significant season as prominent staple foods like ragi, paddy, and other crops are cultivated. Whereas, under the Rabi season, more than 90% of Rabi farmers cultivate only paddy, and few cultivate vegetables like tomatoes and chilly. The water for rabi crops is fetched from the nearby water streams and springs with the help of water pumps. The following table describes the season-wise farmers and their landholding in the study area.

Table 2.18: Distribution of Kharif and Rabi Farmers According to the Area Cultivated

Area (in acres)	Kharif Farmers		Kharif land (in acres)	Rabi Farmers		Rabi land (in acres)
	Persons	%		Persons	%	
0-1	9	9%	9	18	17%	18
1-2	25	24%	50	8	8%	16
2-3	31	30%	93	2	2%	6
3-4	17	16%	68	0	0%	0

²⁴ Kharif and Rabi are major categorisations of the agricultural seasons based on the rain and monsoons. These classifications are frequently followed by the Andhra Pradesh agricultural department for state's production estimates in their annual reports.

4-5	15	14%	75	0	0%	0
5& above	7	7%	35	0	0%	0
Total	104	100%	330	28	27%	40

Source: Field Survey, 2023.

Almost all the farmers cultivate in the Kharif season, and among them only twenty-seven percent (27) of families cultivate Rabi crops. The average land under cultivation in the Kharif season per family is 3.17 acres, whereas during the Rabi season the average land under cultivation is 0.38 acres per family. It implies they are highly dependent on Kharif and rainfed crops and fall under the category of small and marginal cultivators.

Additionally, based on the operational land cultivation in the study area, which includes both kharif and rabi seasons, the farmers have been practicing different cropping systems such as leased-in, leased-out, own land, sharecropping, and *podu*. Of these, the cropping systems like leased-in and leased-out are practised based on the agreement of sharing expenses of cultivation and availability of water resources between the landowner and tenant. According to a few of the main informants, the tenants offer an annual monetary arrangement for roughly 10,000 rupees per acre with their land owners. These agreements must be renewed every year before the commencement of the new Kharif season. Similarly, the villagers also practice sharecropping cultivation by using two strategies. They are, financial payment in the form of rent per acre of land for a year, and dividing all cultivation expenditures equally between the land owner and tenant. In the three of the farming methods, the villagers borrowed lands which have *oota* springs and water streams from people of adjacent villages who are employed in distant locations either in government or private jobs. In all these lands, they predominantly cultivate paddy and sesame crops. Apart from these three croppings, the farmers have crops cultivated in *podu* lands and crops cultivated in their own lands. The *podu* lands are the reserve forest lands in which coffee, ragi and kidney beans are cultivated, whereas own land are those which come under mandal revenue purview and are acquired from their ancestors.

Table 2.19: Type of Cropping and Operational Landholding in the Study Area

Type of Landholding	Operational land holding area in acres.							Total Area (in acres)	% of farmer
	Less than 1	1	2	3	4	6	7		
Leased-Out Land	3	4						7	3%
<i>Podu</i> Land	8	26	37	20	11			102	44%
Own Land	8	11	32	17	22	1	2	93	40%
Leased-In Land	3	8	2	2				15	6%
Sharecropping Land	5	4	3	1	2			15	6%
Total	27	53	74	40	35	1	2	232	100%

Source: Field Survey, 2022.

In the study area, 40% of farmers cultivate their own lands, 44% practice *podu* land crops, 6% are in sharecropping, 6% are doing leased-in, and 3% are cultivating leased-out crops. From this information, it can be understood that though some farmers have engaged in the tenant cropping system like sharecropping, leased-in and leased-out, their total share in overall operational landholding is less because most of the farmers cannot pay ten-thousand rupees towards the agreement of tenancy rent, as said by some of the informants. Interestingly, those who had been practising tenant cropping have been identified having 5 to 10 members in the family. It implies that there is a direct relationship between family size and opting for tenant cropping. However, most of the farmers cultivate their own and *podu* lands only. The farmers in the study area have been classified into different categories based on their operational land and cultivation. The below table provides the type of farmers in the study area.

Table 2.20: Type of Farmers Based on the Operational Landholdings

Type of Farmers (in acres)	Number of Farmers	Percentage
Marginal Farmers (0-2.5)	10	10%
Small Farmers (2.5-5)	43	41%
Semi-Medium (5-7.5)	36	35%

Medium (7.5-10)	8	8%
Large (10-12.5)	6	6%
More than Large (12.5-15)	1	1%
Grand Total	104	100%

Source: Field Survey, 2022.

Based on the operational and cultivation in the study area, it can be understood that 41% of farmers are small farmers, 35% of farmers are semi-medium farmers, 10% of farmers are marginal farmers, and about 15% of farmers are medium and large farmers. It shows that the majority (85%) of the farmers are under the semi-medium to marginal farmers category, and only a few cultivate more than ten acres of land. The data of the major type of farmers in the study area also shows the same similarities with the state's farmers categories see Table 2.4 and Table 2.5.

2.3.8. Principal Crops and Horticulture

As mentioned in the previous sections, they cultivate their staple food crops like paddy, Millet, turmeric, ginger, and some vegetables. Most farmers in the study area cultivate these crops for self-consumption, and very few of the farmers sell their crops (kidney beans and excess Millet) in the Shandy markets. And most of these crops are cultivated mainly in the Kharif season. Traditionally, these crops were cultivated on the hills using the *podu* cultivation methods, but due to restrictions by the government and ecological reasons, this cultivation method was stopped (Pratap, 1969). Consequently, to replace *podu* agriculture and its detrimental impacts such as soil erosion and loss of forest cover, the state government has introduced horticultural crops like coffee, pepper, and eucalyptus plantations in the study area. Thus, all the farmers in the study village have been cultivating horticultural crops. The following tables provide a season-wise list of principal crops and horticultural crops cultivated in the study area.

Table 2.21: List of Major Crops Cultivated in the Study Area

S.No	Kharif (104)	Rabi (29 farmers)
1	Paddy - <i>Vari/ Daanyam</i>	Peanut
2	Little Millet- <i>Samalu</i>	Mung bean
3	Finger millet - <i>Ragi/ sollu</i>	white Kidney beans
4	The pigeon pea - <i>Kandulu</i>	Paddy
5	Ginger- <i>Allam</i>	Vegetables
6	Kidney beans- <i>Rajam</i>	-
7	Turmeric- <i>Pasupu</i>	-
8	Sesame seeds- <i>Nuvvulu</i>	-
9	Peanut- <i>Verusenagalu</i>	-

Source: Field Survey, 2022.

Moreover, as shown in Table 2.22, fruit and cash crops are the bio-diversified crops under the horticultural crops in the study area. Coffee is the primary crop, and other crops such as pepper, lemon, mango, orange, guava, pineapple, and banana are seasonal crops. These seasonal crops provide small economic support for the farmers' livelihood. They sell most of the seasonal crops in nearby towns like Araku Valley and Paderu. Table 2.23 shows their annual agricultural cycle followed in the study area.

Table 2.22: List of Horticultural Crops in the Study Area

Fruits	Fruits	Vegetables	Cash crops
Sapota	Mango	Pumpkin	Coffee
Lemon	Custard apple	Tomato	Pepper
Orange	Gua	Carrot	Turmeric
Banana	Nursery	Brinjal	Garlic

Source: Field Survey, 2022.

Table 2.23: Agricultural Cycle in the Study Area

S. No	Months	Agricultural activities.
1	March – April	Land Preparation
2	April – mid-May	First rains
3	May	Ginger seeding/ Planting
4	May- July	Ginger, Millet, local Rice and Kharif Rice.
5	August	Harvesting first cycle Ginger
6	September	Harvesting millets
7	October– November	Paddy harvesting.
8	December	2 nd cycle Ginger harvest.
9	January- Feb	Leisure and Hunting
10	Mid-March– April	New agricultural cycle starts again.

Source: Field Survey, 2022.

2.3.9. Pattern of Markets in the Study Area

Until recently, the villagers had no market facilities. They used to sell their agricultural produce to the local dalal, *savkaars* and sometimes in the shandy markets. The major constraint was transportation availability, causing them to carry their grains on their head or using *kavadi* (carrying instrument) to the nearest shandy market or to the local dalal shop. Some interior villages of the study area still practice these methods of transporting their produce. But after the introduction of modern transportation systems such as personal bikes and private auto rickshaws, the produce is being shipped to the shandy markets without hassle.

Dalals and Savkars are the predominant buyers both in Shandy markets. Most of the dalals and *saavkars* are seen roaming around the villages with large goods vehicles and purchasing agricultural produce in the villages. Many of them come from Vizag or S.Kota, especially in the harvesting season. Apart from the seasonal buyers from other places, the local Savkars and Dalals act as the money lenders for the farmers. They lend the money on the terms of both cash and kind. However, it was noticed that many

farmers preferred paying the loan with their agricultural produce (in kind). Some of the key informants said that the Dalals do malpractices while purchasing produce from the farmers, as noted by Prathap (1985) and Ramaiah and Manohar (1992, p.103) in their studies on tribal indebtedness. They found that indebtedness is caused among tribals due to local *saavkars* and dalals' malpractices. However, to curtail this problem, the state government has opened local agri-collection units. But the opening of collection units has not solved the total eradication of Savkars because of untimely payment issues by the government and a lack of transport facilities. So, some farmers continued to sell their produce to *saavkars*, who would give them money on the spot. Moreover, apart from the shandy markets, seasonal dalals, now they also have new market platforms which are run by the farmer's cooperatives and some non-governmental organisations. Like the local dalals, these platforms also buy agri-produce from the farmers at better prices and with no malpractices. The data from the study area has shown the following marketing pattern of the farmers.

Table 2.24: Pattern of Markets in the Study Area

S.No	Markets	Grand Total	Percentage
1	Traders who visit the village (Seasonal traders)	22	21%
2	Markets nearby town	4	4%
3	Wholesale traders (<i>Dalals / Savkars</i>)	41	40%
4	Who did not sell to any	14	13%
5	Farmer Producer Organisation or NGOs	23	22%
6	Grand Total	104	100%

Source: Field Survey, 2022.

Notably, the farmers have shown a diversified market pattern due to the multiple platforms available in the study area. According to some key informants, transportation, correct weighing of goods, cash payment, and correct market price to the goods are the prime considerations when they sell their agri-produce. It is observed that due to the availability of multiple platforms and market options, they have started enquiring and cross-verifying the price details of the goods from one buyer to another buyer.

Moreover, from the above table, it is understood that the farmers have reduced their market relationship with their earlier local Dalal/Savkars. However, about 41% of the

farmers preferred local traders (dalals) because they are indebted to them. And, twenty-two percent of the farmers sold their produce to farmer cooperative groups and NGO buyers because they paid better prices than Savkars. However, farmers complained about the untimely or late payment by these markets. It is also noted that twenty-one percent of them sold their agri-produce to seasonal buyers who only come to villages during every harvesting season. Remarkably, it is identified that the farmers almost reduced the selling of their harvest in the Shandy markets, except for some selling of seasonal horticultural fruits. Most of the produce is purchased by the different platforms in the village. Therefore, it is inferred that the multiple availability of the platform have reduced farmers' dependence on local dalals. However, it could not eradicate them because of the weaknesses of other markets and transportation in the village.

2.3.10. Animal Husbandry in the Study Villages

Animal husbandry is also one of the main activities among the villagers. The primary livestock includes cows, bulls, sheep, goats, and hens. Among all of these, hens, sheep, and goats are maintained in small miniature houses constructed with small asbestos sheets/ grass. Whereas other major livestock like cows and bulls are maintained in separate sheds, which can be noticed beside their houses. Sometimes they were seen hitched and parked in front of their houses, especially in the summer season. Moreover, livestock rearing and grazing are a shared group activity, locally referred to as *kodinga*²⁵. Although *kodinga* is not necessary, the livestock herd groupings often created from the same or a closely related kin family. One herd of cattle consists of more than four kin families, and two men in this new group oversee grazing on a roaster basis. The elderly people in the family are the most involved in this practice.

Animal husbandry is also necessary to practise agriculture because cattle and bullocks are essential for cultivation. They help produce organic fertilisers like manure and ploughing. It was observed that there is negligible mechanisation of agricultural activity and greater dependence on livestock due to the hilly terrains and lack of affordability of resources. Livestock was maintained for farming and for obtaining occasional

²⁵ In the Konda Dora language, the word "Kodinga" literally means "cow." However, this phrase is also used as "Kodinga Sonchi" to indicate that a family member went to perform the responsibility of grazing cattle. They combine up to four families to create cattle groups. On a rotating basis, they choose two members of the created group per day to take care of the cattle grazing.

income through selling sheep, goats, and cows at the shandy markets. The following table shows the number of families and their livestock holding in the study area.

Table 2.25: Livestock Availability in the Study Area

Families	Cows	Bulls	Sheeps	Goats	Hens	Total
Boi	17	6	6	3	4	36
Burde	1	1				2
Daseri	1	1			1	3
Dippala	3	4		1		8
Dolya						0
Janni	3	2	1			6
Korra	11	8	4	3	1	27
Kuda	22	16		5	1	44
Masada	4	2	1		1	8
Pangi						
Cheekati	2	2				4
Surra	6	5		4	2	17
Turre	1					1
Grand Total	71	47	13	16	10	157

Source: Field Survey, 2022.

From the table, it can be understood that cows and bullocks are the most possessed livestock among the villagers. The table also shows that seventy-one (71) families have cows, forty-seven families have bullocks, thirteen families have sheep, sixteen have goats, and ten maintain hens. Among all the families, the families of Kuda, Boi and Korra have more livestock assets because they are the initial settlers and have sufficient family members to provide care for livestock in the villages. This high availability of livestock among the villagers indicates their strong dependence on livestock both for agriculture and livelihood.

The availability of agricultural implements in the study area shows livestock's importance and necessity. Table 2.24 on Agricultural implements in the study area shows it has very few agricultural machinery-like tractors and ploughers. There are only two tractors owned by the Boi family and Korra Family. One of these tractors is a mini-tractor, and the other is a big tractor. One of the tractor owners mentioned that most

villagers do not prefer tractors for ploughing since they only use their bullocks and cows for agricultural activities. However, some families who do not have either bullocks or enough manpower to till the land will prefer tractors²⁶.

Table 2.26: Agricultural Implements Owned by Farmers in the Study Area

S.No	Implements	No. of Families
1	Tractor	2
2	Cycle Weeder	1
3	Model Sprayer	6
4	Not applicable	77
5	Water pump	4
6	Others (ladders)	14
7	Grand Total	104

Source: Field Survey, 2022.

The villages also have one cycle weeder and six sprayers. Traditionally, the use of sprayers was not a regular practice. But it is becoming prominent due to the influence of non-local rice varieties and mandatory application of pesticides to this kind of paddy cultivation. They are also used in coffee plantations to apply organic bio-fertilisers. The next major agricultural tool is the ladder; ladders are used in pepper plantations to harvest pepper. The villagers have received the aluminium ladders from the state government programme with 90% of subsidy on the price.

In conclusion, it can be understood that the study area is largely tribal, small and marginal coffee farmers. They cultivate subsistence crops like paddy and millets, and some horticultural crops like coffee and pepper. It is also identified that they practice collective kin-family farming for labour organisations and depend on animal husbandry for agricultural activities. The demographic details of the studied villages show that they have more male population than female and they live in homogeneous society with practicing endogamy. Within this scenario, the next chapter will try to discuss the endeavour of coffee establishment and the process of transforming from normal coffee farmers to organic coffee farmers in the study area.

²⁶ However, the employment of tractors for ploughing is restricted to plain areas, which are usually below the foot of the hills. On top of the hills, they use bullocks and cows.

Chapter 3

Becoming an Organic Farmer: Land, Organic Practices and Recognition

This chapter discusses the process of becoming an organic coffee farmer. It provides details about the process of the different contexts of the interaction between the farmers and the coffee plantations. To delineate this, the study followed the historical and ethnographic approach to correlate the historical context and the present - the ongoing process that shaped the 'becoming' of the organic coffee farmer. The data presented here was collected through extensive interviews, field observations and household survey schedules to investigate the process of becoming an organic coffee farmer.

Organic farming is a method of agriculture which uses organic manures and bio-fertilizers as an input in agricultural production. Organic farming as a method of agriculture has been in the limelight after the realisation of the green revolution's negative impacts on the people, soil fertility and the environment (Ladejinsky, 1973). As a result of this understanding of the detrimental effects, the farmer has created a social identity as an organic farmer as opposed to a conventional farmer²⁷. It means the methods of inputs used for agricultural production have been the primary factor in attributing organic identity to the farmers. However, it was observed that this social identity as an organic farmer is not just as a practitioner of organic methods of production but also involves a social decision of the farmer to adapt, the ability to choose the methods based on the resources available to him/her (to practice organic fertilizers). Moreover, this is a social identity recognised and approved by the certification agency after the evaluation of farmer methods and agricultural inputs used for the production of crops.

With the above context, achieving the social identity as an organic farmer by practising the methods of organic inputs and fertilizers in the coffee plantations of the Araku valley has been explored. All the coffee farmers in the Araku Valley are marginal, small, and medium landowners and predominantly tribal farmers. It is observed that the coffee plantation in Araku Valley was introduced by the Britishers (as noted in Integrated Tribal Development Agency, 2019) but after the independence, they were

²⁷ Conventional farmer is one who uses synthetic fertilizers as inputs in the method of agriculture to produce crops.

expanded by the state government of Andhra Pradesh. Presently, it is identified that tribal farmers produce the majority of coffee in Araku Valley. Unlike conventional farmers who use synthetic fertilizers in agricultural production practices, these farmers do not use chemical fertilizers. They are free of the consequences of the green revolution and have continued to use organic agricultural inputs like cow dung and plant manures. It is observed that with coffee production, they are trying to achieve the organic farmer identity. The organic identity is crucial for them in order to avoid the difficulties faced in the regular markets, such as low prices, malpractice by merchants and transportation issues. So, to overcome these problems, they want to participate in organic contract markets and get a reasonable price for their coffee. (A detailed explanation of the market aspects is discussed in the chapter Four). Thus, it is observed that becoming an organic coffee farmer is vital to them. This chapter also investigates their adjustments and modifications in the organic input methods to achieve organic recognition for the Araku Valley farmers.

It is observed that our understanding of ‘becoming’ an organic coffee farmer would be incomplete if the study does not explore how coffee plantations came into existence in the Araku Valley and how social identities are generated in due course. Thus, the present chapter is divided into three sections. The first section discusses the contact of the plantation with farmers and how this interaction has created various experiences for them. This has resulted in mixed social identities like exploited labour in tea gardens, daily wage workers in coffee plantations, beneficiaries of coffee plantations and the coffee farmers. The second section discusses the organic method of practice and inputs like cow dung and plant manures used for land fertility adopted by organic coffee farmers. The land fertility has been maintained through the use of organic inputs in the coffee land.

This chapter also discusses how they claim that they are organic by default through land and with the type of inputs used in the coffee land. Moreover, it also explains how the land has been used as a farmer’s agency in which the inputs of organic cow dung and plant manures are expressed as agentives. This agency of coffee farmers is investigated with the approach of agrarian agency²⁸, which is borrowed from the works of Galvin’s understanding of becoming an organic basmati farmer (Galvin, 2014, 2021).

²⁸ Agrarian agency means it is a capacity of farmers such as land, the input of cow dung and plant manures (organic practices), which are essential aspects in the day-to-day activities of the farmers.

The third section discusses the process of "becoming an organic farmer", this implies that it is organic by design. The identity of an organic farmer is achieved due to the design of his agrarian agency. It shows that agrarian agency is strengthened due to developmental programs like land ownership, agricultural programs and activities like livestock support, distribution and promotion of biofertilizers conducted by the state government and non-government. Further, it discusses that it is due to this strengthening of agrarian agency and readjustment of agrarian practices like including the biofertilizers into the agrarian agency and organic identity is achieved by attaining organic certification²⁹. Thus, the conditions and settings these farmers followed in becoming organic farmers are discussed in this section.

Moreover, as mentioned above, the agrarian agency has been central in becoming the organic farmer. The agrarian agency is performed by the coffee farmer in his coffee land. It implies that the human capacity to execute his choices and options in choosing the organic inputs and restructuring, according to the certification standards in becoming the organic farmer, has brought into the centre of understanding. The human agency to adjust according to certification standards, i.e., the intentionality in the selection of choice, had been used to perform as practitioners of organic farmers. The choices include the use of cow dung, plant manure, compost units and biofertilizers in the coffee field to achieve the organic identity. In order to present this, the study has borrowed Sherry Ortner's "Agency of Intentionality" into understand the human agency to achieve his organic identity (Ortner, 1984).

According to Sherry Ortner, an agency of intentionality means an individual or group's desire to achieve specific goals and ambitions derived from social, cultural, and political situations. She says that the study of the agency of individual intentionality will give scope to understand the agrarian transformations and motivations (Ortner, 1984, 2006b). Similarly, Karp (1986) also opined that human agency is a medium to understand transformations. He says that the agency, the actor and the agent are separate actions of the same events. However, he also opines that actors try to reconfigure their actions with minor modifications to reconstitute their worldview (Ahearn, 2001; Karp, 1986) to achieve their goals.

²⁹ Certification is an approved document given to the farmer by an accredited certification body according to the norms and conditions of the National Programme for Organic Production. The certification is issued by evaluating the soil fertility and organic practices followed in the coffee land.

The selected two villages of coffee farmers have employed an agency of intentionality to become organic coffee farmers. The intentionality can be observed when they expressed their views about the use of organic inputs like cow dung manure and plant manure and also discernible in the number of times they applied these organic inputs in coffee land to achieve their organic identity. Among these two villages, one village, which is G.Guda coffee farmers are already certified organic farmers, and the second village K.Puttu coffee farmers are in the process of becoming organic farmers. The total number of organic coffee farmers in these two villages is 104. Both village farmers practise organic manure inputs like plant manure and cow dung manure in the coffee fields and no chemical or synthetic fertilizers. Their organic inputs, cow dung and plant manure are based on the livestock and natural plants available in their physical agricultural environments.

3.1. Trajectories of Agrarian Subjectivity

The current investigation, which takes a historical approach to analysing the process of transitioning from conventional coffee farmer to organic farmer, has indicated that agrarian identity has been the most fluid subject among the farmers of the study area. Because of Araku Valley's socioeconomic and political factors from colonial times to the present day, such as migration of labour under *muttadar* practice to tea plantations in Assam during the colonial period, and post-independence political economy changes such as the introduction of coffee plantations and other developmental programmes operated in Araku Valley (Dhanaraju, 2015; Guha, 1983; Rajworshi, 2017; Saravanan, 2008).

As a result, the study found several chronological subjective experiences of these farmers, such as exploited-migrant labour, daily wage labour, and coffee farmers, in their interactions with various events across different contexts. The following sections will quickly go over the specifics and it also provides social and political economic trajectories that have had a substantial impact on the studied area.

3.1.1. Exploited Migrant Labour: Exposure to Plantations of Tea, Indigo and Timber Gardens

The study has identified that the farmers of Araku valley had past acquaintance with tea plantations and exposure to Assam tea gardens. The interviews and interactions with the members in the study area revealed anecdotes related to labour migration. The

literature about labour migration in the Araku valley has also provided links to some people of Araku were labourers in the Assam tea estates (Dhanaraju, 2015; Raj & Axelby, 2019).

The labour requirement in Assam tea gardens was due to the colonial interest in expanding the spread of tea gardens in the hill regions of India. Similarly, Britishers sent labour to different countries, mainly to engage them in sugar plantations in the West Indies, Mauritius, British and some French colonies (Mintz, 1986). During the colonial rule in India, the colonials brought labourers from China and undivided east Pakistan (Sen, 2010) to work in the tea plantations of India. However, due to the high and exceeding cost of immigration of labour in the tea estates of Assam, it had been put to a stop. They had brought the labour force from within India. Under the *sardari system* enacted in 1869 by the same colonizers, they brought labour from central India particularly the tribal people of Chota Nagpur, Bihar, Orissa and Andhra Pradesh (Dhanaraju, 2015; Sen, 2010).

Korra Lachanna is a 57-year-old coffee farmer, a carpenter in a G.Guda village. He (pointed at an old bronze plate in his home that his grandfather had bought from Assam) recollected that his grandfather had travelled to Assam to work in the tea estates as a labourer but escaped from there to avoid dire conditions at work after working for only a year. Further, Lachanna adds that after his grandfather returned from Assam, no one from their family had gone to work in Assam tea gardens after that. He also mentions that one of the villagers who had gone before his grandfather had died there and it is because of these horrible experiences, migration to distant places has stopped in his village.

Similarly, Surra Subhadramma is 50 years old woman. Her facial features are close to Mongoloid. Because of her facial features, most villagers denote Subhadramma as an 'Assam woman'. When Subhadramma was asked why villagers call her Assam woman, she said that her father had gone to Assam tea gardens as tea labour. During his stay in Assam, he liked some local Assam girl in the tea estate and married her and had her come to his home after some years. Because of her mother, she got these features as a mongoloid, and everyone calls her Assam woman. In the study village, not just the Sundaramma case, similar ethnographic accounts were also observed from others' family stories regarding the history of Assam migration in the two villages.

From the ethnographic accounts and historical shreds of evidence, the present study identifies that Araku farmers had exposure to plantation works, especially tea gardens. However, they were not aware of the coffee plantation, in particular. Moreover, other than migration to other states, the people in the study area were also involved in local state Indigo plantation, rosewood and sandalwood processing as daily wage labourers. This shows the colonial usage of locals in the interest of rulers' apparent exploitation of labour for low wages. However, locals' timber exploitation and free labour usage were ended by protests and Rampa revolts against the Britishers. According to Atlury (1984), Bhattacharya (1977), Guha (1983), and Saravanan (2008), the Bengal uprising served as an inspiration for the Rampa revolt. The Rampa revolt against the colonial free labour in plantations has helped to end labour exploitation. Moreover, it was noted that for the successful travels of labour migration to tea gardens in Assam, the availability of railway transport and seaports played a crucial role (Rajworshi, 2017). Vishakapatnam railway facilities and sea ports were used extensively for labour migration.

The historical records of tea plantations and colonial rule in the Vishakhapatnam district have revealed the evolutionary traces of plantations in Indigo and timber (not coffee) in the local habitats of the Adivasi and tribal farmers of Araku valley. The records of tea migration and participation of the locals in timber, indigo and other plantations indicated that the tribal and locals were exploited, and their participation was reduced to the identity of labourer both in tea estates of Assam and Indigo and timber plantations of Vishakapatnam. In addition, the district gazetteers and extant literature described Vishakapatnam's political and economic situation during colonial control and showed that the colonial rule increased the income of the British's wealth under taxation rules. They had imposed heavy taxation on land and agriculture production. The taxation and desire for colonial wealth generation made colonials introduce cash crops into India (Asiaticus, 1912; Bhattacharya, 1977; Francis, 1907). However, the introduction of coffee was done only at the end of the 19th century (David, 2013; Thomas, 2019).

3.1.2. Labourer and Beneficiary in the Plantations: Timber and Indigo to Coffee Plantations

The coffee plantation was introduced into the Araku valley as an experimental cash crop by the Britisher Mr. Brodie in 1898, in East Godavari and Karimnagar districts of erstwhile Andhra Pradesh. It was the first colonial attempt to grow coffee. Nevertheless, before the effort to increase the colonial rise of coffee plantations, it was found, from

the archival literature, that the king of Vizianagaram was cultivating little coffee land. However, the King's coffee land was also maintained under the British supervision. The initial coffee plantation was found in the Gudem agency area of Vishakapatnam. Significantly, in less time, from 1898 to 1906, the coffee plantation spread to the places of Ananthagiri, Araku and Chinthapalli areas in the Vishakapatnam district. In the district gazetteers, 1906 of Vishakhapatnam, the account of the coffee plantation is mentioned.

"Wheat is raised on the hills as a dry crop but is poor stuff. Niger, mustard and turmeric are other characteristic crops in the agency. The Raja of Vizianagram has a coffee plantation under European supervision at Anantagiri, about 3000 feet up the hill below Galikonda" (Francis, 1907, p. 102).

However, coffee plantations were not widely established in the Britisher's plan of cash crops expansion. The initial establishment happened during the post-independence reforms. For all these years, only a tiny portion of coffee fields were growing coffee. In post-independence India, the government of India, under the Ministry of Commerce and Economics and trade department, with the help of the coffee board of India, has conducted a land suitability survey and conditions of soil compositions in the Vishakapatnam district³⁰. Upon the survey result, the coffee board suggested that the Araku valley land could be suitable for growing coffee³¹.

On the other hand, the agricultural activities of the tribal population of Vishakapatnam were based on *podu* cultivation, they were primarily cultivated subsistence crops like rice, millets, kidney beans, turmeric and vegetables, and they did not cultivate any cash crops. Because of the *podu* cultivation practices and minute return from agriculture, they were impoverished and largely dependent on forest resources (Hogg & Joseph, 2013).

Moreover, due to *podu*³² and its adverse effects, issues such as deforestation and soil erosion problems were raised. So, to control these situations in Vishakapatnam, the government of India introduced the coffee plantation program with the help of the coffee board and state forest department. In the year 1960, with the state forest

³⁰ Field visit to Coffee Station in Minimulur, Paderu.

³¹ The data accessed from the "Coffee Board of India" website, on 15/08/2019.

³² *Podu cultivation* means it is a shifting cultivation. In Vishakapatnam *podu* cultivation was practiced significantly due to the ecological reasons and availability of water resources to the crops. In the *podu* cultivation clearing of the forest plants and deforestation was the grave concern.

department, the coffee plantation was implemented, and the locals of the tribal population were employed as daily wage workers in the plantation programs.

Kuda Balanna (85 years old) from K.Puttu village, while sharing his experiences and involvement in coffee plantations as a daily wage worker, said that:

"Before the coffee, in the Konda Bhoomi³³ (which refers to *Podu* land), we used to grow Ragi, Kidney Beans and other millets. However, the government had told us to stop *podu* cultivation and keep coffee in place of that *podu* crops. Initially, we were negligent and did not pay attention. However, the forest department later started a plantation program in Konda Bhoomi. They had asked us to come to the shade trees plantation first, then later, to the coffee pits digging and plantation of coffee saplings. Every day, we were given lunch, water, and a daily payment of 2 rupees per day".

The above anecdote indicates that the Araku Valley people had participated in the coffee plantation programmes as wage labourers. Initially, they were not interested in the coffee plantation since it threatened their *podu* cultivation. However, the daily wage payment activity has offered them an instrument of interest to continue and adapt to the coffee plantation.

Once the farmers accustomed to the change, (Accordingly, from 1960 to 1984) the State Government Forestry Department increased the number of coffee plantations. Though all the departments now have coffee estates, it mainly was Andhra Pradesh Forest Development Corporation (APFDC) and Girijan Cooperative Corporation (GCC) that were actively involved in further expansion of coffee estates during those formative years (i.e, 1960-1988)³⁴. Moreover, in the year 1988, the state government created a separate institution, i.e., Integrated Tribal Development Agency (ITDA). The ITDA was given total control of the coffee plantation programme to expand the coffee plantation and motivate tribal farmers to take up the coffee plantation. Since then, the tribal farmers have been the beneficiaries of coffee plantations. However, the farmers were restricted to beneficiaries, and they did not have full ownership of the coffee

³³ Konda bhoomi refers to podu land among the farmers.

³⁴ After 1984, the state government established the Andhra Pradesh Forest Development Corporation (APFDC), a separate supervision organisation, which developed the coffee plantation of 10,107 acres in the Vishakapatnam region. After the APFDC, the extension works were undertaken by the Girijan Cooperative Corporation Limited. It has developed 4000 hectares of coffee land and it is the separate cell to look after the tribal produces. Subsequently, GCC Ltd. in the year 1986 called Girijan Cooperative Plantation Development Corporation (GCPDC) was established to increase the coffee plantation in Vishakapatnam. The main task of GCC Ltd organisation is to work on the marketing of coffee by facilitating the coffee collection points at selected places of Araku valley.

plantation. The ownership of the coffee plantation was done later due to the Forest Rights Act of 2006 (Bandi, 2013).

Even the literature pertaining to the plantation programs in India and, particularly about Vishakhapatnam shows that the contact of tribal farmers with plantation has evoked in them different experiences. Tribal farmers have been identified as migrant exploited labourers in tea plantations of Assam and low-wage labourers both in the colonial and post-independence periods. Nevertheless, due to some developmental programs like FRA 2006, the tribal farmers have become small-landholding tribal coffee farmers. So, they gained land ownership and thus authority over coffee plantations started.

However, it was observed that the small ownership of coffee lands had been the beginning for the local tribal farmers of Araku valley. The significant increase in coffee management and expansion happened in 1997 when the ITDA was formed, and tribal farmers took little authority over coffee estates due to FRA, 2006. The study found that the establishment of the Vishakhapatnam coffee plantation is an active institutional effort to introduce coffee to the locals of the Araku Valley.

3.1.3. As a Coffee Farmer

The identification of tribal farmers as 'coffee farmers' happened recently after the state government intervention in the developmental program in 1988. That is, when the allotment of coffee estates to farmers was done. However, the mere allocation of coffee estates had not helped them. The tribal farmers had limited knowledge and were partial to small works because they were exposed to being 'labourers' in coffee plantations previously. Their scope of agricultural knowledge is extensive to subsistence crops and not much on coffee cultivation. Thus, the role of ITDA has increased from a funding body to a monitoring agency in the further expansion of coffee plantations in Vishakhapatnam. In the modalities of coffee implementation in Vishakhapatnam, the monitoring and expansion of coffee are done with the tripartite model. In the tripartite model, the three parties are, the Coffee Board of India (CBI), ITDA and the farmer. All the contributions towards the expenses are shared with a ratio of 50:40:10, where the coffee board of India is the major share contributor, the second is the ITDA, and the farmer makes the 10% contribution³⁵. In this model the Coffee Board of India acts as a

³⁵ (Coffee Board of India, XII Plan, 2023)- [Coffee Board of India \(indiacoffee.org\)](http://indiacoffee.org), accessed on 04-04-2023.

research guide and technical support, supplier of seeds, and training on coffee plantations to farmers and land surveys. The ITDA has a coffee development wing. This organization oversees the implementation and on-field operations of coffee plantations. The farmer plays the primary role as beneficiary and implements coffee plantation knowledge received from these agencies.

However, the tripartite model exclusively indicates the model's roles and operations. The literature analysis identified that multiple developmental schemes and special programs had increased the extent of coffee plantations in the Araku valley. Among such programs was a special program by ITDA in 2001-2002. This program has generated 56% (32072 acres) of growth in coffee extension from the inception of ITDA compared to previous agencies' land extent (14100 acres of land from 1960-88). The number of coffee farmers was 28,472. Under the five-year plan of 2003–2008. In addition to the existing extent of coffee land, another 39959 acres were added, which is approximately a 100% rise in coffee extent, and coffee farmers increased by an additional 41224 members. Further, under the five-year plan of 2012, an additional 24306 new acres of coffee extent were raised, which is a 60% rise from the previous coffee land extent. Finally, under the special project of 2016, with clubbing of the Mahatma Gandhi National Rural Employment Guarantee (MGNREG) scheme and subsidy of coffee board increased the coffee extent to almost 200% rise in coffee plantations and the number of coffee farmers was also raised by 250%³⁶. Presently, the total geographical coffee area covered is 158021 acres with coffee farmers is 1,54,5413, according to the ITDA report, 2016.

From the reports of the different developmental programs on the expansion of coffee, the present study points out that a significant increase in the coffee extension was due to the involvement of coffee farmers as primary stakeholders. The transfer of ownership of coffee land *pattas*³⁷ to the tribal farmers under the Reserve Forest Act, 2006, coffee *pattas* made the tribal farmers more involved into the coffee plantation program. The analysis of different reports of the ITDA under various schemes mentioned above has shown a significant increase in the total coffee extent and coffee farmers. This is mainly because, the clubbing of MGNREGA activities enabled a speed of coffee field

³⁶ From analysis of the reports of ITDA on coffee plantation. These reports were collected from ITDA office in the field work.

³⁷ Patta means a ownership title issued by the competent authority.

preparation faster. Under this scheme, coffee works like trenching, terracing, and fire paths were conducted. Secondly, it has also created a wage for the assured 100 days of work for the locals. Apparent enough, these two reasons were the factors for the significant rise of coffee under this project.

Therefore, from literature and records, it is observed that the political and economic interests of the colonials in Vishakapatnam and their influence on agriculture had changed the tribal farmers in the Araku valley. The colonial remarks provided access and entry points to coffee plantations. However, the significant increase of coffee plantations was not done in the colonial period; it can be observed as entry of cash crop into the tribal farmers. In the post-independence period, developmental programs like the MNREGA scheme leveraged the growth of the coffee plantation in the Araku valley. The transfer of land ownership to coffee producers has resulted in a significant transformation and has made it possible for the establishment of coffee plantations.

It has been found that the contact and interaction of tribal farmers with plantations, whether it is of Assam tea plantations, indigo and timber or initial coffee programs in the colonial and post-independence period, resulted in different experiences for them. These farmers have different exposures in the plantations as ‘exploited migrant’ labour in the Assam tea plantations, ‘daily wage’ workers in early plantations of Indigo, timber and coffee plantations, ‘beneficiaries’ to the coffee plantation programme under the government schemes, and finally, ‘owner’ of the coffee plantation lands due to Forest Rights Act 2006. Thus, the study understands the evolutionary change of Araku Valley tribal farmers' identity over the period of time due to plantations and mainly due to coffee plantations. This association of identities that happened diachronically can be inferred as the indicator for the transformations among the farmers of Araku Valley.

Similarly, in the prevailing situation, coffee cultivators of Araku Valley have been identified with new aspirations of becoming organic coffee farmers. This becoming of the organic coffee farmer identity process is detailed in further sections. However, in a nutshell, the new organic identity was connected to the practices and input fertilizer used in the cultivation of coffee. It implies that after the attainment of ownership over the coffee plantation, the coffee cultivation methods and adaptation of techniques to cultivate coffee have become more emphasized. The emphasis on cultivation methods for the farmers would be to increase coffee production and market their coffee. Because of these reasons, daily practices of cultivation methods and inputs used have become

more prominent. Therefore, the cultivation practices have been associated with a new identity as a practitioner of an organic coffee cultivator in the Araku valley. The following sections of this chapter will try to explain the process of becoming an organic coffee farmer with data from the selected villages.

3.2. Organic Farming

Organic farming is a method of agriculture in which naturally available inputs like cow dung, plant wastes and biofertilizers are used in agricultural practices. Organic farming is said to be a practice that protects the natural environment. Some say using natural inputs like animal waste in production as organic farming. Additionally, the terms "natural farming" and "organic farming" are sometimes used interchangeably. However, there is a vast difference between the practices of these methods. According to prominent natural farming philosopher Masanobu Fukuoka, natural farming means a method of farming that follows the laws of nature and earth, where practices are based on the principles of no tilling and no manual application of fertilizers to the crops (Fukuoka, 1978). Contrarily, organic farming, as defined by the International Federation of Organic Agriculture Movements (IFOAM), is a kind of agricultural practice whose goal is to preserve the health of the soil, ecosystem, and people involved in the process³⁸ (for additional clarification, refer to chapter 1.)

Similarly, according to an Indian organization (Agricultural and Processed Food Products Export Development Authority-APEDA), organic farming means no use of chemicals and the use of naturally available input for producing healthy, nutritious food by managing the health of the soil for future generations³⁹. However, practising these organic principles in production does not guarantee an organic farmer's identity. It needs the recognition of the method of practice, and certification becomes more important to label them as organic farmers or producers. The general social recognition

³⁸ International Federation of Organic Agriculture Movements- IFOAM

IFOAM is an international organisation, it advocates for organic agriculture practices. According to this organisation the definition of organic agriculture is "a production system that sustains the health of soil, ecosystems, and people. It relies on the ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation, and science to benefit the shared environment and promote fair relationship and good quality of life for all involved."

³⁹ Agricultural and Processed Food Products Export Development Authority- APEDA

It is an apex body in India to oversee all process related to organic agriculture production under the special program called National Program for Organic Production.

as an organic farmer does not make an attribute to a farmer. So, the certification has become a tool in organic farming practices (Schmid, 2007). The certification refers to a document issued to a farmer in acknowledgement of his organic farming methods used on his land or crops, according to criteria established by a monitoring organisation. The certification has become the tool of recognition for organic farming. In the certification, the main elements considered for evaluation are the method of agriculture, which includes practices such as chemical-free land and the use of organic biofertilizers (Greene, 2001; Lockeretz, 2007b; Schmid, 2007). Therefore, the certification for the method and soil fertility has become essential to label them as organic farmers (a detailed explanation of the organic certification is presented in the other sections). So, organic farming can be viewed as an identity achieved through the practices of organic methods that involve the use of organic input fertilizers in it.

The Araku valley farmers are identified as practitioners of subsistence farming. They traditionally practised the natural use of inputs in agricultural crops. However, it is essential to know what is organic to the farmers of Araku valley and how they are mediating to become organic farmers using the present method of agriculture techniques. However, to illustrate how farmers in the Araku Valley used natural inputs, the study also deduced from historical data that these farmers used them in their agricultural practices. This historical data has been detailed in the following section.

3.2.1. Methods and Use of Natural Inputs in Colonial and Post-independence Period

Introducing the coffee plantation to the tribal farmers of Araku Valley is an evolutionary, multi-developmental program supportive, as explained above. However, managing coffee plantations and expanding this crop required familiarity with the inputs to use and cultivation methods.

The farmers used natural inputs like cow dung manure as major fertilizers in agriculture. The archival reports of district gazetteers of Vishakhapatnam found that the Araku valley people were using naturally available inputs residues of leaves, tank silts, sunn hemp, *ragi* and *chulam* as a fertilizer for crops (Francis, 1907). The agricultural activities are conducted based on understanding earth and moon movements. The local Telugu calendar, *karthulu* months, shows the importance of each movement. Similarly, the district gazetteers of 1869 also showed evidence that the farmers of the Araku

Valley region used livestock for fertilizers. Their sheep and cattle were the main animals used, and they were left on agricultural land for several nights in a row so that natural manure could be generated for the soil. Moreover, they were also using the local flora as fertilizers to enrich the soil quality.

"Manuring- The most common way of manuring here is by enfolding sheep or cattle on the land for several successive nights. Many ryots also form a dunghill from the litter of their own cattle, mixed with ashes and soils of the house" (Carmichael, 1869, p. 152).

The usage of agricultural inputs is derived from the type of crops that farmers produce in Araku valley. The Araku valley is a high altitude location 3000 feet above mean sea level. Agriculture mainly depends on rainfall and is far from the irrigational facility due to geographical complications, and here they depend on rainfed crops⁴⁰. So, the study understands that the preexisting knowledge of crop inputs and methods gives evidence of organic farming practices. Therefore, this area's early precolonial and colonial records reveal marks of naturally available manures such as sunn hemp, tank silts and other cow dung in their agricultural practice. This natural input application was the practice for them to continue the cultivation.

Subsequently, after post-independence, especially after the introduction of the green revolution, the urge to increase the food security for the Indian population by the state government was the primary concern. So, the major shift of technical methods in the production process has changed to synthetic fertilizers. Synthetic fertilizers have increased to generate higher yields, though the initial intent of the green revolution was to increase food security by growing staple foods like rice and wheat in India (Dasgupta, 1977; Ladejinsky, 1973). The program had spread to all other crops, like sugarcane, vegetables and cash crops. This means the high spread of synthetic fertilizers in agricultural production activities has been observed due to the green revolution.

Consequently, it has heavily impacted the production methods in India, from the use of organic manures to the artificial/synthetic use of manures. This shift led to a decline in land quality (S. Singh & Benbi, 2016). Under such a prevailing scenario in other parts of India, the farmers of the valley are not affected by this process, mainly because of the demerits of irrigation availability and the geographical disadvantage of adapting the green revolution program. Thus, the tribal farmers of the Araku were not much disturbed by the more significant changes that occurred in fertilizers usage in

⁴⁰ Andhra Pradesh District Gazetteers- Henry (1908).

agriculture due to the green revolution. However, the study found that a small number of farmers used non-organic fertilizers sparingly during the Kharif season, significantly when growing rice⁴¹. However, in the coffee plantation, the use of chemicals has not been observed.

Therefore, it is noted that in precolonial, colonial, and post-independence India, the naturally available resources were used to cultivate crops, especially for subsistence foods. The archival records strongly support the use of natural methods in the agricultural practices of these farmers. In post-independence, the adverse effects of the Green Revolution touched other parts of India. The negative impacts have been observed with soil fertility damage, sustainability of crops, high risk of fertilizers cost on the farmer and also farmer suicides. However, these adverse effects of the Green Revolution could not reach the tribal farmers of Araku valley. Thus, traditional farming methods are continued even today (Deepak, 2017).

Furthermore, it has been observed that these farmers use primary production methods like using natural resources available to the farmer. The natural resources identified by the farmers are livestock availability and other plant waste in their agricultural land and their surroundings. Thus, it can be concluded that their methods are derived from his own environment. Moreover, it is also understood that natural inputs like cow dung and plant manure practices are used as a medium to negotiate, attribute and claim as an organic farmer.

3.3. Becoming an Organic Farmer

As detailed above, the Araku Valley farmers cultivate their crops using natural resources and organic fertilizers prepared from livestock assets. The major subsistence crops of the Araku Valley are rice, millet, and kidney beans, and the significant inputs of these farmers' livestock assets include cattle, goats, and sheep⁴². Among the Araku valley farmers, the perception of organic farming is derives from their traditional method and their affinity to the land. Moreover, their annual festival *bandapam pondoi*⁴³, which is the worship of their local deity *zankar*, in August every year to

⁴¹ From the field work done in 2018, Kharif Season.

⁴² They prepare organic manures using the waste from this livestock in the study area.

⁴³ Similarly, in Itukala Panduga, which is an annual festival celebrated by the villagers to their local deity Sankulamma by presenting the cow sacrifice, people do this ritual to ask their goddess' blessings for a bountiful harvest and protection for their lands' fertility.

protect soil fertility also shows their perception and value towards the fertile lands. In the study villages, heaps of cow dung manures were seen beside the pathways of the village. However, it is observed that livestock asset maintenance is an essential part of farmers' agricultural practices. For them, the land and use of different inputs of organic materials, which are derived from livestock and plants, are the essential aspects of their agrarian lifestyle. To the Araku farmers, the method has become an essential attribute to claim as organic farmers. This attribution process has been observed in the ideas, notions and understanding of farmers towards the traditional method of agriculture. So, these driving notions about this traditional method become essential to become an organic farmer. However, in Araku, transforming coffee production has institutional involvement, like bodies of government coffee departments and non-institutional bodies. Both these institutions for them play crucial roles in becoming organic by supporting farmers.

Therefore, the farmers' perception of organic farming and how they are attempting to become organic farmers were found in the practices of using natural resources like cow dung and plant manure as fertilizer in production methods. These fertilizers have been a pathway for them to achieve their organic identity. So, to understand this process, the present study has considered land fertility as an agency and the farmer as an actor. Organic input fertilizer practices are the land's agentives and are considered part of the agency; these agentives create land fertility. Additionally, the ability to become an organic farmer depends on performance, the selection of organic fertilizers, and the fertility of the land. Consequently, it has been determined that the agency, i.e., land fertility and agentives (the application of organic input fertiliser and the farmer as an actor), are connected to the agricultural environment in which they reside and engage in their field of activity.

Similarly, some of the agrarian anthropologists such as Philips Abrams, Ivan Karp and Sherry Ortner had explained the same process about the agency, primarily in their investigation regarding transformations and changes in agricultural practices by utilizing the agency as a tool to understand. According to Philips Abrams, agentives of the agency are derived from purposeful intentions and individual actions (Skocpol, 1985). Ivan Karp, however, argued that the actors and their components of agentives, or his capabilities, will define and construct a worldview about the individual (Karp, 1986). Along similar lines, the present study observed that the selected village farmers

attribute land fertility to their agency and organic input fertilizer practices as their agentives to generate their organic identity.

Similarly, Sherry Ortner highlighted the agency as an "Agency of Intentionality" in her description of it (Galvin, 2021; Ortner, 1984). According to her, in the concept of agency, a human's role and capacities are purposeful and conscious. These conscious and purposeful actions make targeted goals and decisions to transform himself. She also argued that the agency of farmers and their related actors like institutions (govt), intermediators and non-institutional aspects like subjective and personal opinions are essential because 'other actors' play an important role in transforming farmers' goals. According to her, "other actors" such as political, governmental, non-governmental, and developmental organizations play a vital role because these other actors constantly engage with farmers. Galvin (2014), in her work on Himalayan basmati farmers, followed Sherry Ortner's approach of agency of intentionality to explain the process of becoming an organic *basmati* farmer. Galvin observed that the basmati farmers could achieve their organic identity by asserting their lands as fertilised lands because they practice organic input fertilizers to generate land fertility. Further, she mentioned that basmati farmers mediate through the agency of land fertility to become organic farmers and by employing the agentives of organic manure practices on the land. In a comparable way, the current study has revealed the same analogous process in relation to transforming into an organic coffee farmer. However, there is a difference between the *basmati* and coffee farmers' processes. As part of its state government programme, the government assisted the *basmati* farmers in becoming organic farmers. On the other hand, the conversion of coffee producers to organic farming is not a government endeavour. Local NGOs and development organizations assisted them. Thus, the present study has attempted to employ the Sherry Ortner agency of intentionality to delineate how their agency of land fertility is being maintained to achieve the organic identity.

The two villages that were chosen for the present study are divided into two groups of organic farmers: 'new organic' (transitioning) farmers and 'certified organic farmers'. The new organic coffee farmers are those who have recently signed up for certification but have not yet received organic status. The term 'certified organic farmer' refers to

established, certified farmers who continue to use organic farming practices⁴⁴. From the data collected from these two villages, the following table is prepared to show the type of coffee land holdings among them.

Table 3.1: Classification of Farmers Based on the Coffee Landholdings in the Selected Villages

Type of Coffee Farmers	No. of Coffee Farmers			In Percentage		
	Certified organic Farmer	New organic Farmer	Total	Organic Farmer	New Organic Farmer	Total
Marginal (0-1 hectare)	42	33	75	63.46%	80.77%	72.12%
Small farmers (1-2 hectares)	08	16	24	30.77%	15.38%	23.08%
Semi-medium (2-4 hectare)	02	03	5	5.77%	3.38%	4.81%
Medium (4-10 hectare)	Nil	Nil	Nil	Nil	Nil	Nil
Large (10 and above hectares)	Nil	Nil	Nil	Nil	Nil	Nil
Total	52	52	104	100%	100%	100.00%

Source: Field Survey, 2020-2022.

Note: The farmers' categorisation is based on the Ministry of Agriculture and Farmers Welfare landholding classification structure.

Among the selected two villages, the total number of farmers identified was 104. Out of these 104 coffee farmers, the new and organic farmers are equal in numbers. The majority of the coffee farmers fall under the category of marginal landholders with 72.12%, the second-high category of farmers falls under small landholders with 23.08%, and only a few farmers fall under the Semi-medium landholder's category at 4.81%. In two villages, it has been observed that no medium and large landholders were found in coffee cultivation. The above table on farmers' land holding classification includes *patta* and non-*patta* lands. They cultivate coffee in the *podu* land. These *podu*

⁴⁴ About certified and yet to certified farmers, explained detailed in the further section while discussing about organic by design.

lands were earlier used for subsistence crops, adopting the traditional shifting cultivation methods by these farmers.

3.4. Perceptions as Organic by Default

As implied by the section's name, farmers in the Araku valley frequently refer to organic farming as "organic by default." Aside from farmers, most locals who have visited Araku would agree with this (Ganguly, 2018). Additionally, institutional entities like government employees and non-governmental individuals refer to farmers in the Araku Valley as organic or natural farmers. For the farmers, the term "organic" automatically connotes a manner of cultivating coffee that is natural. The natural way of cultivation means using plant litter as the primary source of manure for the coffee plants and employing cow dung to improve land fertility. The plant trees observed were various shade trees covering the coffee plants in the coffee fields. The shade trees such as silver oak, mango and orange are among the significant shaded trees. To naturally fertilize their coffee plants, they rely on this plant's waste material.

Moreover, it was identified that, among the farmers, the distinction and pride about the 'place' of Araku as a fertile land played a vital role in claiming themselves as a natural organic farmer. Kuda Ch Babu, a new organic farmer from K.Puttu village, insisted that his agricultural land was very fertile and did not need any extra inputs or fertilizers for coffee production. He explained that farmers on plain land use chemicals for rice and other crops in agricultural practices. They are damaging the land and the health of the soil and farmers. In contrast, he adds that the hill people do not use such chemicals to cultivate rice, millet, coffee, or other products. He further said that they are natural cultivators and chemical-free.

Similarly, Boi Ramesh, another organic farmer, said that he had participated in many political campaigns in other places. In his journey around different places like Vishakapatnam and Hyderabad, he noticed that farmers of these places use extensive chemicals in their cultivation. Ramesh mentioned:

"I was shocked to see that plain people use chemicals, and we never used such things in our rice and millet cultivation. We only know and use our *gatham*⁴⁵ natural cow dung as manure. Our lands are not affected by those chemicals. I am happy that we are not using such chemicals. Our fore-fathers cultivated with natural gatham, and this gatham is best for our crops and soil. My father used these kinds of gatham (organic)

⁴⁵ *Gattham* – *Gattham* means cattle dung and other manures include sheep and goats or livestock assets of locals.

only in all the crops. I believe, using this gattam makes our soil looser, which means it improves the soil quality. Good soil will give us good yields."

From the opinion of these organic farmers, it can be inferred that farmers always compare their methods with other far-off farmers because there is a real difference in their practices and methods of cultivation. They claim that their land is pure and not polluted like other lands, which shows their perception towards the practices and methods of cultivation from other farmers. Therefore, because of their claims, perceptions and practices, they claim that all the produced goods in the lands of Araku Valley are organic. Moreover, farmers attributed that organic farming means the traditional use of techniques that were taught and passed onto them by their fathers and ancestors. They claim that their fathers had used natural inputs for cultivation, and they lived a happy, natural life. Thus, these farmers opine that belief and trust in the traditional techniques make them continue the natural practices. Bojnu Babu (50 years) of K.Puttu village has been introduced into organic farming recently. He said that, in all the types of crops like millet, rice, turmeric and coffee, he followed traditional methods of agriculture that his father had taught him. Farmers believe that their ancestors' way of cultivation is good. In his opinion, it is observed that trust in the traditional methods and his affinity and acquaintance with the knowledge about the cultivation method make him feel authoritative and confident. Because of this reason, it can be inferred that they are assertive as a natural organic farmer by default.

Another farmer in the K.Puttu village, Appa Rao, while clearing weeds in the coffee fields, said that they had to keep the coffee plant clean and with no bushes around it. Otherwise, the coffee harvest will not be good. He further said that *thuppalu* (a type of weed) should not be thrown out of the coffee land. It should be put near the stem of the coffee plant. This weed decomposes as manure, resulting in high yields of coffee fruits. Thus, knowledge about the weeds as manures for the coffee plants is evident, and the farmers have been performing this practice.

Moreover, similar opinions among organic farmers of G.Guda village were also observed. When asked about fertilizers used, Korra Lachanna said that they use *gattam* (cow and other livestock manures) for rice, millet, ginger and coffee. Using the non-organic might increase the yield, but it will damage the land. He said that sometimes he felt like using synthetic manure (DAP) for rice. However, he did not use them because he felt that if he was using them, his community farmers might follow him and can damage the land. Thus, it infers that his primary concern is community commitment

and care towards the land to maintain purity and soil fertility. In addition, it also indicates that community interest and affinity are dominant over individual interest when it comes to land fertility protection.

Similar was the experience of Boi Appala Swamy. Every day morning, he would be seen walking with a basket on his head, taking it to collect cow dung manure. When he returned from the manure storage spot, he said that he had to collect this cow dung manure daily and store it for future use. It will be used for the paddy and millet. Using this would increase the high-yield crop. He further said that it is not about the type of crop, but irrespective of the type of crop he cultivates, the daily collected *gattam* manure is important for the soil. By using this manure, the soil will be loose. The loose soil will give a high ginger, coffee and turmeric yield. The farmer's daily activity of collecting and storing the manures for future use is an essential practice for organic farming. These practices show the significance of the culture of collecting and preparing the manures for their cultivation.

In the daily roles of these farmers, the collection of manure is an integral part of their agrarian practices. The decisions they make regarding the use of inputs for their coffee and other crops are closely tied to this process. One crucial factor influencing the preparation of manure is the number of livestock they possess. For example, Boi Ramaiah, who is a farmer in this community, owns two cattle and ten sheep, he shared similar views on the significance of livestock maintenance and the use of manures in agricultural production.

However, the farmers face challenges in maintaining their livestock due to a shortage of grazing land. The close connection between livestock care and agricultural activities has been hindered by the lack of available grazing areas. Nevertheless, these farmers remain committed to their traditional methods, which they consider essential for successful agricultural practices. Despite the limitations imposed by the scarcity of grazing land, they are determined to persevere with their established ways.

Table 3.2: List of Plants Used as Manures in Coffee Lands

List of significant plant waste in Coffee fields	List of plants grown in backyards and front yards of farmers' settlements	Agricultural fodder as manures
1. Silver Oak trees 2. Mango trees 3. Jackfruit 4. Banana plants 5. Naseberry 6. Custard Apple 7. Gua 8. Orange trees	1. Mango trees 2. Neem tree 3. Lemon tree 4. Caryota 5. Vegetable plants	1. Fodder from little millet 2. Fodder from finger millet 3. Fodder from red gram grains. 4. Husk from Paddy.

Source: Fieldwork, 2020-2022

Note: The above table shows manures derived from plant waste.

It is noteworthy that the farmers have the assertive view as organic farmers because of the type of inputs used and the type of activities performed to keep land as fertile ground. Similar opinions have been identified with government staff and non-governmental organizations. As mentioned above, the involvement of government bodies was instrumental in establishing coffee farming among Araku Valley farmers. It is noted that their perspectives had a significant role in making them organic coffee farmers. Sherry Otner also mentioned the importance of other actors while discussing farmers' transformations (Ahearn, 2001; Ortner, 1984). According to her, the opinions of other actors, such as government staff and intermediary bodies, and recognition of local practices are significant factors for the transformations in agriculture change.

It is also notable that Araku Valley is a hilly region with green forest cover isolated from the plain areas. Often, the place of Araku Valley is said to be a nature hub and clean place in the public media (Dey & More, 2019), especially in the tourists' opinions. In addition, the state government regularly promotes Araku valley as a natural and pristine place for tourism⁴⁶. The opinion and recognition by the institutional staff also

⁴⁶ The Vishakapatnam Tourist Guide Collected from the ITDA office in Paderu, Headquarters.

play a crucial role in presenting the distinctiveness of the valley as a natural and pristine place by being a passive narrator to the public and tourists. It implies that the natural farming practices of the farmers acknowledge that the land of Araku Valley is pristine.

Similarly, at the Araku Valley coffee house, the management had placed a painting with a caption, "Welcome to naturally grown and produced coffee", and they have a recorded voice clip played over the speaker for the visitors. It informs "Welcome to the coffee house. The aromatic coffee and distinctive taste of Araku coffee is created by the natural organic methods and no chemicals used by the tribals of Araku valley." From this, it is inferred that Araku valley coffee producers' practices are being reminded and presented as natural organic farmers to the general public. This promotion of practices and natural use of fertilizers for coffee shows the institutional recognition of organic and natural inputs in coffee cultivation as organic by default in Araku valley.

Jeenabandu (59 years old) has worked in the coffee management department with the ITDA for the last 30 years. He said that since the inception of the coffee in the Araku valley, no farmer had ever used chemicals for coffee and other crops. He further detailed that the farmers do not have money to buy chemicals or non-organic fertilizers. It is good that they are not using chemicals. Otherwise, chemicals damage the land, and the food produced will be chemical. So, they have been producing coffee using natural manure. That is why they are by default organic coffee producers. The land of Araku has been kept pristine and not affected by chemicals. In addition, Vijayalakshmi, who works in the VIKASA Foundation, a non-governmental organization, has been associated with this organization for the last ten years. She works in the management of animal husbandry and agricultural developmental activities in the Araku Valley. She said that Araku Valley farmers cultivate using the natural inputs in the coffee fields. They only use plant waste and cow dung. So, they are organic farmers by default.

Similarly, Mr Bhanu Rao, assistant director and a top official of coffee management, expressed that the whole Araku Valley farmers are natural coffee farmers. They do not use any extra fertilizers for the coffee. So, by default, they are all organic farmers. He pointed out that they could be recognised as organic practitioners because of these natural input fertilizers, but they cannot be officially identified as organic coffee farmers. He adds that they need certification to label farmers as organic as he elaborates that certain bodies are working as certification agencies. It is not that easy to get a certificate. The certification agencies charge a lot of money for it. Which means these

farmers cannot afford it. Thus, the top management officials in the state coffee department also attribute the organic inputs as a natural cultivation method, and all of these Araku Valley farmers are, by default, organic farmers. However, he also opined that certification had been essential for identifying the farmer as organic. Apart from the farmers, government staff and non-governmental organizations have had the same opinion and acknowledge the input practices as organic by default. However, they need recognition from outside institutions to label organic identity by certifying their daily practices of organic inputs. Thus, the certification has been the determining mechanism for attributing the organic identity to farmers.

Finally, as far as Araku Valley coffee farmers are concerned, mainly the land functions a fertile agency through their agentic practices of the use of livestock manures and plant waste in the coffee fields playing an essential role in labelling them as organic farmers. Moreover, their affinity towards the land as pure and fertile claim makes them assert themselves as organic farmers. Similarly, the government staff and non-governmental people opine that the lands of Araku Valley are pristine, natural and organic; this type of recognition and opinion by the government and non-government towards the land has contributed to attributing farmers' production methods as organic by default. Thus, from the opinions of farmers, government institutions, and non-governmental persons, it can be understood that the use of cow dung manures and plant manures for land fertility is considered as part of their agrarian agency, which asserts to claim their practices, methods and land as organic by default.

This regular practice of organic manures in the coffee land was an unconscious activity because it was part of their regular agricultural activity to manure the lands⁴⁷. On the contrary, the institutional staff and non-governmental officials opine that the farmers are ignorant, innocent and natural practitioners of practices and organic methods. They expressed that these farmers are away from chemical fertilizers, and their lands are still pristine. Therefore, by considering these views, according to Sherry Ortner's agency of intentionality, this 'organic by default' opinion can be attributed to unconscious

⁴⁷ The festival of *Itukala Panduga*, which is practiced in the month of March, adds manures in order to make them fertile. Similarly, the *bandapam pondoi* festival of worshipping their local goddesses and seeking the blessings to protect their land's fertility. This festival is celebrated in the month of August every year.

intentionality in practicing organic inputs like cow dung and plant manures in order to claim as an organic farmer⁴⁸.

However, according to some informants, using natural and locally available inputs does not make farmers eligible to claim organic coffee farmer. They need certification to recognize and qualify the methods, inputs and land these farmers have used to produce the coffee. At this juncture, the study notes that becoming an organic farmer cannot be an unconscious and ignorant activity to get recognised as an organic farmer.

Thus, the study observed that organic identity is achieved by certification. The farmers must undergo a process of evaluation to achieve the organic farmer's identity. Therefore, the present study has found that organic identity is attained only through the 'organic by-design' process. Further, it is observed that 'organic by design' is the process of becoming an organic identity involving multiple institutes' roles, activities of developmental programs, and farmer performance to prove his organic practices. Therefore, it is inferred that becoming an organic farmer is linked to multiple factors and farmers' ability to prove their capabilities for the organic identity through certification.

In the villages studied, it is observed that in the 'organic by design' process, there are multiple factors which contributed to this process. The significant factors are land rights for the coffee fields and developmental programs related to agricultural activities by the state government, NGO and the Coffee Board of India. Because of these factors and their involvement with farmers, it was observed that they could participate in the process of becoming organic farmers through certification, for which they are continuously monitored and evaluated by the external bodies related to certification agencies. Thus, the agency of the farmer's agency such as the use of manures and natural practice methods of land use are brought into the ambit of evaluation. The farmer had to exercise his performance in proving his ability to become an organic farmer. This process was explained as an "agency of intentions" by Sherry Ortner, Ivan Karp, and Galvin in their studies on agrarian changes (Ahearn, 2001; Galvin, 2021). They all discussed that individuals make choices and set goals to transform themselves in the agency of intentions. Those intentions may be conscious or unconscious. Along

⁴⁸ Shaila Seshia Galvin has also made a similar observation among the Himalayan basmati farmers. She says that the basmati farmers claimed that they are organic by default because of the use of cow dung manure in their lands (Galvin, 2021).

similar lines, the present study observed that to become an organic farmer, the farmer was putting their purposive choices and interest in the organic by design. The following section will explain what is organic by design and how is this organic by design is happening in Araku valley to contribute to a significant identity of becoming an organic farmer.

3.5. Organic by Design

Among the farmers of Araku Valley, it has been observed that becoming an organic farmer has not just only because of organic practices. However, it was due to the systematic intervention of multiple processes and multi-institute's participation in the Araku Valley. Such processes identified are developmental programs by government institutions and non-governmental organizations.

As discussed in the previous section, the concept of 'organic by default' is not used to recognize an organic farmer until and unless they have certification for production, practices, and the land used for production. In order to achieve this certification, it was observed that they had organized into Farmer's Producer Organizations (FPO) and collaborated with non-governmental institutions and promoters⁴⁹. They seek help in certification mechanisms from their collaborators. According to the Indian national accreditation agency for organic certification (APEDA), certification means a label given to an individual or a group of farmers as organic producers by evaluating and monitoring the practices of inputs they follow in farmland. According to the certification agency, the three elements are essential for certification. One is the product, the second is the practices, and the third is farmland.

Further, it was identified that collaboration between the farmers and NGOs has been instrumental in achieving certification as an organic farmer. The collaborators provided help in searching and arranging certification bodies for the farmers and provided organic inputs like biofertilizers and other techniques to continue the organic practices, except the certification, a key element in achieving the organic identity. The registered document for land or pattas for coffee land played a significant role in becoming an organic coffee farmer because product certification cannot be achieved without the registered land document.

⁴⁹ In the present study, the promoter word refers to an allied organisation. The allied organisations are those who help farmers in certification, quality maintenance and marketing of coffee.

One of the key informants, Vishweshwara Rao, is a farmer and manager in the Farmer Producer Organization. He said that they have formed Farmer Producer's Organization with farmers owning the coffee lands and with a common interest in the coffee activities. The registration for land or *patta* is an essential part of the certification because the certification agency needs the GPS locations and individual farm details in order to issue an organic certificate to them. Thus, the possession of land documents for organic certification has played an important role in becoming organic. If not, they cannot aspire for the organic certification. It shows that the registered land document is vital to the 'organic by-design' process. However, the study observed that land registration certificates have been difficult for the farmers because of the farmer's tussle between the forest lands and forest rights. Nonetheless, because of the Forest Rights Act 2006, they could get registered documents for coffee land and aspire to become organic farmer identity. The role of land rights and coffee farmers' current situation is discussed in the following section.

3.5.1. Registered Land and Documents for Coffee Land

In the process of becoming an organic farmer, the land rights of the Araku Valley farmers from the past to the present need to be considered an essential aspect of documentation. The present study identified that the history of land and forest rights dates back to colonial rule; the tribal were prohibited from forest access for cultivation and livelihoods (Bandi, 2013). They were used as laborer in forest work and activities. It continued even after the colonials left India. After the independence of India, the forest lands went into the hands of the state forest department, and they continued the colonial legacy of forest administration. The takeover of land into the forest department led to land deprivation and livelihood problems for the forest inhabitants, i.e. Araku Valley tribals (Bandi, 2014). However, the constant fight for land rights, cultivation, and forest produce collection are undone until the Forest Rights Act of 2006. Afterwards, in FRA 2006, the access and registered land documents for the forest land were gained. The coffee producers in Araku coffee plantations from 1960-2006 remained as beneficiaries of the coffee plantation. They were allowed to work, access, and expand the coffee plantation and allowed to sell the coffee for their livelihood. However, they were not given the right to ownership of coffee farms until the forest rights act was implemented in the Araku Valley. Consequently, they started applying for ownership of the coffee lands.

However, with the slow implementation of the FRA Act 2006, forest land rights have been the most delaying matter of the subject from the government side. Because of this delay, there were rising uncertainties over the issues of the Forest Rights Act of 2006. These uncertainties in Araku Valley often led to protests. In 2018, there were many protests, gatherings, meetings and rallies to demonstrate their problems regarding their forest land rights. Usually, these protests and meetings occur at the Araku Valley Forest Department and Revenue offices. In these protests, people held placards and banners written slogans like "*ma bhoomi ma hakkulu*", which translates to ‘our land and our rights’.

Nonetheless, this act has benefitted some of the coffee farmers who have been in coffee plantations as a beneficiary. Because of the FRA Act of 2006, they eventually owned coffee lands. The ownership of forest land has made a significant change in the discourse of the coffee plantation by resulting in the registered land document for coffee lands. With registered land documents, they have started the initiatives like forming the Farmers Producers Organization (a cooperative) to conduct a better way of coffee production, organized collection and systemic induce of coffee quality techniques through farmer training workshops in collaboration with non-governmental organizations and the coffee board of India. Through the Farmer Producer Organisation, they aspire to become organic farmers through the group organic certification process.

Table 3.3: Registered Land Documents Granted to the Coffee Farmers, Under FRA, 2006

Name of the Mandal	ROFRA Pattas Issued (Under the Recognition of Forest Rights Act, 2006)							
	2009-2013		2013-15		2016-19		Total	
	Number of farmers	The extent of land issued (in acres)	Number of farmers	The extent of land issued (in acres)	Number of farmers	The extent of land issued (in acres)	Farmers	Land (in acres)
Araku Valley	1061	1413.19	78	176.60	799	1422.53	1938	3012.32
Paderu	3238	5776.11	213	59.30	476	1290.21	3927	71256.62

Source: Fieldwork 2020-2022, records collected and compiled from the office of ITDA.

Note: The above table shows the number of coffee farmers who benefitted from FRA 2006. The data table includes the two studied villages.

The above table shows the registered land documents issued to the respective mandals of studied organic coffee villages. Among these mandals, Paderu represents the new organic farmers (transformative/ K.Puttu village), having more issued land pattas with 3297 members covering the land extent of 71256.62 acres. In contrast, the Araku valley has 1938 farmers and 3012.32 acres of land coverage. It also shows that Paderu has more registered land documents than the Araku Valley because Paderu farmers are adjacent to the district headquarters and have easy access to the administrative official works. In contrast, the Araku valley is almost 50 km from the district headquarters.

Thus, as Marshall Shalin (1999) emphasis the wholistic and diachronic assessment in understanding the changes and transformations of peasants, this study historical investigation of becoming organic farmers revealed that land rights in the form of Forest Rights Act, 2006 have played a central role. The registered land document for the coffee-grown land aided them in forming Farmer Producer Organization (cooperative society). Through this organization, they aspire for organic certification to become organic. This FPO organisation has been used as a medium of negotiating between government and non-governmental organizations to gather sources like financial help for certification and monitoring the certification process for becoming an organic farmer.

Thottathil (2014), Panneerselvam et al. (2012), and Palackal (2019) noted that among Indian farmers of different regions had registered land documents when they aspired for organic certification. Whereas, Sara Lyon (2010) observed among the coffee producers of Guatemala that organic identity has created land rights for the farmers of Guatemala. In contrast to these two scenarios, the Araku Valley farmers did not have registered land documents, but land reforms and FRA 2006 have helped them to get registered land documents, and these registered land documents have again helped them to aspire for organic recognition through certification for land. After the registration document for the coffee land, the critical element in the process of ‘organic by design’ are the developmental activities and programs of state government and non-governmental organizations, which have helped these farmers in becoming organic.

3.5.2. The State Government, Developmental Activities and Programs

Being an organic farmer by design includes the registration document for land as a significant component by providing ownership to the coffee land, as was noted in the preceding section. Their ability to acquire coffee land has encouraged them to pursue organic certification so they can be known as organic producers. However, it must be mentioned here that there are other elements in the organic by-design process. They are the emphasis of the state government, non-governmental organizations and Coffee Board of India on chemical-free coffee, use of organic manure, compost pit unit establishment and biofertilizers. The emphasis and influence of these agencies have helped the farmers continue their organic practices like cow dung and other organic manures in their crop productions, like paddy, millet and coffee. The following sections will explain further.

3.5.2.1. Government Activities

In the year 2004, the state government of erstwhile Andhra Pradesh launched Community Managed Sustainable Agricultural Program (CMSA) under the Department of Rural Development to promote non-pesticide management in agricultural activities. This program was channelled through Society for Eradication of Rural Poverty, a nonprofit organization (D. N. Reddy, 2022). The Community Managed Sustainable Agriculture aim was to reduce poverty and increase the livelihoods of rural farmers through the reduction of expenditure on chemical fertilizers and agricultural inputs. This program has played a vital role in spreading organic practices against chemical usage in the study area. Their main focus was to promote sustainable agricultural practices. In the studied villages, farmers were supplied with plastic drums to prepare the non-chemical fertilizers and store them for agricultural inputs (see Plate 3.1). However, this programme was mainly engaged in the paddy crop. It did not focus on horticultural crops like coffee. Here it is important to note that though its aim was restricted to a non-chemical usages program, it has indirectly helped to conserve and reinstate rural agricultural uses of non-chemical fertilizers in agriculture.

Further, it was also noted that the CMSA program had extended its activities to soil health and water conservation programs. Its extension of the developmental program on soil health was to enrich soil fertility through the supply of organic fertilizers. They distributed the jaggery and *chanaga pindi*- gram flour to mix with cow dung and so as

to prepare the organic fertilizers by the farmers. However, this programme was more focused on developing and increasing livelihoods through cost-cutting on agricultural fertilizers expenses. Thus, this program indirectly contributed to land soil fertility enrichment.

Similarly, another program, Andhra Pradesh Community Managed Natural Farming Program (APCNF), was launched in 2014. This APCNF program is a reframed version of the CMSA as mentioned earlier. It promotes natural farming practices with zero cost on input material for agricultural use. Under this program they have constructed compost units. The farmers were encouraged to use these compost units and manures on agricultural lands. In addition, they had been supplying the ingredients to prepare the *Jeevamrutham* and *Ganajeevamrutham*⁵⁰ biofertilizers to the farmers. This application of compost manures and biofertilizers was encouraged in the paddy, millet, and coffee plantations in the Araku Valley. It was also observed that the program had emphasized the aspects of soil health through organic bio-fertilizers like *Jeevamrutham* and *Ganajeevamrutham* and compost units. Thus, it is clear that a deliberate action on land quality improvement has been emphasized in this program, and organized organic manure preparation through compost units was encouraged.

Raja Lingam is an employee of the above mentioned APNCF program. He teaches organic biofertilizer techniques to the farmers. He motivates farmers to use the compost units and mobilizes them for systematic cow dung collection than the earlier practice of open heap cow dung collection. He said they give the training under this program by conducting organic fertilizers workshops and farmer's schools. When asked why he is working in this program, he replied that this is an effortless job for him and that he does not have to work hard to learn these techniques of organic manure preparation. Biofertilizer preparations are very close to their organic cow dung preparation techniques and he adds that they encourage farmers to use biofertilizers prepared by using cow dung, cow urine and other inputs supplied by the program. They believe that using this cow dung manures and biofertilizers is good for soil fertility. From his opinion, it is evident that active impart of organic input practices were highly placed in

⁵⁰ *Jeevamrutham* and *Ganajeevamrutham* are the biofertilizers prepared with mixture of cow dung, cow urine, gram flour and jaggery. *Jeevamrutham* is a liquid form of biofertilizer, whereas *Ganajeevamrutham* is a semi-moist biofertilizer. These both are applied to the agricultural lands to increase the soil fertility.

the study villages, and there is a conscious effort from the state govt to promote the use of cow dung manures, bio-fertilizers and the making of compost units.

Therefore, the promotion of non-chemical fertilizers, compost unit establishments and supply of ingredients like *Chanaga Pindi* (gram flour) and Jaggery for biofertilizers preparation had implicitly become part of organic design. The design favoured the regular practice of organic materials in farmers' agricultural activities. So, it can be inferred that these developmental programs have been a significant role in conserving and promoting the local practices of these farmers. These organic practices have played an active role in becoming an organic farmer in the Araku Valley. Because of their contributions to the preservation and promotion of indigenous traditional practices, these farmers have been able to maintain the quality of their land. So, the agentives of farmer organic practices which include biofertilizers and their effects on land fertility have strengthened because of the govt programs. Thus, the role of government development activities can be considered as one of the primary element in the organic process by design.

3.5.2.2 Non-Governmental Programs

Araku Valley region holds several non-governmental organizations, many of them actively engaged in various actions related to health, welfare, agricultural sustainability, education and many more⁵¹. In the studied villages, it was observed that several NGOs are working in the areas of education, maternal mortality, sustainable agriculture and self-help groups. Some of the most prevalently discovered active NGOs during the fieldwork are the WASSAN Foundation, which works on animal husbandry programmes. The NAANDI Foundation focuses on agriculture and education. The KOVEL Foundation promotes sustainable agricultural practices, and the VIKASA Organisation works on non-pesticide programmes. Each one of these groups are frequently engaged with farmers.

Dayal is an agronomy expert and a top management member in one of the above-mentioned organizations. His associated organization works on education and forest green cover improvement activities. He said that his organization had been enthusiastically involved in building the forest green since the year 2004. They have

⁵¹ Online directory from give India website shows that there are 150 NGO's operating in the Araku Valley region.

been supporting the coffee farmers by supplying coffee saplings and shade trees free of cost. They also conduct workshops and programs to impart techniques and skills to increase coffee yield by encouraging the farmers. In the workshops, the farmers were taught about compost manure preparation, organic fertilizers, and managing coffee farms. When asked why his organization prefer to teach and propagate these organic inputs to the farmers, he says that "the land of Araku Valley has been fertile because of their *gatham* cow dung practices. These practices should be protected because they keep the land fertile and it can give high yields to the farmer". Here, it shows that the staff of the NGO values the farmers' efforts and organic farming methods, and they want to support farmers in maintaining organic fertilizer practices. This kind of recognition added to the conservation of organic practices in the Araku Valley.

Yadaiah is a master trainer for non-pesticide management practices and traditional methods of agriculture. He is associated with an organisation that is based in Hyderabad. He said that the Araku Valley farmers still practice traditional methods of cultivation, no machines and less use of synthetic fertilizers in paddy. He also mentioned that his organisation is working to eradicate the synthetic use of fertilizers on paddy crops and replace them with organic manures like cow dung and bio-fertilizers so that farmers depend less on cash. It also protects and sustains the land quality by avoiding the chemicals in the agricultural fields. It can be understood that non-government organizations' activities are attentive to farmers' practices of organic manures, and they are also trying to preserve the organic techniques so that the land quality remains intact. Thus, it can be inferred that these practices have been helping the farmers to continue their organic manure practices in the studied villages.

Venkatesh, a young farmer in the studied village, has one cow and one bullock. He wanted to buy one more bullock to perform ploughing activities but had no money. However, he had recently borrowed 15,000 rupees from his wife's self-help group, which is supported by an NGO operating in the village. With this amount, he bought one bullock and performed his agricultural activities. It is seen that NGOs are financing the improvement of farmers' livestock assets through self-help organizations. The farmer then uses these livestock assets for agricultural operations and also for the making of organic manures. The NGO's role had been essential in regenerating organic input like cow dung and agricultural activities by providing financial help to buy

livestock assets for them. Further, it can also infer that these programs have been helping to improve the land/soil quality and distance the farmer from synthetic fertilizers. However, it was noted that paddy was the main focus of all of these programmes, and coffee crops were not included. In addition, the programme has indirectly aided farmers without livestock in acquiring livestock assets, producing organic inputs, and improving soil fertility. The following table shows some of the NGO's activities in the study villages.

Table 3.4: List of NGO Activities in the Study Villages

S.No	List of activities NGOs in the villages
1	Promoting farmer training schools
2	Campaigns on chemical-free farming
3	Supply of Bio-fertilizer ingredients
4	Establishment of Compost units
5	Marketing the agricultural produce on behalf of farmers.
6	Promoting self-help groups
7	Health awareness programs

Source: Field Survey, 2022.

Thus, NGO activities have been a crucial factor in sustaining traditional agricultural practices like organic manures and land fertility through programs like providing financial aid for livestock assets, conservation of forests and sustainable agricultural practices with no chemical usage. Though their work was primarily on non-coffee activities, they have helped the farmers sustain their agricultural environment, such as the conservation of land quality by promoting non-pesticide manures and increasing the capacity of livestock assets, as mentioned by the informants. In addition, NGOs targeted programs like the distribution of biofertilizers and plant saplings as shade trees for the coffee fields, which strengthened the farmers' capacity of organic assertive nature to claim as organic farmers.

Similarly, studies by Flachs (2017) on organic cotton farmers in Telangana, Panneerselvam et al. (2012) on Tamil Nadu and Madhya Pradesh farmers, and Reddy (2022) on Andhra Pradesh farmers had argued that developmental programmes had

helped the farmers in alternative agricultural practices, particularly by providing the incentives and infrastructural facility.

Therefore, the NGOs' programs and activities can be considered as one of the essential factors in the 'organic process by design'. Moreover, these programs have helped farmers to be more assertive about their organic identity. However, it ought to be noted that participation in the above-mentioned programmes has not resulted in farmers' conscious attempts to become organic farmers. It was achieved only with certification from the accreditation bodies. This process of achieving organic identity through certification is discussed in the following section with much emphasis on the exercise of the agrarian agency.

3.6. Organic Certification: Process of Organic Design and Performance

As discussed in the previous section, the farmers' registered land documents and developmental programs have aided them in getting the organic certification. However, it was observed that achieving an organic identity through certification is not a simple process. They must modify their organic practises to perform and meet certification requirements, such as using plant manures, cow dung inputs, and biofertilizers to improve soil fertility, in order to be recognised as organic farmers. Because, as argued by Richards (1993), Schlippe (1956) Besky (2014), Glenn Davis (2014) and Flachs (2017), agriculture is equated with the performance, where farmer (actor) performs his actions by taking required decisions and adjustments to achieve his goals and motivations. Additionally, since they have to get recognized by the certifying agency, the coffee produced, the inputs used, and their daily responsibility for coffee field activities must be supported by evidence (Galvin, 2018). Thus, a farmer's organic identity through certification necessitates accountability of actions and practices in order to achieve the organic identity.

Furthermore, it was observed that accountability for actions and practices was noted in the farmer's diary. The farmer's diary has been used as a tool to demonstrate the originality of the produce, inputs, soil and land as organic. This farmer's diary contains minutes of the farmer's activities, such as inspection records, crop details, monthly activities, inputs/ingredients for fertilizers purchased, inputs applied to coffee fields, harvesting details and sales and stock records. The certification agencies evaluate these farmers' diaries before issuing the organic certification document. The certification

agencies are the institutionalized bodies that label agricultural products as organically produced by evaluating the physical activities and decisions to continue the organic practices.

Table 3.5: Replica of a Sample Page from A Farmers' Diary Book

Date	Inputs Used (Made on own/ Purchased/ Bio-fertilizers)	Quantity Applied (in kgs)	Applied Crop/ Plot

Source: Fieldwork, 2022.

Note: Farmers' diary books are essential for proving their accountability of organic practices so that they can get the organic certification.

The availability of organic certification agencies in India is limited, and very few bodies are identified. As of January 2023, data from India's apex body for organic certification agencies shows only 35 agencies (APEDA, 2023)⁵². These agencies have the right and authority to declare that any specific product and practices evaluated are as organic. In the present two villages, it has been observed that they have collaborated with two agencies to get organic certification. The new organic farmers, i.e. coffee farmers in transition (K.Puttu village), have collaborated with the TQCert certification Pvt. Ltd agency, while established (G.Guda) organic farmers have collaborated with IMO Control Pvt. Ltd. The transitioning new organic farmers are yet to get their organic certification, and G.Guda village organic farmers have the certification (for more differences see Table 3.8). It is noted that though they have collaborated with two different certification agencies, the procedures of certification agencies are similar. The main intention of transformative (K.Puttu) coffee farmers is to get organic certification. The established (G.Guda) organic coffee farmers are to continue the status of organic certification. The detailed similarities and differences between these two villages have

⁵² [Recognized Organizations \(apeda.gov.in\)](https://apeda.gov.in) APEDA accessed on 02/02/2023.

been presented in Table 3.8. It implies that both villagers aim to achieve the organic farmer identity through soil fertility and practices of organic input used in the coffee land.

3.6.1. Organic Certification for Transitioning Coffee Farmers: K.Puttu Village

The K.Puttu village farmers were identified as the transitioning organic coffee farmers among the two studied villages. In the K.Puttu village, it was observed that organic certification had been the essential document to becoming an organic farmer. However, to get the document, they have formed the Farmer Producer Organization⁵³. But, the certification cost for the individual farmer is higher than group certification, and the certification process is complex and meticulous. So, one needs knowledge of writing and recording the documents. With the help of non-governmental organizations, they have formed the farmers' producer organizations to enable the certification task. According to the National Bank for Agricultural and Rural Development (NABARD), the Farmer Producer Organization (FPO) is a registered body formed by the producers of small, marginal, and medium landholders to promote their products and reap the benefits by marketing the product (NABARD, 2015). The registered members of the organization would be the shareholders and possess all the rights with them to monitor the functioning and management. The main aim of this FPO is primarily related to marketing (it is discussed in detail in the Chapter-4). However, it is observed that the Farmer Producer Organization has been a platform to get the certification. The national accreditation body APEDA⁵⁴ under the NPOP program has the provision to give the certification to the producer's organizations rather than individuals. Furthermore, utilizing this provision, the farmers have applied for the certification in the selected village.

According to APEDA, the organic group certification is issued to producers/farmers who intend to produce organic products utilizing organic inputs according to the standards of the NPOP. Further, it mentions that the group should have the Internal Control System (ICS) for certification eligibility. In the studied village, the organization

⁵³ Farmer Producer Organisation- It is a group consists of primary producers of coffee. The main aim of this group is to organise their individual produce into collective produce, and mediate in the markets to get the reasonable prices to their produce.

⁵⁴ Agricultural Processed Food Export Development Authority of India- APEDA
APEDA is an accreditation apex body for organic certification in India. It regulates and directs certification agencies according to the National Program for Organic Program rules and procedure.

has employed ICS members with the help of promoter organizations. Sometimes, they are referred to as trainers because they deliver organic inputs and knowledge to the farmer. The promoter organization in the transitioning village is a non-governmental organization, the Kovel Foundation. This NGO, with the help of their funding bodies and other developmental organizations, have scrutinized and placed the ICS members in the Farmers Producer organization. The promoter organizations have been intermediates for these Farmer Producers Organizations. In the K.Puttu village, it is observed that ICS members' role as intermediates has been playing an important role in achieving organic certification. Because they are the mediators to teach techniques, communicate instructions and record the activities related to organic practices. The primary role of the ICS members is to continuously monitor, direct and evaluate the organic practices of the coffee farmer according to the NPOP certification agencies.

3.6.1.1 Conversion and Practices

Conversion is the phase in which the coffee farmer has to undergo for three years to get organic certification. The manual of APEDA says that conversion is the first three years in which the practices, soil fertility, inputs used in specific farmland, type of crop management carried, and the quantity of yield expected in the conversion period should be collected⁵⁵. The external certification agencies would analyse the collected documents in the conversion period of all three years. The internal control system member (ICS) will collect information regarding the aspiring organic farmers in the first year of the conversion period. According to the informants of K.Puttu village, the most critical checkpoints that internal control members would check in considering an application are:

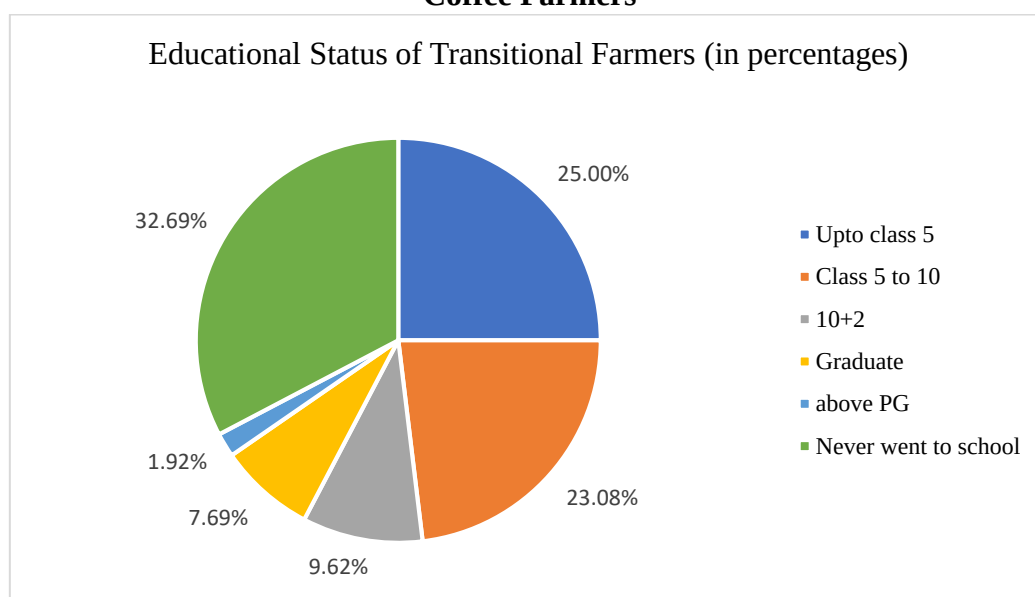
1. Registered land documents for the coffee farm (it can be individual, combined registered documents, or registered land documents under the FRA,2006 act)
2. Crop details of the specific land
3. Count of livestock the specific farmer is holding.
4. Should produce the coffee using naturally available inputs or organic manures only.
5. No use of chemical/ synthetic manures in the coffee field.
6. Clear boundaries should be there around the coffee farm. GPS coordinates of each coffee land would be taken.

⁵⁵ (2018) and [Organic Products \(apeda.gov.in\)](https://www.apeda.gov.in) accessed on 02/02/2023

For those farmers who have fulfilled the conditions mentioned in the above checkpoints, their application would be taken for the first year of the conversion period. In this first phase of the conversion, the role of farmer performance had to be documented and produced in the farmers' diary book for future evaluation by internal and external agencies. Thus, it was observed that the most important activity is the diary of the coffee farmer, which the farmer has to maintain to show his accountability in organic input practices (see Table 3.5). Since most of the farmers are illiterate and do not know how to write the record activity in a book, they only record most of the activities for them. Sometimes, the farmers manage to take the help of other farmers who know how to write the records. From his opinion, it is observed that internal control staff are acting as an intermediate support member for the farmer, helping in recording the activity book of accountability, which is essential for the evaluation at the time of inspection. Thus, it can be inferred that farmers' accountability significantly depends on diary books and record keeping.

Further, the educational background of the farmer has become a barrier to the task of book keeping. This educational barrier also shows the necessity of intermediate members in recording the farmer's diary book. Therefore, the internal control members are an essential part of the process for the farmers to claim their organic identity. The following figure shows the educational status of transitional organic coffee farmers.

Figure 3.1: Pie Chart Showing the Educational Status of Transitional Organic Coffee Farmers



Source: Field Work, 2022

Note: The educational percentages are calculated based on the total number of farmers' educational backgrounds. The total number of transitioning new organic farmers in the village is 52.

Among the transitional farmers in the village, it is observed that most of the farmers cannot write the records. The above figure shows farmer's who have never been to school is 32.69%, educated up to class 5 studied is 25%, farmers studied between 5th to 10th class is 23.08%, those studied up to 10+2 (intermediate) is 9.62%, Graduated farmers is 7.69% and farmers whose educational status is above post graduate farmers is 1.92%. The data infers that most farmers do not know how to write and record their daily accountability book. Only a very few (graduate and post-graduates) farmers were writing their own farmer's diaries. Thus, it can be inferred that on the farmer's behalf, the emphasis of ICS members' task is to record the activities in the diary accordingly as it adds to the process of proving the farmer's accountability for organic practices. Otherwise, the identity approval from the organic certification agency would be at risk. It infers that the farmers and internal control members exhibit social relations. That social relation has been used to prove the farmers' credibility by producing the farmer's diary.

Bonju Bajju is a graduated farmer in the village. He said that he writes his own diary and extends his help to other farmers in the village to complete the process. However, he also mentioned that writing the farmer's diary is a very tough activity because writing

each and every activity as a conscious effort was never a habit for them. He further mentioned that most of the farmers do not know what quantity is used and how much inputs are applied for the coffee plants because they were not habituated to measure the inputs. They just practice them.

From his opinion, it is observed that the pressure of performing as an accountant is evident for them. Their earlier daily agricultural activities were unconscious and were not part of record keeping. Now, they have to record their activities consciously to become an organic farmer. On the other hand, though he mentioned about the disturbance because of record-keeping activity, he still wants to continue the process since recognition as an organic farmer is a significant achievement for him.

Informants explained that the farmer's diary is as equal to organic certification. According to them a poorly maintained book would not be considered for certification. The certification agencies would point out the laps, which would be mounted to the rejection of the application for the certification. The recording of farmers compulsory activities in the farmers diary is considered as the responsibilities of a farmer.

They are:

1. Type of inputs applied for the coffee plants, which includes cow dung, biofertilizers like *Jeevamrutham* and *Ganajeevamrutham* and other fodder materials used in coffee farms.
2. These organic fertilizers and manures should be frequently applied to the particular plot of land.
3. Must use the biofertilizers prescribed by certification agencies such as *Jeevamrutham*⁵⁶ - biofertilizer, and *gatham* the organic manure.

For a coffee farmer, the above-mentioned are very necessary activities. According to the informants, the auditing officers will be strict, and they randomly check the diaries and look for mistakes in the book. Moreover, the external auditing members check the farmer's diary and physically examine the land in the presence of farmers and internal control members, at the time of the inspection. Usually, a handful of soil picked from the middle of the coffee farm, of the randomly selected farmer, will decide the future of achieving the organic certificate for the farmer. This is the soil fertility test that the certification agency conducts for the presence of non-synthetic chemicals and assess

⁵⁶ *Jeevamrutham*- It is a biofertilizer prepared with water, cow urine, cow dung, *putta mannu* ant hole soil, gram flour and jaggery. *Jeevamrutham* is prepared in two types one is of liquid form and solid form. Liquid form *Jeevamrutham* is called as *Dravajeevamrutham* and solid form *jeevamrutham* is called *Ghanajeevamrutham*. *Dravajeevamrutham* is used to spray on top of plants to prevent it from pests.

the land quality, i.e., a soil nutritional status profile. Thus, it can be observed that the accountability of the farmer's practices to become organic is always a test to succeed and achieve. However, farmers never deviate from the instructions and avoid organic practices. Therefore, it can be noted that the farmers share a trustworthy relationship with internal control members through their discipline and responsibilities.

Moreover, apart from the above-mentioned diary book, livestock has been an essential aspect of maintaining primary sources of organic manures for the coffee fields. Thus, it is considered as a crucial role in the process of becoming a certified farmer. The following table is created from the K.Puttu village transitioning organic farmers.

Table 3.6: Showing the Livestock Asset Holding in Transitioning Coffee Farmers Village (K.Puttu Village)

The score of livestock asset	No of the farmers	The sum of livestock assets
0	11 (21)	0 (0)
3	1 (2)	3 (1)
4	7 (13)	28 (9)
5	2 (4)	10 (3)
6	1 (2)	6 (2)
7	1 (2)	7 (2)
8	19 (37)	152 (50)
9	1 (2)	9 (3)
10	7 (13)	70 (23)
11	2 (4)	22 (7)
Grand Total	52 (100)	307 (100)

Source: Field Work, 2022.

The average score of livestock assets in the transitioning village is 5.9

Note: The numbers in brackets indicate percentages. Livestock score is calculated by assigning the scores to different types of livestock. The scores are assigned as Cow-4, Bull-4, Sheep-2, Goat-2, Hen/ Chicken-1. Based on the scores given by the farmer to his livestock asset. The scores of livestock assets are categorized into different types of scores. The sum of livestock assets is the number of farmers multiplied by their scores of livestock assets.

The above table infers that among the transitioning coffee farmers, 80 per cent of the farmers have scored more than one for livestock assets. It indicates that in K.Puttu village, most of the farmers hold livestock assets, and only very few farmers do not

have livestock assets. People who do not have access to livestock sources were observed borrowing manures from their family members.

The average livestock assets is 5.9, which amounts to conclude that the total number of livestock holding among them is 5, which is the strength of livestock availability with one person in the village⁵⁷.

Chiranjeevi is a young farmer in the village. He has one acre of coffee farmland and does not own any livestock. He cultivates the coffee with the use of plant waste manures from the shade trees such as silver oak and mango trees. When asked, he said that even though he has no livestock, he also uses *gatham* cow manure for the coffee plants, which he borrows from his family members or the neighbouring household. In return, he will labour on their farm or participate in agricultural tasks like preparing the fields for paddy during the kharif season or helping with the millets, paddy, and turmeric harvest. It is mandatory to use this cow dung for the coffee fields and to record the number of times they have used these fertilizers. Activity should be entered in the diary book. Otherwise, the internal control member always cross-verify about the inputs, and it is compulsory to get an organic certificate. Here, it is inferred that though they do not have livestock assets, they are taking support from the villagers and family members to arrange manures for the coffee plants to accomplish the essential criteria of organic manure application by adjusting the exchange of labour with manures. Therefore, organic input fertilizers are arranged and entered the same activity in the farmer diary book in order to prove their accountability to becoming certified organic farmers.

Another farmer, Shankar Rao, aspires for organic certification and has 1.5 acres of coffee land. He works in the state government-supported program on natural farming practices. He does not have livestock. Since he does not have livestock, he has borrowed organic fertilizers from the compost unit operated in the village and also from his elder brother. He borrowed these fertilizers only once between 2019 and 2020. Besides borrowing cow dung manure from his elder brother and from the compost unit, and he has collected bio-organic manure managed by the NGO. When asked about the use of manure, he responded that using cow dung manure is beneficial for the quality of the soil and the health of the coffee plant. Additionally, it is crucial to keep a record of the

⁵⁷ The livestock assets are scored into points and averaged, to see the total livestock availability to one person in the village. This average measurement is suitable here because, it was observed that villagers share the organic manures with non-livestock available farmer.

use of organic fertilizers in the farmer's diary, which will be examined by an Internal Control member and certification bodies. For the farmers who do not have the livestock asset source for organic materials, they are dependent upon the family relations and compost units established under the developmental activities. These family relations and developmental programs have been a significant role in continuing the organic inputs for coffee. Moreover, it also infers that maintaining the organic methods of input and capacity of organic manure holding due to this kind of activities has favoured them to meet the organic certification conditions.

Another farmer, Dhanunjaiah, is (50 years old) owns 1.5 acres of coffee field, and has two cows, two bulls and three goats. He is an active farmer in the village. He employed *gatham* organic manures for his coffee plants between 2019 and 2020. Usually, he applies organic manures in the mid of March and April months and keeps a record of the same in the farmer's diary book. In the month of May, when mulching the coffee field, *ganajeevamrutham*, a biofertilizer, was applied to organic manures for the health of the plants. The second time, during October, *dravajeevamrutham* biofertilizers was applied. This biofertilizer is sprayed to get good coffee beans and maintain the coffee plant's moisture. According to Dhanunjaiah: "this *ganajeevamrutham* and *dravajeevamrutham* are not like our long-standing practice of *gatham* cow dung and plant manures, they are prepared according to the standards of certification. The promoter organisation supplied the extra ingredients used in biofertilizers. Additionally, a member of our internal control team informed us that in order to receive organic certification, we must use both biofertilizers. However, since these fertilizer preparations are not complex, they can be prepared from our *gatham* and organic inputs given by our promoter organisation. We need to adjust a little according to standards so that we can get the organic certification".

From Dhanunjaiah's opinion, it is observed that they are inclined to make minor adjustments to the earlier practices so that they can become certified organic farmers. Additionally, it implies that they are prepared to make minor additions to organic inputs and demonstrate their accountability through the use of inputs. This input usage had been modified to reflect their soil fertility and soil worthiness. These attributes of soil worthiness and fertility made them more assertive that they genuinely deserve organic certification. A similar observation has been made by Ivan Kurp in practice theory,

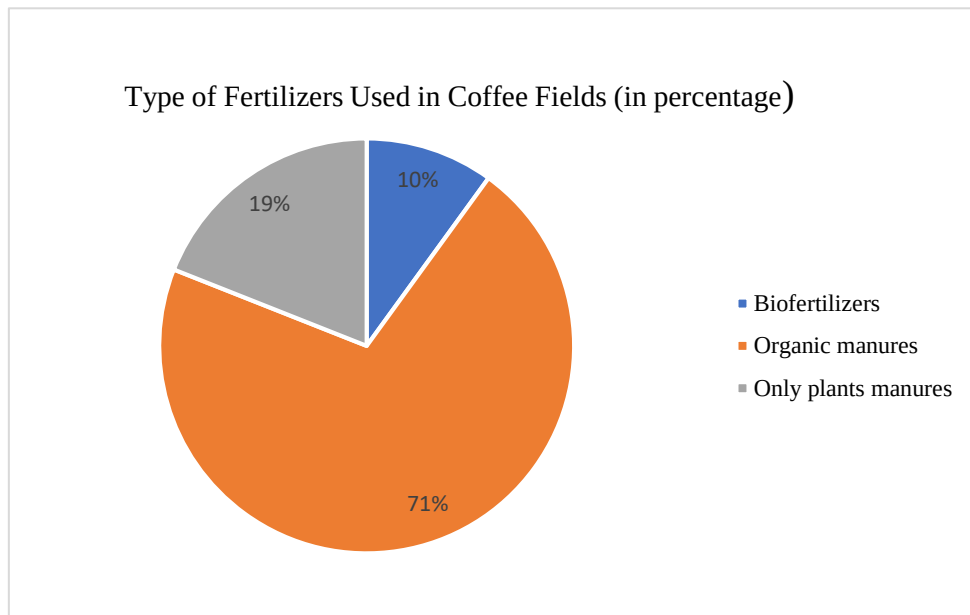
actors make small changes to their pre-existing practices and try to reconstitute their practices to achieve their goals (Ahearn, 2001; Karp, 1986).

Moreover, in addition to minor adjustments to their earlier organic practices, they have also amplified the intensity of using organic and bio-fertilizers in the coffee fields. So, high-frequency use of these fertilizers has resulted in recurrent organic practices and strengthened the land quality. Therefore, the high frequency of organic fertilizers usage has been a convincing strategy for farmers to aim for organic status from certification agencies. The data from the studied villages in the following (Figure 3.2: Type of Fertilizers Used by Transitioning Coffee Farmers) figure provides details.

On the other hand, it was observed that sufficient funds/capital for arranging inputs like *ganageevamrutham* and *dravageevamrutham* is a difficult task for these farmers. They depend upon helping bodies like NGOs for capital and support to organize fertilizers. In this studied village, it was observed that farmers arranged fertilizers with the help of NGO activities. It means that the capital strength of intermediary agencies is essential to continue the biofertilizers practices. Their capital strength has a vital role in gaining organic identity to the farmers. Therefore, the transformation from conventional coffee farmers to organic farmers has been made possible by developmental programmes like APCNF, which indirectly helped them with the distribution of organic inputs.

Moreover, though the NGOs or intermediate bodies have a capital crisis, they continue to use organic and biofertilizer inputs in the coffee farms. The following figure shows the type of fertilizers used in coffee farms by the transitioning coffee farmers and also the fertilizers supplied to them by intermediates.

Figure 3.2: Type of Fertilizers Used by Transitioning Coffee Farmers



Source: Field Work, 2022.

Note: The percentages shown in the figure are calculated based on the total number of farmers in the transitioning organic coffee farmers. The total number of farmers is 52.

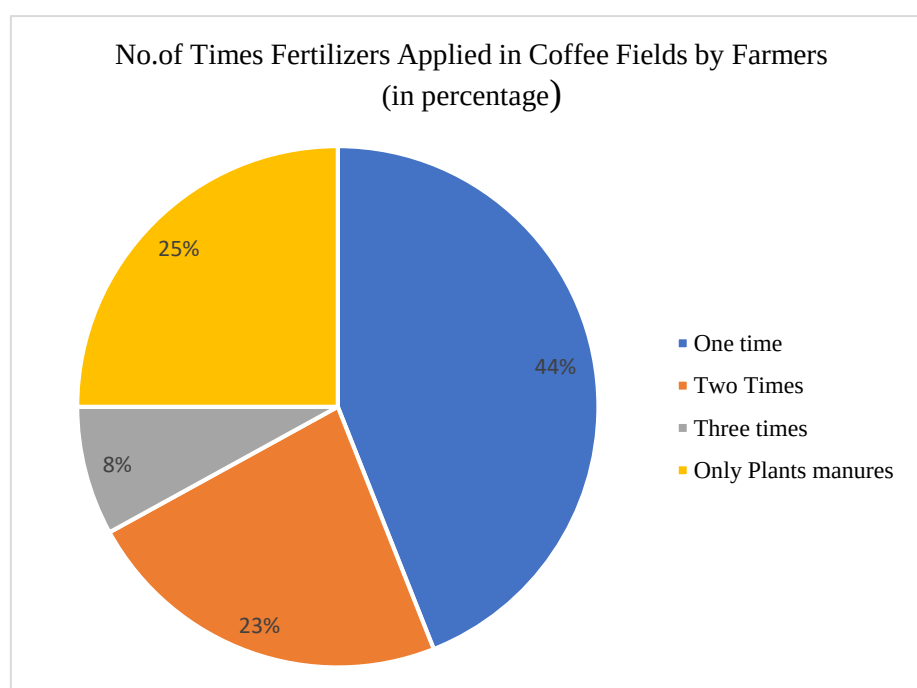
The above figure shows that, to become a certified organic farmer, they have increased the use of organic fertilizers (71%) and biofertilizers (10%) in the coffee fields. Only 19% of the farmers used the plant manures from shade trees. This means that they must comply with certification agencies and prove their worthiness of soil quality and organic practices in the coffee field. They have increased adherence to recognizable organic practices in the village so that they can attain organic certification.

The figure also shows the less availability of biofertilizers in this village. Since their promoting NGO does not have the substantial capital or funding to supply biofertilizers, they must depend on other developmental programs. Only a few farmers were supplied with biofertilizers. However, officials from the non-governmental organization expressed that there is a dearth of financial capital and are looking for funding bodies. Soon they will buy biofertilizer inputs for the farmers once they can manage the funds for the fertilizers. Thus, the promoter organisation's capital is one of the key elements for them to achieve an organic identity.

Moreover, the above figure shows that 80% of coffee farmers were using organic manures and biofertilizers as main inputs in the coffee farm. Their livestock asset had become essential as an agentive role in organic certification. The average livestock availability in the villages is 5.9 for each individual (see Figure 3.2) since most of them

have livestock. Thus, it explicates that the livestock practice is essential to becoming an organic farmer, besides organic manures made from livestock assets. Nevertheless, to become an organic farmer, they incorporated the new biofertilizers into their standard practices involving the utilisation of plant and cow manure. The farmers' agencies have played an essential role in attributing the soil quality of their coffee land, which has become an essential element to recognize them as organic farmers by certification agencies. Moreover, the number of times these practices are used in the coffee fields as a form of fertilizer infers that they are in compliance with the agency's instructions, and practices to reach the organic identity through the certification. The following figure is drawn from the transitioning coffee villagers. It shows the number of times fertilizers are used in the coffee fields by the farmers.

Figure 3.3: Number of Times Transitioning Farmers Used Fertilizers in the Coffee Fields



Source: Fieldwork, 2022.

Note: The percentages calculated in the above figure are based on the total number of coffee farmers in the transitioning village. The total number of farmers in the village is 52. Fertilizers denoted as one time, two times, and three times includes cow dung manures and biofertilizers. They are clubbed into one category because the farmers use them as combined input manures. Plant manures include shade trees and leaf litter available in coffee fields.

From the above table, it can be interpreted that the farmers are using organic materials and practices to prove their land quality and coffee. It also gives that they have to record

their activities in the farmer's dairy, and it is essential to note the number of times the fertilizers are used. This activity has been used to justify the accountability of their practice and documentation for approval by the external body so as to attain the organic identity/certification. The figure shows that they are not only practising these organic fertilizers to keep the record and comply according to the rules and regulations of the certification body. Nevertheless, they are exercising their human agency's fluid nature of adjustability to accommodate the new inputs like bio-fertilizers and compost manures in the coffee lands (agrarian agency). Therefore, the number of times and type of inputs used in the coffee fields indicated an increase in the soil fertility. This practice of using repeated fertilizers has been a recognisable organic practice by certification agencies, which helps them to become an organic farmer.

Moreover, it was identified that becoming an organic coffee farmer is not a one-time goal or destination. It is a process of regular actions and practices. According to the national apex body APEDA, the certification validity is only for a period of three years, under the condition that they have to be under the purview of regular audition by the certification agencies⁵⁸. Thus, it can imply that achieving and maintaining the status of an organic coffee farmer's identity is a continuous effort. It suggests that the practices of organic manure, methods, and inputs employed by the coffee farmer are constantly being assessed. The agency, i.e., land fertility and his agentives livestock, and methods of practices, should be performed under the structure of the certification body's rules and regulations to become an organic coffee farmer. This needs a constant supply of financial and social capital for them in the form of biofertilizers and funding to afford the audits. Being an organic farmer is a continuous effort, and this is true for both the certified organic farmer's village (G.Guda) and this transitional community (K.Puttu) have both been observed with this process. The following section explains this process of acquiring an organic identity which is a continual process rather than a single-time fixed identity.

3.6.2. Becoming Organic: A Continuous Process

As explained in the previous section, becoming an organic coffee farmer means performing recognisable organic input practices according to certification agencies. Moreover, it is a constant, conscious effort by the coffee farmer through his organic

⁵⁸ National Programme for Organic Production handbook shows that the organic practitioner's have to undergo regular audits and visits by the certification agencies, in order to continue their organic status.

inputs, fertilizers, performance, and practices and abiding by the framework or structure of rules and regulations of the certification bodies. Unlike the transitioning coffee farmers (K.Puttu village), these selected village farmers are certified organic coffee producers. It was observed that they are practising the organic methods under the rules and regulations of the organic certification agency⁵⁹. These village coffee farmers had observed that they were able to continue to claim their organic status through continuous, extensive organic regular practices, like the application of cow dung, biofertilizers and plant manures for the coffee.

The coffee farmer's recognition and reinstating of organic methods for the organic identity have been maintained under the supervision of the Farmer Producers Organization (FPO), similar to transitioning village farmers. Again, this FPO was maintained and supported by the non-governmental organisation (NGO) in the studied village. These NGOs act as intermediates to the FPO by extending technical support in the form of Internal Control Members (ICS) and distribution of biofertilizers and other coffee fruit management biofertilizers to them. Similar to the K.Puttu new organic coffee farmer's village. It has been observed that these certified organic farmers (G.Guda) were also strongly reconstituting their use of organic inputs like cow dung, plant litter and biofertilizers. Both villages had compost units built under developmental programs. However, a significant difference is observed between these new organic and certified organic farmers. The certified farmer's village had constructed a specific bio-compost unit (see Plate 3.2) to control soil fertility and land quality for coffee fields. In contrast, the transitioning village did not have specific biofertilizer units for coffee plantations. They are heavily designed and systematically managed to become an organic coffee farmer than transitioning to new organic coffee farmers. Among the certified organic farmers, the status of organic by design is evidently observed when the bio-compost fertilizers are distributed among the coffee farmers of the village. The strict discipline in recording the farmer's diary and obeying the responsibility of organic activities also signifies the continues efforts to maintain the organic identity.

It is a regular practice to apply fertilizers to the coffee plants during the month of May. The application of fertilizers to the coffee plants is absolutely necessary for them. Because they must show the excellent soil quality of their land and follow all rules and

⁵⁹ See the Plate 4.8

regulations set forth by the auditing agency. They must also show their accountability by maintaining the same activities in the farmers' dairy book. Seetharam is an Internal Control Member (ICS) to conduct the organic practice programs, and he delivers the supplies that the promoter organization gives to the certified organic farmers. He distributes the bio-fertilizers at the compost unit located at the village premises. While distributing the bio-fertilizer, he noted each farmer's name that he had given.

Bheemanna is a certified organic farmer, and he has two cows, two bulls and three goats. However, he gets the required quantity of bio-fertilizers from the officials. Bheemanna said that "*gatham* is very important for coffee plants. If we apply it to the coffee plants, yielding will be good, and the fruits will be of red quality. We have to apply this fertilizer while mulching. Otherwise, the soil quality will not be good. If the soil quality is not good, the auditor will get to know, and it won't be easy challenging to get the organic status, and the FPO will not take our coffee for marketing". Thus, though they have livestock availability, cow dung and organic inputs on their own, collecting bio-fertilizers distributed by promoter organizations is essential to comply with organic practices. These processes are recognised by certification organizations as organic practices, enabling them to keep their organic identity. Thus, a conscious and purposive use of fertilizers in coffee fields is essential to continue their certified organic status.

Furthermore, the bio-compost unit has been added to their open heap organic manures stock practices. For farmers, this bio-composting unit has now symbolised the use of organic farming practices. Thus, they have adjusted and accommodated the new symbol, i.e., bio-compost unit, to their earlier practices of organic inputs of cow dung and other fodder usages. According to Sherry Ortner, the human agency of conscious intentionality is within the scope of his choices and resources available to him in the practices of organic fertilizers. He may attain organic identity from the certification agency by consciously adjusting the new biofertilizers with their earlier practices (Ortner, 2006 b).

Another farmer, Subba Rao (50-year-old) and a certified organic farmer in the village has no livestock assets. He used to practice plant manures for the coffee fields. He mentioned that he has to collect biofertilizers and compost manures to use in the coffee fields because he does not have livestock or other sources for organic manures. He has taken biofertilizers from the village biofertilizer unit to boost the soil and improve

the quality of the coffee. He mentioned that application of bio-fertilizers is a must, and the ICS will question the farmers if they failed to apply the bio-fertilizer. The ICS always reminds the farmers to collect organic fertilizers so that people will recognize their coffee as genuine organic.

Thus, the internal control member always tries to guide and instruct organic practices. Farmers and ICS members are collectively trying to continue certified organic status by proving organic practices and coffee quality. Additionally, it is also shown that the new bio-compost unit has become an opportunity as an additional organic fertilizer, along with earlier plant and cow dung input manures. This new adjustment of compost units and biofertilizer units acted as a symbol to reconstitute their organic practices so that they could become an organic farmer. Ivan Karp (1986) mentioned that in practice theories, the actors, i.e., farmers here, always try to reconstitute their agency, i.e., soil fertility and land quality, through organic input fertilizers practices like cow dung, biofertilizers and compost manures to achieve the organic identity⁶⁰.

Since the availability of livestock is the fundamental prerequisite for manure preparation, it plays a vital role in the growth of farmer agrarian agencies, namely soil fertility, the agentive of which is cow dung manure. Thus, it is essential to understand the livestock availability of these certified organic coffee farmers. The following table is presented from the certified organic farmer's village to understand the livestock availability of the farmers.

**Table 3.7: Livestock Assets Holding Among the Certified Organic Farmers
(G.Guda Village)**

Scores of Livestock Assets	No. of Farmers	Sum of Scores
0	12 (23)	0 (0)
1	2 (4)	2 (1)
4	17 (33)	68 (30)
5	1 (2)	5 (2)
6	3 (6)	18 (8)
7	3 (6)	21 (9)

⁶⁰ (Karp, 1986)

8	12 (23)	96 (42)
9	1 (2)	9 (4)
10	1 (2)	10 (4)
Grand Total	52(100)	229(100)

Source: Fieldwork, 2019.

The average score of livestock assets of the villagers is 4.40

Note: The numbers in brackets indicate percentages. Livestock score is calculated by assigning the scores to different types of livestock. The scores are assigned as Cow-4, Bull-4, Sheep-2, Goat-2, Hen/ Chicken-1. Based on the scores the farmer gives to his livestock asset, the scores of livestock assets are categorized into different scores. The sum of livestock assets is the number of farmers multiplied by their scores of livestock assets.

From the above table, it can be inferred that among the certified organic farmers, the average livestock holding is 4.40, which means that the availability of livestock for one person in the village is 4 for the certified coffee farmer⁶¹. However, some farmers do not have livestock, but they relied on bio-fertilizers and compost manures to continue their organic practices and organic identity. Where the new compost units act as new symbols to attain the organic claim. These kind of practices and symbols clearly matches with Pierre Bourdieu's argument that symbols creates meanings (Bourdieu, 1977, p. 78). In the village, more than 77 per cent of farmers have livestock assets and scored more than one livestock per person. Many of them have cows and bulls as the major livestock asset, and cows and bulls are significant sources for organic manure preparation (see Table 3.7)

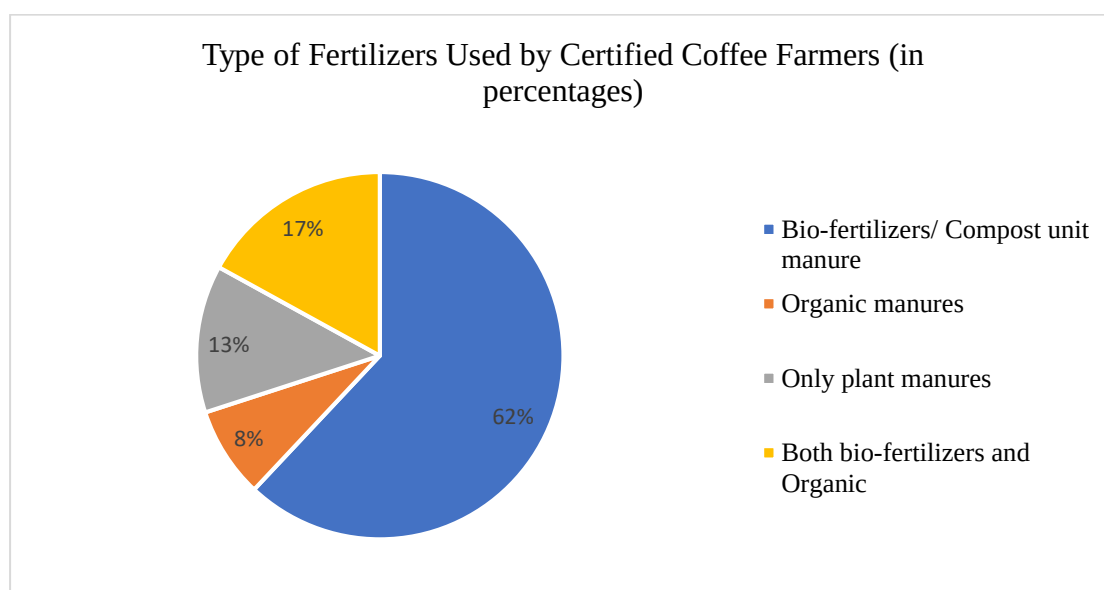
Therefore, it can be concluded that farmers rely on livestock to use organic fertilizers as inputs in their coffee crops. Because of using organic fertilizers, coffee fields are highly fertile. To achieve the organic identity, the land fertility has been enriched with biofertilizers such as *ganajeevamrutham* and *dravajeevamrutham*, along with the pre-existing cow dung and plant manures. These additional biofertilizers into agrarian agencies were observed for the following reasons: they want to impress the auditing agencies with their organic practices and to show that they are following the rules and regulations of certification agencies. Further, they are equipping the land quality to

⁶¹ The livestock assets are scored into points and averaged, to see the total livestock availability to one person in the village. This average measurement is suitable because it was observed that villagers share the organic manures with non-livestock available farmer and they have community collectiveness sensibility.

assert as organic practitioners so as to continue their organic status. Therefore, livestock could be considered a significant factor in enhancing land quality, and it has been an essential agentive to his agrarian agency.

Further inquiry into the type of fertilizers and frequency of the fertilizers applied to the coffee fields has provided additional insights regarding the adaptation of fertilizers to aspire for organic status. The type of fertilizer used, such as cow dung, plant manure, biofertilizers such as *ganajeevamrutam* and *dravajeevamrutam*, had shown the farmer's choices to continue the organic status. These fertilizers have been central to organic fertilizers practices. Accordingly, the input materials depends upon farmers' choices and decisions regarding the use of organic fertilizers. Therefore, using different fertilizers would also adduce their intentions in choosing their fertilizers. The following data was generated using the certified coffee farmer's choice of various fertilizers used in coffee fields.

Figure 3.4: Type of Fertilizers Used by the Certified Organic Farmers



Source: Fieldwork, 2019.

Note: The percentages shown in the figure are calculated based on the total number of certified organic coffee farmers. The total number of farmers is 52. The type of fertilizer labels indicates manure.

From the figure, it can be interpreted that 62% of certified organic farmer's choice of fertilizers was biofertilizers, 17% of the farmers used both organic manures and bio-fertilizers, 13% of them used only plant manures from the shade trees and 8% of farmers used only organic manures like cow dung and other fodder manures. It implies that they have a practice of mixed use of fertilizers. They had intentionally increased the use of

biofertilizers in order to show the richness of the land fertility and achieve organic certification.

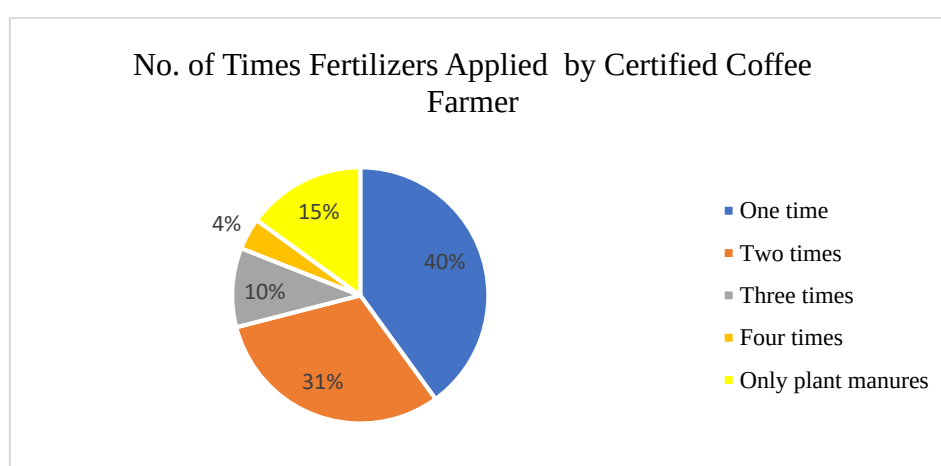
The figure also shows that most farmers use biofertilizers as the primary choice of manure in the coffee fields, and they are conveniently choosing bio-fertilizers to generate their land soil fertility. So that land can be negotiated as a medium to recognize their land as organic fertilizers practised and approval of identity from the certification agency. Irrespective of the type of livestock asset and availability of livestock assets, by using these biofertilizers, they could manage to get the organic identity from the certification agency. Further, the systematic application of bio-fertilisers as directed by the ICS members has a more prominent role than earlier irregular usage of fertilisers. Bio-fertilizers and manures from compost units occupy the more prominent part in the process of continuing the status of organic identity for them, as compared to other organic manures, such as cow dung and plant manures (shade trees litter). The farmer's choices of fertilizers were navigated towards the bio-fertilizers and compost inputs along with their earlier organic and plant manures in the coffee field. This mechanism indicated that their decision and execution of different choices of fertilizers are within the farmer's environment of farming practices. These synthesized processes of clubbing biofertilizers and compost units into their earlier cow dung and plant manure inputs have helped them to continue the organic practices. This helps them to be recognised as an organic coffee farmer. Accordingly, their ability to choose what fertilizers to use in the coffee fields has become a human agency component. Ahearn (2001) has also argued that when the organic practices, when analyzed as agentives of the agency, there would be multiple capacities of actors, i.e., human's different choices in a single practice. A similar observation has been made by Galvin in her work on Himalayan basmati farmers (Galvin, 2021, p. 66). For the purpose of obtaining the organic identity, the basmati farmers made a choice to use compost manures in addition to cow dung manures.

The data also shows that the purposive actions of the farmer are evident from the type of fertilizers used by them. It means that the tutored use of inputs, according to the rules and regulations of certification agencies, has become a constituent of a farmer's capacity to perform organic practices. According to Foucault, such decisions and acts of the farmer within the boundaries of the certifying agencies' controlled actions and use of inputs in the coffee area can be referred to as disciplinarity (Foucault, 1975). In

his disciplinary perspective, they are trained and directed by the internal control members to use biofertilizers and organic manures in the coffee fields. They generate a social identity as organic farmers by undergoing organic fertiliser practices. This mediation of instructions and training as a form of disciplinarity was observed when they used high-frequent fertilizers in the coffee fields similar to what is observed with transitioning new organic farmers in the previous section. Whereas, certified organic farmers have a high use of bio-fertilizers and organic manures in order to continue organic status. Because of strict display of instructions and controlled practices by the certification agency.

In addition, a comparison has been made between transitioning (K.Puttu) and certified organic (G.Guda) coffee farmers focusing on aspects other than physical documentation, that is the farmers' diary as an element of accountability to the certification agency. The oral inspections of certification agencies with farmers and internal control members' interviews have been important factors in continuing the organic status. Their social interaction and moral performance in the form of interviews between the certification body and farmers have been vital to continue their organic status. The following figure has been drawn to understand their purposive actions among certified organic farmers of the village.

Figure 3.5: Number of Times Fertilizers Applied in the Coffee Farm by Certified Coffee Farmers



Source: Fieldwork, 2019.

Note: The percentages calculated in the above figure are based on the total number of coffee farmers in the certified organic coffee village. The total number of farmers in the village is 52. Fertilizers denoted as one time, two times, and three times includes cow dung manures and biofertilizers. They are clubbed

into one category because the farmers use them as combined input manures. Plant manures include shade trees and litter available in coffee fields.

From the above Figure, it can be inferred that certified organic farmers purposively increased the use of fertilizers in the coffee fields. It means that their conscious use of organic and bio-fertilizers has increased to show their accountability and to mark their identity as organic farmers. However, this frequency of fertilizers usage in new organic farmers is less (see Figure .3) when compared to certified coffee farmers. It also indicates that the monitoring staff members frequently direct and give consistent instructions to the certified farmers about the usage of inputs in the coffee farms. They also have a high frequency in the practice of fertilizers in the coffee fields. Thus, organic identity needs more effort and input than initial recognition as an organic farmer. They have to keep using these biofertilizers and inputs to get organic identity constantly.

It also deciphers that the disciplined behavior of farmers is high in certified organic farmers. The frequency of the use of organic fertilizers is more than 50%. Many of the farmers used fertilizers two times on their coffee fields. This repeated use of fertilizers leads us to conclude that the frequency of fertilizers used in coffee fields is crucial for maintaining and gaining organic identity by uplifting the quality of the land. Simbadri is a certified organic farmer. He shared a similar opinion saying that they have to use these fertilizers more often so that the soil quality is improved and maintained. Their internal control member tells us when to use and how many times we should apply it. He further mentioned that the officials concerned with certification enquires farmers orally at the coffee fields about the material been used, and the number of times used. If not thus, they may think their coffee is not organic. Thus, the frequency of fertilizers used in the coffee is essential to show that it has been a compulsory deed to recognize it as an organic method, and that they are following the rules and regulations properly and finally to show their commitment towards practices.

Apart from the farmer's performance and use of organic fertilizers, there is interaction between internal control committee members (ICS) and certifying bodies. Throughout this interaction, the certifying organizations also sought oral opinions on actions and information related to organic training practices. In this interaction, ICS members' performance was also inquired, such as training skills, communication, an account of farmer diaries and their commitment to deliver values of organic production to the farmers. Nevertheless, the verification of these qualities is not specified in the rules and

regulations of the organic certification procedures⁶². The off-record examination of the ICS member's performance through oral interaction also has been a significant factor in the accountability of organic practices while validating the farmer's organic identity.

Seetharam is an internal control member and trainer whose job is to disburse the organic fertilizers and skills to the farmers. He said that at the time of inspection by the organic certification body, the certification officers interview him to know his abilities and dedication to the implementation of the organic methods they are instructed to implement in the coffee field. He said they inquired him about the activities, such as training workshops he had conducted and the information communicated to the farmers. They also enquired about any observations on disturbances in organic fertilizer practices and application, and his overall opinion on farmers' commitment to organic practices. Therefore, in addition to ICS's primary task of keeping the farmer's diary (see Table 3.5), the social interaction between the internal control members and farmers has been crucial in establishing organic practices' trust and accountability. Therefore, these interactions can be considered essential for the organic identity by the certification agencies.

Thus, the successful delivery of instructions is held at the capacity of the internal control members and their interaction with farmers. The regular social interaction between the internal control members and farmers has played as social capital to farmers. This social capital has contributed to the continuity of the organic identity status. A similar observation was made by Flachs (2017) in organic cotton farmers of Telangana. His study says that for Telangana's cotton farmers, the ICS members' performance was a necessary social capital to continue in the organic cotton practices (Flachs, 2017, 2021).

⁶² The national apex body for organic certification, APEDA, on its website, specifies that there is no specific rule or procedure to check the performance and abilities of ICS staff in order to issue the organic certification. However, the certification agencies are organising the oral interaction. These interactions are used to validate the farmer's organic practices. Therefore, the ICS staff's performance has also significantly contributed to the farmer's organic identity.

Table 3.8: Similarities and Differences Between Certified Organic and Transitioning Organic Farmer

Variables			Organic Certified Village (G.Guda)	Transitioning Village (K.Puttu)	Remarks
Fertilizers	*G.Guda	*K.Puttu			
Biofertilizers	62	10	High	Low	- Both the farmers of the villages use fertilizers to become organic farmers. - Both have adopted compost and biofertilizers to achieve organic identity. However, certified farmers show a high percentage of biofertilizer adoption to continue the organic identity. - It shows that both of the villagers have organised the practice of fertilizers than earlier unorganised use of only plant manures. - Both villagers have been reconstituting their organic fertilizers practice to achieve organic identity. - The difference between types of fertilizers shows that they have to consciously increase the use of biofertilizers in addition to cow/plant manures. - The organised use of fertilizers in the coffee lands was exhibited in both villages to strengthen their agency, i.e., land fertility. - The organic by-default opinion about their practices is present in two village farmers. However, the prominent observations of this point can be observed in transitioning farmers of K.Puttu. K.Puttu farmer's high dependence on plant and cow dung manure substantiate observation.
Animal manures	8	71	Low	High	
Plant manures	13	19	Low	High	
Both (biofertilizers & animal manures)	17	00	High	Abscent	
Total percentage of farmers.	100	100			
Compost Units			Yes	Yes	In both villages, compost units were constructed under NGOs

					and developmental programmes.
Biofertilizer Unit	Yes	No			The promotor organization has constructed this unit in G.Guda village. In contrast, K.Puttu village is yet to construct because they are in starting stage of conversion.
<u>Frequency of Fertilizers Used</u>					
	*G.Guda	*K.Puttu			
One time	40	44	Yes	Yes	1. The frequency of fertilizers usage between the two villages shows that they have to increase the repeated use of fertilizers to increase soil fertility. 2. The G.Guda village farmers have been applying more times than the K.Puttu farmers. It shows that to continue their organic identity, they have repeatedly used fertilizers. 3. Earlier, they never applied manures to coffee. They were just dependent on plant manure. However, to get an organic identity, now, they have increased the use of fertilizers in coffee lands. 4. The frequency of fertilizers used in the coffee lands indicates that their aspirations to become an organic farmer are high. With high frequency, they want to recognise their input practices in coffee land.
Two times	31	23	Yes	Yes	
Three times	10	8	Yes	Yes	
Four times	4	0	Yes	No	
Plant manure only	15	25	Less	High	
Total Percentage of Farmers	100*	100*			
FPO/ Cooperative Society	Yes	Yes			1. Both village farmers have formed Cooperative societies to get an organic identity.

<u>Promoter Organisation</u>			
ICS Members	Yes	Yes	- Both villages were supported by NGOs, and they are acting as promoter organizations to them. - With the help of promoter organizations, they were being monitored, instructed, and systematically continued the organic practices. - For both villagers, the promoter organizations are different. The G.Guda village supporter has seen more financial stability than K.Putta promoters. Therefore, the organic infrastructures and inputs are varied based on capital stability.
Fertilizers Supply	Yes	Yes	
Workshops/Training	Yes	Yes	
Financial/ Capital stability	Strong	Weak	
Organic Certification	Yes	In conversion	Both of the villagers were supported by promoter organizations to get an organic certificate for them.
<u>Accountability and Trust</u>			
Farmer diaries	Yes	Yes	- The farmers’ practices of organic were confirmed with farmer diaries. Farmers have used this document to prove their genuineness. - Apart from the farmers’ diaries, physical land verification about the organic practices was also performed to track the organic accountability, land fertility and non-use of non-organic fertilizers.
Physical and Coffee land visits by Certification agencies	Yes	Yes	
<u>Social Accountability and Trust</u>			
Farmer- Certification Agencies Interactions	High and regular	High	- Apart from the farmers’ diary, the social interactions in the form of interviews make an important factor of consideration for the farmers to prove their commitment to organic practices and knowledge. - In addition to farmer-certification agencies’ oral
Farmer – Internal Control Members’ Interactions	Very Frequent	Frequent	

ICS- Certification Agencies Interactions.	Frequent	Frequent	interaction, it was noted that ICS-Certification agencies' oral interactions were considered to confirm the organic practices' accountability. 3. In both villages, farmers expressed that farmer- ICS regular interaction made them continue the organic practices according to the rules and regulations of certification agencies. Thus, this interaction can be observed as social capital for them. 4. Among both certified and transitioning farmers, it was noted that though certified farmers had achieved organic identity. They were seen with high and frequent regular social interaction to continue their organic identity through certification.

Source: Fieldwork, 2020.

Note: (*) the numerical figures of this column represent percentage values.

Conclusion: Becoming an organic farmer for the farmers of Araku Valley is a continuous process. The farmers's involvement with the tea plantations works and coffee plantations from the colonial and post-colonial periods have created different identities for them. The first exposure to tea plantations of Assam by migrant labour under colonial rule created 'exploited migrant labour.' The local timber, indigo and coffee plantation under colonial and post-independence has resulted in a 'daily wage' worker identity. The specialised development programme on extensive coffee plantation expansion by the government has created a 'beneficiaries' identity for them. In all these phases, the identity has resulted from passive participant experience and the nature of work in the plantations.

However, the ownership of coffee lands through the registered land document under the FRA 2006 has created a personalised and subjective experience for them. The ownership of coffee land has created a kind of actual ownership over coffee plantations; this has enabled them to denote themselves as coffee farmers. Due to this ownership, active participation as a cultivator of coffee producers has emerged. Since then, the need for cultivation methods and practices of input fertilizers have been their prime

importance in producing coffee. The historical data on the method of production and input fertilizers practices in Araku Valley has shown that they are natural resources dependent, like plant fodder and cow dung manures. They continued to stick to the same natural input practices in coffee lands even today.

Because of these natural input practices in the coffee lands, they assert that their lands are fertile and organic by default. It indicates that their methods of production have given them a new identity—that of ‘organic coffee farmers’ rather than just coffee farmers. Similarly, the government officials and non-government people who are directly and indirectly engaged with coffee plantations of Araku Valley have expressed similar opinions on the coffee land and method of practice as organic by default. However, they reasoned that because these farmers do not use synthetic or chemical fertilizers to cultivate the coffee, the Araku Valley lands are pure and natural. The land has been the medium of agency to assert Araku Valley farmers as organic by default. In the organic by default assertions, the practices of plant and cow dung manure application to the coffee lands were rooted in their earlier agricultural methods, which were said to be ignorant, innocent, and natural in the opinions of farmers, government officials and non-government people. These opinions, according to Sherry Ortner's concept of "Agency of Intentionality," tell that the practices of natural plant and cow dung fertilizers in coffee lands (agency), which were rooted in their traditional agricultural methods can be seen as unconscious human intentions to keep the land as fertile. Thus, these plant and cow dung practices make them assertive as ‘organic by default’.

However, the organic identity was not recognised because of the organic by default opinions. In order to become organic farmers, their organic practices must be recognised by certification agencies. So, to recognise their practices and land as organic, they had to comply with certification agencies. Therefore, the coffee land and practices of input fertilizers were designed to match the standards and rules of the certification agencies. Since the practices and land had to be designed, the process of becoming an organic farmer can be considered ‘organic by design.’ In the organic-by-design process, they included enriching the quality of coffee lands through organic (plant and cow dung manure) and biofertilizer practices that were recognised as organic by certifying agency.

They had to adjust the new input practices, such as the use of biofertilizers and manures of compost units with earlier input plant and cow dung practices. This adjustment and reconstitution of the organic manure practices to show the coffee land quality as organic can be drawn to the purposive and conscious intentionality of the farmer to become an organic farmer. These human (farmer) choices of purposive actions and conscious intentionality in the form of biofertilizer inputs, along with plant and cow dung fertilizers adjustment, can be seen as "conscious intentionality" within the framework of Sherry Ortner's "Agency of Intentionality" to achieve organic identity (Ahearn, 2001; Karp, 1986; Ortner, 1984, 2006).

Similarly, the above-said adjustability of organic practices according to certification agencies can be argued on similar lines to Michael Foucault's "agency of disciplinarity" (Foucault, 1975). According to him, the power of certification bodies can be seen through the standards and regulations of organic practices to be followed by the farmer. The actor, i.e., farmer, is subject to power through the discipline of organic fertilizer practices under institutionalised certification bodies. Further, from Foucault's perspective, their regenerative practices of organic fertilizers have created an organic identity for them. However, his analysis of focus has a more prominent place for power and minimal scope for individual choices of intentionality in the practices. Therefore, the present study finds the aptness of Sherry Ortner's agency of intentionality. Unlike Foucault (1975), in practice theories, she emphasizes the individual human capacity for choices, purposive actions and conscious attempts to achieve specific goals (Ortner, 2006).

Furthermore, the organic by-design succeeded in achieving the organic identity mainly because of two reasons: land registration documents for coffee lands and developmental programs by the state and non-governmental programmes. These programmes and developmental activities have helped them to get incentives like biofertilizer ingredients, compost units and biofertilizers units. Moreover, NGOs are acting as promoter organizations and helping the farmers to maintain farmer diaries and conduct workshops on techniques and knowledge about organic practices. Thus, becoming an organic farmer is conditioned on the availability and support of the NGOs' constant incentive in the form of physical infrastructure and social capital support for them in achieving the organic identity. Moreover, it also shows that they are similarly

conditioned by the individual capabilities (farmers) like low educational status and livestock availability of each farmers to claim organic identity in the study villages.

The present study has also revealed that unlike state government and policy-supported organic farmers like Uttarakhand and Kerala (Galvin, 2021; Palackal, 2019, 2014), the NGOs and other developmental programs supported farmers of this current study are more contingent on ending the process of becoming an organic farmer because of the crisis of capital crunch. Moreover, this study also has considerable distinctions as much as similarities to Galvin's work on becoming organic basmati farmer. A similarity between the present study and Himalayan basmati farmers is that they claim their organic identity through land and using organic manures as inputs, and both studies' farmer's classification falls under the small, marginal, and medium landholders type. The difference spotted is that, for basmati farmers, mostly non-tribe, land ownership is available when they have claimed organic identity. In contrast, the coffee farmers are tribal farmers, they deprived of land ownership, and they had been fighting for land ownership while also attempting to claim organic identity.

In conclusion, the process of becoming an organic coffee farmer in Araku Valley is a collective endeavour involving farmer contributions and commitment to modify organic inputs in accordance with the standards and regulations of certification bodies, as well as the roles of NGOs (promoters) and developmental programmes by facilitating and providing the inputs to become an organic farmer. The next chapter will discuss the reasons behind the becoming of an organic farmer and how this identity supports the coffee farmers.

Chapter-4

Creating Organic Markets Through Quality, Imaginaries and Aspirations

The previous chapter examined the process of becoming an organic farmer, their claims, and how they acquire the organic identity. This chapter discusses how farmers participate in organic markets. In other words, it discusses how they sell their coffee produce in the markets and what factors enable them to envision organic market participation or how organic markets are created for their coffee. To understand this process, the chapter has been categorized into two sections. The first section outlines how farmers rework on all their existing techniques and methods and what are the agencies that are present, and their relationship to connect to the organic markets. It also describes their capacities and conditions concerning their roles and responsibilities. The second section focuses on how the organic markets are established and what kind of events are contributing to the solid networking of organic buyers in the study area. It also addresses what socialistic elements are involved in the process of bringing organic buyers to the area.

Coffee farmers live in mountainous terrains and are physically distanced from open market platforms. In addition to this proximity to the markets, they lack suitable infrastructural facilities, transportation, and communication (as mentioned in Chapter Two). Because of this, they resort to depending on local traders and shandy markets. But, this scenario has been changing because of the modifications happening in the structure of markets due to liberalization and neo-liberalization in the Indian markets (Kaviraj, 2005, p. 263). This change in market dynamics has brought domestic and international traders into remote areas of Araku Valley to trade coffee. These changes were evidently visible when the Araku Valley farmers explored different markets for their coffee. Furthermore, it also noted that to trade with neo-liberal markets (organic markets), they bypassed the technical, infrastructural, communication and transportation problems with the help of alike organizations (who offered their help in mentoring and promoting the organic farmers) to connect to organic markets in Araku. Here, it is important to emphasize that connecting and creating organic markets for coffee has been possible because of the collective efforts of the farmers and organic practices promoting organizations by overriding the infrastructural and technical

problems of the coffee trade. This simple mechanical analysis of organic markets shows a technical aspect in bringing markets to Araku Valley.

However, the anthropological question is what are the human factors (which are suppressed due to the technical process of analysis) that have made to connect the organic markets in Araku. Taylor (2002) and Arjun Appadurai (1996) have argued that when there is a transitional change in the process of social practices, especially in the neo-liberalization markets, it is the aspiration, imagination, and negotiations (which are elements of human factors) of the people that make them to connect, and participate in the markets. With the help of Callon's qualifications and requalification process, which states that quality of the goods acts as the eligibility to participate in market and it is achieved by different active actors' contribution (Callon et al., 2002). Further, Charles Taylor(2002) says that these imaginaries and aspirations can be a set of shared beliefs and imaginaries, which can be of individual or collective, that want to create a market economy (Taylor, 2002, p. 92). Similarly, Appadurai (1996) explains that we shape our claims of the future in aspiration. The aspirations that are drawn from the imaginaries we create from daily interactions. And, imaginaries are created by exchanging interactions in different domains of aspects, particularly in thick social life or interactions (Appadurai, 1996, p. 31). He also argues that these imaginaries exhibit differently based on the "capacity to aspire" of the actors, which can be related to caste, class or position (as cited in Galvin, 2021, p. 150; Rao & Walton, 2004; Appadurai, 2004).

With the above framework of aspirations, imaginaries and negotiations, this chapter tries to delineate the imaginaries, aspirations and negotiations of farmers and other members (government and intermediators) who have contributed to bringing organic markets to Araku coffee. Furthermore, this study also tries to show a unique story of (Araku) farmers who have been participating in the organic markets without any state program or scheme, unlike Uttarakhand (Galvin, 2014) and Sikkim (Yadav, 2022) organic markets where state government intervention was instrumental in establishing the markets for their farmers. Thus, this study shows a different process than any other studies about the organic market in India. However, with an understanding that structural policy changes have helped them, like allowing private markets to have direct trades with farmers because of the neo-liberal policies in India (Joseph, 2007).

Moreover, in understanding the imaginaries, aspirations and negotiations, this study tries to discuss them as affects and elements of human agency that are considered important for the "forces of production" and for creating organic markets for coffee⁶³. The efforts to create organic certification in the Araku coffee farmers, and eventually connecting to organic markets is done by intermediators/ promoter organization and their imaginations and aspirations, and farmers. Therefore, this chapter tries to show all the stakeholders' imaginaries, such as intermediate organization members, farmers, and other individuals responsible for envisioning organic markets in the Araku Valley. It also tries to show government staff's narratives and their imaginaries about organic markets while a parallel change of markets from traditional to organic markets has been observed in Araku Valley⁶⁴. As mentioned in Chapter Three, the government have also recently started a program for organic certification to connect farmers to organic markets. However, it is in the starting phase, as observed in the study area.

This chapter also shows the process of coffee preparation according to the (quality) requirements of their imagined and aspired buyers. Because uncovering the preparation process reveals farmers' constraints and commitments, as Appadurai (1996) articulates, understanding the farmers' capabilities and conditions in preparing the accepted quality of coffee for organic markets is necessary. It shows their strategies and methods for handling human and financial capital to match the organic buyer's demands. Therefore, this chapter tries to demonstrate how coffee farmers used social and financial capital to create organic markets.

4. Cultivating Knowledge and Quality: Processing and Connecting Markets

In the previous chapter, it was understood that Araku Valley farmers adopted new methods (organic designs of use of biofertilizers) of practices to get recognized as certified organic coffee farmers. But, just being recognized as certified organic farmers

⁶³ This study follows an anthropological theory "Forces of Production", postulated by Yanagisako Sylvia in her study on Italian family firms. According to her, the sentiments, desires, commitments, and motivations which are elements of human agency, create cultural capital for production or running businesses. Similarly, this study also adopts the same approach to show that aspirations, imaginations and negotiations of farmers and other intermediators have created the markets for coffee production in the Araku Valley.

⁶⁴ The narratives of the Government are also important because from the inception of coffee plantation in the Araku Valley, they have since been in direct contact with farmers as a facilitator in technical and market support. However, it was observed that they were not involved in organic markets, but only in regular markets. But, due establishment of organic markets trend in Araku valley, the government also started organic certification to connect and create organic markets.

does not suffice because they have to sell their organic coffee in the markets and earn their source of livelihood. Since newly adopted practices are highly laborious and require efficient allocation of time and management to cultivate organic coffee, they opine that they must get a reasonable and better price for their coffee, which values their efforts and practices in creating coffee.

It was observed that farmers depend on traditional markets like local money lenders, village traders and shandy markets. However, these traditional markets do not offer better prices, and often, local moneylenders offer the same as conventional non-certified organic coffee prices. So, farmers are not interested in participating in the traditional markets, but they choose to sell their coffee to the Farmer Producer Organization, which offers better prices than local markets. However, connecting to organic markets with organic certification requires farmers to follow certain methods to match the tastes and demands of the organic buyers while processing and storing. Domestic and international organic buyers demand premium quality coffee that tastes mild bitterness, but to match these requirements, farmers have to change their methods of processing from dry method to wet method (Tucker, 2011). Because, it is highly believed that dry method coffee is less valued and offered lower prices by the buyers because of low quality. Whereas the wet method of processing gives better quality of coffee, so better prices are offered in the markets (Tucker, 2011, p. 175). So, the quality and characteristics of goods become main eligibility to participate in markets.

Callon et al. (2002) argues that these qualities and characteristics of goods can be achieved by "qualification and requalification process"(Callon et al., 2002). He says, "The qualification-requalification process in the economy of qualities refers to the continuous evaluation and adjustment of the characteristics and attributes of goods and products in response to consumer preferences and market dynamics. It involves the active participation of various actors, including researchers, designers, producers, marketers, and consumers, who contribute to the qualification of goods based on their needs and expectations" (Callon et al., 2002, p. 202).

But, a shift from the dry method to the wet method requires huge capital for machinery, human resources, transportation, communication, and skill to complete the process. The farmers of the study area are small and marginal tribal farmers, with the disadvantage of illiteracy and poverty, as mentioned in Chapter Two. So, creating a fine-quality coffee that matches the buyers' requirements necessitates external support. Therefore,

it was observed that the change in processing methods is formed with the collective efforts of the farmers, promoter organizations, NGOs, and government by involving machinery to cultivate premium quality and match the buyers' demands. These active efforts of the Araku Valley people made it. Therefore, it implies that establishing the organic markets in the Araku Valley necessitates sharing a complex relationship between the multiple stakeholders, i.e., farmers, organic promoter organizations and state government to meet buyers' demands.

This phenomenon shows a rope of links depicting the admixture of global economic standards for coffee and local (Indian farmers) producers' abilities and strategies required to connect to the organic markets. It also shows the effects of global political and economic changes in cultivating and processing coffee from faraway places (coffee-consuming countries like the USA, Brazil, Germany, and France) on Araku coffee farms. In other words, the changes that take place in most coffee-consuming markets like Europe and America change farmers' cultivation practices and post-harvesting techniques, which Sarah Lyon has also observed and argued that decisions taken in faraway places have the capacity to induce political and economic changes in farmers when they are trading in global markets (Lyon, 2009). Therefore, the political economy of coffee is an unavoidable factor in delineating the Araku coffee farmers efforts to bring the organic markets into Araku Valley.

4.1. The Political Economy of Araku Coffee: A Shift from Traditional to Wet Processing Method for Quality Coffee

The political economy of coffee shows complex connectivity by interlinking the producers with global consumers. The connectivity of producers with international consumers has resulted in alterations in cultivation methods and post-harvest processes, especially for the new organic markets (Ponte, 2002). The changes and adaptations disseminated by organic markets assume idealistic ideas, such as sustainable environmentally friendly produced, non-polluted coffee along with consumer interest in coffee's 'good taste' (Brando, 2004). In this context, it is observed that the organic farmers have shifted from the traditional dry method of processing to the wet method and reworked on this process. Dry processing is a traditional method in which farmers pick all the coffee harvest at once and let it dry in the sun on plain surfaces, then hull manually by thrashing with the motor and pestle on dried coffee (see Plate 4.1 and Plate 4.2). This method of processing is believed to have many advantages, like a cost-

effective, simple technique, generate minimal waste by-products, and most importantly just fewer inputs are used other than labour. Undesirably, the dry method produces lower quality because of drying ripe and unripe coffee together, poor drying surfaces and exposure to humid and dirt patios (Tucker, 2011, p. 174). This type of method is mostly followed by conventional farmers, and they receive low prices for their coffee.

In contrast, wet processing is a method which involves small to heavy machines to remove the coffee husk and convert coffee beans into parchment. It involves soaking and rinsing the coffee beans in water to remove the mucilaginous substance, then drying it on a clean surface to ready the final parched coffee (see Plate 4.6). It is believed that wet-method coffee creates a better taste than dry-method coffee, so the farmers would get a high price for coffee. But, it was understood that because of the extensive process and method, a lot of investment in machinery, inputs, expertise and skill to perform the tasks is required. Therefore, among the farmers, it is noted that they have been shifting to the wet method of processing, which will give them better quality than the dry method of coffee. That also gives them eligibility to match the high-quality standards of organic markets and an ability to participate in organic markets. Consequently, they can attract a reasonable price to their coffee and labour. Further, in the study area, it is noted that all organic certified farmers practice the wet method of processing. However, some (K.Puttu) farmers use smaller pulper machines, which are performed by family members (see Plate 4.6), whereas some farmers (G.Guda village) use heavy machines under a collective processing unit, which are performed by experienced skilled staff. These divergences of logistical and human expert differences among study villages are observed because of the differences in strength, programs, and incentives (capital and human force) of promoter organizations, as well as the availability of funding and donors to help and connect the farmers with organic markets.

Similarly, the studies conducted around the world on different organic coffee producers from Guatemala, Honduras and Mexican farmers of Central America and North America, who have adopted the organic practices much before Indian farmers, have also shown a standard of ways of practices for the newly joined farmers to organic markets (Enelow, 2012; Fischer & Victor, 2014; Lyon, 2010b). Harish, one of the chief field operations heads for organic practices in coffee and who is also a Netherlands citizen (he has been a coffee expert consultant for the government of India over the last two decades) said that since the farmers of Araku Valley have joined very late in

organic practices, they had to follow the same coffee processing methods as like other global farmers, who have established and accepted the organic methods of processing. So, the farmers of Araku had to leave their present (dry method) method of processing to new methods of processing. It means that in order to participate in the organic markets, they need financial support for machinery and the skill to unlearn old and learn new (wet and controlled) methods of processing coffee to match the organic buyers' requirements. And, more importantly, building an ecosystem by establishing cooperative and collective efforts to undertake the new method of processing.

However, matching the organic buyers' coffee standards and shifting from the dry to the wet method has been progressive enough only because of the farmers' constant engagement and relationship with different agencies, such as NGOs, the state government, and the Coffee Board of India. These agencies constantly conduct rural developmental programs that emphasize on imparting skills through workshops, training on coffee processing and distribution of incentives in the form of inputs like small mechanical pulper machines. Therefore, farmers' continuous and stabilized relationship with these agencies is necessary to transform to the wet processing method. This was evident in the way the state government and the Coffee Board of India operationalized their programs and operations, which are run under specific plans and incentives to support "small and marginal" and "tribal" farmers in the coffee cultivation⁶⁵. Consequently, the farmers' identity also plays a significant factor in framing and implementing incentives for farmers and maintaining continuous relationships with all agencies. This kind of complex social relationship in the rural background shows a similarity with Reynold et al.'s and Roseberry's argument that the inclusion of farmers into the organic markets necessitates the understanding of the local cultural identity of the farmers and their capabilities in logistical and financial matters, when the government agencies are involved with farmers (Reynolds et al., 2004; Roseberry, 1996). Because, it can identify the gaps, such as economical status, social background and fill them with special incentives and policies. The following table from the study villages has been prepared to show different agencies involvement in

⁶⁵ Under the special plan of the Coffee Board of India, XII Plan modalities, 2015, the Integrated Tribal Development Agency and the Coffee Board of India distribute subsidised manual baby pulper machines and financial assistance to concrete drying yards to tribal coffee farmers. For further details please see, <https://www.indiacoffee.org/modalities-implementation-support-schemes.html>. Accessed on 2023-03-23 23:31:02.

transforming the farmers into the wet method of processing and imparting the capacity and skill development programs required for it.

Table 4.1: Agencies' Involvement in Shifting from Dry to Wet Processing

S.NO	Name of the Item	No of farmers		
		Government	NGO's	Self/ own
1	Baby pulper machines	97	Nil	Nil
2	Model sprayers	06	Nil	Nil
3	Skill development, workshops and training on coffee processing techniques	9	24	Nil
4	Concrete drying yards	8	Nil	15

Source: Field Work, 2022.

In the study villages, apart from small baby pulper machines, which farmers manually perform at their homes, also have a centralized coffee processing unit in which a heavy mechanized process is employed to prepare parchment from the raw coffee fruits (see Plate 4.7). However, it is observed that they have established this unit with the help of an NGO. It means that to transform into wet processing methods, match the organic buyers' standards and participate in organic markets, they need external agency support to establish a centralized processing unit. They have to maintain relationships with outside agencies so that they receive incentives and inputs to participate in organic markets. It was very much evident in one of the NGO's group meetings conducted to build awareness of processing techniques among the farmers of the study villages. Raju, one of the respondents, said that it is compulsory to attend the meetings conducted by the government agents and NGOs; failing would cause him to stop receiving the inputs and incentives offered by the agencies. That means their participation in organic markets is very much fragile and depends on the relationship, which farmers maintain with external agencies to receive inputs and incentives for processing the coffee.

Accordingly, it is inferred that to participate and match the organic buyer's standards, they have transformed their (dry) method of processing into the wet method of processing, because of the pre-established accepted methods in organic coffee markets

in international markets. Furthermore, it is also understood that this transformation is possible because of three reasons: the availability of rural development programs by government and NGOs in the study area, the infrastructure and capabilities of the farmers to change into a new method of processing, and most importantly the sustainable relationship of a farmer with the government and NGOs, which plays an important factor in receiving the inputs required for coffee processing. Thus, it concludes that mere organic certification does not guarantee participation in organic markets; their participation is conditional on the incentives they receive either from government or NGO agencies.

Furthermore, the coffee procurement process of two study village farmers, who have adopted the same wet method of processing to establish organic markets for their coffee, has revealed the constraints and contexts of farmers they have faced to participate in organic markets and establishing the standard processing methods. The following sections will provide these details.

4.2 Shared Beliefs and Organized Knowledge

In the study area, it is understood that in order to participate in organic markets, the farmers have changed their method of processing from traditional to modern wet methods of processing, with the help of incentives and skill capacity programs offered by different agencies, as mentioned before. However, a mere change of method does not help farmers to connect with the market. In addition to mastering the method of processing, they should meet the requirements of the organic buyers' standards, such as uniform taste, no adulteration, proper dryness, and premium quality, as one of the coffee expert mentioned. To achieve these demanding standards of buyers, they need efficient and systematic practices, skill, social capital, and also human and financial capital. In all the activities, right from the coffee farm to connecting buyers, these activities are shared between different stakeholders at different capacities, which acts as the agent in the process of connecting farmers to organic buyers. These agencies are Farmers, Farmer Producer Organizations and Promoter organizations. These agencies share a cordial social relationship with farmers, which is generated from daily interactions and when they are involved in the process of bringing the organic markets to the coffee. According to Taylor (2002), it is these interactions and relationships that occur in the process of daily mediation between the different agencies, who share a common motive, goal and belief in the coffee quality, create aspirations and a way forward for the

farmers to connect and establish a relationship with the organic markets. Therefore, it is observed that among the coffee farmers, these agencies have played a significant role in connecting to organic markets by playing a varied responsibility at various stages, from coffee fruit picking to negotiating with buyers (in other words, throughout the process of coffee procurement). Furthermore, it is acknowledged that the procurement structure process discloses the various agencies' interacting actions and functions that build the connection to organic buyers and bring markets to their region.

From the anthropology of food studies and market perspective, it is learned that to create an economic value to the commodities, the farmers not only require technical or procedural adjustability but they also have to provide the context and social settings of the commodity cultivated and the subjects involved in the form of documents and reports (Basha & Lal, 2019; Galvin, 2018). Most importantly, after the post-liberalization reforms, these approaches and ideas have created a mutual benefit and exchange of ideas and meanings for producers and consumers. According to Bourdieu (1984) and (2002) and Appadurai (1996), the intricate process and frequent interactions, such as those between global buyers and farmers, influence the participants' perceptions and meanings. Like producers acquired the identity of responsible consumerism in this case since they offer better pricing for coffee than traditional customers (Appadurai, 1988; Tucker, 2011). Similarly, among the coffee farmers of the study area, it has also been observed the exchange of ideas and meanings gives organic identity, economic benefits, and social images as pride and great about the quality of coffee (Bacon, 2005 and Flachs and Panuganti, 2020). In this process, farmers, Farmer Producer Organizations and intermediators (Promoter/NGO) have played agentive roles. That includes cultivation of coffee to sell in a market place. The following sections will provide these actors' detailed agentive roles and responsibilities.

4.2.1. Farmer: As an Agent

It is observed that in the procurement structure, the farmers play a significant and primary role as key agents in creating and cultivating a coffee that organic coffee buyers can accept. Their roles and responsibilities can be categorized into two sections of actions. The first set of actions is related to the technical and labour activities such as collecting and picking precisely ripened coffee fruit and segregating into different grades to create quality coffee. The second set of actions is related to the social settings of coffee producers, that is, the geographic location of the coffee farm, knowledge and

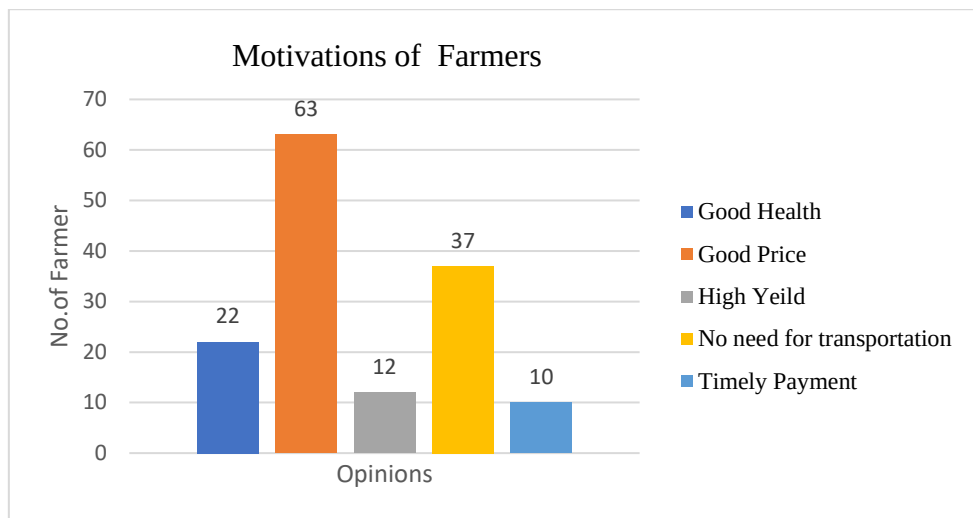
skill and method of expertise, which are backed by the identities of tribal farmers, Adivasis, and small and marginal farmers. However, among these two roles of the farmers, it is observed that the first set of activities like picking ripened coffee properly at the right time and segregating them into different grades for further preparations of parchment (parchment means removing the outer layer of the coffee using the wet method of processing), and labelling them into different qualities of coffee for the markets acts as a primary key factor in cultivating good quality coffee. But, this idea of 'good quality' coffee is not just a technical adaptation of practices; it is also a social practice which is cultivated in the daily interactions of farmers with the coffee expert staff, who are employed by the promoter organization to oversee the quality picking of coffee. Raja, one of the coffee farmers from G.Guda village, while picking the coffee harvest at his coffee farm pointing at red ripened coffee fruit, said that they have to pick this (red ripened) type of coffee fruits only as it was directed by the Seetharam (coffee expert) in his interaction happened at the village. He also said that it is important to follow strict picking instructions as directed by the coffee expert; otherwise, it results in mixed and poor coffee quality when further processing is performed. Similarly, when one of the ground-coffee expert staff arrayed for this task was asked, they also shared the same opinion that 'right pick (properly ripened coffee fruit) will give good quality coffee'.

Therefore, it can be understood that creating a quality coffee that can be marketed in the organic markets happens at the commonly shared belief of both farmers and local staff. These beliefs are observed to be exchanged in their daily interactions and meetings in the village and at the coffee farms. As argued by Aksoy and Öz (2020) and Mittal (2018), the exchange of knowledge to farmers happens during the daily interactions and the social relationship they maintain with experts. It also shows that farmer practices and activities like picking coffee fruits and grading by farmers play a primary agentive role in the process of meeting the standards of the organic buyers and markets. Organized inculcation of knowledge and processing is also a necessary condition, in addition to organic certification. Most importantly, the daily social interactions between farmers and coffee experts, non-governmental organizations and other institutions have made it easy to transfer and adopt the formal knowledge among the farmers. Thus, it infers that institutional support is necessary to equip the farmers regarding the organic coffee quality (Wójcik et al., 2019).

Apart from these roles, the second set of factors in the process of connecting the organic markets are identities like a tribal farmer, Adivasi, small and marginal farmer, social factors like poor and underprivileged and geographic (hill farmer) factors attached to farmer playing an agentive role. These factors are very much visible in the program and incentives like availing the subsidized manual machines for pulping and skill induction workshops conducted by government institutions like the Integrated Tribal Developmental Agency and NGOs operating in Araku Valley. One of the government senior officials who oversees the coffee plantation in Araku Valley have said that the underprivileged and Adivasi farmers need special developmental programs and incentives to uplift their social and economic conditions. Here, it can be understood that the role of farmers was not directly related to influencing the programs and incentives to strengthen their coffee processing methods. But, from a top government official opinion, their identities that show their poverty and backwardness are important since it can be inferred that their identities, social and economic conditions are acting as agents for the government to formulate special programs, workshops and subsidies that equip the farmers to participate in the organic markets. Therefore, from the above data, it can be inferred that farmer activities and their identities act as key primary agents in cultivating good quality coffee, which can be marketed in organic markets. However, it shows that their actions are created and motivated by the daily interactions of coffee experts who share a common belief and goal to produce good quality coffee.

Besides shared beliefs and interactions, it was also noted that farmer intentions held a strong driving desire to look for organic markets and establish a network. Those intentions are very much evident when the study investigated their motivations behind choosing organic coffee production, certification, and organic markets. The most frequent opinions and motivations are a good price, timely payment and no transportation problem, high yield and good health, fair practices of intermediates, and transparency in actions and accounts. However, among these motivations, the good price for their coffee, timely payment and absence of transportation have been the significant motivations to be part of organic markets for the farmers in the study villages.

Figure 4.1: Farmers' Intentions and Motivations in the Study Area.



Source: Fieldwork, 2022.

Bharathamma, one of the women farmers, said that she had chosen the organic practices for coffee cultivation in anticipation that she would get better prices than traditional coffee markets. She also mentioned that she doesn't have to worry about transporting coffee produce to the market due to her membership with the Farmer Producer Organization. Because, their FPO have a transportation facility, where they directly pick coffee from the village. Earlier, farmers used to carry the coffee produce on their heads to the nearest markets on foot. Thus, providing transportation facilities and better prices for their coffee adds a dynamic choice to show their motivation for organic market participation. Moreover, it also assumes that their motivation dynamism is very much intended to reduce the financial and social burden on the families of the farmers. So, the motivations play a significant role in shaping their interest towards organic practices and markets.

Therefore, from the above data, it can be inferred that farmers play an agentic role in shaping the quality of the coffee by performing activities related to segregation and grading, which are inculcated with a daily exchange of knowledge from coffee experts.

4.2.2. Farmer Producer Organization: An Agency to Formalize the Process

In the Indian markets, particularly after the post-liberalization reforms, it was observed that there had been a change in market mechanism due to changes in political and market structures, which allowed small and marginal farmers to have direct market relationships with buyers and sell their products (Kaviraj, 2005). In this context, one of the major apparatuses induced by the government of India was the promotion and

establishment of Farmer Producer Organizations by granting financial and logistical support for the farmers to create their own collectives and mechanisms and strategies to sell their goods in the markets. In the study villages, it was also observed that the farmers had established their Farmer Producer Organizations, which comprise six hundred members of coffee farmers in the K.Puttu's FPO and seventeen thousand members in G.Guda's FPO. The structure of the FPO shows representatives elected by its members, comprising the President, Vice-president, Secretary, Board Members, Branch Manager and village volunteers. These elected representatives will hold the highest decision-making power in formulating the strategies to collect coffee produce from the farmers' villages and market it for the benefit of its members. They also organize workshops and skill development programs for their members, in collaboration with outside organizations, like govt and non-government organizations, to educate and train their members on coffee processing techniques so that they improve coffee quality and attract good prices to increase incomes.

Table 4.2: List of Farmer Producer Organization's Activities in the Study Area

S. No	List of Activities
1	It collects coffee produce from villages.
2	It processes the coffee and prepares parchment.
3	It negotiates with buyers to sell parchment.
4	It searches for collaborators/ promoters.
5	It provides manures and fertilizers.
6	It removes local traders.
7	It conducts workshops and skill development programs.
8	It prepares documents and reports or bookkeeping.
9	It conducts monthly meetings to evaluate and strengthen its marketing strategies.
10	It facilitates the logistics and infrastructure to its members with the help of govt institutions, banks and non-government institutions.

Source: Fieldwork, 2022.

Among the roles and responsibilities mentioned above, it is understood that FPO's main activity lies in collecting and organizing the quality coffee that organic buyers can accept. To match their demands, the FPOs in the study area have established centralized

processing units with the help of the government and made it easy to get local bank loans to systematize coffee processing with machinery and coffee quality experts, through which coffee quality can be sustained uniformly. However, the FPO presidents revealed that organizing and formalizing this process wasn't simple tasks. They have made it possible with local networks of NGOs ('Chaya' and 'Palle') and other promoter organizations to arrange the coffee processing machines, arrange the salaries of their staff and train farmers with marketing strategies.

Besides the role of formalising the coffee procurement and processing, another significant role of FPO is the ability to supply a large quantity of coffee or match the orders of organic buyers, which was learnt from the opinions of FPO managing staff Daniel and Saidulu. It was also again corroborated by Babu Rao, one of the key informants from the study villages, who said that since they are small landholders, they produce very little coffee (this year, 1500 kgs) and cannot meet buyers' demand, like twenty tonnes or more. So, it is understood that they need an FPO platform to contribute all their coffee produces into one place and match the buyers' demands. Otherwise, matching the quantity and quality standards of the buyers would be difficult for the study area's farmers.

Harris-White et al. (2014) also opined that opening the international market allowed Adivasis to incorporate into India's capitalist economy and establish their own business because of structural change in the markets. Thus, according to her, the Farmer Producer Organization (FPO) is acting as the main apparatus for these farmers in connecting with organic markets⁶⁶.

4.2.3. Intermediaries: Collaborating FPO with Promoter Organizations and NGOs

Different intermediates in the study villages are noticed to have contributed to coffee marketing, either directly or indirectly, to increase the coffee quality and connect organic coffee farmers with markets. Such intermediates are non-governmental organizations, promoters of organic farming or no-chemical use farming and local state government. Surprisingly, none of these agencies are part of the Farmer Producer Organizations. They establish a thick relationship with farmers to perform collective

⁶⁶ FPO- Farmer Producer Organization is a co-operative group/society formed by the number of individual farmers with a common interest to organise, maintain and market their agricultural produce, in order to have a direct trade agreement with market partners and buyers.

activities related to coffee techniques and knowledge. The new transitioning farmers of K.Puttu villagers have collaborated with one of the international non-governmental organizations (TANAGER) to connect farmers with global organic buyers, and they also have a local mentoring organization, which is again a non-governmental organization, to support them in arranging the funds and donors for the functioning of FPO. Similarly, the established organic farmers of G.Guda village farmers also collaborated with one of the local non-governmental organization, which has its own sister organization that promotes organic farming, helps farmers with networking and establish a relationship with organic buyers. It is observed that NGO's roles are mostly operated in handling field-level activities, whereas the promoter organizations are mostly involved in marketing matters in the collaborations. The following tables show the roles and activities of these intermediates in the study villages.

Table 4.3: Role of NGO (Intermediate) in Establishing the Organic Markets in the Study Villages

S.No	Roles of NGO's
1	It provides mentoring support.
2	Help in arranging funds and donors.
3	Providing human resources to work in collaboration with FPO
4	Provide educated human resources to create documents and reports.
5	Logistical and infrastructural facilities
6	Providing the negotiations between the FPO and organic buyers

Source: Fieldwork, 2020.

Table 4.4: Role of Promoter Organization in the Study Villages

S.No	Roles of Promoter Organization
1	Provide the organic certification help.
2	Prepare the farmer organic activities reports.
3	Finding the appropriate and profitable organic buyer.
4	Mediate the negotiations between the farmers and organic buyers.

5	Conduct workshops to educate the farmers about organic marketing strategies.
6	Provide the transportation facility.
7	Provide the technological knowledge and supply the same materials to educate the farmers.

Source: Fieldwork, 2020.

In addition to the above-mentioned roles and responsibilities of intermediaries, as a larger organizational behaviour, a deeper insight was learnt from the interviews of the staff of these promoter organizations and their enthusiasm towards a common purpose of cultivating quality coffee and bringing organic buyers to the study village. Vikram is an experienced field expert in the promoter organization who conducts field visits for donors and organic certification agencies. When asked about his opinion on working with his promoter Organization and coffee farmers, he pointed out the study villages' farmers practice good methods to generate good coffee while stressing the fact that they should get a good price for the hard labour and dedication they put into it. He also opined that it is his responsibility to teach useful techniques for the benefit of the farmers. Moreover, he tries to impress the donors and visitors with the farmers' practices so that farmers would get support for their organic certification and practices. It means that in addition to organizational commitments and roles of the promoter organization, it is the common belief, enthusiasm and good intentions of individuals that make a greater contribution by impressing the donors to secure funds in the form of donations for the FPO, which indirectly helps farmers participate in organic markets.

From the above data, it is understood that to produce standard coffee quality and connect the farmers to organic buyers, they need collaborations and associations with outside agencies, where they get contributions in the form of logistics, infrastructure, organic certification assistance, records and reports maintenance, and a moderator to negotiate with buyers. It also suggests that for the effective formation of organic markets, the objectives, purpose, and ambitions of individuals working in promoter organizations play a key influence in the successful organization of market participation to farmers. In other words, these intentions, common beliefs, and commitment of promoter organizational staff also add a profuse contribution to the farmers' forces of production and the prosperity of coffee trades. Similar to the views held by Yanagisako Sylvia (2002).

Thus, from this section, it can be concluded that the three agents - Farmer, FPO and Promoter Organization share a tripartite relationship, wherein the farmer performs professional expertise in picking and segregating the coffee; FPO formalizes the process of collecting coffee from the villages to processing units, and it also put in order the exchange of knowledge between farmers and experts in the form of interactions. Intermediaries act as the larger functionaries in coordinating all the roles of agents with infrastructural support. Apart from their organizational support, they also contribute to the farmers' forces of production and the prosperity of coffee trades with a common intent to cultivate quality coffee and establish organic markets.

The observations made by Mukherjee et al. (2018), Pathania et al. (2020) and Sawairam (2015) emphasized the importance of structural changes through FPOs and intermediaries and neglected human affects and contribution in the process of market. This study found that in addition to structural changes in the markets, the less emphasized human common cultivation motives, beliefs, and intent act as the key factor in the successful organization of quality coffee and marketing it. They are caused through regular interaction and knowledge exchange between the farmers and intermediaries.

Farmers, on the other hand, have received the support as mentioned above and incentives through organizations and cooperation aimed at organic coffee marketing. The study villages have adopted different processing mechanisms due to differences in the capacities of farmers, FPOs and intermediates (NGOs and promoter organizations). However, they all try to participate and connect with organic markets. The following section will provide the details of the capacities of collaborators and farmers.

4.3. Capacities of Collecting and Processing the Coffee: Procurement Mechanisms

Capacities of collecting and processing the coffee in the study area show that irrespective of the associations and collaborations they have with intermediators, the two study villages have adopted a different procedure to connect themselves with organic markets because of their socio-economic reasons, strengths (financial and leadership) and weaknesses of the intermediates.

4.3.1. Capacities of FPO and Intermediate Agents in G.Guda Village

The G.Guda village farmers and their FPO have a collaboration with the Chaya Organization. Chaya is an NGO that works on rural developmental programs and social

welfare activities in the village, such as natural farming, non-pesticide farming, children's education, infant mortality rate and development of rural youth in skilled and unskilled labour. Its headquarters is in Hyderabad, an urban and metropolitan city in India. Their top management composition and funding bodies show that they have some of the top businessmen of the Indian entrepreneurs. Because of their top management and their networks, Chaya organizes good funds, donors, and efficient coffee experts to support the farmers in the villages.

It was also clearly noticeable when enquired about adopting the wet method of processing techniques among G.Guda village farmers. To adopt the wet processing method, the farmers of these villages, under the FPO, have established a centralized processing unit⁶⁷, in which they placed a large coffee pulping machine (see Plate 4.7). They could arrange costly machines (30 lakhs) because of Chaya's support in arranging the funds from the banks. Dany, one of the top management associates in the Chaya, said that without submitting any collateral to the bank, they have borrowed money from the bank and established a central processing unit. They have also hired a coffee processing expert and attached them to the Farmer Producer Organization to oversee the activities and ensure good coffee quality. Here, it can be understood that the promoter organizations have played an important role in securing loans from banks due to the NGOs' strong capacity and networks. Therefore, the capacity of the farmers to adopt the new method of technologies and knowledge to process the coffee depends on strong management, social relations, and the capacity to influence the capital, resources, and efficient human resources of the promoter organization.

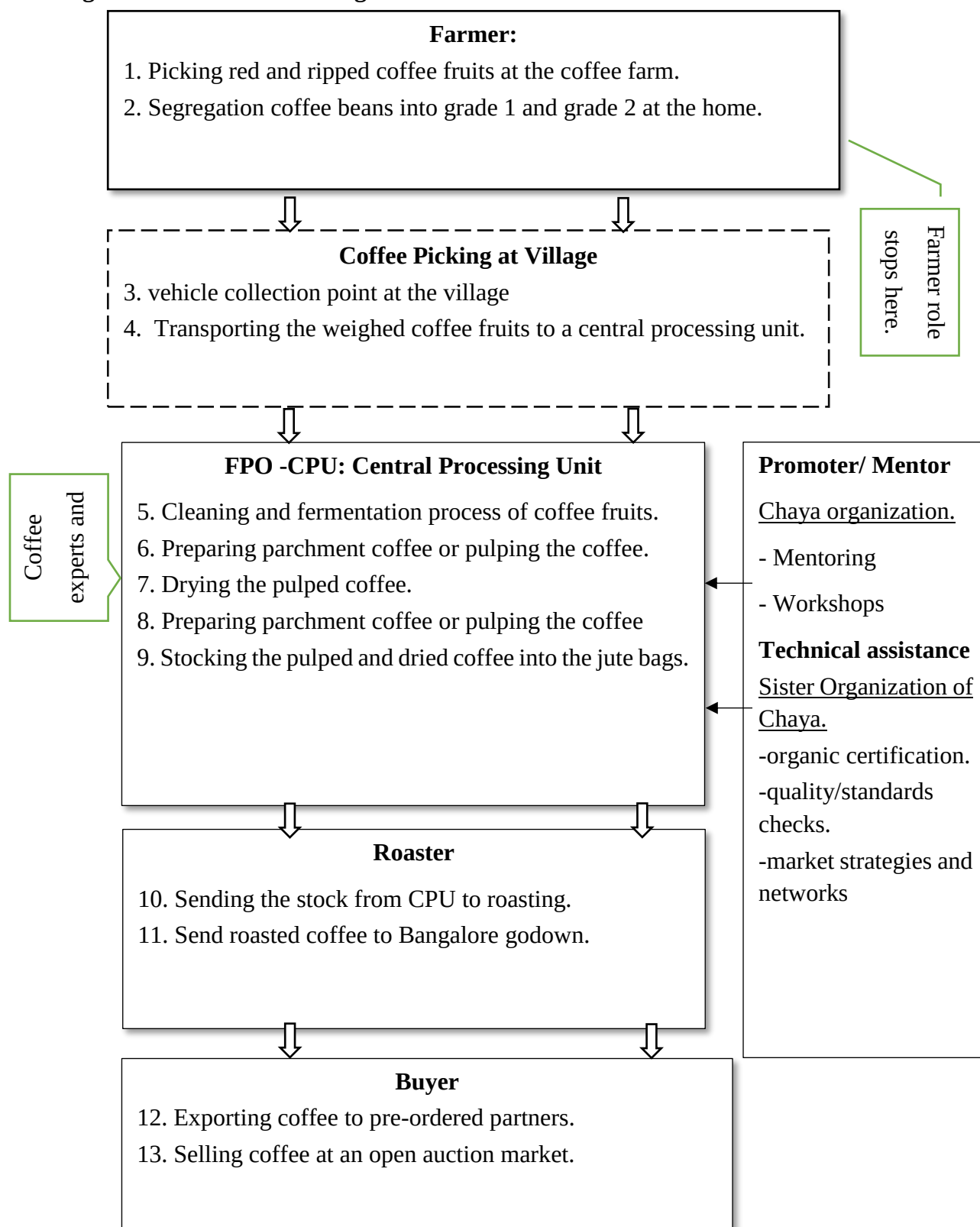
Besides, it was also observed that due to the strong human capital, networks, and most importantly, the consciousness about the coffee markets around the world by the managers of the NGO. The NGO has established a sister organization to the Chaya, which specifically works on coffee management activities like organic certification and training the farmers with proper coffee fruit collecting techniques in the workshops and farmer schools. It also functions as a monitoring member to draw the systematic procedures and make sure that they are followed by the farmers, right from coffee plantations to grading, and until they reach the centralised processing machinery. So, it

⁶⁷ It is a place where the Farmer Producer Organization have established a machine to process coffee by wet method of parchment, which produces fine and standard quality of coffee.

is noteworthy that the role of promoter organization is not only task-oriented; they are also acting as a mentor to connect farmers with organic markets.

Nevertheless, a less exchange of interactions between farmers and coffee experts was also observed because of the huge distance relationship of farmers from the central processing unit and activities. And because of this, farmers are restricted to organic coffee cultivation knowledge and practices, but not much on the preparation of green coffee or parchment. From this, it can be understood that the intentions to cultivate quality coffee and practices of intermediators benefit the farmers, but it also hinders upgrading the knowledge of coffee processing to the farmers. It means that the organic buyers' quality standards and the intermediary agencies' involvement create a dichotomous relationship between farmers and final processed coffee. Therefore, as Anderson Benedict (1983) argued, it creates an "imagined communities", where farmers and final consumers will not have direct contact but only through reports, documents and advertisements created by the promoter organizations. So, this kind of process needs a more inclusive mechanism that can upgrade and distribute required knowledge and skills to the farmers, and connect them to the organic markets, which would empower the farmers by better negotiations with buyers so that they get premium prices. The following figure has been picturized to show the above observations of this village process.

Figure 4.2: Coffee Processing and Collaborative Actions to Cultivate Coffee



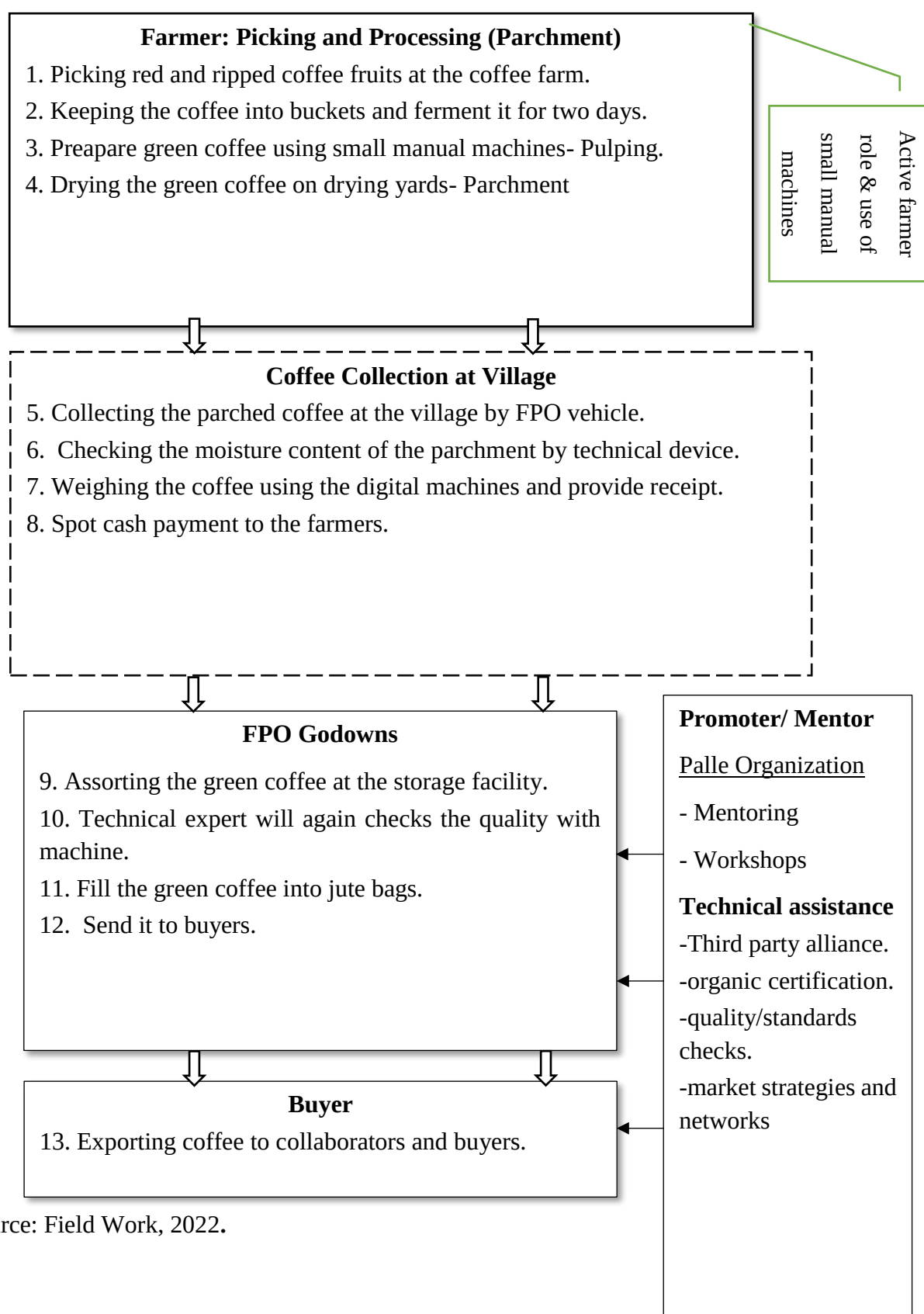
Source: Field Work, 2020.

4.3.2. Capacities of FPO and Intermediate Agents in K.Puttu Village

K.Puttu village farmers and their FPO are similar to another study village G.Guda, and they also have collaboration with one of the local NGOs- Palle organization, which acts as their mentor and promoter organization to organic practices and methods. Its headquarters is located in the nearest city of this village, Vishakapatnam. Unlike aforementioned NGO, this organization is a locally based organization, and they work in the areas of natural farming, non-pesticide farming and promoting forest produce and indigenous crops. The promoter organization works mainly by collaborating with government organizations like NABARD, the state government and the Coffee Board of India. The top management of this organization shows that they have well-experienced management. However, their networks and capital (financial and human) are limited, unlike the Chaya organization, to support the farmers for organic practices extensively, as informed by one of the key informants of the Palle organization. Therefore, to support the farmers, they have collaborated with one of the international coffee marketing organizations, which will support the farmers with human experts to oversee the organic certification, coffee processing and connecting them with organic buyers. Here, it can be understood that the financial strength and human resources are limited to these village farmers because of the lack of economic strength and insufficient networks to influence and arrange the funds by the promoter organization. Therefore, it can be inferred that the capacities of farmers are directly connected to the programs and incentives offered by the promoter organization to participate in the markets.

Moreover, due to the weak financials and human expert resources, the farmers process the coffee fruits (parchment) using small manual pulper machines, which the state government supplies. Because of this manual processing, the quality of the coffee parchment may not be preserved, and it is exposed to lower prices by the organic buyers. It means that the lack of capacities of promoter organization not only hinders the infrastructural facilities but also creates a gap in inculcating knowledge transmission, which is necessary for the farmers to create standard quality of coffee that the organic buyers can accept. It was understood when enquired about the workshops and training received by the farmers and the opinions of the promoter organization. Thus, the organic farmers would need more financial and human capital of promoter organization to succeed in their practices and generate income from the organic coffee.

Figure 4.3: Coffee Processing and Collaborative Roles to Cultivate Coffee



Source: Field Work, 2022.

Moreover, a comparison of these two villages' processes, in which farmers have adopted a similar wet method of process, shows that they have collaborations and associations with the help of different intermediary agencies. However, due to the conditions and capacities of promoter organizations such as human, financial, and coffee experts, networks and relations also make a huge impact in the processing of coffee parchment and connecting them to organic markets. Thus, it also comprehends that farmers' participation is fragile and dependent on the role of intermediary agencies. The following table shows intermediary agencies' comparative conditions and capacities and their role concerning farmers.

Table 4.5: Comparative Table of Processes in the Study Villages

S.No	G.Guda Village	K.Puttu village
1	Process Centralized machinery processing. Done by the coffee processing expert.	Process At-home pulping using hand baby pulpers. Done by the farmer
2	Home pickup Only coffee red-graded fruits. Uses digital weighing machines	Home pickup Only parchment coffee. Uses digital weighing machines
3	Payment Bank account payment Payment is usually made at the end of the harvest season	Payment On-spot cash payment with receipt
4	Promoter Promoter/mentor organization A subsidiary of the promoter organization will connect to buyers and do the marketing for FPO.	Promoter Promoter/mentor organization Third-party promoter for connecting buyers and supporting in inculcating the

		organizational skills to FPO strategies.
5	Strength and weaknesses. They have strong capital (human and capital), networks and management.	Strength and weaknesses. They have moderate capital (human and capital) and less network and management.
6	Buyers - More International partner tie-ups - Participation in a few domestic auctions/markets.	Buyers - More domestic buyer agreements and collaboration - Trying for international buyer

Source: Field Work, 2020.

According to Galvin (2021), Pandian (2009) and Appadurai (2004), the capacities of the individuals do not only differ because of the indifferences of the collaborators and associations or intermediary agencies. But they are also varied because of the social and economic capacities of the individual, which can be related to economic disparities, cast differences, and marginalities that are operated at the village level. Similarly, the present study also observed some of such conditions of the farmers, because of which they would face difficulties in participating in organic practices and markets. The following sections discuss these in detail.

4.4. Conditions and Capacities of Farmers

It was noted that the conditions and capacities of the farmers are connected with their frequent interactions with coffee experts, reach of the workshops and farmer training programs and knowledge of technologies, such as grading and moisture levels of the green coffee. Most importantly, their labour, family size, education, land, debts, and traditional money lenders' role in the study area.

4.4.1. Grading, Technology and Machines

In the previous section, it is understood that farmers have to grade their coffee fruits according to the prescribed grades of the promoter organizations so that coffee quality can be continued and accepted by the organic markets. But these grading standards and practices depend on the knowledge they received from the workshops conducted by the promoter organizations. Boi Sundaramma, one of the key respondents who has attended

training workshops, said that the coffee fruit picking should be very careful. They cannot collect all coffee fruits but 'only red rounded and ripened fruits'; otherwise, the coffee quality will not be good. Vajaram, one of the certified organic farmers, said that though he has organic certification, the promoter organization did not take his coffee fruits because he had not collected them according to the 'accepted red rounded and ripened coffee fruits' and did not grade them to the prescribed grades (see plate 4.3). Thus, from the above opinions, it can be understood that the reach of training programs and knowledge on coffee grading that must be equally passed on to farmers is one of the biggest hurdles to sell their coffee to organic markets.

Similarly, another farmer, Rama Rao, who belongs to K.Puttu village and used a manual pulper machine to prepare the parchment, said that he does not have his own baby pulper machine, but there are few machines at the village, so they share and coordinates among themselves to prepare the parchment. He said that organic collaborators demand strict moisture-controlled coffee⁶⁸ when they come to purchase at the village. But, because of drying parchment in their drying yards, lack of knowledge and availability of instruments to check the moisture levels that match the prescribed standards make it difficult for them to participate in the organic markets. It means that the lack of availability of technological machines and knowledge hinders the process of coffee. Moreover, since many of the farmers are illiterate and lack education, the absorption of technological knowledge would also be difficult. So, it needs a comprehensive and futuristic mechanism to train the farmers and next-generation kids so that sustainable and inclusive processes are developed.

Therefore, it can be comprehended that the capacities of the farmers are conditioned based on the knowledge, technological tools and machines they get from the intermediary agencies and individual (farmers) educational capacity to imbibe technological methods.

4.4.2. The Availability of Labour Force and Family Size

Most of the activities pertaining to organic activities are performed by the husband and wife in the study area. But, grading practices, systematic collection and segregation of coffee fruits require more than two members and a high availability of labour. Otherwise, it would be difficult to prepare the parchment, as said by one of the key

⁶⁸ It is observed that in order to sell their coffee they have to match to a moisture level of 11 points, which is measured by using the digital moisture meter (see plate 4.4).

informants. When they segregate the coffee collection into grade one and grade two by involving three of their family members (see plate 4.5), Nagaraju said that they need more labour to segregate coffee into grades. Because, collecting the coffee fruits throughout the day in the farms and segregating the coffee the next day morning is a difficult task for them because the collection vehicle would be ready by seven in the morning. So, he opines that the task would be smoother if they had a larger family size and had their children also participate in the task. Therefore, it can be understood that the availability of labour and family size are some of the capacities and conditions of the farmer to cultivate organic coffee and connect to organic buyers. Further, it can also be understood by the opinion of the Chinthanna. He said that since his children are attending school and there are only two active labour members (he and his wife) for all agricultural activities, he did not grade the coffee according to the prescribed/demanded qualities of the promoter organization. He sold his coffee to local moneylenders by performing the traditional methods of parchment. Thus, in addition to infrastructural differences that were received from the promoter organization, the issues of arranging the labour capital play a prime factor because most of the activities are performed by the family members in the coffee farms. So, cultivating organic coffee is not only an incentive constraint but it is also conditioned by family size and the availability of the labour to work in organic processes. Because, the availability of labour decides whether they should follow grading and segregation practices, which are necessary to maintain the quality of the coffee.

4.4.3. Continuity of Local Money lenders Relationship

The farmers of the study area are still dependent on local money lenders and middlemen for instant loans and cash requirements. They repay the borrowed amount after the coffee harvest. Some of the major borrowings are related to conducting marriage functions and festivals and managing the expenses of children's education.

Though they are aspiring to get into organic markets through certification, which offer better prices than middlemen and local money lenders, it is tough to choose organic markets over existing relationships with local moneylenders because Boda, one of the informants, narrates his story that he took a twenty-five thousand rupees loan from one of the local middlemen, and he has agreed to clear the debt with coffee harvest and other agricultural produce later on whenever possible. He chose to sell his coffee to a local moneylender even though he has organic certification, which can give him a better

price than local markets. It indicates that the organic certification, which is meant to offer better price options and markets to the farmer, is failing to substitute the pre-existing relationship of farmers with moneylenders and convince them to shift to the organic markets.

Another farmer, Vijay Sai, said that he had a debt of fifty-five thousand from a money lender, who hails from an adjacent village, for his son's marriage. He said that their FPO gives good prices for the coffee, but they do not give the payment on the spot or early. They give one month after the harvest. So, he chose to sell his coffee to a money lender and was not interested in selling his coffee to FPO and participating in organic markets even though he has organic certification. So, late payment by the organic markets makes the farmers not to choose organic markets because they have to repay debt and are obliged to maintain their earlier relationships with the money lenders.

Therefore, it can be understood that cultivating coffee and processing is a collaborative mechanism where all the agencies, such as farmers, FPOs and intermediaries, share common beliefs, motives, and goals to match the organic buyers' demands and standards. However, it can also be noted that the roles and responsibilities of the agencies are conditioned by their capacities. For example, intermediaries, funding, social networks, and management play a significant factor. To farmers, the individual capacities of arranging the labour, education to absorb the knowledge required for processing, availability and support of technological tools and machines play a factor. Whereas for FPO, finding potential associations to establish collaborations on processing, coffee experts, market connections and networks, and prepare documents and reports which are useful for promoting the coffee in the market. Thus, organic certification seems to be merely useful for the coffee trade's success until and unless these contexts of agencies are addressed.

4.5. Exhibiting the Quality and Commitment

Once the coffee is cultivated and processed by overriding the conditions mentioned above of the farmers, FPOs and intermediaries, connecting to the organic buyers and markets have been observed by delineating two aspects of markets: (1) establishing the technical aspects such as supply chain mechanism, infrastructure for storage and processing and (2) commitment to work in coordination, agreeing to maintaining quality standards and hoping to get better associations for coffee. Here, the

anthropological question is not about the technical aspects of the markets but the other aspects. According to Galvin (2021), it is not only the technical aspects that connect the local farmers to outside buyers; it is the imagination and aspirations which are exhibits of 'human agency' that show as their commitment to labour and efforts to establish associations with buyers and markets. Similarly, among the farmers of the study area, these aspects are observed in the platforms where the promoter organization facilitates in the form of buyer-seller interactions and participating in exhibitions like coffee conferences and auctions by the farmers and promoter organizations. Therefore, buyer-seller interactions and other platforms act as avenues to show their coffee quality, commitment and coordination to establish their collaborations and agreements with buyers.

4.5.1. Buyer- Seller Interactions: Negotiating Quality and Quantity

Gems of Araku (the buyers-seller meet) is an annual event organized by the promoter organizations (NGOs and collaborators) in an accessible location of these study villages. Most of the time, it is organized at the FPO's central processing unit. According to the promoter organization's key informant, this event is organized to exhibit the coffee to the buyers and show how it is produced. More than exhibitions, it also provides the interaction and negotiations between the farmers and the buyers, where the promoter organization plays the job of mediator between them.

In the buyer-seller meeting, the promoter organization invites organic buyers from the different parts of India and the world. Many of the buyers are foreign traders and buyers from America, Canada, Bulgaria, and Ukraine. They also invite the coffee experts who likely provide a validation report on coffee quality and grading to the organic buyers in the event. Based on these reports, the buyers book their orders with farmers. Here, it can be understood that organic markets are created by the envisions and networks of the promoter organization, for which they brought the network of buyers to the event. It means that when there is a lack of structural systems like markets in rural areas, they must be created with state help or local non-government institutions. Similarly, for the organic markets in the study area, the local non-governmental organizations' vision and farmers' collaboration with promoter organizations establish organic market networks.

Apart from bringing the networks and buyers, the negotiations in the event also show that the farmers must continue and rework on organic practices, which are instructed by the promoter organization, so that they can attract more buyers and agreements from

the buyers. It was clearly noticeable in the opening remarks placed by the President (Kona Rao) of the Farmer Producer Organization, where more than thousands of farmers were present at the event. He said that their buyers are particular about the organic practices and quality of the coffee, "we have to strictly follow the instructions of our collaborators and impress them with our coffee quality" so that they can convince the buyers and get a good price for the coffee. Further, to support this process the farmers will get the organic fertilizers free of cost from the FPO, he added. From the respondents' opinion, it can be inferred that the interaction of farmers with buyers in the event sets the quality standards among the farmers, where they need to rework on their coffee practices and continue the present methods, as directed by the collaborators. It also shows that the organic buyer's interest determines quality standards and they are bound to be obeyed by the farmers to establish an agreement with buyers. Therefore, these agreements and collaborations give them hope to participate in organic markets.

Similarly, Manish, CEO of the promoter organization, while expressing his ambition to increase the quantity and quality, also opined that "this year, the farmers have supplied 60 tonnes of coffee, and it is graded as the top-quality coffee by securing the 95/100 marks from the jury of coffee connoisseur". Yet, he opines that the farmers should increase the quantity from 60 tons to 75 tonnes and should score the grading quality more than 95 marks in the next year so that they can meet the quality and quantity demands of the buyers meaning that to maintain their association with buyers, the farmers have to coordinate among themselves and encourage the other farmers to participate in organic coffee practices to meet the quantity requirements of the buyers. And, it also compels them to think that they have to strictly follow the grading and segregation practices.

Thus, from the above data, it can be understood that the buyer-seller meeting functions as the platform for negotiations between the farmers and buyers, where the promoter organization acts as the agency to mediate and monitor the discussions. Moreover, the event also showed their commitment, practices, and willingness to rework with coordination and meet the standards and demands driven by the buyer's interest. So, this meeting is a major functionary in exhibiting farmers' commitment to achieving the agreements and networking with buyers.

4.5.2. Display at Auctions, Fairs and Conferences

In addition to the buyer-seller meeting in establishing the organic buyers' associations, it is observed that regular attempts of the representative of promoter organization, some of the "show farmers" and the government organization members participation in coffee auctions and conferences also act as the avenues and imaginaries to bring and connect the buyers to the farmers of the study area.

4.5.2.1 Display at Fairs and Conferences: Promoter Organization

It is noteworthy that the promoter organization not only arranges the platform (buyer-seller meets) to bring the buyers to the study area, but it also aspires to display the quality of coffee in international and national fairs and conferences to advertise and exhibit the coffee cultivation practices. So, in order to participate in these kinds of events, it selects and trains some of its coffee experts to represent the local coffee farmers and present the quality for the recognition of larger buyers. Vinay, one of the key informants, who participated in the international coffee fair in Paris, 2017 said that displaying the quality of coffee at the international avenues is very important because it gives larger reach to these products and attracts the buyers to Araku. Further, when asked why it is important to reach international events, he replies that the study area farmers cultivate in hilly and difficult locations. Their hard work and labour should get recognition and appreciation in the international markets so as to get a good high premium for the coffee. From his opinion, it can be understood that the aspirations of the representatives also play an important role in representing the farmers among international buyers and attracting the networks. Moreover, it also shows that the recognition of labour and identifying the value of the farmers are the key elements that drive these representatives to participate in such fairs and look for buyers. Thus, these representatives' presence and participation have played a major role in developing organic marketplaces.

4.5.2.2. Show Farmers

The 'show farmers', as postulated by Glenn Davis (2014), are the model farmers trained by the promoter organization to demonstrate the effectiveness of the organic practices and mechanisms to the outside viewers and visitors. These demonstrations are performed (by the farmers) to convince organic buyers and donors about the fertilizers and materials used by them so that they can get prolonged donors to organic inputs and practices. Glenn Davis (2014) and Flachs (2017) noted that farmers' performance is

very important in organic and alternative agricultural practices, where the farmers play a dynamic role in given structures and institutional agencies' relationships to achieve the targets. In addition to the arguments mentioned above of the scholars, it is observed that they are not limited to their role in the displays and exhibitions of practices at the farms. But they also travel beyond the physical boundaries of coffee farms, like to the auctions and organic markets, and visit the off-the-farm events to get the organic buyer networks and associations. Though these kinds of farmers are negligible in the study area, very few can be identified. Boja Babu, one of the show farmers in the Farmer Producer Organization, said that he has participated in Bangalore coffee auctions and markets to display the coffee quality in the open markets with an expectation that they will get the buyer to the coffee.

Another farmer, who does not belong to any of the study villages and has organic certification, Anjaneyulu, said that he has been doing the organic practices but struggling to get organic buyers. He has travelled more than 70km to participate in one of the exhibitions organized at the district headquarters (Paderu) by the State Government on the eve of Indian Republic Day celebrations, where the District Administrative Officer invites a few organic buyers. But, unlike coffee auctions and platforms (buyer-seller), this event offers very few sources of buyers to the farmers. However, they try to negotiate with buyers and establish collaboration with visitors. But, since it is not a platform of the market, most of the time, they end up advertising and publishing their stories with fewer buyer contacts.

From the opinions of the (show) farmers, it can be understood that the role of farmers, particularly those who share alike and progressive interest towards the organic practices is more than performance at the coffee plantations. They have to cross boundaries and go beyond the coffee farms to display their coffee at auctions, organic markets and some of the events organized at faraway places like Bangalore, hoping that they would get the network and association with buyers. Therefore, these desires and participation of the show farmers can be inferred as one of the key elements to get organic buyers, which are displays of the human imagination.

4.5.2.3. Institutional Imaginaries Towards the Organic Markets

The institutional displays are the imaginaries and aspirations of the staff of the government organization. In addition to the activities of farmers and promoter organizations, the ambitions of the individuals who are part of the government agency

also play an important role in bringing organic markets to the farmers of the study area. Bhansvar is a top manager in the Department of Coffee Extension Services at the state government institute. He opines that the top management officials realized the economic value and prosperity of the organic coffee of the Araku Valley. Particularly because of the successful stories and exhibitions portrayed by the Chaya organization (one of the promoter organizations in the study area) in the buyer-seller meets over the last ten years. Chaya Organization is offering better prices to the farmers than the government because of the international buyers through certification. Further, he says that they also feel proud and challenged to adopt such a model to support the farmers in organic certification and establishing the network of markets. Thus, they have also realized and started supporting the farmers by selecting a few villages as an experiment. It was clearly noticeable when he explained that they are negotiating with TATA Beverages, a private company, and trying to collaborate with them to bring buyers to the study area. As Herzfeld (2014) noted, the ambitions and recognitions of individuals in government institutions who understand the value of agricultural prosperity through regular cultural practices and activities bring supportive actions towards the subjects (farmers).

It infers that the ambitions and desires of the government individuals, who are part of the government agency, also envision the organic markets and try to bring connections to the Araku Valley coffee. This kind of implicit behaviors are important in the study area because the state government has no separate scheme or program to support organic coffee. In such absentia, these kinds of desires and ambitions of the government officials help the farmers by persuading the government either in the form of policy or programme. However, it was observed that these kinds of government agencies' initiatives towards the organic markets are new and recent in the study villages.

Therefore, from the above data, it can be inferred that the establishment and envisioning the organic markets in the study area has been possible mainly through the promoter organization and alike farmers' imaginaries, where they were created at the buyer-seller interactions and their display and promotion of quality of coffee at the exhibitions and conferences, both at international fairs and domestic markets. Unlike state-sponsored and promoted farmers of Uttarakhand and Sikkim, where the government has played a major role in connecting the organic buyers and promoting organic practices (Galvin, 2014; Yadav, 2022). However, this study identifies that the government agency is

influenced by the stories of non-governmental organizations and some of the work farmers and recognizes the scope of organic coffee prosperity. So, they also ambited to bring the organic buyers' connections to the farmers of the study area. Thus, the imaginaries of all of them make a significant contribution to the prospect of selling coffee to good buyers.

4.6. The Aspirations in Organic Practices of the Study Area

Appadurai says that aspirations are the elements of human agency, and they drive individuals to be part of larger actions (Appadurai, 1996). Due to the interactions and encounters of the farmers in the platforms of buyer-seller meets, displays and exhibitions, and negotiations with organic buyers, it create images, stories and multiple parallel values to the coffee farmers (Flachs & Panuganti, 2020). These kinds of values are clearly observed in the aspirations of the farmers and the members of their families.

4.6.1. Lucrative Actions

The association with the Farmer Producer Organization and collaboration with organic buyers have changed the local dynamics of market platforms in the study villages. The organic markets addressed some of the issues like transportation, storage, and processing by facilitating them with the help of promoter organizations. It also changed farmers' choice to shift from local markets to better organic markets, where they would not be cheated by the middlemen's malpractices and offered premium prices because of the organic certification. Turre, one of the key informants, is a 26-year-old woman and owns two acres of coffee plantation. She said that she has joined the Farmer Producer Organization because they have assured the transportation facility and better prices than traditional middlemen and money lenders. They also maintain transparency by employing digital weighing machines and providing the receipt of the trade, where this kind of activity is not practiced by middlemen or at local markets. So, from her opinion, it can be interpreted that they are aspirational to shift from traditional markets to organic markets because they are lucrative and offer better prices than local markets of middlemen. It means that organic markets are not only offering relief to the transportation, storage and processing issues, but they also offer better practices and premium prices because of which they are aspirational towards the organic markets.

4.6.2. Images of Pride and Recognition

The regular encounter of farmers with organic buyers and participating in the exhibitions and displays, where they learn the organic standards about quality and practices, shows that they not only rework on their practices to meet the coffee quality, but they also realise that their quality of coffee is very much accepted in the market and recognised by the most of the buyers. Appa Rao is an active participant in the organic markets and has been associated with FPO for the last ten years. He has received an appreciation award as "Best Coffee Farmer" from the jury of coffee connoisseurs in the previous buyer-seller meet organised at the Araku Valley⁶⁹. Further, he says that "I feel proud to be recognised as a best farmer and I feel great because I have cultivated the best quality of coffee among the many farmers". Thus, from his opinion, it can be understood that in addition to the premium prices of their coffee. The recognition and realization they get by contributing quality coffee make them feel great and proud about their coffee, which persuades them to aspire to continue and collaborate with organic markets and buyers.

Interestingly, when one of the respondents, Nagaraju, offered black tea, naming it as 'coffee' to the researcher, has also revealed a further opinion. When asked if he had ever tasted the coffee, he said they never drink it at home. He said that coffee is mostly consumed by the "White" (the local people refer to foreigners whose complexion is white, like Americans and others) and the wealthy people. He feels proud and great that their coffee is reaching America and is consumed by foreigners, which he learnt from a local news channel and, also at the buyer-seller meet. So, he says that they are getting better prices and recognition of quality than local buyers, and they want to associate with international buyers.

Therefore, from the opinions of the above respondents, it can be inferred that they are aspirational to participate in organic markets because they are creating an image of pride and recognition among the farmers through appreciation, rewards, and recognition of the quality. This means that the achievement of desires in the form of pride and recognition of quality is also playing as the forces of production and aspirational to be part of the organic markets (Yanagisako, 2020). Thus, these

⁶⁹Best Coffee Farmer is an award bestowed by a jury of coffee experts, which is organised by the promoter Organization to persuade organic purchasers. This prize is provided to the farmer who sincerely practises organic methods and receives the most points in the coffee cupping competition.

aspirations are important for the farmers in the organic markets, which is also observed by Flachs and Panuganti (2020).

4.6.3. Aspirations of Owning the Business

It is observed that the aspirations of the family members also play a key role in participating and desire for organic buyers' collaborations in the study area. These desires are revealed by the opinions of the children of farmers, and also by some of the farmers. In addition to the goals of the farmers, the aspirations of their children play a significant role in the sustainability of the practices, and it also boosts agricultural prosperity because their education skills can aid in identifying new avenues and marketing platforms for coffee. It was clearly noticed by the opinions of the many informants.

Bajranja, aged 32 years, has completed his bachelor's degree and chose to continue certified organic coffee farming. He said that because of the collaboration with the promoter organization and training, he had learnt knowledge of coffee processing and marketing techniques. During this procedure, he also had the opportunity to engage with outside purchasers, from whom he learnt that their coffee has a high market demand. As a result, he wishes to build his own collaboration with customers without the assistance of a promoter organization. It means that the children of the farmers who have the education and attained the capacity and knowledge, through the workshops and training are desired to avoid the intermediaries' support and establish their own collaboration with the buyers. It also means that they want to own and maintain a direct relationship with the buyers, by which they can have direct trade negotiations and higher benefits by cutting the depreciation of intermediary costs in premium prices. However, it can be observed that these aspirations are not easy to achieve because they are again conditioned by their lack of social network (where promoter organization has huge social capital to get buyers) and capital required to override the logistical and infrastructure elements of the present mechanism in connecting the buyers.

Therefore, it can be inferred that the aspirations of the children play an important function in continuing the associations with organic buyers and increasing coffee prosperity. However, their opinions also show that they want to own the process themselves and retain their identity because it can generate sustainability in the

practices and encourage the next generation to consider it a viable option for their livelihood.

Conclusion: This chapter shows that to bring the buyers and network of associations to sell organic coffee in the markets, farmer organic practices and certification alone do not help. They need to showcase their coffee quality and commitment to convince organic buyers. In this process, the study villages have revealed that apart from organic by-design practices, they need to rework on their processing methods, that is, from the dry method of coffee processing to the wet method of processing. This means that they have to adopt the standards and demands that are driven by the buyers, as similar to the observations of Galvin (2021) on Basmati farmers of Uttarakhand. Moreover, to match these prerequisites, they have arranged a tripartite relationship involving farmers, FPOs and intermediaries, where they share a common belief and motive to cultivate quality coffee. In this tripartite relationship, they all share an agentive role where farmers perform technical activities and implement the right method of practices to process the coffee. For this, they learn from interacting and exchanging knowledge with coffee experts. In a similar manner, the FPO serves as the formalization agency for the coffee processing mechanism. It does this by establishing partnerships with regional promoter organizations that assist in arranging the financial and social capital necessary to hire qualified coffee specialists to oversee the quality of the coffee. Whereas, the intermediaries are the agencies that share the regular interactions with farmers and FPOs in the study area. These agencies are NGOs and organic farming promoter organizations which function as the mentors and promoters of organic coffee practices to these farmers. They find potential buyers, and also mediate the negotiations between farmers and buyers. Thus, this chapter has revealed that cultivating the quality of coffee and knowledge among the farmers of the study area is a collective and collaborative action.

However, it also shows that creating quality coffee and generating knowledge about the processing is not equally practiced and distributed among the farmers. These differences and variances are observed in the financial and human capital strength of FPOs and promoter organizations. Apart from the financial capital and infrastructural variances of the promoter organization, the social capital (that is, the promoter organization's capability to mobilise the potential buyers, a network of associations, and management strength) makes a significant change. It was clearly visible from the

studied villages that is G.Guda villages farmers had both domestic and international buyers, whereas the K.Puttu village farmers have only a domestic buyers network.

In addition to the organizational capacities of the FPO and promoter organizations, the conditions and capacities of the farmers, such as availability of labour and family size, education and ability to procure and adopt the machinery and technology, and the problems of local money lenders relationship are also playing as a hurdle in partaking in organic markets. Though the farmers of the study villages have different capacities and conditions at the organizational and individual level, they continue the process because of their motivation to get a good price for the coffee.

But, this process of making organic prosperity has been made possible because of the imaginaries and aspirations of the promoter organizations, farmers and lately by the government organization as well. These imaginaries were observed in the form of desire and ambitions when farmers and promoter organizations displayed their coffee quality, commitment, and labour at platforms of buyer-seller meets, auctions, and fairs of both domestic and international avenues, in order to attract and establish collaborations with buyers. In this aspect, the (show) farmers not only perform the organic practices at the farm, but they also transcend the physical boundaries and travel to distant places to showcase their coffee and get potential buyers. Further, the farmers' aspirations, such as lucrative practices and pride and recognition of their efforts in cultivating the coffee, also add as the forces of production and influence to be part of collaborations of organic buyers and markets.

Finally, this chapter concludes that establishing the organic markets and buyers for agricultural prosperity requires collective actions to rework on methods and processes to convince the buyers with quality, which are identified in the form of aspirations and imaginaries of all the stakeholders. It means that for the successful creation of markets, it is not only the infrastructural and economic elements but also the display of human desires and aspirations that make a larger contribution to establishing the organic markets and participation of the farmers of the study area.

Chapter 5

Emerging Socio-Economic Changes in Araku Coffee Farmers

The previous chapters discussed the becoming of an organic farmer and their participation in organic markets. This chapter will focus on the emerging changes due to organic coffee cultivation and its markets on the economic and social lives of small and marginal farmers of the study area. This chapter also discusses how adopting organic practices for coffee has impacted their previous agricultural activities and its ripple effect on the farmers' families. Furthermore, it shows how organic markets have affected the Farmer Producer Organisation and its members in the economic and social aspects of the farmers. In addition, it tries to see how organic practices and markets have contributed to the changes in pre-existing market relations, income upsurge, debt patterns, and economic impacts. Finally, it also discusses how an economic impact, induced by organic markets, is changing their social aspects such as marriage and gifts, shifting conflict resolutions, and developing initiatives like the construction of pucca houses and other related issues.

5.1. Impact on Agriculture and Farmers

The agricultural activities of farmers are derived from their principal crops, as mentioned in Chapter 2 (See Table 2.21 List of Major Crops Cultivated in the Study Area). The agriculture cycle starts in the month of March and ends in early January every year, and the rest of the year (mid of January, February and mid-March) usually is a time of no work for the farmers. During this leisure period, they engage in community hunting in the forest. However, as mentioned by some of the key informants, because of having taken up coffee plantations, the hunting and leisure period has been reduced drastically. Before the application of organic practices to coffee plantations, they were performing very minimal activities, such as clearing the coffee plantations once a year and harvesting the coffee from October to January. However, embracing organic growing practices has brought up many more activities than earlier, as shown in the following Table 5.2. These kinds of activities, such as irregular visits to coffee plantations, continued only until the emergence of organic practices in coffee fields.

Notably, the internalisation of coffee cultivation into their pre-existing agricultural practices has been a recent phenomenon among farmers. As one of the key informants, Konda Chinna Babu, mentioned that, before the adaptation of organic practices in coffee fields, coffee plantations were not considered as a primary activity (as they were not part of their staple and principal crop), but rather they were only considered as cash crops. Nevertheless, the income and realisation of the abundant cash from coffee plantations motivated them to adopt coffee cultivation practices. However, he further mentioned that the adaptation and application of organic practices have increased the labour burden and reduced their leisure time. This expansion in coffee plantation activities has also caused pressure in dividing the workload among the family members. He also explained that the organic practices involve frequent visits to coffee fields to perform weeding, pruning, mulching, and the timely application of organic fertilisers. Thus, it eventually increases the work burden among the family members, especially when they are supposed to have leisure and recreational activities like hunting, which are essential for community bonding among the tribal coffee farmers. The extra labour that organic farming requires creating a lessening scope for community bonding and opening up a possibility of disharmony amongst the villagers.

Another farmer, Murthy, has a family of seven members, but most of the agricultural activities are done by him and his wife. He mentions that works like pruning and weeding in the coffee plantation and paddy transplantation start simultaneously. Due to the simultaneous requirement of working on both crops, both he and his wife work in paddy transplantation from morning to afternoon. However, in the afternoon, he moves to the coffee plantations to perform weeding and pruning while his wife continues working in the paddy field. The implementation of organic practices has divided the operational work within the family's available workforce. The shifting of time and resources from their major crop 'paddy' to coffee has created a division of available workforce and a new dilemma for the farmers to choose between either a cash crop or a subsistence crop, resulting in a threat to their traditional livelihoods.

Table 5.1: Major Participants in Coffee Related Activities

S. No	Major Participants	No of Families
1	Husband-Wife	74
2	Husband-Wife-Father-Mother	13
3	Whole Family	5
4	Wife Only	5
5	Husband Only	5
6	Not Applicable	2
7	Grand Total	104

Source: Field Survey, 2022.

The Table above indicates that more than 71 percent of the coffee field activity is performed together by the husband and wife in the villages studied. This shows that organic practices create an operational division of labour between husbands and wives due to the requirement of simultaneous work in paddy crops and organic practices at coffee fields. Similarly, Duram (1999), in his study on organic farmers, observed that adopting new practices created the division of operational work between the husband and wife to complete the work. Thus, it is changing labour organisation among the family members. Because of this work division, some families also consider organic coffee work as a burden and being stressful.

The Table below illustrates their agricultural cycle, including both conventional and organic coffee cycles. It also demonstrates how the shift from conventional activities to organic practices encounters the existing agricultural cycle.

Table 5.2: Interplay of Major Agriculture Activities with Organic Coffee in the Annual Cycle of Activities

S. No	Month	Major Agricultural activities and cycle	Annual cycle of activities	Organic coffee activities	Conventional coffee activities	Month	S.No
1	March to April-	land preparation for the next cycle		1. Pruning 2. Prepare bio-manures (April to	1. Pruning	March to April	1

				June) over three months. 3. Apply bio-manure, which is prepared in January- March)			
2	April to mid-May-	first rains		1. Fencing around the coffee field, topping, centring and pruning 2. Apply bio-manure, which is prepared from April to June 3. Prepare bio-manures (July to September) over three months.	1. Clearing shade tree litter and pruning	May, June and July	2
3	May	Ginger seeding or planting	Annual cycle of activities.	1. Mulching and Weeding. 2. Applying bio-fertiliser, which is prepared from July to September. 3. Prepare bio-fertilisers (October-December) over three months	1. Weeding and second pruning (if necessary, based on the weeds)	August to September	3
4	May to July	Seeding ginger, millet, local rice, kharif rice		1. Spray bio-fertilisers 2. Coffee harvesting (main) 3. Prepare bio-manures (Jan to March) over three months.	1. Coffee harvesting (main)	October to January	4
5	August	Harvesting first-cycle ginger		1. Last pick of the coffee harvest	1. Last pick of the coffee harvest	February	
6	September	Harvesting millets					
7	October to November	Paddy harvesting					
8	December	2 nd cycle Ginger harvest					
9	January to February	Leisure and Hunting					
10	Mid-March to April	The new agricultural cycle starts again					

Source: Field Survey, 2022.

5.2. Changing Labour Organization Pattern and Wage Payments

In addition to the division of operational work among the family members, as mentioned in the previous section, it is also observed that organic farming has also changed the labour practices in the studied villages. The villagers practice collective and non-payment labour exchange practices (as mentioned in Chapter 2). Due to the increased demand for activities in the coffee plantations (see Table 5.2), farmers have started to hire more labour from their relatives and neighbouring villages. Most of them were paid wages by lending the same labour hours to employees' coffee farms. However, some key informants mentioned that because of the labour shortage⁷⁰ and the numerous activities in the coffee fields, they started employing labour and paying them in cash for those activities. Interestingly, this change in labour payment practices is not seen in activities of staple crops, i.e, paddy. Dileep, a key informant, said that paddy and millets are essential crops for them, requiring collective labour activities right from seeding to transplantation and harvesting. He explained that since paddy and millet crops are essential for daily consumption, they do not use cash for wage payments. Thus, they tend to continue labour-to-labour exchange practices in major (paddy) crops. This continued labour exchange shows how they hold strong to their community bonds, collective activities and the importance attached to labour relations they follow for their major crops.

No changes are seen in the labour practices for their primary crops. However, labour practice changes can be noted only in the new organic coffee plantations. In addition, the monetary payments for the labour employed in coffee plantations have increased due to the need for skilled labour in works like weeding and coffee fruit picking. As mentioned in Chapter 4, the Farmer Producer Organisation takes the specific quality of coffee such as first-grade and second-grade coffee, and they need to employ experienced labour for picking and harvesting. Since the farmers are new to organic farming and many of the family members do not have specialised professionals for picking, they hire experienced individuals from their community, relatives, or

⁷⁰ The crisis of labour in the village is because of two reasons, one - most of the villagers have coffee plantations and they all demand the same type of labour requirement in the coffee plantations; Other one is many informants opine that works like weeding and picking coffee is a laborious activity. So, in order to finish the task as instructed by the promoter organisation, they have to employ labour.

neighbouring villages for fruit picking instead. The following Table shows the pattern of labour hired in the coffee plantations of the studied villages.

Table 5.3: The Pattern of Labour Hired for Coffee Activities

S. No	Type of labour hired in coffee fields	No. of Farmers
1	Weeding	9
2	Mulching	1
3	Spraying manures	24
4	Coffee fruit picking	34
5	Weeding, coffee fruit picking and coffee pit digging	1
6	Weeding and mulching	1
7	Weeding and coffee fruit picking	26
8	Weeding, mulching and coffee fruit picking	7
9	Weeding, mulching, coffee fruit picking and coffee pits digging	1
10	Grand Total	104

Source: Field Survey, 2022.

From the above Table, it can be understood that weeding and coffee fruit picking are major labour-demanding jobs in organic coffee plantations. Choosing to grow coffee organically has resulted in increased labour hiring and cash payments for wages, whereas the conventional coffee works required only close kin-family members (see above Table 5.2 showing the annual cycle of works in organic and conventional coffee). The changes in labour practices and wage payments have had a notable effect on traditional labour organisation among the studied farmers.

5.3. Developing Organisational, Collective and Cooperative Decisions

As mentioned in the previous chapter, farmers sell their coffee through FPOs by establishing a direct contract with the buyers (see Chapter 4). The organisation of FPOs involves the president, manager, and board of directors, who are elected by the

organisation's members. The FPO holds regular monthly review meetings with the board of directors for better strategies and mechanisms to market its coffee. The organisational structure and these regular meetings play a significant role in the successful marketing of coffee. In the FPO meetings, it is observed that the president and manager chair the meeting together, as well as the board of directors from its clusters. The meetings also include members from NGOs (acting as mentors) and from promoter organisations for discussions. Wherein the opinions of the promoter's organisation and FPO members are taken into consideration when making decisions and strategies collaboratively. However, the promoter organisation members' opinions on marketing strategies, such as finding potential premium buyers using their networks, attending coffee exhibitions and auctions, and involving the model farmers in their marketing advertisement, are given primary importance in the meetings. These kinds of strategies and mechanisms, which the promoter members suggest, are welcomed by the FPO members. When asked about his opinion on the suggestions the promoter organisation gave, the FPO president said that they "always suggest the best methods and practices to us" which are beneficial and make it easy to find the best buyers for the coffee.

Similarly, one of the board members also expressed that since the farmers do not have any formal education and do not know how to find platforms for buyers, it is good to follow the promoter's suggestions and instructions. The board member further expressed that following the suggested strategies helped them in getting premium buyers for their coffee. Meetings of FPOs show that members of the organisation and promoter organisations develop cooperative and consensus decisions, which are some of the essential aspects in strategising coffee marketing. This also helps us understand the role of mentor organisations in supporting the farmers in marketing coffee on various market networks and platforms. The promoter organisations' suggestions are significant when it comes to the strategies of coffee marketing, even though the organisation's participation is voluntary.

On the other hand, one of the promoter organisation members (who oversees farmers capacity building programmes) also had a similar opinion that farmers do not know how to connect with organic coffee markets which are located at faraway places (often in foreign countries), and lack of infrastructure and education to communicate with buyers. He further goes on to assertively add that the promoter organisation has the

capacity and networks to connect them to organic coffee buyers and the organisation's involvement is necessary to broaden farmer awareness of buyers' requirements, encourage group decision-making among FPO members, and facilitate communication regarding marketing strategies between the markets and FPO. In essence, encouraging regular FPO organisational meetings is vital as they contribute to raising awareness of market strategies among farmers, and are also of paramount importance for the growth of collective decisions amongst farmers, and between the promoter organisation and FPO. Thus, it signifies that for small and marginal farmers, these collective and collaborative strategies are necessary to connect organic buyers and markets.

On the contrary, one of the farmers, Ramulu, said that they are not aware of the happenings and the decisions made for marketing the coffee in the monthly meetings of FPO, aside from his trust that FPO operations are profitable and advantageous to him. He says that all the information on buyers, platforms, and strategies tail up between the FPO working committee and the promoter organisation, implying the communication gap between the organisation and its members. This gap shows that the FPO meetings involve only some members of the organisations, failing to reach all its members. It has been observed that FPO meetings skill and upgrade only those farmers who are part of the working committee. This selective training hinders their ability to instil capacity building and upgrade themselves from being mere coffee producers to informed and market-aware coffee farmers in the community (Gibbon, 2001). In a similar context, Negi (2018) has also found that among small and marginal Indian farmers, the availability of information and communication enables farmers to succeed and implement strategic decisions while participating in the open markets. Consequently, it entails that in order to upskill all farmers and inculcate collective decisions, a more comprehensive and inclusive dissemination of information within its group seems truly essential.

5.4. Changing role of Women

In cultivating coffee, women perform most activities, such as weeding, mulching, picking, grading, and segregating fruits. Most of the time, women are reserved only for performing those activities. But, this has been changing due to the terms and conditions

of trading and marketing partners⁷¹. Simhachalam, a retired board member from the FPO, said that the buyers and donors who support them in organic practices and markets have made a compulsory condition that the FPO working committee must include a woman in decision-making. So, since 2020, the FPO has started including women as the board of directors. He further applauds the inclusivity of women into the decision-making of the working committee, though the reality for women is concerning. They face a lot of trouble in just attending these monthly meetings because of the lack of public transportation and having to depend on their family members to participate in the meetings.

Another farmer, Ramani, has been elected (recently) to the board of directors by their village farmer. She also added that the lack of public transportation has been the main challenge in attending the meetings. Since Ramani does not know Telugu language, communication has been another barrier for her when conversing with mentor/promoter organisations. Ramani tried to remedy this by taking the help of another male board of directors as a translator to help her in the meetings. It may be concluded that using organic farming practices and exposing them to organic coffee markets has raised awareness of the role that women play in coffee growing. Therefore, it also fosters aspirations among other women in the villages. Additionally, it altered the Farmer Producer Organization's composition by adding female members to the board of directors⁷², which is the decision-making body.

5.5. Employment in Farmer Producer Organization (FPO): Seasonal and Permanent

The Farmer Producer Organisation provides seasonal and permanent employment to the members of farmer organisations. As noted in Chapter Four, farmers believe that cultivating the best quality coffee involves a systematic and lengthy process, which requires both wage labourers and the involvement of professional coffee experts (see

⁷¹ Some of the donors who are supporting the organic practices to these FPO are Livelihood Funds and Organic and Fair Trade organisations. They strongly recommend that their collaboratives must be gender inclusive and labour force of the women should be recognised by the organisations. They also say that women representative must be there in decision making bodies of the Farmer Producer Organisations. (see website. Fair Trade- <https://www.fairtrade.org.uk/>; Livelihoods- <https://livelihoods.eu/>)

⁷² By including the women as the board of directors in the FPO working committee also gives them authority over financial decisions by providing the cheque power.

the process of the coffee market in Chapter 4). The FPO collects coffee fruits from farmers in the villages and takes them to the processing units⁷³. The FPO then employs labour for different activities such as separating the coffee boxes, cleaning, drying, packing, and storing.

Work at the processing unit starts in October and ends in February. During this period, the organisation provides a seasonal daily wage employment opportunity to the organisation's farmers. Daily wagers are employed particularly for labour-intensive manual activities such as cleaning, segregating, and drying the coffee. FPOs mostly employ women whose villages are nearer to the processing unit for these kinds of activities. A female daily wage worker in the processing unit said that the organisation provides seasonal work for the families of the farmers by employing them in coffee cleaning and drying for up to five months a year. She also said that the organisation pays higher wages than the regular wages in her village⁷⁴.

Another worker (who is also a farmer), Ganesh, expressed a similar opinion that since he has only one acre of coffee plantation, he will not have much work to perform in his land. So, he chooses to work in the processing unit as a seasonal labourer to supplement his livelihood. In addition to seasonal employment, the organisation also hires some permanent employers from the families of FPO members who have education and communication to motivate farmers. These recruited persons work with promoter organisation staff. They get training from experts on aspects of organic practices and organisational skills such as book-keeping, communication, and negotiation skills. Notably, the permanently employed recruits are placed in jobs like organic fertiliser distribution, mediators between professional experts and farmers, and in mobilisation and promotion of organic coffee practices to the farmers. Nine permanently employed members work with the Farmer Producer Organisation in the studied villages.

⁷³ Processing unit is place where they convert the coffee fruits into pulped coffee beans by invoking the cleaning, pulping and drying. This unit is maintained by the FPO in collaboration with promoter organisation. It was observed that FPO members are involved in manual labour activities, whereas the promoter organisation staff (who is the expert in coffee processing) supervises the whole process of converting coffee fruits to parched coffee beans.

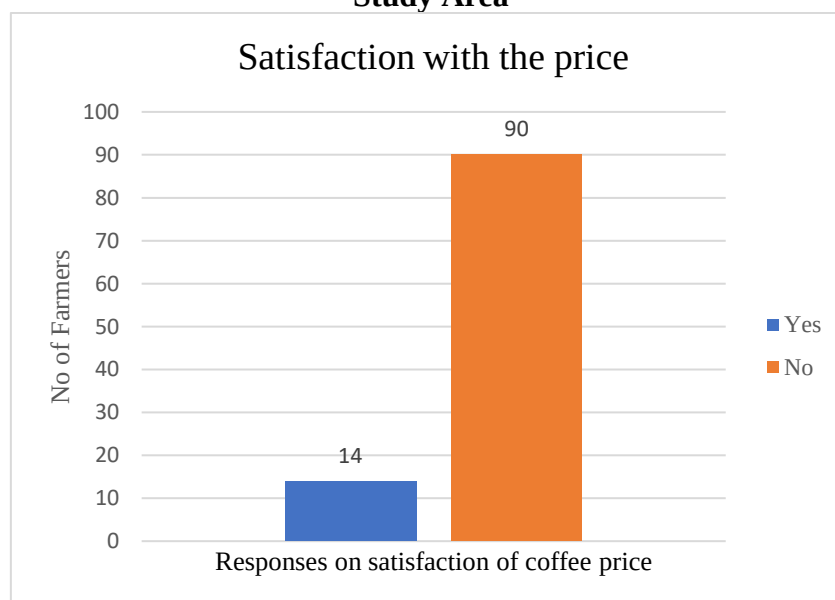
⁷⁴ It was observed that the workers in the processing unit were paid 250 rupees per day for both men and women. Whereas, the daily wage payments paid at their respective villages is 200 rupees for day.

Therefore, it can be understood that the Farmer Producer Organisations, which practise organic farming and participate in organic markets, show an opportunity for both seasonal and permanent employment to the members of the organisation, which means that it is providing an alternative livelihood platform, encouraging children for higher education and additional occupations for its members. It also shows that FPO and promoter organisations have been the tools of change by inculcating capacity-building skills to the farmers and their family members. However, only a small number of farmers have become part of the FPOs.

5.6. Organic Markets: Disappointments and Frustrations

Although the organic markets offer better pricing than their current market places, farmers in the study area expressed displeasure with the organic markets. They are disappointed and frustrated because of the practices and procedures followed in this market. Disappointments were observed mainly because of three reasons: a) dissatisfaction with the price offered for their coffee, b) late payment, and c) rejection of coffee on the grounds of grading and quality issues.

Figure 5.2: Farmer's Level of Satisfaction with Organic Coffee Prices in the Study Area



Source: Field Survey, 2022.

Some key informants said that FPO has been buying coffee at the same price for the last three years, and the price has not hiked even after raising their concerns with FPO over price stagnation. These informants have also mentioned that the FPO does not pay on the spot from the starting month (October) of the coffee harvest to the last month

(February). They pay lumpsum only after the completion of the last harvest, all at once, to their bank accounts and not in cash. Because of these events, many farmers are of the opinion that organic markets are a late payment process. Instead of selling all coffee to the FPO, many of the farmers tend to divide their coffee quantity into two halves, one of which is sold to the FPO and another half to the local *saavkar* (money lenders). Many farmers adopt this dual process and continue their trade both with *saavkars* and the organic markets due to the existing market dynamics like low price payments by local traders.

Another farmer, Dullu, opined that it is due to grading practices (as grade one and grade two) the coffee which is affected by unexpected weather conditions are not selected by the FPO team while purchasing as it is graded low. He further opines that due to the grading system, the farmers have been forced to choose the traditional markets, although they are not lucrative. It is witnessed that the rules of the organic coffee markets on quality coffee are strict, and the farmers have to match the grading practices and comply with organic standards. Therefore, the organic markets and practices have not been a major contributor to overcoming their problems and accommodating their concerns.

From the above opinions of the farmers and data from the villages, it can be understood that farmers feel disappointed and frustrated due to its payment method, stagnated prices over the years, and strict coffee grading rules. Because of these factors, the farmers depend on their traditional markets, such as local money lenders and shandy markets, which are not beneficial to them. Interestingly, it is also observed that a couple of farmers have taken new roles as seasonal petty merchants. However, they buy very little coffee from other farmers and resell it in the shandy markets or government procurement centres.

5.7. Impact on Land Rights and Political Movements

Organic certification and practices that are synthesised with international rules and regulations generate economic value to the commodities with better prices (Ranjan Jena & Grote, 2017). However, it is also noted that they create different parallel values in the form of opinions, stories, and images which show their sociological and political interests by being in the organic practices and markets, as noted by Martin Franz and Markus Hassler (2010), Sen & Majumder (2012), and Flachs & Panuganti, (2020).

Among the farmers of the study area, the ownership of land rights for the Podu lands (which are cultivated by tribal farmers but have land rights with the government) has been a continuing problem. Though the Indian government brought the Forest Rights Act 2006 for the tribal farmers of India, many of the farmers have yet to get their land rights. It is noted that many of the farmers do not appreciate FRA, 2006, as it involves lengthy procedures by government officials to issue the registered documents for the Podu lands (Bandi, 2013).

However, as some of the informants said, due to organic farming methods and farmers' realisation of the high prices for coffee in the international markets, it was observed that farmers participated in political rallies and protests that were often conducted for land rights and formal loans, at their nearest towns and revenue departments. Chinnaiah, one of the informants who recently participated in the political rally at Araku (the nearest town), stated that he had been approaching the revenue department for the last five years for a registered document, but the officials are delaying. So, he mentioned that he could put pressure on government officials by participating in political rallies to speed up the process and get the registered document for his Podu land. The economic value realisations from organic coffee markets have led him to participate in political rallies and fight for registered documents for their coffee land, which eventually enabled him to participate in organic certification and get better prices for their coffee.

Similarly, another farmer, Domaiah, said that he had received land registration for his coffee land under the Forest Rights Act of 2006. He asserted that organic certification had helped him to maintain the proper documents for his land as it involves recording the details of the land with the certification agency. Therefore, these regular documentation processes have been used to prove their rightful claim on land ownership and access to land registration. Moreover, it shows that organic practices in the coffee farms are creating parallel values for their unregistered land, and they have been the direct influencers to the farmers for raising their issues in the form of political rallies and protests. Besky (2014) also argued that organic markets have also helped locals participate in protests organised for land rights in Darjeeling other than gaining better prices for their tea.

Taking part in demonstrations and political gatherings helped persuade government representatives to provide loans for podu lands⁷⁵. In one of the meetings held at Paderu (district headquarters) between the farmers and the top district administrative officers on one of these issues, it became evident that the government officials were convinced by the success of the coffee farmers' efforts, labour, and management skills in creating globally famous coffee. Thereafter, the top officials agreed and assured that they would provide loans to farmers in collaboration with the banks. This describes the impact of organic markets on the farmers and their portrayal of successful practices playing a significant role in convincing the higher government officials regarding land rights and eligibility to avail formal loans from the banks.

5.8. Changing Market Relations

As mentioned in Chapter 2, the organic coffee farmers are small and marginal and fall below the poverty line. They lack infrastructural facilities such as open market platforms, transportation and communication. Because of these issues, they got used to selling their coffee to local money lenders, who would often cheat with malpractices such as improper weighing and low prices compared to market prices. Due to a lack of cash availability among the farmers, they borrow money from the money lenders, eventually drowning themselves in debt (Pratap, 1985). The state government has placed procurement centres to address these issues. Unfortunately, these procurement units are often located far from the farmers' localities. Furthermore, many farmers complained of late payments from the government procurement centres, making them unpreferable. For the aforementioned reasons, farmers have continued to sell their coffee to *saavkars*. But lately, farmers have shifted their trade relationship from local *saavkars* to FPO due to organic markets. By choosing FPO over *saavkars*, they have been able to avoid malpractices and indebtedness. A key informant, Bonjanna, explained that his preference for FPOs stems from their practices of collecting coffee fruits from his doorstep, using digital weighing machines, and offering better prices than local *saavkars*. Due to pre-existing problems with local markets and the effect of indebtedness, they have moved to organic coffee markets where better prices and

⁷⁵ In addition, a government representative from the revenue department stated that the government would conduct a survey and issue the farmers with land ownership documents, which could only be valid for 99 years and could not be used for mortgages with banks for loans. It means they can only cultivate in the land and inherit it to their children and they can not do any economic transactions.

practices are followed. So, the organic markets have played a significant role in reducing the farmers' reliance on local money lenders.

Another farmer, Ramanna, expressed that he is interested in selling his coffee to FPO because it gives him a better and higher price and a bill receipt for the transactions. He says the bill receipt springs confidence in him to trust the organisation. He further adds that it is because of FPO's correct payment that he could manage to write off his debts from money lenders and stop selling his coffee to the *saavkars*. However, he also mentioned that he sometimes uses his pre-existing *saavkars* relationship to sell low-graded and unaccepted coffee from the FPO pickup. From the above two informants, it can be inferred that organic markets have reduced the pre-existing market relationships between the local *Saavkars* and farmers. However, sometimes the relationship sprouts again because of the occasional selling of coffee when their coffee is regarded as low-graded and not accepted at the FPO. Nevertheless, these organic markets have played their part in removing the shandy market option and the transportation problems associated with the coffee trade⁷⁶. Consequently, this change is affecting social issues such as malpractices and indebtedness linked to traditional markets.

Farmer's preference for the sale of coffee also depends on two factors: One is that of financial capital of the FPO organisation to afford the process of coffee collection from the villages, and the second is the social capital to mobilise the farmers and to find the best buyers for the Farmers Producer Organisation. Therefore, the studied farmers of both the new organic market participants and the established participants showed a concurrence. However, there were differences in preferences for selling their coffee.

The farmers of the G.Guda village strongly preferred selling their coffee through the FPO. Meanwhile, the farmers of K.Puttu village showed multiple preferences for selling their coffee in the market. These differences are because of the above reasons mentioned (for more details, please see Chapter 4). The following Table provides a comprehensive overview of the changing market preferences among the local farmers of the selected villages.

⁷⁶ See chapter 2 on pattern of market preferences by the farmers of the study area.

Table 5.4: Market Preferences of Established Organic Farmers

S.NO	Market Preferences	No. of Farmers
1	FPO	45
2	Not applicable	7
	Grand Total	52

Source: Field Survey, 2022.

Table 5.5: Market Preferences of New Organic Farmers

S. No	Market Preference	No. of Farmers
1	Dalal	21
2	FPO	19
3	GCC	1
4	Market	1
5	Market nearby	2
6	Market, FPO	1
7	Not applicable	5
8	Village trader	2
	Grand Total	52

Source: Field Survey, 2022.

When farmers' preferences for selling are compared, it shows that K.Puttu FPO farmers have shown multiple preferences rather than exclusively choosing the FPO. Informants of this village have pointed out that the FPO does not consistently arrive on time for pickup when the coffee harvest is ready in hand. Ramakanth (one of the farmers) says they would rather sell their coffee to the *saavkars* and the local traders who come to the village or even try selling at shandy markets since their Farmer Producer Organisation members do not regularly pick up. This shows that the organic markets impact farmers

differently based on the organisation's financial and social capital⁷⁷ as well as the support they receive from the promoter organisation. However, it is observed that organic markets could reduce the farmer-*saavkar* relationship and help them to come out of the problems of indebtedness.

5.8.1. Organic Markets during Pandemic

The world has experienced a global health pandemic due to the COVID-19 outbreak, leading to strict lockdowns and movement restrictions in markets worldwide. These strict restrictions were imposed for nearly three years, from January 2020 to May 2023, as noted by the World Health Organisation declaration on Covid-19⁷⁸. Because of restrictions on physical movements, COVID-19 has impacted trade relations and market movements by distancing the market access to the farmers. However, only the conventional coffee farmers in the study area faced these situations. The organic markets and Farmers Producer Organisation devised strategic plans in order to sell their coffee by overriding marketing problems. They have adopted a digitalisation process⁷⁹ which involves providing coffee quality reports and farmer's details on online selling platforms to the coffee buyers, with the help of promoter organisation and their networks. They have also adopted direct contract agreements with domestic and multinational corporate buyers like Walmart, with the help of a promoter organisation's social network and negotiation capabilities. According to some of the informants, COVID-19 did not change their trade relationship with organic markets. Instead, it provided an alternative approach to sell their coffee through direct contract agreements with multinational wholesale buyers. Furthermore, one of the staff members of the FPO provided an opinion that it is due to their relationship with the promoter organisation and their nexus of market connections, they could digitalise their coffee marketing

⁷⁷ The K.Puttu Village FPO and their promoter organisation does not have strong financial capital and transportation vehicle. They depend on their donors and private vehicles while purchasing the coffee from the farmers, so because of these issues sometime they don't show up when the farmers are ready with coffee harvest at the village.

⁷⁸ See WHO statement of declaration on Covid-19. [https://www.who.int/news/item/05-05-2023-statement-on-the-fifteenth-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-coronavirus-disease-\(covid-19\)-pandemic](https://www.who.int/news/item/05-05-2023-statement-on-the-fifteenth-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-coronavirus-disease-(covid-19)-pandemic), Accessed on 2023-09-10 11:52:55.

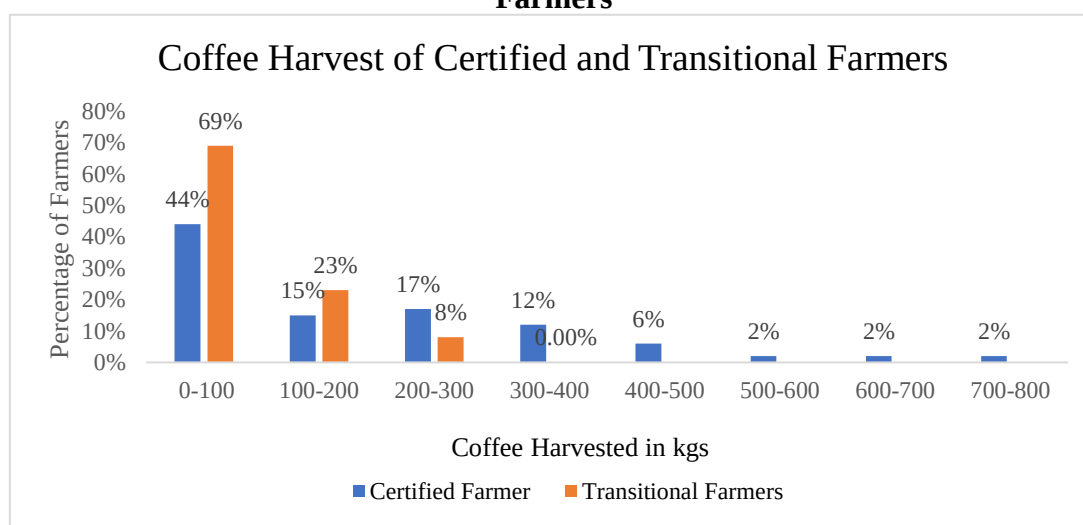
⁷⁹ It was observed that the in order to sell their coffee produce in the markets they have digitalised the coffee processing activities and provided them in the online platforms. The digitalisation of activities involved such as providing the coffee farm locations using GPS data, coffee processing methods and coffee quality reports.

process and sell their coffee at online auction platforms without any impact of covid-19 on the coffee prices. However, he also mentioned that adopting the digitalisation process involved a substantial amount of working capital and fund raising to complete this process. Thus, because of the farmers' membership in the FPO and their relationship with the promoter organisation, they avoided the market restrictions imposed by the COVID-19 pandemic, unlike conventional coffee farmers in the study area.

5.9. Economic Impact on Farmers

The organic practices and activities in the coffee fields have shown a significant change in the coffee yield when compared to their previous conventional coffee harvests because of the increase in timely care and necessary grooming activities in the coffee field (as mentioned in Chapter 3). This rise in coffee harvests due to organic practices is noticeable when we compare transitional farmers' and established farmers' harvests in the study area.

Figure 5.3: Comparison of Coffee Harvest Between Certified and Transitional Farmers



Source: Field Survey, 2022.

Though all the farmers in the selected villages are small, marginal, and possess similar landholdings, they have shown a wide difference in coffee harvest because of the early adoption of organic practices. The established certified farmers have shown a huge change in coffee harvest as compared to transitional organic farmers. From the above Figure, it can be observed that certified farmers have harvested a minimum of 100 kgs of coffee to a maximum of 800 kgs, whereas transitional coffee farmers have harvested

a minimum of 100 kgs of coffee to a maximum of 400 kgs. This indicates that, due to the application of organic fertilisers and certified farming, the farmers have increased their income compared to conventional and transitional organic coffee farmers. However, according to a few key informants among the transitional coffee farmers, they have also increased their coffee harvests from conventional methods due to the use of organic fertilisers in the coffee field, but not as significantly as the established organic farmers. Nonetheless, it shows that organic methods have contributed to the increased incomes of coffee among transitional farmers. And, they also opined that it is because of being new to using organic fertilisers for their coffee, their harvest is less. However, the transitioning organic farmers expressed confidence that their harvest will be good in the future because of the adoption of organic practices and its methods.

The study has also noted that there are model farmers within the farming community. The organic practices not only increased the coffee harvests and income but have also created new roles for farmers who are known as "model organic farmers" or "best organic coffee farmers." It is observed that model organic farmer plays important functions for the community. Ajay, one of the respondents, mentioned that he has been motivated and inspired by the model farmer's harvest and income. So, he decided to adopt certified organic practices in coffee cultivation. In essence, the model farmers function as influencers and resource persons to inspire new farmers to take up organic farming, which certainly increases income compared to previous practices.

Therefore, it can be understood that organic practices are creating new roles as model farmers within the organic practitioner, and these model farmers function as resource persons, influencers, and motivators for new organic farmers, which helps new organic coffee farmers to increase their income and livelihood. It also means that these new occupational changes and roles are acting as the new statuses among the members of the villagers.

Moreover, due to change in incomes from the organic coffee and markets, it is also identified that many of the farmers have been able to afford luxury items such as bikes, smart mobile phones, and televisions. Some farmers even diverted their incomes into acquiring machinery, such as woodcutters, carpentry machines, rice mill motors, autos, and mini-tractors, which could provide alternative incomes. The following Table provides some of the new kinds of assets they owned in the studied villages.

Table 5.6: New Assets Owned in the Study Area

S. No	New assets and luxury items	Total
1	Carpentry machines	6
2	Autos	7
3	Mini-rice mill motors	2
4	Tractors and min-tractors	2
5	Woodcutters	5
	Total	22

Source: Fieldwork, 2022.

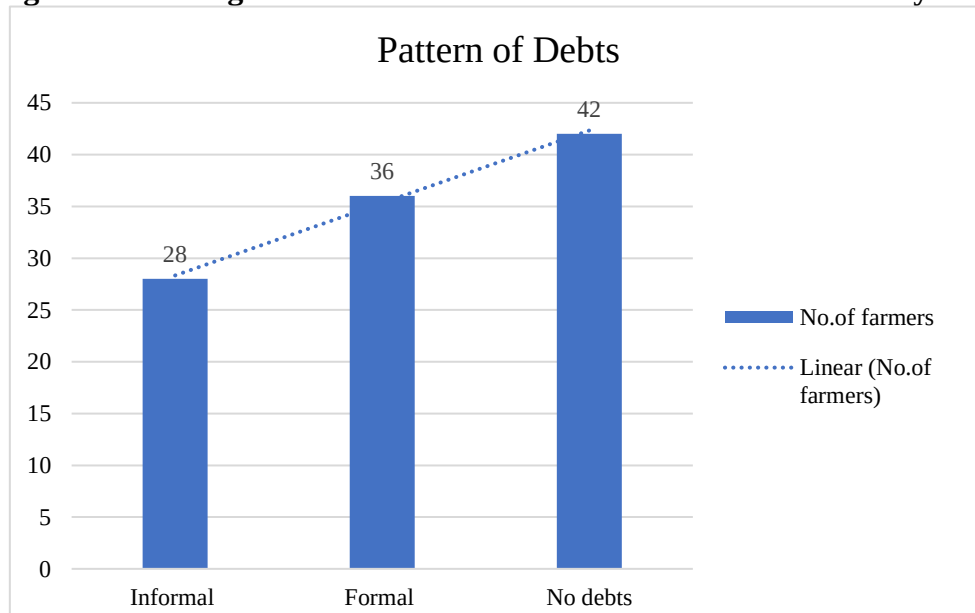
5.10. Changing Pattern of Debts

In the past, the tribal farmers of the study had more informal debts than formal debts, with no regulations available to their rescue. They used to borrow money for their marriages and festival expenses from informal sources like local money lenders and *saavkars*. But, due to their low literacy and education, they often fell victim to fraudulent money lenders (Pratap, 1985). However, it has been noted that in recent years, people's preferences for sources of debt have shifted from informal to formal, potentially due to increased awareness of formal sources of debt and the availability of land registration documentation, which allows them to apply for bank loans. This shift has coincided with rising levels of education and income from agricultural products like coffee and pepper. Moreover, many of the informants have opined that participation in the organic markets, in addition to the increased income from the coffee, resulted in the rise of savings. These savings are used to meet their expenses on marriages, festivals, and their children's education.

A farmer of G. Guda (one of the study villages) shared an anecdote from 2010 that including him, most of the farmers had informal debts with the local money lenders, and were debt-trapped before joining the organic coffee markets because they earlier had no cash crops and solely cultivated subsistence crops. As a result, they had to rely on local money lenders for their cash demands. There were no formal sources like banks, in this region. So, they used to rely on local money lenders (informal sources) for cash. However, due to coffee, the organic promoter organisation, and FPO, he received bank loans and cleared their dues and debts to the moneylenders. As a result,

farmers are transitioning towards becoming debt-free. The following Figure from the sample villages provides similar cases of debts possessed by the farmers and their changing pattern of debts to no-debt farmers.

Figure 5.1: Change in Pattern of Debts From 2017-2022 in the Study Area



Source: Field Survey, 2022.

From the data of the selected villages, it can be understood that farmers' choice of loan-seeking behaviour has been changing from informal to formal sources because they no longer depend on local money lenders as they are not in indebtedness, and their awareness of formal loans has also increased with guidance from the promoter organisation. Flachs and Panuganti (2020) have also noted that organic markets have helped them access formal loans. Moreover, another major change in the formal debts is the state government's provision for the farmers to avail loans on a crop, based on the land registration documents⁸⁰.

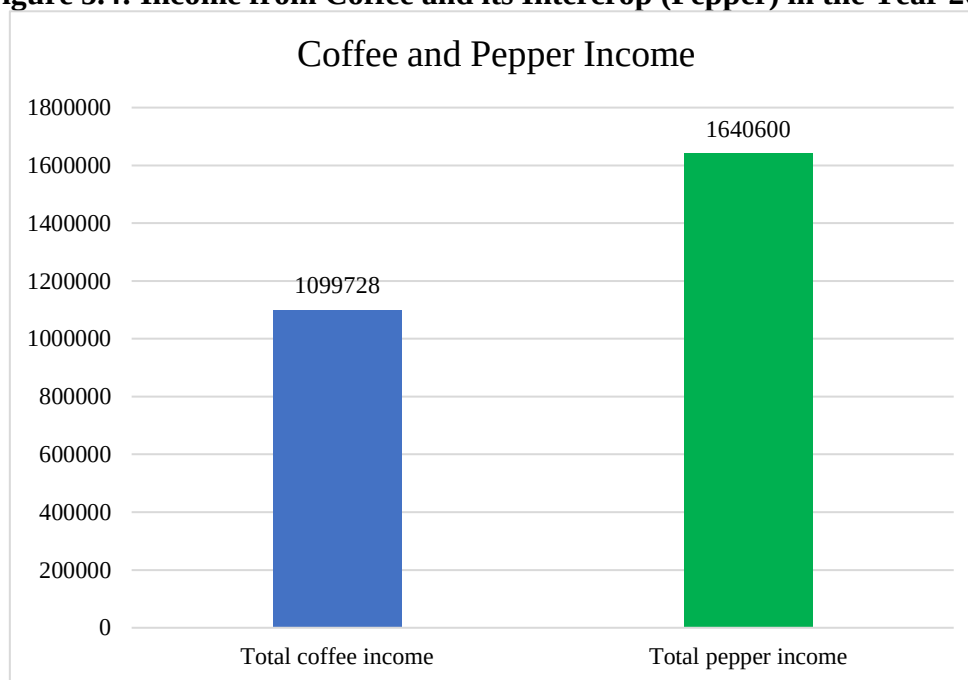
Therefore, it can be understood that organic markets have helped farmers to come out of indebtedness and increase their savings, reducing the economic and social relationship between the money lenders. Thereafter, farmers are changing towards formal sources of debt, where malpractices are less and systematic process for transparent and accountable methods are followed in money exchange.

⁸⁰ Most of the farmers have said that they could avail the loan on the patta lands which come under the revenue department only. Though many of the farmers have the Podu registered land documents, they couldn't get loan from the banks, banks allege that Podu lands are government lands so they can't provide loan to Podu lands (coffee lands).

5.10.1 Aspirations for Pepper Markets: Looking for a High-Value

In the coffee plantations, the farmers also cultivate bio-diversified crops, including seasonal fruits and pepper (see Chapter 2 on horticultural crops). The seasonal fruits provide income and livelihood sources for many of the farmers. Other than these seasonal fruit crops in the coffee plantations, it is noted that the pepper crop is the most lucrative crop for them. According to many of the key informants, it is noted that the pepper crop holds an equal importance to coffee because of its high market value and lower labour and maintenance requirements compared to coffee. Moreover, the data from the study area also shows that they get more income from pepper than from coffee. The following Figure illustrates the income earned by all the farmers from both coffee and pepper.

Figure 5.4: Income from Coffee and its Intercrop (Pepper) in the Year 2022



Source: Field Survey, 2022.

The farmers currently process the cultivated pepper using their traditional methods, which do not involve machinery for grading and sorting. They sell pepper in traditional markets such as local money lenders/ *saavkars*, to traders who visit the village, and at the shandy markets. One of the key informants, Chinnaiah, claims that pepper is grown in the same coffee-growing regions where organic fertilisers are used, but FPO does not purchase pepper since it has not found any potential buyers for pepper. They are, therefore, solely dependent on local traditional markets. He opines that the FPO should

buy their pepper as it is cultivated using the same organic practices, which could increase their income and overall economic well-being. In this note, it is also observed that it is due to organic practices followed for the intercrop pepper (in the coffee plantations) and exposure to organic markets, farmers have developed a new aspiration to negotiate the inclusion of pepper with the same buyers who are buying the coffee.

From the above data, it can be understood that along with coffee, pepper is a prime and highly lucrative crop for increasing farmers' income. This set a new goal among farmers protesting to include pepper in the organic markets while negotiating with the buyers since pepper undergoes rigorous organic farming practices, as does coffee. Though their aspiration shows a logical negotiation with buyers, achieving pepper markets seems rather difficult because they have to comply with the organic quality testing and organic compliance certification, implying that they would need financial and social capital to achieve a trade agreement for pepper. Yet the farmers are of the opinion that intercrop pepper also would be identified with potential buyers any time soon, which can be a gateway to increased incomes of the farmers. The increase in income from coffee and pepper among farmers in the study area has led to a significant change in other aspects like house types, marriages and gifts, and conflict resolution. The following sections will elaborate on this.

5.11. Changing house types: Semi-Pucca houses to Pucca houses

It is noted that the study area is one of the potential sites for natural calamities like cyclones. One of such noted calamities in the study area is the Hudhud cyclone that occurred in 2014. Samaiah (2015) also identified that erstwhile Vishakhapatnam is prone to natural calamities and disasters since the study area is adjacent to the coastal area and is at a high altitude. As mentioned in Chapter Two, most houses in the study area are semi-pucca houses. Traditionally, their houses were built with mud walls and grass roofs. However, due to the adverse effects of natural calamities, they want to construct houses that can be resistant to natural calamities.

One of the respondents, Krishnaiah, 45 years old, constructed a pucca house after dismantling his previous semi-pucca house in the G.Guda village, said that he had been saving money for the last four years to construct the pucca house. He adds that he is able to build a pucca house from what he could earn farming both coffee and pepper. Further, he also mentioned that selling his coffee to organic markets improved his

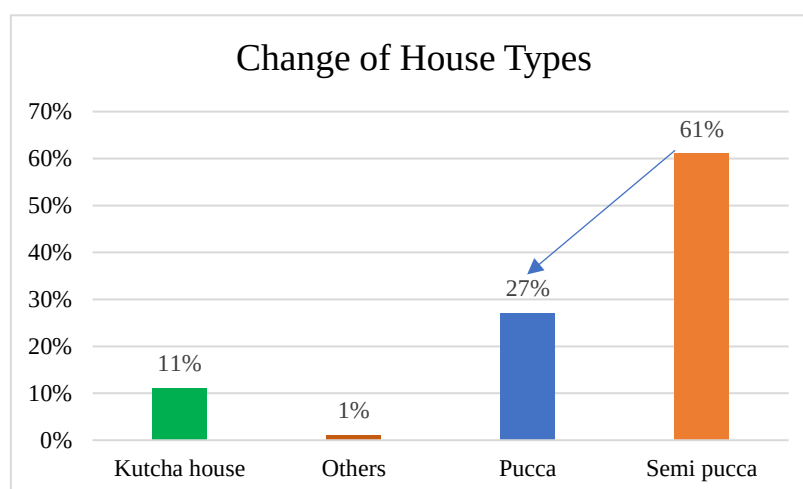
savings. It basically shows that the direct contract markets of organic buyers have eliminated the local *saavkar* malpractices and benefitted the farmers of the study area to construct pucca houses and prepare for the adverse effects of natural calamities.

Another farmer, Sithaiah, is a 50 years old farmer from G.Guda village. He has a semi-pucca house and is constructing a new house. He said that because of the organic coffee practices, the organic markets have provided him with the best coffee buyers who can quote premium and better prices than local markets. Therefore, he added that his income and savings had increased significantly, and because of this, he could construct a new pucca house. He also shares that his main intention in constructing a pucca house was to store the grains securely from the damage that occurs due to bad and moist weather and can also take refuge from natural calamities.

Furthermore, it has been noted that the farmers' extended nuclear families have benefited from the change in ambitions from conventional housing types to pucca houses. The construction of pucca houses has reduced the stress and burden on nuclear families as these new houses provide safer and more protective accommodation. One of the respondents, Bojjaiah, (a 53 years old farmer of K.Puttu village), living with his son's son's family (extended family), said that he is constructing a new house with three rooms that can accommodate all his family members. This ensures that his nuclear family does not have to worry about constructing a new house independently. He also acknowledges that he could help his family because of his income and participation in the organic markets. It means that the organic markets not only increased the farmers' income but also reduced stressful expenses on the heads of the nuclear families of farmers by providing a shelter. Farmers are devising strategic plans to construct permanent and strong pucca houses with architecture that suits their needs.

The following Figure shows the changing aspirations for constructing pucca houses, and a transitional shift from traditional houses to pucca houses of 104 organic coffee farmers.

Figure 5.5: Change of Semi-Pucca Houses to Pucca Houses in the Study Area



Source: Field Survey, 2022.

Table 5.7: Trend in Increase of Rooms Within House Type

Number of Rooms	No of Families	Showing trend in increase of rooms in houses.
0-1	1	
1-2	11	
2-3	56	
3&above	36	
Total	104	

Source: Field Survey, 2022.

From the above Figure and Table, it can be understood that many of the farmers have been shifting to pucca houses from semi-pucca houses (61%-27%) and kutch houses because of the income and savings created out of the organic coffee markets, as mentioned by the key informants. Moreover, it also shows that they are building bigger houses with more rooms than their previous houses, which used to have a maximum of two rooms. This change of constructing bigger houses has again resulted in accommodating the extended nuclear family members under one roof. However, many

of the nuclear family members opined that they wanted to construct a separate pucca house⁸¹. Thus, joint family living has slowly given way to nuclear family households.

Thus, organic markets and practices have produced a wide range of possibilities for enduring unanticipated events by strengthening themselves to be able to fend for themselves and their extended families. Along with providing people with a sturdy home to withstand natural disasters, but also raised human dignity.

5.12. Changing Marriage Ceremonies and Practices

The farmers in the study area belong to the Konda Dora community. This community follows bride-price practices in their marriage alliances. Bride-price in this community involves a mix of economic transactions, both in cash and kind. In the past, setting up a marriage involved offering a local drink, goat, feast, and rice to the bride's family by the groom's father. However, due to increased cash availability and savings from major cash crops like coffee, they have amplified cash offerings from a minimal amount of three thousand to four thousand rupees (on average) to more than ten thousand rupees.

Similarly, regarding the kind offerings, from one goat and two or three jars of local alcohol, they have come a long way to offering two or three goats and including foreign brands of alcohol along with the earlier preferred local alcohol.

This indicates that the coffee income has altered the composition and economic transactions of bride prices in the studied villages, which signifies that they are changing towards cash-important practices in marriage alliances. However, it is important to note that economic changes have altered the composition of bride price offerings but did not affect the social practices in general.

Case 1: Aparith is the head of the family and is from the G.Guda village. Regarding bride price payments, he stated that in the past, they used to offer a feast to the bride's family in order to convince them of the marital alliance, included important things such as one bag of rice, one can of cooking oil, one goat, vegetables, and a few thousands of rupees. But after the establishment of coffee plantations and the availability of cash with his family, he spent ten thousand rupees of cash and offered ingredients like a rice bag, cooking oil tin, two goats, and 40-50 kgs of chicken with vegetables for his son's

⁸¹ Because the farmers of the study area belong to the Konda Dora community and they practice nuclear family habitation but collective agriculture. Therefore, the nuclear supplementary families want to construct a separate house adjacent to their main family house.

wedding. It indicates that in contrast to previous bride price offerings and other exchanges there is a significant growth in cash payments.

Case 2: Chandru, who is 53 years old and from K.Puttu village, offered a similar viewpoint on bride-price payments. He stated that he paid fifteen thousand rupees in cash, three goats, and two bags of rice for his son's marriage and associated bride price payments, as opposed to traditional bride price payments, which include more products and items produced and available in the villages. Furthermore, he believes that because bride-prices are of the utmost importance in the Konda Dora community and cash is readily available, payment methods are changing from kind to cash. Thus, on the above cases, it can be inferred that the income earned from coffee plantations is converting bride-price payments from kind to cash and leading them towards cash-dependent practices, especially for marriage alliances.

Table 5.8: Change in Bride-price Payment Among the Farmers

Family	Bride price (<i>Voli</i>) earlier	Bride price (<i>Voli</i>) now
Case 1	● One oil tin ● One bag of rice ● Vegetables for the bride's family feast ● Country chicken ● One goat ● 2-5 thousand rupees in cash	● One oil tin ● One bag of rice ● Vegetables for the bride's family feast ● 40-50 kg poultry chicken for the feast ● Two goats ● 10-15 thousand rupees in cash.

Case 2	● One oil tin ● One bag of rice ● Vegetables for the bride's family feast ● Country chicken ● One goat ● 5 thousand rupees of cash ● Two drums of local alcohol	● One oil tin ● Two bags of rice ● Vegetables for the bride's family feast ● Three goats ● Fifteen thousand rupees of cash. ● Local alcohol plus foreign alcohol is offered at the feast.

Source: Field Survey, 2022.

According to some of the key informants, coffee cultivation has not only increased economic transactions as discussed already, but has also impacted the rituals and gifts involved in the marriage. The marriage rituals previously, which involved minimal gold displayed on the bride's body, have now changed to very expensive gold ornaments worn by the bride. It shows a change in the perception of gold possession in the marriage rituals. Moreover, a significant change has been seen in the marriage gifts that were offered at receptions and feasts, which were held either at the bride's or the groom's place. Wedding feasts are one of the main activities in this community. So, to host the wedding feast, the bride/bridegroom's family members and relatives will contribute in the form of goats, chicken, oil tins, bananas, cool drinks, brass vessels, and rice to conduct the feast. One of the informants, Appalanna of K.Puttu village, who has gifted his relatives in some of the marriage feasts, said that coffee plantations allowed him to save money and make contributions as gifts at the marriage ceremonies for his relatives. These offerings are regarded as investments and economic holdings that he will receive back in future wedding or event in their families. His contributions included bananas, chicken, biryani rice, cooking oil and cool drinks for the feasts he would conduct in the future. He said that, they used to offer vegetables, millets, rice and local alcohol and bananas before coffee plantations. But due to high income from coffee plantations they have included many other items like brass vessels, which are costlier and considered as an economic assets.

Therefore, it can be understood that the income from coffee functions as an economic asset by creating economic wealth in the form of marriage gifts, and it also functions to strengthen the social bondage between the family and relatives of the farmers. So, the changes that emerged out of coffee can be seen as a significant factor for the social and economic security among the farmers of the study area. The following information shows the transactions and gifts they have contributed to their relatives' marriages and feasts (which are considered economic assets).

Table 5.9: Change in Marriage Gifts in the Study Area

Informants	Some of the marriage gift contributions
Informant one	• 500 kg chicken • Fifteen thousand rupees worth of rice • Twenty-two brass vessels • Thirty thousand rupees cash
Informant two	• 250 kg chicken • Twenty-one thousand worth of rice. • Fifteen brass vessels • Eighteen thousand rupees cash • Seven cases of cool drinks
Informant three	• Fifteen thousand rupees for lighting at marriage • 100kg chicken • Seven cases of cool drinks • Three biryani rice bags • Fifty-five thousand rupees as cash.

Source: Field Survey, 2022.

5.13. Change in Conflict Resolutions Pattern

Conflicts are predominantly observed in marriage-related issues (termed as *moganallu*⁸²) and family disputes that might occur among the community members. In both these conflicts, they used to settle the conflicts by paying the fines that were decided by the village headman either in kind or cash. According to some of the key informants, it was noted that they used to resolve the conflicts by paying the money fined for the punishment in the form of goats and a small amount of cash. But now, due to cash availability from the coffee and pepper, the form of payment has changed to cash with huge amounts as fines. Laxmanan of K.Puttu village, one of the informants, when married to Subadra (already married and who got separated from her first marriage), as part of the settlement in *moganallu*, had to pay a fine of rupees one lakh ten thousand to the divorcee of the woman.

Similarly, another informant who married a woman who eloped from her previous marriage, said that he had paid an amount as punishment in breaking the previous marriage. An amount of rupees one lakh fifty thousand is paid to the divorcee's family for breaking the new wife's earlier marriage. He also mentioned that he could not pay in the form of kind like in the old times because of the enforcement of fines to be paid in cash due to changing preferences towards a cash economy. Thus, income and cash availability among the farmers owing to coffee cultivation have changed conflict resolutions, particularly the mode of transactions, which have been changed from kind to cash, and also how they are getting resolved.

Conclusion: Organic practices and their market have shown a great impact on varied fields such as work division, community bonding, house types, conflict resolutions, employment, change in labour organisation and land rights of the organic farmers.

Firstly, the nature of work and activities of organic practices have increased the work burden and working division of labour among the family members of the farmers. It has also shown that due to the nature of work, their community activity such as collective hunting, which is usually conducted in their leisure time (from January to March), has been reduced to minimal. This results in less time for community bonding

⁸² *Moganallu* is a practice in which compensation is paid to the divorcee family by the divorcer or remarried husband of the divorcer.

activities, which are essential for them to continue social relations and bonding within the community.

Secondly, the organic practices are changing their collective family farming (in coffee plantations) to employing more daily wage labourers for cash payments. They used to have only collective family farming and labour exchange for labour. However, the high demand for work in the coffee fields resulted in employing labourers from neighbouring villages and distant relatives in exchange of cash, thereby changing coffee farmers' labour practices and payment methods in the study area. It implies that changing labour practices and induction of a cash economy into the tribal farmers would further lead to dependence on cash, which would result in perpetual indebtedness in the process of reorganising labour. It would also imply that changing labour practices could create a disturbance to their earlier kin based collective farming, resulting in social disharmony in the community, as observed by Pathy (1995).

Moreover, it is also noted that, apart from the organic work practices in the coffee fields, the organic markets and Farmer Producer Organisations are showing a larger impact on the rise of coffee income and in establishing organisational skills amongst farmer groups. The Farmer Producer Organisation, because of their tie-up with organic markets and promoter organisations, has been gaining skills on the work culture of an organisation (FPO) and also running a successful organisation to sell their coffee to the organic coffee markets. It has also been observed that collaborations with international buyer organisations have made a compulsory condition for FPOs to recognise and include the women working in the organic coffee markets. Because of this, the FPO has been including the women in their top decision-making committee and giving importance and recognition to the women's work. It shows that neoliberal trade impacts farmer organisations when local organisations meet with global trade organisations (Lyon et al., 2019; Tucker, 2011, p. 223). These policies have enabled farmers to have authority over the process of coffee and community-oriented strategies. As a result, through FPO, they are creating seasonal employment as wage labourers and facilitating permanent employment to the educated youth of the farmers' families.

This chapter, at length, also notes that organic practices and participation in organic markets have increased the income of farmers drastically when compared to conventional markets and also removed the pre-existing dependency on money lenders who caused most of the problems faced by the farmers. Because of these changes, the

economic assets of the farmers have risen, and it is significantly reflected in the change in the debt pattern, i.e. from informal loans to debt-free, of the farmers and helped them in the construction of permanent pucca houses. Moreover, it is also observed that the economic changes and rise of income from coffee have also impacted marriage practices majorly. Similar changes have been observed in the nature of gifts and conflict resolutions (from less money to heavy cash punishments) in the study area. Thus, the rise of organic farming and markets can be correlated to the changes happening in the nature of work, employment, organisational skills, participation of women, pre-existing market relations, debt patterns, marriage practices, and gifts, political rallies, among other aspects.

Chapter-6

Summary and Conclusion

The study is about how farmers become organic farmers and participate in organic markets. Becoming ‘organic’ means attaining or claiming a new identity through the process of performing and adjusting to specific roles and activities in the coffee plantations and thereby convincing the certifying agencies. At the same time, participating in the organic markets means deciphering the process of establishing organic connections and markets, in which it focuses on tacit human agencies such as imaginaries, aspirations, desires, and intentions, along with the infrastructural and logistical arrangements in the process. For this purpose, a micro-level study was conducted among the small and marginal coffee farmers of the Araku Valley in Andhra Pradesh.

Agriculture has been undergoing constant change due to shifts in practices, technology, and changing socio-economic conditions/scenarios and political influences. This process has resulted in many changes, from low-yield agricultural producers to high agricultural producers, because of the use of technology, fertilizers, capital, and adaptability of new knowledge into the previous agrarian knowledge (Gahukar, 2010; Mishra et al., 2017). However, using modern technology and fertilizers has brought significant changes to the actors (farmers) and land. The actors have become more resource-dependent and dragged into indebtedness and poverty because of high capital-intensive resources (K. Singh et al., 2009). Meanwhile, land has become unfertile and non-resilient to local climatic conditions, resulting in crop failures and damage to farmers’ livelihoods, particularly after the extensive implementation of the green revolution (Ladejinsky, 1973; S. Singh & Benbi, 2016).

Realizing adverse effects on actors and resources has led to new trends in farming practices like organic and natural farming (Thottathil, 2014). They focus on soil fertility, land, reduction of economic costs on fertilizers, resources, and the importance of local knowledge and climatic conditions (Fukuda, 2018; Fukuoka, 1978; Lockeretz, 2007a). The organic practices brought changes in performance and niche organic markets, where they buy agricultural commodities at better prices than open markets (Panneerselvam et al., 2012a). However, these markets demand an organic certification that is ‘recognized’ by trusted agencies that check the authenticity of the organic nature

of agricultural products (Galvin, 2018). Thus, organic farming and markets require the capacity and knowledge of the farmer to perform activities, actions, and roles that fetch the organic identity and guarantee the capability to participate in markets (Raynolds, 2004). However, the ability to perform such practices is conditioned based on the farmers' agricultural settings, linked to the environment, land, resources, institutional support, social and cultural relationships of the farmers.

Among Indian farmers, becoming certified organic farmers becomes a much more rigorous exercise as most are small and marginal farmers who mainly cultivate in rural and remote areas (Jouzi et al., 2017; B. S. Reddy, 2010). Consequently, they lack minimum technical support, roads, storage, markets, and minimum support prices. Under this scenario, the current study was taken up among the small and marginal coffee farmers of the Araku Valley. The study tries to show how farmers are becoming organic using coffee farming and establishing their markets to increase agricultural prosperity (coffee income).

I

The current study was carried out among the two villages of Andhra Pradesh state, falling under Alluri Seetharama Raju district. The respondents of the study belong to the Konda Dora tribal community and speak Konda and Telugu languages. These Konda Dora tribal farmers have a total of twenty one sub-clans. Out of these clans, the study has identified organic farmers amongst the clans of Boi, Burde, Cheekati, Dasari, Dippala, Dolya, Janni, Korra, Kuda, Masada, Turee, Pangi, and Surra. It is also observed that they practice endogamy in their marriages. The total population of the study area is 536, and there are 286 families, 104 joint families, and 182 nuclear families. Among these families, the Kuda and Boi clans are the dominant clans, with 27% and 24% of the population, respectively. Males occupy more quota than females in the total population, and more than 51% of the population belongs to the age category of 21-50 years, which they consider to be the 'active/working' age category in the study area.

It is also revealed that 68% of the families practice Hinduism, and 28% of families practice Christianity. The majority of them live in semi-pucca (61%) while the rest live in pucca houses (27%). Men are encouraged to pursue higher education, i.e. graduation

after their 12th/intermediate, in contrast to women who are married off after their 12th. As a result, men have higher literacy levels than women.

It is noted that the study area observes 800-1000mm average rainfall per year and falls under the High-altitude climatic zone, according to the Andhra Pradesh Planning Department. Most of the population depends on agriculture for their livelihood, and they cultivate dry land paddy, millet, ginger, chilly, coffee, pepper and kidney beans in the hills. Below the foothills, they cultivate sesame, vegetables, paddy, and turmeric crops. These crops are produced in two agricultural seasons - *kharif* and *rabi*. More than 90% of these crops are cultivated in the Kharif season. Only 10% of crops, like paddy and vegetables, are produced in the Rabi season because they follow rainfed cultivation due to the lack of irrigation and since it is predominantly hilly areas.

The average land under cultivation per household is 3.17 acres in the study area. According to the categorization of the Ministry of Agriculture and Farmer Welfare Department (2022), 41% of farmers are small, 35% are semi-medium, and 10% are marginal farmers. It means more than 85 % of farmers are small and marginal farmers, and very few have large landholding.

Besides the type of crops and amount of landholding they possess, it is observed that they heavily depend on livestock and animal husbandry to perform agricultural activities and resources like ploughing and source of organic manures for fertilizers. In addition to the above-mentioned principle crops, they cultivate horticultural crops such as coffee, pepper, chico, pineapple, and mango. However, it is noted that coffee is the main horticultural crop, and others are cultivated as intercrops within the coffee plantations. The state government introduced the coffee plantations in the 1970s. It is identified that these coffee plantations are practised in the *podu* lands. Out of these coffee lands, marginal farmers own 73% of the land, small farmers own 23%, and semi-medium farmers own 4.81% of the land. The study villages had no larger landholding farmers with more than 4 hectares of coffee land. However, it is noted that before these farmers took up these coffee plantations, the farmers of the study area used the same lands to cultivate traditional millet crops using the slash-and-burn method. However, due to the disadvantages of slash-and-burn cultivation methods like soil erosion and forest deforestation, the state government was instrumental in stopping this practice. It took the initiative to introduce mass coffee plantations in the study area.

Moreover, it is observed that the study area has no proper infrastructure and road connectivity with outside markets, because of which, they depend on the shandy markets and local moneylenders to sell their coffee at lower prices than the prices announced by the government.

II

The study reveals that becoming an organic farmer is an evolutionary process due to the subjective experience of farmers with the interaction of coffee plantations in the study area. The earlier studies have argued about the social and economic impacts of coffee plantations, but not many have focused on the subjective experiences of these farmers. Michael Foucault (1985) says that the subjects (farmers) will have a subjective experience of both conscious and unconscious in the process of achieving the task or goal. Thus, before the arrival of coffee plantations to the study area, the historical secondary text analysis revealed that the farmers had contact with (tea) plantations of Assam due to the colonial *muttadari* system, and it resulted in an ‘exploited migrant’ labour experience (Dhanaraju, 2015). The colonial and post-colonial plantation works such as timber, Indigo, and coffee plantations have given workers an identity as ‘daily wage’ workers. However, post-independence initiatives of the state government to increase the coffee plantations have revealed that the farmers’ roles have changed to participants and have given them a ‘beneficiary’ identity, where they had access to land and harvest but no ownership over the land. However, the active ownership of coffee plantations and shift of identity to ‘coffee farmers’ have happened after the state government intervention of the Forest Rights Act 2006. This FRA 2006 has brought significant change among coffee farmers as they have started engaging actively because of their ownership of it. Thus, this evolutionary change of identities significantly influenced them to transform into coffee farmers.

Another significant component of organic farming is the method of practice that uses organic manures and bio-fertilizers as inputs on the lands to strengthen soil fertility (Ladejinsky, 1973). It implies that techniques (such as using organic manures) are equally crucial as coffee lands in achieving the organic identity. The historical and ethnographic accounts of the study revealed that they had been practising natural input fertilizers like plant fodder and cow-dung manures to keep their lands fertile. Considering they still use the same methods even today, land and its fertility have thus

been the agency to assert that they are organic by default. These traditional organic manure practices have been used as a provincial agrarian capital for them to claim organic identity. Similar findings of this agrarian agency can be found in the works of Galvin's understanding of becoming an organic basmati farmer (Galvin, 2014, 2021). However, this study finds considerable distinctions as much as similarities to Galvin's work. A similarity between the present study and basmati (type of rice) farmers is that they claim their organic identity through land using organic manure inputs. In both studies, farmers' classification falls under the small, marginal, and medium landholder types. The difference spotted is that, for basmati farmers, mostly non-tribe, landownership is available when they have claimed organic identity. In contrast, coffee farmers are deprived of land ownership, and they have been fighting for landownership while attempting to claim organic identity.

Owing to the natural input practices in the coffee lands, the farmers assert that their lands are fertile and organic by default. It indicates that their methods of production have given them a new identity—that of 'organic coffee farmers' rather than just coffee farmers. Similarly, the government officials and non-government people who are directly and indirectly engaged with coffee plantations of Araku Valley have expressed similar opinions on the coffee land and method of practice as organic by default. Moreover, they also reasoned that because these farmers do not use synthetic or chemical fertilizers to cultivate the coffee, the Araku Valley lands are pure and natural. So, the land has been the medium of agency to assert Araku Valley farmers as organic by default. In the organic by default assertions, the practices of plant and cow dung manure application to the coffee lands were rooted in their earlier agricultural methods, which were said to be ignorant, innocent, and natural in the opinions of farmers, government officials and non-government people. These opinions, according to Sherry Ortner's concept of "Agency of Intentionality," tell that the practices of natural plant and cow dung fertilizers in coffee lands (agency), which were rooted in their traditional agricultural methods can be seen as unconscious human intentions to keep the land as fertile. Thus, these land, plant and cow dung practices make them assertive as 'organic by default.'

However, the organic identity was not recognized because of the opinions on organic by default. In order to become organic farmers, their organic practices must be recognized by certifying agencies. So, to identify their practices and land as organic,

they had to comply with certification agencies. It means that achieving the organic identity depends on the adaptability, enhancement, and adjustability of new inputs and knowledge into their organic practices so that coffee lands are recognized and certified, as argued by Netting (1993), Richards (1985 and 1993), Leslie and McCabe (2013) and Flachs (2017) about performances and ability of the farmers in the agrarian practices.

Therefore, it is revealed that the coffee land and practices of input fertilizers were designed to match the standards and rules of the certification agencies. Since the practices and land had to be re-designed, the process of becoming an organic farmer can be considered 'organic by design' (Galvin, 2021, pp. 60–61). In the organic by design process, they included enriching the quality of coffee lands through organic (plant and cow dung manure) and bio-fertilizer practices that were recognized as organic by a certifying agency. That is also similar to the observations of Galvin's (2021) study of becoming organic basmati farmers, where they also reconstituted their methods to claim organic identity.

They had to adjust the new input practices, such as using biofertilizers and manures of compost units with earlier input plant and cow dung practices. This adjustment and reconstitution of the organic manure practices to show the coffee land quality as organic can be drawn to the purposive and conscious intentionality of the farmer to become an organic farmer. These human (farmer) choices of purposive actions and conscious intentionality in the form of biofertilizers input, along with plant and cow dung fertilizers adjustment, can be seen as "conscious intentionality" within the framework of Sherry Ortner's "Agency of Intentionality" to achieve organic identity (Ahearn, 2001; Karp, 1986; Ortner, 1984, 2006a).

However, it is also revealed that the organic by-design succeeded in achieving the organic identity mainly because of two reasons: land registration documents for coffee lands and developmental programs by the state and non-governmental programs. These programs and developmental activities have helped them to get incentives like biofertilizer ingredients, compost units, and biofertilizer units. It means that farmers perceive these new elements, such as compost units and biofertilizers, as new organic symbols and meaning to claim the organic identity, which is similar to Bourdieu's argument that symbols and practices convey new meanings to the actors (Bourdieu et al., 2009; Galvin, 2021; Lovell, 2000). NGOs function as promoter organizations in this

process, assisting farmers in maintaining farmer diaries and organizing workshops on skills and information related to organic practices. Thus, becoming an organic farmer is conditioned on the availability and support of the NGOs' constant incentive in the form of physical infrastructure and social capital support for them in achieving the organic identity. Similarly, Goldberger (2008) and Siddaraju (2011) have also observed the importance of this kind of organization in organic farming studies of both India and the globe.

The study also observes that the process of becoming an organic coffee farmer in Araku Valley is a collective endeavour involving farmer contributions and commitment to modify organic inputs (performance and capabilities through organic by design) in accordance with the standards and regulations of certification bodies, as well as the roles of NGOs (promoters) and developmental programs by facilitating and providing the inputs to become an organic farmer. It also finds that becoming organic happens because of the organic by design process, not by organic-by-default opinions. However, it also identifies that becoming an organic farmer is a continuous process because of the fragility of programs and incentives operated by NGOs and governmental organizations. It means that to transform farmers into organic farming, the organic farming process necessitates a lot of funding, support, and capital like the government's investments in the supply of livestock, bio-fertilizers, irrigations, canals, and dams, which Galvin (2021) also argued among the study of basmati farmers.

III

Once the farmers perform and attain their organic identity from the certifying agency, the next endeavour is to sell their certified organic coffee in the markets. However, organic markets and buyers are absent in the K.Puttu and G.Guda villages, and they depend on the traditional shandy markets, traders who visit villages, and money lenders who offer low prices, the same as uncertified coffee. Moreover, it is also observed that the study area needs more robust connectivity with outside markets due to transportation issues, so they are most likely compelled to depend on the local market options. However, lately, they have realized the potential of organic coffee quality and aspire to bring specific organic buyers by overriding the technical and logistical issues with the help of NGOs and promoter organizations.

It is revealed that to participate and bring organic markets into the study area, they have to create 'quality' coffee, where the buyers' interest determines such quality. So, the study identified that in order to nurture coffee quality, collective efforts are pooled and managed by farmers by collaborating and networking with intermediaries, such as non-governmental organizations and promoter organizations, who also believe and share the common aim to increase the coffee quality and bring the organic buyers. One of the main achievements of the farmers was the adoption of a change of processing techniques, that is, from the dry (traditional) to the wet method of processing in which they employ small to heavy machines to process and cultivate the coffee quality. The traditional dry method on the other hand, uses redundant techniques such as the use of motor and pestle and drying on mud yards, which are believed to produce low-quality coffee. It means that the 'quality' of coffee, which is derivative of buyers' interest, compelled farmers to adapt the already existing and established processing techniques, which shows the effects of the world political economy on the new organic coffee farmers (see also Tucker, 2011, p.176 and Paudel and Parajuli 2020). Along with this, the local non-governmental organisations and state governments provide farmers with machinery to process coffee through various schemes and programmes, such as the promotion of non-traditional coffee farmers under the 12th plan and modalities to the development of coffee by the Coffee Board of India and Andhra Pradesh state in 2015. Through this, they are promoting the knowledge on cultivating the quality of the coffee through organizing workshops and training and supplying the manual pulping machines in the study area.

Moreover, it is also observed that in order to generate quality, they have established Farmer Producer Organisations (FPO) and developed networks and associations with Promoter Organisations, where they all work with a common aim to strengthen the quality of coffee. These farmers, Farmer Producer Organisations and Promoter Organisations established a tripartite relationship to achieve this target. Farmers have to perform the roles of accomplishing technical tasks, such as segregating the coffee fruits into different grades and picking the red-ripened coffee fruits only. Here, it is observed that this knowledge about the grading and type of coffee fruits to pick was exchanged in the daily interactions of farmers with coffee experts in the villages, meetings, and sometimes at the coffee plantations. It means the interactions and exchange of ideas between the farmers play a significant role in the cultivation of

quality coffee, which offers a pathway to get the associations of organic buyers for farmers. Similarly, studies by Shreedevi et al. (2016) and Yadava et al. (2022) have observed that workshops and training sessions developed the farmers in imparting knowledge on quality. The present study further reveals that daily interactions with coffee experts, both on and off the farm, have a substantial impact on farmers' ability to absorb the necessary knowledge about coffee quality in addition to training and workshop sessions. Therefore, the interactions between the farmers and coffee experts became the prime factor in this process.

Another significant component in the tripartite roles revealed is the Farmer Producer Organizations. These groups are formed by farmers of the study village with a common aim to formalize the coffee processing method, where they control the processing methods to maintain the quality of coffee. These organizations also establish associations and connections with non-governmental organizations and organic farming promoters to get support in the form of funding, report writing, and coffee expert persons to enhance the coffee process. It means that FPOs, which are structural changes promoted by the state government in the liberalization period, have been acting as the significant apparatus for these farmers to take up their own strategies and mechanisms to participate in the open markets, particularly for the rural and tribal farmers as observed by the Kaviraj (2005), Harries-White et al., (2014) and Pathania et al., (2020) among the Indian farmers.

Another significant contributor is the Promoter Organisations, which act as agents in the process of cultivating organic coffee. These promoter organizations in the study villages are non-governmental organizations and organic certification facilitators. They work on the promotion of sustainable and organic agricultural activities. It is identified that NGOs provide funding, technical machinery, coffee experts, accounts maintenance and mentoring to farmers to take the strategies according to the market requirements. Meanwhile, organic certification (promoter) organizations perform roles such as finding organic certification agencies for coffee farmers and identifying potential organic buyers and associations to sell their coffee. Apart from these roles of promoter organizations, the individuals and staff who work in these organizations hold strong opinions and beliefs on the potential of organic coffee quality because of the farmers' organic methods. It means that in addition to the roles and activities performed by the promoter organizations, the desires, shared beliefs, commitment, and common goals of

these organizations also act as significant forces in the process of cultivating quality coffee and bringing markets to the study area (See also Yanagisako, 2002 and Taylor, 2002).

However, the study also revealed that the methods of processing and formalizing coffee differ because of the capabilities and conditions of the Promoter Organisations, such as high capital or funding for qualified and experienced management staff. It was clearly noticeable when the study compared the process of two villages. Among these two villages, the G.Guda village farmers collaborated with an NGO with strong funding bodies and own a sister organization that works on organic certification works. They also have strong management staff and are mentored by some of the top Indian businessmen, who can give these farmers a robust social network and connections around the world. They have convinced the banks to sanction a loan of three crores to the Farmer Producer Organisations to establish the centralized Processing Unit to cultivate the quality of the coffee and participate in the organic niche markets.

In contrast, the K.Puttu village farmers' FPO has collaborated with one of the local NGOs and has unstabilized financial strength and management. Unlike the previous village, these promoter organizations had established third-party collaboration towards the organic certifications and marketings because of a lack of management staff and capital to support the organic process. However, they have been continuing the organic processing methods due to the support of multiple organizations. It means that the capacities of the intermediaries play a essential role in acquiring the capability of coffee quality, coffee experts, and organic market connections. Thus, it is observed that farmers' participation in organic markets is determined and conditioned by the capacities of FPOs and Promoter Organisations. Similar to the observations of Flachs (2017), Galvin (2021), and Pandian (2009) studies.

It is also revealed that the farmers practice different methods not only due to differences in capacities of FPOs and intermediates but also because of the individual capacities of the farmers, which can be rooted in class, caste, family size, availability of labour and other rural problems of these farmers. This is similar to the arguments of Arjun Appadurai (2004) and Pandian (2009) that farmers at the ground level will also have different capacities and conditions in addition to the economic and global markets. Some of the identified conditions of the study area are:

1. The Grading, technology and the machines.
2. Continuity of local money lenders' relationship with farmers
3. The lack of availability of labour force and family size.

The Grading, Technology and Machines

The study observed that the knowledge of grading techniques and the use of technology and machines to test the moisture levels of the coffee, which is an essential component of the farmers to maintain the coffee quality, are acting as a hurdle. Due to the fact that most of the farmers are illiterate and have a dearth of knowledge of new coffee techniques, they lack technological tools, but they depend hugely on intermediaries and government organizations. However, the long wait for help from the supporter organization would often result in rejections from the FPO on the grounds of low quality and because of the lack of strict implementation of procedures that were instructed by the promoter organizations to these farmers to maintain the quality. It means that in addition to the lack of capabilities of the FPOs and intermediaries, the individual abilities of these farmers, which are related to the low education and lack of regular knowledge incubations by the promoter organizations, also act as the conditions to participate in organic markets and cultivate the market-driven qualities.

Continuity of Local Money lenders in the study area

The study also identified that the long and traditional relationship of the farmers with local moneylenders and their continuous debts with them also act as one of the significant conditions for these farmers. For the reason that, they would repay their debts by directly selling coffee harvests to the money lenders. On the other hand, due to the lack of spot payment and the long wait for payments, though organic buyers offer better prices than moneylenders, some farmers are inattentive to shifting to the organic process because of the issues with debts they have with money lenders. It means that in order to increase the farmers' organic market participation, the farmers' local issues, which are rooted in their poverty and traditional matters of local moneylenders, need to be addressed by the organic markets. Otherwise, it would be challenging for these farmers to shift to organic markets, though they attained the organic identity by passing the complex tasks of a certifying agency. Therefore, the process would need a more

comprehensive mechanism to accommodate the individual conditions of the farmers operating in the villages.

Lack of Availability of Labour Force and Family Members

Another condition of the farmers is that they have to override the lack of availability of effective labour forces to carry out the coffee processing works. It was observed that most of the time, the husband and wife are the only ones involved in the coffee processing work. However, it was opined that they need more than two members to perform the coffee segregation and grading works. Further, due to the unavailability of their family members and their children's participation, some of the farmers tend to avoid the prescribed techniques to maintain the quality and choose to stick to traditional dry methods, which confines them to unuse their organic certification and waste of hard labour that they put in to cultivate the organic coffee. Therefore, the study observes that the lack of labour capital and capacity to afford labour to engage in coffee processing adds to the conditions of these farmers. It means that in addition to the lack of incentives offered and distributed by the promoter organizations, which are again conditioned by their strengths and capacities, they are constrained by effective labour contribution from the family members and family size. That amounts to understanding that in the absence of labour, they must depend on the local daily wage workers or relatives who would offer labour for the coffee harvest and processing works. It means that to utilize the organic certification and reap its premium prices, they have to deal with these local issues; otherwise, it would be difficult for them to cultivate organic coffee, match the organic market quality demands and bring buyers and associations for their coffee.

IV

Though the farmers have the conditions mentioned above, it was observed that they were able to overcome the problems and cultivate quality coffee with the help of promoter organizations and utilize their organic identity to create a network of organic buyers. They have established all the technical facilities and machinery with these intermediaries. However, the study identified that it is not just the economic or social networks that these farmers have used to connect to the organic buyers and bring the markets to the study area. Instead, it is also the imaginaries and aspirations of all the significant agents, such as farmers, NGOs and promoter organizations, and government organization members. Which means that in addition to the quality as a method or tool

to convince the buyers, that included logistical and associations of the farmers with intermediary persons. The human exhibits or agencies, such as imaginaries and aspirations, played an essential role in the successful creation of organic participation for the farmers of the study area. Thus, human intuitives act as a significant factor for the farmers to participate in organic markets, as observed and argued by social anthropologists such as Arjun Appadurai (2004, 2008), Charles Taylor (2002), Galvin (2021), and Pandian (2009).

Most importantly, the study observed that the participation of farmers in the organic markets and the establishment of organic buyers has happened largely due to the visions of promoter organizations and some of the progressive farmers of the study area. However, the state government's role is also observed but is not as active as that of other agents because the government organizations had started lately after the realizations and success stories of some farmers who could bring some organic buyers to the study area. In contrast, the studies of Sikkim and Uttarakhand organic markets showed that the government was a pioneer and was active in establishing such markets in their respective localities (Galvin, 2020; Yadav, 2022). Therefore, to bring the organic buyers, the individuals of the promoter organizations and farmers exhibit and display their quality and commitment by organizing buyer-seller meets and also by participating in fairs, auctions and international conferences. Among these, the buyer-seller meet, which is organized annually in the Araku Valley by the promoter organization, close to the farmers' villages, plays a significant role for the farmers to display their coffee quality to the jury of coffee connoisseurs. This event plays a vital role in convincing the organic buyers and negotiating the price of their coffee with the help of a mediator, that is, promoter organizations. Here, the intention of promoter organizations inviting their collaborators of organic buyers to the event as significant actors is to establish coffee markets. However, it is observed that this event ended up imposing new tasks and rework activities on the farmers, such as the importance of quality and matching the quality requirements of the buyers. It means that though buyer-seller meets bring some connections of organic buyers, it also enforces the buyer-driven ideas upon the farmers, which means the quality and quantity are to be matched according to the buyers' interest.

Other than this, it is also observed that the participation of farmers in the organic markets is enhanced due to displaying the coffee at international events. For example,

in the study village, one of the promoter organizations participated in the Paris cupping contest and won the best coffee prize. Such displays and exhibits also have enlarged outreach of the quality of coffee and a high number of buyers. Similarly, some of the "show farmers" have also played a significant role by showcasing and displaying their quality by travelling beyond boundaries, such as Bangalore, to showcase their coffee and attract buyers to the Araku Valley, in addition to proving their capability and performance of achieving the organic identity to the coffee. Lately, government organizations have also been organizing buyer-seller meets at some events, like Republic Day celebrations at the district headquarters, by inviting outside organic buyers to the event and providing a platform for negotiations between farmers and buyers. Though all of these efforts have been attempted within the different capacities of farmers and promoter organizations, they have made a pathway for the farmers to participate in the organic markets.

In addition to these imaginary activities of promoter organizations, 'show farmers' and government organizations, the aspirations of the farmers also held a substantial share in trying to connect to the organic buyers and markets in K.Puttu and G.Guda villages. Among such aspirations are the lucrative natures of these markets, pride, and recognition of their labour towards cultivating good quality coffee. These can be noticed in their opinions about the buyers they sell it to, and a strong desire to withhold the organic process within their family and trade directly with organic buyers by eliminating the FPOs and promoter organizations (though they are dependent on intermediaries presently). These factors have also played a significant role for them to aspire for the organic buyers' associations and markets which helps them to participate.

Therefore, the study observes that the organic markets and participation of farmers are created by mainly two factors in the study villages: (1) they create and cultivate quality coffee, and (2) this quality of coffee is used to exhibit and display at various occasions and places by the imperative actions and imaginaries of promoter organizations, farmers and government organizations to convince and attract the buyers to Araku Valley. It is also observed that these activities, which are intended to establish the farmers' participation in organic markets, are collective efforts and conditioned based on the capacities of NGOs, promoter organizations, and also individual (farmers) abilities, which are rooted in the dynamics of villages like moneylenders' problems and availability of labour of family members for the coffee works. These observations find

distinct from the remarks made by previous scholars such as Federico Monatari (2012), Fu-re Lin & Szu-yun Wang (2014), Larssæther (2011) and Thorsøe & Noe (2016), who have emphasized economic and actor-network analysis to understand the process of establishing the organic markets in Indian and other context. However, the observations are similar to Galvin's (2021), Taylor's (2002), and Appadurai's (2004) argument that human agency also plays a significant part in creating markets.

V

The study also observed significant changes in the farmers' socio-economic aspects due to organic practices and markets in the study area. The organic practices, which involve extensive work throughout the year in accordance with organic certifying agencies and markets, have resulted in the division of labour within the productive family members like husband and wife. Because, the husband and wife (active labour force in the family) had to share the activities of their principal crops (such as rice and millet) and coffee harvesting and weeding activities, which coincided at the same time (Durram, 1999). Moreover, it also reduced leisure time and increased hectic work among the farmers, resulting in declining community and collective activities like hunting, which is essential for community bonding among the tribal farmers. It means that organic practices are leading to the heterogeneity of community members by not providing space for bonding activities like community hunting. It also creates a burden on the family members to divide efficient labour, thus resulting in a dilemma among the families of the study area to choose either cash crop or subsistence crop, which would result as a threat to their livelihood and staple foods.

It is also observed that these practices are changing the labour organization pattern among the farmers of the study villages. They used to depend on close kin-family and collective labour farming. But, due to the increased demand for organic works in the coffee plantations such as weeding, grading and segregations, according to the instructions of the Farmer Producers Organisations, they are compelled to hire labour from neighbouring villages and distant relatives on paid wage labour basis. It means that labour organization patterns are changing to paid wage labour practices and there is a decline in the collective kinship-based farming among the villagers.

It was noted previously that for organic market establishments, the significant apparatus was the tripartite relationship, which is farmers, Farmer Producer Organizations,

promoter organizations, and their collective actions. In this model, the study has observed that it also creates organizational behaviour among the farmer, such as leadership, cooperative efforts, negotiating skills, and marketing strategies like reworking the quality and quantity of coffee. It implies that organic market strategies and regular interaction of farmers with skilled promoter organization members are developing varied organizational skills to negotiate with buyers. Additionally, these skills are used to attract more buyers' associations and maintain contacts with and gain support from promoter organizations (see also Little 2004; Canessa 2005, and Lyon 2010). Moreover, this tripartite relationship has also created new seasonal and permanent employment for the farmers by engaging them at the coffee processing units and storage centres. Significantly, the educated youth of the villagers, including both men and women, are actively involved in these jobs.

Interestingly, it is also observed that women are encouraged to be part of the Farmer Producer Organizations and are elevated to the core decision-making committee. It implies two aspects of organic markets with regard to women. First, organic markets provide new economic alternatives to women, which is beneficial to support their families. Second, organic markets are trying to include and recognize the women's contribution of labour and craftsmanship in the agricultural commodity, i.e., to quality organic coffee. This implies that international organic buyer collaborations and associations and their principles of ethically valuing coffee have a progressive economic and organizational skill impact on the women and families of the study area, as observed by Lyon et al. (2017 and 2019) and Meier Zu Selhausen, (2016) among other organic coffee farmers.

The study also observed that these organic markets have significantly increased the economic status of the farmers due to the premium price offered to coffee. As a result, their debt patterns are changing into debt-free families, from informal to formal debts and formal debts to no debts, as shown in Figure 5.1. In this process, the Farmer Producer Organizations' entry and replacement of the local moneylenders' interventions and occasional interest-free loans have played an important role in the study area. They have also effectively eradicated the dependency on local shandy markets and the need for transportation. With this effect, many farmers feel free of financial burden and are motivated to participate in the organic markets.

Consequently, there is a rise in income, as a result of which they are sending their children for higher studies to cities like Visakhapatnam and Hyderabad. The study also observed that they aspire for new occupations and other seasonal income sources such as carpentry, electrician, and DJ-music operators. All these income opportunities, are inter dependent from the earnings received from coffee.

It is also observed that organic markets had a noteworthy impact on marriages, gifts and conflict resolutions among the villages. The marriages and gift practices are changing from kind to cash involving more economic value items like brass vessels, which was previously dominated by more agricultural produces like rice and grains. This change of behaviour shows that they are inclining towards the accumulation of economic assets. Similarly, due to the availability of cash among the families, the conflict resolutions related to marriages and village conflicts replaced goods and kind punishments with colossal cash payments. It means that they are slowly moving towards a cash-oriented system.

A similar pattern can be observed in their housing. The house types are changing from semi-pucca houses to pucca houses. Changing house types has resulted in withstanding the natural calamities, as the study area is prone to frequent cyclones. Further, the construction of new homes with larger rooms has resulted in accommodating the extended family members under one roof. However, many of the nuclear family members wanted to construct a separate house. Thus, joint family living has slowly given way to nuclear family households who are venturing into coffee cultivation.

Moreover, the study also identified the link between (establishing) organic markets and the realization/actualization of coffee prosperity in the markets. This realisation of coffee prosperity has also raised consciousness of their land rights. The farmers often engage in political rallies and protests upon the government officials to issue land registration documents for their coffee plantations. It implies that due to organic farming and markets, they aspire to persuade government officials for their land rights, similar to the observations of Besky (2014) among the Darjeeling organic tea plantations. It also means that other than economic value in the form of better prices, organic markets also support the farmers with different parallel values in the form of political protests, opinions and images among the farmers of the study area, as observed by Martin Franz and Markus Hassler (2010), Sen & Majumder (2012), and Flachs &

Panuganti, (2020). These observations further support the arguments of Barrientos et al. (2014), Raynolds et al. (2004), and Roseberry (1996) that the success of organic markets is dependent on the local sociological and political issues such as land rights of coffee plantations of small and marginal farmers.

From this study, it is evident that the villages had multiple changes in socio-economic aspects due to organic practices and markets such as household patterns, new occupational aspirations, higher studies to children, labour organizational patterns, land registration documents, political protests, marriage gifts, and conflict resolutions. However, the study also notes that these changes are prevalent among farmers who participate in organic markets, are certified organic, and are members of Farmer-Producer Organizations. Therefore, the larger economic and social changes are limited to the farmers of the study area. These observations show that organic markets and practices can only reach a few of the farmers who are certified and part of the Farmer Producer Organisations, and they cannot contribute to the larger community development and changes, as observed by Gibbon (2001), on the impact of organic markets on farmers.

The study revealed that becoming an organic farmer depends on the changing agrarian subjectivity and farmer (actor) performance and capability, which requires multiple agencies (farmers, NGOs, and government) to collectively act and coordinate, along with high investments and capital sources for the study area's small and marginal coffee farmers. The changing perceptions of farmers, government staff, and non-governmental organizations about organic farming revealed a change of opinions from organic by default (natural, traditional, ancestral, nonchemical, and pristine) to organic by design (rework on land fertility with practices of organic manures such as additional usage of bio-fertilizers and compost unit), that has enabled them to be assertive for organic identity with certifying agencies. However, it is noted that each region and its subjects, (tribal coffee farmers) hold different subjective experiences based on the political, social, and economic situations of people and places, such as coffee land rights and developmental activities. Thus, becoming an organic farmer requires not just complying with organic certifying agencies but also dealing with these locally situated conditions of small and marginal tribal farmers in south India.

Thus, a thriving organic (coffee) endeavour can be achieved not only through generating income from markets, but also requires them to be accommodative to the market-driven interests of buyers and create an organic market through the envisions of farmers and other helping actors like NGOs. However, with the help of economic and market structure adjustments propagated by the governments. Thus, becoming organic and participating in organic markets for tribal, small, and marginal farmers is not just conditioned by economic factors. It is primarily constrained by farmer's local issues, social assets (coffee experts and ICS), networks and associations of promoter organizations, and the influence of the political economy on organic certification and coffee quality, which will decide the organic (coffee) prosperity of small and marginal farmers in the study area. The current research suggests that converting or transforming conventional farmers into organic farming requires a policy that will address regional and social discrepancies of the farmer like land rights, indebtedness, market facilities, livestock availability, subsidies on certification cost, and funding, along with infrastructural facilities like storages, roads, and transportation.

The study also suggests that for small and marginal coffee farmers who belong to tribal categories and practice collective family farming. A comprehensive policy is required to empower the farmers with education, awareness of organic fertilizers, certification, markets, training schools and workshops to convert to organic farming. Moreover, frequent interaction of farmers with organic coffee experts (on- and off-field) and marketing professionals is also required in rural areas to cultivate new aspirations and imaginaries among farmers. Thus, they can envision participating in high-premium price markets and reap the benefits of organic identity to increase their incomes and livelihoods.

PLATES

Plate 3.0: Organic Manure Preparation Sites in the Study Villages
Compost manure site **Bio-fertilizer site**



Source: Fieldwork, 2019.

Plate 3.1: A Coffee Farmer Preparing the Bio-fertilizer (Dravajeevamrutham)



Source: Field Work, 2020.

Plate 3.2: Bio-fertilizer Unit in G.Guda Village



Source: Field Work, 2020.

Plate 4.1: The Dry process of Hulling the Coffee



Source: Fieldwork, 2022.

Plate 4.2: Drying the Coffee after Hulling



Source: Field Work, 2022.

Plate 4.3: Accepted Grades of Coffee Fruit by Organic Buyers



Source: Field work, 2020.

Plate 4.4: A Coffee Expert and Collaborator Utilizing a Device to Check Coffee Moisture and Quality



Source: Fieldwork, 2022.

Plate 4.5: Segregating the Coffee Fruits into Grades by the Family Members



Source: Field work, 2020.

Plate 4.6: Wet Method of Processing Using Manual Machines



Source: Field work, 2022.

Plate 4.7: Centralised Processing Unit Using Heavy Machinery to Perform the Wet Method of Processing



Source: Field Work, 2022.

Plate 4.8: Distribution of Organic Certification to Coffee Farmers at Coffee Board Office, Paderu, Andhra Pradesh



Source: Haribabu, 2023.

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Annexure-1

Excerpts of Coffee Cultivation Incentives and Schemes

(Under XII Plan Modalities of Coffee Board of India)

Modalities for implementation of

Component 4: Coffee Development Programme in Non-Traditional Areas

4.1. Coffee Expansion

Objective: To increase the area and production of Arabica coffee in association with the State level Nodal agencies like Integrated Tribal Development Agency (ITDA), Andhra Pradesh and the Soil Conservation Department, Odisha so as to facilitate afforestation in the Podu lands and to help settle the tribals on a permanent footing.

4.1.1. Eligibility

- i) Applicable to all growers of NTA in whose case the coffee development programme is implemented by ITDA in Andhra Pradesh and Soil Conservation Department in Odisha.

4.1.2. Unit cost: Rs. 1,00,000/- per ha.

4.1.3. Scale of Subsidy: 25% of unit cost i.e. Rs. 25,000/- per ha.

4.1.4. Release of Installments

- 1st installment - 60% during the first year (Rs.15,000/- Ha)
- 2nd installment - 40% during the second year (Rs.10,000/- Ha)

4.1.5 Role of Coffee Board

- i) Supply of quality seed coffee of suitable varieties.
- ii) Provide technical assistance to the growers and training of personnel of ITDA, AP and Soil Conservation Dept., Odisha.
- iii) Provide counterpart financial assistance towards expansion activity

4.1.6 Role of ITDA, Paderu/ Soil Conservation Dept., Odisha

- i) Identification of beneficiaries and suitable land
- ii) Advance shade planting
- iii) Procurement of seed coffee from Coffee Board and raising of coffee nurseries
- iv) Assisting growers in planting of coffee and all cultural operations.
- v) Providing assistance for taking up fencing of coffee farms to demarcate individual tribal holdings.
- vi) Furnishing of annual progress of area newly planted and financial achievement to the Coffee Board.

4.1.7 Procedure for claiming subsidy:

By ITDA, Paderu, AP

First Year:

- i) On completion of planting, the ITDA shall submit a village wise list of beneficiaries to the Deputy Director (Extn.), Paderu duly certifying the correctness of the claims during October of the planting year for releasing the first installment of subsidy.
- ii) To release 1st installment, no deduction will be made if the vacancies are in normal range i.e. 15% or less. But if the vacancies are above 15%, the amount equivalent to the vacancies above 15% will be deducted while recommending for release of 1st installment of subsidy. For example, if the vacancies are 25%, subsidy amount equivalent to only 10% will be deducted while releasing 1st installment.
- iii) The SLOs / JLOs shall undertake joint field inspections along with ITDA officials (at least 10% of the cases) and forward eligible claims to DDE, Paderu.
- iv) The Deputy Director (Extn.), Paderu shall scrutinize, compile the claims, recommend and forward the eligible claims to the Competent Authority of the Coffee Board for sanction.
- v) The JDE, Visakhapatnam shall supervise and monitor all these steps and provide necessary guidance and coordinate with ITDA.
- vi) The Coffee Board will release the eligible subsidy amount to the ITDA.
- vii) The ITDA shall ensure disbursement of subsidy to the concerned beneficiaries and furnish the utilization certificate to the Coffee Board before the end of the respective financial year.

Second Year

- i) The ITDA shall prefer the consolidated claim of subsidy to the Coffee Board in the prescribed format along with the list of beneficiaries duly certifying the satisfactory maintenance of the coffee block and completion of vacancy filling.
- ii) The SLOs / JLOs will undertake joint field inspections of the claims along with ITDA officials (at least 10%) and forward the eligible claims to the Deputy Director (Extn.), Paderu.
- iii) The Deputy Director (Extn.), Paderu shall scrutinize, compile the claims, recommend and forward the eligible claims to the Competent Authority of the Coffee Board for sanction.
- iv) To release 2nd installment, deduction will be made as per the existing vacancies as on the date of investigation while recommending for release of subsidy.
- v) The JDE, Visakhapatnam shall supervise and monitor all these steps and provide necessary guidance and coordinate with ITDA & Coffee Board.
- vi) The Coffee Board will release the eligible subsidy amount to the ITDA.

4.3 Raising & Supply of Mixed Shade Tree Saplings through ITDA, AP/ Soil Conservation Department, Odisha and self help groups (SHGs)/ collectives of Tribal / Non-Tribal beneficiaries

Objective: To encourage planting of mixed species of native trees / fruit yielding trees like mango, jack, syzygium, orange etc. in new coffee holdings so as to establish good evergreen shade canopy to increase soil fertility, moisture retention capacity and thereby increasing productivity levels and also provide additional revenue from fruit trees.

4.3.1 Eligibility

All the existing coffee plantations under mono shade.

4.3.2. Scale of support

- i) A sum of Rs.5/- per shade tree sapling
- ii) A maximum number of 100 shade tree saplings per acre

4.3.3 Procedure for claiming subsidy (AP & Odisha)

- i) The village wise requirement of shade tree saplings shall be worked out by the Nodal Agency (ITDA, AP/ Soil Conservation Dept., Odisha) / SHGs/ collectives of tribal & non-tribal beneficiaries.
- ii) The nodal agency/ beneficiary group shall initiate necessary steps to raise the required number of mixed shade tree saplings in different locations/ villages in the already established coffee areas.
- iii) After ensuring satisfactory growth of the saplings followed by distribution and planting of shade saplings in the field, the Nodal Agency (ITDA/ Soil Conservation dept.) / SHGs/ collectives of tribal & non-tribal beneficiaries shall prefer the claim indicating the village wise, variety wise number of shade saplings and submit to the concerned JLO/SLO.
- iv) In case of growers groups (SHGs/ collectives), the application should be supported by Certificate of incorporation/registration, memorandum of article of association/society as Grower Collective/SHG/ Cooperative issued by the authority concerned and Complete list/ details of members of the organization.
- v) JLO/SLO would undertake inspection and submit the inspection report along with the claim to the Deputy Director (Extension), Paderu by the end of October.
- vi) The Deputy Director (Extn.), Paderu shall scrutinize the claims and release the eligible amount @ Rs.5/sapling to the Nodal Agency (ITDA/ Soil Conservation dept.) / SHGs/ collectives of tribal & non-tribal beneficiaries.

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4.4 Support for Quality-Up-Gradation/ Eco-certification

Objective: To facilitate improvement of quality of coffee produced by the tribal growers by encouraging them to put up infrastructure for quality improvement and also facilitate them to obtain certification of their coffees, so as to enable them to earn better returns.

This component has three major activities viz., supply of pulpers, construction of cement drying yards and eco-certification of coffee holdings.

4.4.1. Supply of Baby Pulpers

4.4.1.1 Eligibility

- i) All tribal growers
- ii) A grower is eligible for only one unit
- iii) Those who have availed the benefits during XI plan are not eligible

4.4.1.2. Unit cost

Actual cost of the unit or Rs.16,000/- per unit whichever is less.

4.4.1.3. Scale of support

50% of the unit cost.

4.4.1.4. Procurement & Supply of Baby Pulpers through ITDA in Andhra Pradesh

- i) ITDA shall initiate suitable action for identification of the beneficiaries, obtaining applications and inviting tenders through the tendering process by observing all official formalities and placing the supply order.
- ii) Coffee Board will provide technical specification of the machinery.
- iii) After ensuring the supply and distribution of baby pulpers to the beneficiaries, the ITDA shall prefer claim for release of the subsidy from the Board along with copies of documents viz., list of beneficiaries, tender notification, supply order issued, invoice/ bill etc.
- iv) The Coffee Board will scrutinize the claim and release the subsidy to the ITDA.
- v) The ITDA shall furnish the utilization certificate to the Coffee Board for the amount released before the end of the respective financial year.

4.4.1.5 Procurement & Supply of Baby Pulpers in Odisha

- i) The Soil Conservation Department shall initiate suitable action for identification of the beneficiaries.

- ii) On finalizing the rate for procurement each year by ITDA, Paderu after following all official formalities in Andhra Pradesh, respective ITDA in Odisha (ITDA, Koraput; ITDA, Rayagada etc.) may place purchase order to procure required number of Hand operated Baby pulpers to the same firm to which ITDA, Paderu has placed supply order. Otherwise, the ITDAs at Koraput/ Rayagada may follow the procedure for procurement of baby pulpers for the tribal growers of Odisha as stipulated under sl.no.4.4.1.4. for ITDA, AP.
- iii) After ensuring the supply and distribution of baby pulpers to the beneficiaries, the ITDA, Koraput/ ITDA, Rayagada shall prefer claim for release of the subsidy from the Board along with copies of documents viz., list of beneficiaries, tender notification, supply order issued, invoice/bill etc.
- iv) The Coffee Board will scrutinize the claim and release the subsidy to the ITDA.
- v) The ITDA shall furnish the utilization certificate to the Coffee Board for the amount released before the end of the respective financial year.

4.4.2 Construction of Cement Drying Yards

4.4.2.1. Eligibility

- All tribal Coffee growers are eligible.
- The grower should have a minimum of 0.20 Ha of area under coffee to become eligible for the benefit.
- The maximum size for the purpose of subsidy is limited to 400 Sq. ft.

4.4.2.2. Unit cost and scale of subsidy

Size of the holding	Dimension of the unit	Unit cost	Rate of Subsidy
Up to 2 Ha.	10' x 10' or (100 Sq. Ft)	Rs.15,000/-	50% of unit cost
2 Ha and above	20' x 20' or (400 Sq. Ft)	Rs.45,000/-	50% of unit cost

4.4.2.3 Procedure for claiming subsidy (Andhra Pradesh & Odisha)

- i) Coffee Board would identify the beneficiaries with the help of ITDA/ Soil Conservation Department and motivate the growers to construct cement drying yards.
- ii) The growers shall submit claims for drying yards in prescribed format of application alongwith necessary documents.
- iii) The JLO / SLO of the Coffee Board shall take up joint inspection with the ITDA officials /Soil Conservation Department officials and forward the claim along with the inspection report and other relevant documents to the DDE, Paderu.
- iv) The DDE shall scrutinize the claim, sanction and release the eligible amount of subsidy to the grower.

4.4.3. Support for Eco-Certification / Organic Certification:

Objective: To encourage coffee growers to improve quality for higher returns and improve access to high value specialty markets through production of eco-certified coffees.

An allied objective of this scheme is to encourage small growers to form groups/collectives for taking up eco-certification that will facilitate creation of common facilities in future.

4.4.3.1. Eligibility

- i) SHGs/ collectives of tribal growers who obtain certification of their plantations for various sustainability and quality standards.
- ii) Support is available for certification of estates as per Organic, Fair Trade, Rainforest Alliance, UTZ Certified, Bird friendly / Shade grown coffee standards or any other certification programmes equivalent to the above programs.
- iii) Those claiming support for Eco / organic certification, should have been certified as per the National Programme for Organic Production (NPOP) standards, even if they are certified as per various international standards like EU Regulation, NOP (National Organic Programme of USA), JAS (Japanese Agriculture Standards) etc.
- iv) The Certificate should be obtained only from the Certification Agencies accredited by the respective Certification Programmes during the XII plan period.

4.4.3.2. Role of ITDA, Paderu / Soil Conservation Department, Odisha

- i) The Nodal Agencies viz., ITDA, AP/ Soil Conservation Department, Odisha will identify the growers and form the SHGs/ grower groups.
- ii) The Nodal Agencies will contact the certifying agencies apart from helping the growers groups identified in obtaining certification as and when necessary from time to time.

4.4.3.3. Role of Coffee Board

- i) Provide technical support to the growers / growers groups for adoption of appropriate cultivation practices so as to enable them to obtain Eco certification.

4.4.3.4. Scale of subsidy

4.4.3.4(a) For organic certification

75% of the certification cost spread over a period of 3 years or the Conversion period whichever is less during the XII Plan period.

4.4.3.4(b) For other eco-certifications

75% of the certification cost for one year during the plan period.

4.4.3.5. Procedure for claiming subsidy

- i) This incentive is provided only as backend support for those who obtain certification of their estates. However, in the case of organic certification, the costs incurred towards certification during in-conversion period are also eligible for support.
- ii) After obtaining certification by the accredited certification body/ agency, the SHG/ growers groups of tribal growers or ITDA, Paderu / Soil Conservation Department, Odisha are required to submit their application along with a copy of the certificate and other relevant documents to the concerned office of the JLO / SLO of the Coffee Board.
- iii) The concerned JLO / SLO will scrutinize the documents, carryout field inspection for verification of books and records.
- iv) The JLO / SLO shall forward the claim along with Physical Verification Report and other relevant records to the concerned Deputy Director (Extn).
- v) The Deputy Director (Extn.) after scrutinizing the claim and records and on confirming about the admissibility of the claim in all respects will release subsidy amount to the beneficiary.

4.4.3.6. List of Documents required for claiming Subsidy for Quality Improvement activities viz., Drying yards and eco-certification

- a) Application in the prescribed format (in duplicate).
 - b) In case of growers groups (SHGs/ collectives):
 - a. Certificate of incorporation/registration, memorandum of article of association/society as Grower Collective/SHG/ Cooperative issued by the authority concerned and Complete list/ details of members of the organization.
 - c) Land Ownership documents like Land Possession/ ownership Certificate issued by the competent Revenue authority of AP / Odishain case of individual tribal growers availing subsidy for drying yards
 - d) In case of eco-certification
 - a. Copy of the certificate issued by the accredited Certification Agency
 - b. Original invoice towards the cost of certification
 - c. Proof of payment of certification costs
 - e) Copy of the Bank Pass Book containing the details of account number, name of the Bank, branch, IFSC code, etc.
-

4.5 Market Support:

Objective: The objective of the scheme is to extend support to the tribal growers, for taking up marketing of their coffee on community based approach, through suitable financial incentives.

An allied objective of this scheme is to encourage small tribal growers to form groups/ collectives for taking up marketing activities that will facilitate creation of common facilities in future.

It is expected to provide a mechanism for better price realization for the group, arising out of both the improvement of quality as well as collective bargaining.

4.5.1. Eligibility:

- i) The SHGs/ collectives of tribal growers who undertake marketing of their coffee on their own or any Government Nodal Agency like ITDA/ GCC etc. which facilitate marketing of tribal coffee are eligible. In the latter cases, the actual procedure will be finalized in consultation with such state agencies.
- ii) The coffee marketing should be taken up in any of the following manner.
 - a. Through recognized public auction platforms like Indian Coffee Trade Association (ICTA)
 - b. Direct export by the growers groups/ nodal agency
 - c. Through the recognized Commodity Exchanges wherein, physical delivery of coffee takes place.

4.5.2. Unit cost

A maximum amount of Rs.15/- per kg of clean coffee is project as unit cost towards the cost of marketing right from procurement of raw coffee at farm gate to final disposal of clean coffee.

4.5.3. Scale of subsidy:

Rs.10/- per kg of clean coffee marketed by the growers groups/ Nodal Agencies.

4.5.4. Procedures for claiming subsidy for Marketing of coffee

- i) After marketing of coffee, the growers groups/ Nodal Agencies would furnish the claim for reimbursement in the prescribed application along with the proofs/ supportive documents.

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- ii) The application for subsidy should be submitted to the Deputy Director (Extension), Paderu
- iii) On scrutinization DDE shall forward the application to the Head Office for approval.

4.5.5. Disbursement of subsidy

- i) The subsidy is disbursed only after the sale of coffee is completed by the growers groups/ nodal agencies.
- ii) The coffee marketing should takes place in clean coffee (green bean) form only.
- iii) Wherever the Govt. agencies like GCC / ITDA market the coffee of the growers the subsidy shall be released to the agencies directly.
- iv) Wherever the growers groups / Collectives / SHGs market their coffee the subsidy shall be released to the individual members directly to their bank account through NEFT In cases where the application is complete in all respects.

4.5.6. List of Documents to be furnished

- i) Application in prescribed format (Duplicate)
- ii) Certificate of incorporation/registration, memorandum of article of association/society as Growers' Collective/ SHG/ Cooperative issued by the authority concerned.
- iii) Complete list/ details of members of the organization as per Annexure 1.
- iv) Along with each claim for subsidy, the application should be accompanied with the details of the member wise coffee sold.
- v) Certificate from the Growers' Collective/ SHG/ Cooperative stating that the concerned grower is the member of the organization.
- vi) Certificate from concerned state Government commercial tax department (VAT registration certificate) wherever applicable.
- vii) In addition to the above documents
 - A. In case of coffee marketed through the Auction platform/ Commodity Exchange
 - a) Registration certificate as member of ICTA / other recognized marketing auction platform (one time)
 - b) Proof of coffee sold-- Attested copy of sale note issued by the auctioneers' concerned to the growers' collectives/ SHGs/ Cooperatives.
 - B. In case of coffee exported directly
 - a) Export permit having Customs endorsement
 - b) ICO certificate of origin having customs endorsement
 - c) Bill of Lading (BL)

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Annexure-2

Household Schedule Sheet (A)

Serial No.....

Date:-

.....

Village

Respondent Name: Sex: (Male/ Female/ other)

Household Head (HH): Tribe/ other (if any):

Religion:

1. Family details

S.NO	NAME	Relation with HH	Age	Marital status	Education	Occupation

Note:

Housing Type: (Pucca/ Semi Pucca/ kutcha/other)

No.of Rooms.....

Toilet Facility.....

Support in construction (House/ Toilet) 1. Government 2. Own 3. Other

If Govt/ Other, specify 1. Amount and year.....

2. Agriculture land in acres

S.NO	Category	Irrigated	Sources (if irrigation)	Unirrigated	Total
1	Owned				
2	Leased – in				

3	Leased -out				
4	Podu				
5	Share cropping				

3. Crop Grown

Kharif (July- Oct)		Rabi (Oct- March)	
crop	Extent of land in acres	crop	Extent of land in acres

4. Horticulture Crop Grown

Crop cultivated	Acres	Years in which started	Approx. Income

5. Economic Assets

1. Livestock?		4. Tractor	
2. Buffalo		5. Machinery	
3. Cattle		Others	
Others		Luxury goods (T.V, Smart phone, bike, any	

6. Possession of ID cards/ Documents

SHG Membership (specify name below)	Bank A/C	MNREGS	Land patta/ Passbook

7. Debt

Debt	Amount	Reasons
Informal sources		
Formal sources		

8. Migration

S.NO	Name of the person	No. of days	Reason	Month/season	Place of migration	Average income

9. Health

Male (name the disease)	Treatment	Female (name the disease)	Treatment

10. Coffee

Coffee	Other plants(mention)	What attacked?	What used?	How many times?
Fertility		xxxx		
Pests				

11. Do you have membership with GCC?

Yes-----

No-----

11. 1 If yes, how are you linked to it?

11. 2 what type of coffee do you produce?

a) Conventional b) organic (for organic farmers use schedule sheet B)

11.3 Do you have organic certification? Yes/No

11.4 When did you get? ----- (specify in years/ period)

12. Where do you sell coffee?

Markets (weekly)

Traders who visit our home

Markets in the nearby town

Whole sale traders through agents

13. What is the approximate quantum of returns in Rupees?

Markets (weekly)

Traders who visit our home

Markets in the nearby town

Whole sale traders through agents

If you sell your coffee to traders in towns or cities, how is the sale arrived at?

- a) Predetermined price b) through middle man/ commission agent c) self-bargaining

14. What are the problems/ difficulties do you face in sale of your produce?

15. Do you want to shift to organic produce? Yes/ No, if either yes/ no, specify the reason

.....

.....

.....

.....

Organic Coffee Schedule (B)

Date: -

Village Irrigation.....

Name HHID..... Caste/ Tribe.....

Age.....

Current year-----

Total acres planted----- Coffee Trees.....

Previous year-----

Total acres planted----- Coffee Trees Quintals Harvested.....

Other than coffee plants

Quintals Harvested (other than coffee).....

Coffee	Other plants(mention)	What attacked?	What used?	How many times?
Fertility		xxxx		
Pests				

A. Economic Assets			
1. Livestock?		Tractor	
Buffalo		Machinery	
Cattle		Others	
Others		Luxury goods (T.V, Smart phone, bike, any	

B. Income			Coffee	Other crops
1.Farm Income		3. Open market sale?		
2.Off farm income		4. Direct/ contract market sale?		

C. Debt	Amount	Reasons
Informal sources		
Formal sources		

Farmer Name (all who do farm work)		Sex	Age	Education	How long coffee?	How long chemical free?	What crops before?
Hired labour?	Purpose?						

Space for notes:

What kind of support does program offer?	What could be improved?

D. NGO involvement this year	
Training programs/ help	
Sales help	
Loans – from bank, money lenders, How much?	
Infrastructure this year	
Do any job for program?	

Space for notes:-

1. Why did you shift to organic coffee farming?

.....
.....
.....

2. What motivated you to choose organic coffee?

.....
.....
.....

3. What are the difficulties problems in coffee produce?

.....
.....
.....

4. Are your children interested in coffee produce? Do you want to continue them? How do you train them?

.....
.....
.....

5. Where do you sell coffee?

Markets (weekly)

Traders who visit our home

Markets in the nearby town

Whole sale traders through agents

6. What is the approximate quantum of returns in Rupees?

a) Markets (weekly)

b) Traders who visit our home

c) Markets in the nearby town

d) Whole sale traders through agents

If you sell your coffee to traders in towns or cities, how is the sale arrived at?

- a) Predetermined price b) through middle man/ commission agent c) self-bargaining

If you sell your coffee to contract buyers (organic/ fair trade) how is the sale arrived at?

- a) Predetermined price b) through middle man/ commission

7. Do you get a say in negotiation of the price? Yes/ No.

Specify what do you say about above? Satisfied/ unsatisfied?

Reason.....

8. What are the problems/ difficulties do you face in sale of your produce?

.....
.....

Organic aspirations in South India

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Organic regulation makes products legible to consumers around the world, adding value to commodities and seeking to counter socioecological injustice through neoliberal logics of consumer choice and market diversification. Despite the regulatory and consumer need for universal signification, organic agriculture varies considerably between regional contexts and even within the same country. Within India, home to more organic producers than any other nation, certified organic cotton agriculture in Telangana and certified organic coffee production in Andhra Pradesh highlight how organic agriculture provides distinct, but parallel, ways for farmers and intermediaries to capture value in these supply chains. These questions are especially pressing in South India, which has struggled to spread the economic development of Hyderabad and coastal Andhra Pradesh to poorer rural areas plagued by suicide and agrarian distress. In this article, we explore how organic farmers and intermediaries in South India navigate the demands of foreign capital and governance while negotiating the benefits of global ethical supply chains alongside their own aspirations.

Keywords South Asia; Organic Agriculture; Commodity Chains; Value; Aspiration

On a July morning in 2018 in Adilabad, Telangana, Joshan¹ was helping farmers comply with regulations enforced by Prakruti Organic, an organic and fair trade cotton program. Joshan ensured that these farmers were not breaking rules by planting genetically modified (GM) seeds or using chemical pesticides, but he also relayed farmer frustrations back to Prakruti staff. His mediation keeps organic agriculture viable in this village because he alone has built connections and trust between farmers and program managers. His counterpart in a nearby village, however, quit his job, and the village severed their ties with Prakruti in solidarity. Ten hours by train to the east in Araku, Andhra Pradesh, organic coffee farmers were still recovering from a cyclone that devastated Araku forests in 2014. Although the storm showed coffee agroforestry's vulnerability to extreme weather events, farmers recognized that organic coffee production offers better prices and support than local government buyers or predatory brokers. Even when storms uproot coffee agroforests, organic coffee can be a bridge to educational opportunities and wage work that offer better prospects.

The commodity chains for both certified organic Telangana cotton and Araku coffee involve several stages where the commodity gains added value: cotton's ginning, weaving, dying, and design and coffee's pulping, fermenting, drying, and roasting. On top of these material transformations, organic supply chains charge consumers more with the understanding that certification helps to return higher monetary gains to farmers or supports environmentally friendly agricultural practices. When participating in organic agriculture, Indian farmers produce not only agricultural commodities consumed for their use values but also meticulously cultivated images and stories (Franz and Hassler 2010) that draw consumer gazes to farmer producers and justify extra costs by emphasizing underdevelopment (Sen and Majumder 2011). Organic coffee and cotton may entice consumers wary of pesticide residues on their clothes or in their beverages, but the main marketing thrust in both South Indian supply chains involves paying extra to improve socioecological life for farmer producers. Although capital accumulates off the farm in many long supply chains (Jaffee 2012), some farmers capture parallel socioeconomic value through the opportunities of organic production. These futures differ from those imagined by consumers who support an agricultural development where elite consumption empowers poor farmers more in touch with the natural world

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Becoming an Organic Farmer and Market Participant: A Case Study of Small and Marginal Coffee Farmers of Araku Valley

by Sreenu P



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