SOCIO-CULTURAL CHANGES OF FARMERS GROWING BIOLOGICAL GOLDEN BANANAS IN THUNGKHAWAT SUB-DISTRICT, LAMAE DISTRICT, CHUMPHON PROVINCE

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF ARTS
(RURAL DEVELOPMENT STUDIES)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2007

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Thesis

Entitled

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Thesis Entitled

SOCIO-CULTURAL CHANGES OF FARMER GROWING BIOLOGICAL GOLDEN BANANAS IN THUNGKHAWAT SUB-DISTRICT, LAMAE DISTRICT, CHUMPHON PROVINCE

was submitted to the Faculty of Graduate Studies, Mahidol University for the Degree of Master of Arts (Rural Development Studies)

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ACKNOWLEDGEMENTS

This thesis is successfully accomplished as a result of support and endorsement from many individuals. I would like to bestow my gratefulness to my advisor, Dr. Lakana Daoratanahong, thesis committee, Assistant Professor, Iam Thongdee and Renu Muenjanchoey and thesis defend committee, Associate Professor Dr.Ruengdet Pankhuenkhat for their kind advice and opinions on this study.

Sincere gratitudes to my parents and family for their endless support, both financially and mentally. Great appreciations to my beloved wife-to-be for always understanding and being my strength throughout the study.

I am grateful to the farmers in Thungkhawat for their participation and cooperation in providing useful information.

Finally, I would like to give thanks to all my friends for their assistance, sincerely from my heart.

Acting Second Lieutenant Yutthana Auitakul
May 16, 2007

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ABSTRACT

The objectives of this research were to study the characteristics, processes, factors, and impacts of social and cultural changes of farmers growing biological golden bananas in Thungkhawat sub-district, Lamae district, Chumphon province. The study was qualitative research with purposive sampling of 8 villages within the Thungkhawat community. Sampled populations were farmers, members of the Thungkhawat Gardening Management Group, from 104 households. Research information was collected using in-depth interview, participant and non-participant observations.

It was found that there was a great variety of social and cultural characteristics existing among farmers of the Thungkhawat Gardening Management Group as a result of migration of people from different places.

The main driving forces of changes were novelty acceptance resulting in group assembly, and group endorsement resulting in reflections of practice outcomes for further improvements.

Factors influencing the changes were both internal and external. Internal factors were community leaders and education while external factors were technology, communication and economy.

Impacts of the changes brought about occurence and exchange of novel ideas which further results in increasing knowledge and information among the farmers as well as earning more income. Moreover, the farmers are more aware of chemical harm leading to destruction of the environment and the subsequent lasting drought which, in return, affects the farming.

Suggestions: There should be an endorsement on further research and studies regarding the development of the group and the farmers growing biological golden bananas in order to acquire sufficiency and perpetuity of the practice.

KEY WORDS: SOCIO-CULTURAL CHANGES/ GOLDEN BANANA/ FARMERING PRACTICE AND LIFESTYLE/ CHUMPHON

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การเปลี่ยนแปลงทางสังคมและวัฒนธรรมของเกษตรกรผู้ปลูกกล้วยหอมทองปลอดสารเคมี ตำบลทุ่งคาวัด อำเภอ ละแม จังหวัดชุมพร (SOCIO-CULTURAL CHANGES OF FARMERS GROWING BIOLOGICAL GOLDEN BANANAS IN THUNGKHAWAT SUB-DISTRICT, LAMAE DISTRICT, CHUMPHON PROVINCE)

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บทคัดย่อ

การศึกษาครั้งนี้มีวัตถุประสงค์เพื่อศึกษาลักษณะ กระบวนการ สาเหตุปัจจัยและผลกระทบของการเปลี่ยน แปลงทางสังคม และวัฒนธรรมของกลุ่มเกษตรกรผู้ปลูกกล้วยหอมทองปลอดสารเคมี ใช้วิธีการวิจัยเชิงคุณภาพ เลือกพื้นที่แบบเจาะจง โดยเลือกพื้นที่ตำบลทุ่งคาวัดจำนวน 8 หมู่บ้าน ประชากรกลุ่มศึกษาคือ สมาชิกเกษตรกร ทำสวนผู้ปลูกกล้วยหอมทองปลอดสารเคมี จำนวน 104 ครัวเรือน ใช้วิธีการสัมภาษณ์แบบเจาะลึก การสังเกตแบบ มีส่วนร่วม และการสังเกตแบบไม่มีส่วนร่วม

ผลการศึกษาพบว่าสมาชิกเกษตรกรผู้ปลูกกล้วยหอมทองปลอดสารเคมีชาวตำบลทุ่งกาวัดมีลักษณะทาง สังกมและวัฒนธรรมที่หลากหลาย เนื่องจากการผสมผสานของกนต่างถิ่น ต่างจังหวัด ต่างภูมิภาก อพยพเข้ามาตั้ง ถิ่นฐานอาศัยอยู่ในพื้นที่

กระบวนการหลักที่มีส่วนขับเคลื่อนเปลี่ยนแปลง คือ การขอมรับโอกาส จนเกิดการรวมกลุ่ม และมองผล สะท้อนที่เกิดขึ้นเพื่อนำมาแก้ไขปรับปรุงกลุ่มและสมาชิกเกษตรกร โดยสาเหตุปัจจัยการเปลี่ยนแปลงมาจากทั้ง ภายในและภายนอกชุมชน ปัจจัยภายในคือ ผู้นำชุมชน และการศึกษา ส่วนปัจจัยภายนอกมาจากเทคโนโลยี การ สื่อสาร และเศรษฐกิจ

ด้านผลกระทบของการเปลี่ยนแปลงต่อสมาชิกเกษตรกรก่อให้เกิดแนวคิดใหม่ๆ มีการแลกเปลี่ยนเรียนรู้ที่ ช่วยเพิ่มพูนความรู้ให้แก่สมาชิกเกษตรกร พร้อมกับสามารถสร้างรายได้เพิ่มขึ้น และมีการตระหนักถึงการใช้สาร เคมีเพิ่มขึ้น แต่ผลกระทบอีกด้านหนึ่งที่เกิดจากการเปลี่ยนแปลงทำให้สภาพแวคล้อมในชุมชนถูกทำลายเพิ่มขึ้น จนฝนแล้งทิ้งช่วงเป็นระยะเวลานานส่งผลกระทบต่อสมาชิกเกษตรกรเป็นอย่างมาก

ข้อเสนอแนะเพื่อการวิจัย ควรส่งเสริมให้มีการวิจัยเกี่ยวกับแนวทางการพัฒนากลุ่มและสมาชิกเกษตรกรผู้ ปลูกกล้วยหอมปลอดสารเคมีเพื่อความพอเพียงและยั่งยืน

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CHAPTER I INTRODUCTION

1.1 Research Background and Significance

Since Thailand has begun to put its first National Economic Development Plan 2504 and The National Economic and Social Development Plan IX in action, the country has changed dramatically in political, economical, social, and cultural aspects. The government began to improve living standards of people in the rural areas by introducing urban cultures and new technologies to those areas, thus, resulting a better communication and contact to the other parts of the country and to the so called 'The external world'. Accordingly, lifestyles of rural people were slowly but constantly transformed, creating changes in economic, political, social, and cultural contexts of the rural society (Somsak Srisuntisuk, 2529). Advancement in science and technology led to an introduction to industrialization and the green revolution incredibly excited the people with its promises of being able to control and make maximal use of the national resources. Concerns on shortage of food supplies for the rapidly increasing population had vanished. However, the confidence in the new excitement resided for only a short period of time because as time progressed, expectations on how much science and technology could do to the agricultures were facing extensive criticisms and judgments from various groups of people. It was discovered that technology could not essentially solve the problem of starvation and poverty. On the other hand, it did give advantages to only a minor group of people while the major remainders were still in debts and in risks from economic fluctuations and all that it led to. Moreover, the so called 'Modern agriculture' resulted in such impacts as the expansion in food and goods exports, and reliance on foreign technologies and the global markets especially in this era of global economy with no boundaries, competitive marketing resulted in an inevitable life-or-death factors indicating survival of the local farmers. In addition, the outrageous marketing rivalry also caused pollutions from industries as in trying to

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produce adequate agricultural products which required intensive uses of chemicals; these hazardous remains caused depreciation of the environment and national resources and unfortunately, the local inhabitants still directly rely on these resources (Wattana Sugunseen, 2540).

In the past, Thailand used to be a country with abundance of vacant, unoccupied lands and shortage of labors. Now it has become completely the opposite. Lands are all occupied and we are facing scarcity of land for people to farm on and make a living. Rural areas are slowly transformed into urban areas. Capitalism converts labors and properties into trading which further creates a replacement of locality with urban settings especially in property ownerships and rights. Changes in property ownerships lead to structural changes of occupation and agriculture (Mark A. Richy, cited in Wunnee Plutawon, 2547).

Changing trends in Thailand such as economical transformation from sufficient living into free trading, partial changes from agriculture to industry and services, advancement in technologies for better production, transportation and communication all bring about to great impacts on structural changes in the cultures and society. Now economy is the driving force of lifestyle which has an impact on values and morals wrapping up under economic control. Society is driven by the power of advertisement and capital. Behavioral formats of production and consumption tend to follow the mental desires rather than the basic physical needs to survival. For instance, in the past, the productions were for self-consumption and usage which was in accordance with traditional cultures, there were reliant supports from nature to environment to human, creating safety awareness. However, now the old structures have vanished and production tends to follow marketing with isolated units of mono-crop farming, enormous usage of chemicals of better products and plants; animal farming is directed for business rather than self-feeds and a number of producers use chemicals for food decorations with no concerns on negative impacts on consumers.

The tropical rain forests have turned into farms of economic plants such as corns, sugar cane, and tapioca. All agricultures are for trades unlike in the past where there used to be multi-crop farming for self-consumption; now they become a mono-

crop type of agriculture for trading only. Tractors have replaced buffalos and cows; productions are accelerated with chemicals and insecticides, yielding negative impacts on the ecosystems including soil quality depreciation, water scarcity, chemical remains in soil and water sources. Furthermore, it affects the food chains of the ecosystems and finally it inevitably ends with the humans taking in all the fatal chemicals daily as if they are waiting for the chemicals to work their way to the grave.

Chemical usage such as insecticides and pesticides, hormones and chemical reagents used for stimulation of plant and animal growth and immunity have created massive problems on the environment. Fertility of the soils rapidly faded away with too much farming and chemical usage. The lack of fertile soils leads to further usage of the chemical fertilizers added to increase nutrients for plants as well as usage of pesticides. When it rains, all these chemicals are flushed into the soils and water sources. Later it has become a concern that huge agriculture is not suitable for Thailand as with high capital investments, and side effects from using chemicals in the form of fertilizers, pesticides and other reagents towards consumers and other people involved. This initiated the idea of alternative agriculture where emphasis on optimal national resources is reinforced. This also emphasizes on the potentials and wisdoms of the local farmers as well as implicates on values and traditional cultures in application of agricultures to create a firm and stable society, economy and environment (Wunnee Plutawon, 2547).

Chumphon is the uppermost province of the southern part of Thailand with a territory covering 5,947 km² or approximately 3.73 million Rai. Climates in Chumphon are influenced by the northeastern monsoons, resulting in only 2 seasons: summer from February-May and raining season from June-January. Average rainfall is 2,000 mm annually with an approximate temperature of 27° C. Topographic landscapes of Chumphon are divided into 3 main regions: the mountainous areas in the west, the central plain and the coastal plain. Next to the mountains in the west to the eastern side is the central plain which has both hill-like and lowland characteristics and is the most significant agricultural regions. The eastern coastal area characterizes

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long, mostly straight with minor curves, coastline of about 222 km long and makes up a width of the province only 36 km wide.

Most of the land, 3,826 km² or approximately 60.03 % of the total area is utilized for farming. Farming comprises of pineapple farming, rice paddy fields, mixed perennial trees, rubber, palm, lead tree, coffee, mixed fruit trees, orange, durian, and coconut as well as animal farming such as animal meadow, avian farmhouse and shrimp farms (Department of Environmental Quality Promotion, March 2544). However, during the past 2-3 decades, land utilization in Chumphon has changed dramatically due to forest concession, forest uproots for highland rice farming, and fruit and rubber gardening. These result in less woodland and the ones remaining are only diminutive areas at mountaintops. Economic plant cultivation especially rubber has expanded rapidly, covering the whole area of the lowland. Shrimp farm replaces coastal rain forest and fishery (Somnuek Tubpun and Chaweewun Prachuabmoh, 2535, cited in 'Alternative Agriculture', 2540:11).

Recently, agriculture is the most common occupation for Chumphon citizens. There are both fruit gardening and crop cultivation. For example, coconut is the most common local breed agricultural product cultivated mostly in Sawi district and Mueang district with the total farming area of 401,367 Rai. Oil palm grown is a crossbreed which is suitable for the area, resulting in more production annually and is mostly cultivated in Pathio, Tha-Sae, LangSuan and La-Mae districts with total cultivation area of 235,089 Rai. Rubber, about 90% of the rubber cultivated is of a good breed, grown mostly in Pathio, second most in Tha-Sae and Phato districts with total cultivation area of 362,464 Rai. Chumphon is known to deliver most of the country's coffee production; the most popular is Robusta, cultivated mostly in Sawi and second most in Phato and Tha-Sae. Pineapple has been cultivated after the Gae Typhoon; the most popular is the Pattavia breed with total cultivation area of 25,455 Rai. Chumphon has been a province cultivating fruits for a long period of time especially lower parts of the province. Important fruits are rambutan, durian, mangosteen, and finger banana. Rambutan is cultivated in LangSuan, Thung-Tako and Phato districts with total area of 66,313 Rai. Durian is mostly cultivated in LangSuan and in Mueang and Sawi districts with total area of 140,408 Rai. Mangos teen is cultivated in LangSuan, Phato and Mueang districts with a total area of 58,775 Rai. Finger banana is cultivated in LangSuan, Sawi and Mueang districts with a total area of 4,000 Rai. Besides these, there are secondary economic fruits which provide reasonable incomes to the farmers such as lansa and mandarin.

Chumphon is a province with significance in fishery as a result of its location and geographic characteristics which comprise of long coastlines and approximately 50 islands emerging from the deep blue sea. The depth of sea water is around 10-30 meters on average. This makes it appropriate for fishery and fish nursery. Coastline fisheries are of small to medium size with suitable fishing ships. Fisheries take place for about 7-9 months a year with prohibitions during egg-laying periods from February to May. There is also a freshwater fishery in Chumphon with varieties of local fish such as catfish, Mudfish (extinct), serpent-head fish, etc. Massive natural ponds with ample fish are found in Nong Yai, Mueang district. There are seawater fish nurseries such as prawn nursery found in coastline districts from Pathio to La-Mae; mussel nursery with two common types: green mussel and oyster found in Mueang, Sawi and La-Mae districts. There is also a nursery with in-water floating baskets which are used to keep the fish in place in the nursery and these are for white snapper and grouper fish; these nurseries are found in Pathio, LangSuan and Thung-Tako districts.

Geographic and topographic landscapes of Chumphon have an influence on people's choice of occupation for agricultures especially fruit gardening. Fruit gardening has an ongoing farming alteration relevant to the market and economic trends. With an increase in demands, farmers choose to increase their productions by using chemicals as thought to help reduce the production costs. However, these chemicals actually increase them. In addition, farmers always have to adjust their production processes in relevant to market demands as well as to increase their incomes from the productions.

On the other hand, there is a group of farmers who choose to go against the trends and turn into a non-chemical farming, so called The Thungkhawat Gardening Management Group in Moo 1, Thungkhawat sub-district, La-Mae district, Chumphon. The group is a gathering of about 36 local farmers in 2536 to grow biological golden bananas and export them to Japan. The objectives of this group are to create job

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opportunity and to increase income from agricultures for the local and community farmers.

In the past, the group consisted not of many people and they aimed only at supporting each other in their farming with activities emphasizing environmental conservation by using non-chemical methods as well as to raise consciousness on chemical harms and prevention of chemical use in all types of farming.

From then until December 31, 2547, there were up to 408 farmers interested in participating in the group. Their networks spread to 6 districts of Chumphon: La-Mae, LangSuan, Phato, Sawi, Thung-Tako and Mueang; and one district Thachana of Suratthani province. There are 16 agricultural units: Thungkhawat, Mit-Ari, Neunsunti, Numtokchumpoon, Sakao, Klongsong, Klongglang, Huaysaikao, Huamad, Pungwun, Praruk, Naitoong, Kaotaloo, Tachana, Prasong and Kuanput (Thungkhawat Gardening Management Group, 2547). Recently in December, 2548 there are altogether 439 members with the same number of 16 agricultural units, canceling the Kuanput but adding the Kuanchumpa unit instead.

Changes in farming practices lead to an alternation or adjustment in social and cultural contexts as well. The researcher is keen on investigating the Thungkhawat Gardening Management Group in Thungkhawat, La-Mae because they are the group choosing not to use any chemicals in their farming which is quite against the modern trends of farming in these recent years. By switching the farming practice, it must as well change the social and cultural contexts. As a result, the researcher would like to investigate the social and cultural changes of these members of the group. Moreover, the changes must as well comprise of processes and factors which makes it even more interesting to see how this type of farming affects the lifestyle and life quality of the farmers. These will serve as guidance for further improvement of social and cultural conditions of farmers and to upgrade their living conditions as well as to learn the existing problems and obstacles in growing biological golden bananas to guide other types of farming to the practice of biological agricultures.

1.2 Research Objectives

- 1.2.1 To study the characteristics of social, cultural and occupational changes of farmers growing biological golden bananas in Thungkhawat subdistrict.
- 1.2.2 To study the processes and factors of social, cultural and occupational changes of farmers growing biological golden bananas in Thungkhawat sub-district.
- 1.2.3 To investigate impacts of social, cultural and occupational changes of farmers growing biological golden bananas in Thungkhawat subdistrict.

1.3 Expected Outcomes

- 1.3.1 To learn to characteristics of social, cultural and occupational changes of farmers growing biological golden bananas in Thungkhawat subdistrict.
- 1.3.2 To learn the processes and factors of social, cultural and occupational changes of farmers growing biological golden bananas in Thungkhawat sub-district.
- 1.3.3 To learn about the impacts of social, cultural and occupational changes of farmers growing biological golden bananas in Thungkhawat subdistrict.
- 1.3.4 The data obtained in this research may serve as guidance for further improvements of social and cultural conditions of farmers growing biological golden bananas as well as to upgrade their living conditions and to be aware of problems and obstacles in growing biological golden bananas.
- 1.3.5 The information gathered may serve as guidance for technical and academic development regarding the use and practice of biological farming in application to other types of farming to reduce chemical use in agricultures.

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1.4 Research Boundaries

In this study, the researcher has divided the field studies into 2 aspects as the followings.

- 1.4.1 Information boundary focused mainly on the characteristics, processes, factors and impacts of the social, cultural and occupational changes of farmers growing biological golden bananas in Thungkhawat subdistrict.
- 1.4.2 Location boundary focused only on farmers growing biological golden bananas in Thungkhawat sub-district, Lamae district, Chumphon province.

1.5 Definitions

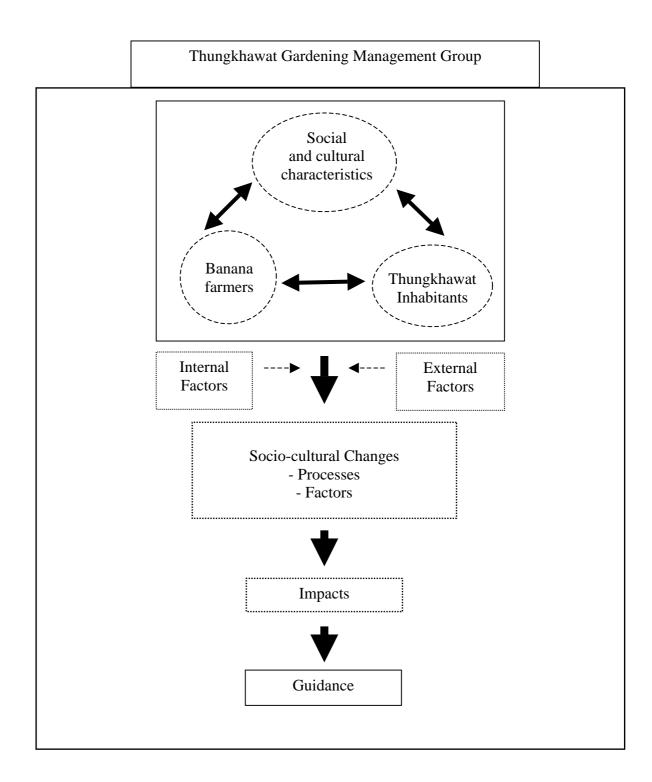
- 1.5.1 **Thungkhawat Gardening Management Group** defines those farmers growing biological golden bananas in Thungkhawat sub-district, Lamae district, Chumphon province.
- 1.5.2 **Golden bananas** define pleasantly scented bananas with dense mass and sweet in taste. When fully ripe, it is golden in color.
- 1.5.3 **Biological golden bananas** define golden bananas which have been cultivated without any types of chemicals used in all stages from 3 months prior to cultivation through harvesting
- 1.5.4 **Changes** define differences of one measure over a period of time. Changes occur in every type of society.
- 1.5.5 **Social changes** define structural changes in relationships of people living together in the same community of Thungkhawat sub-district. These social changes can be progressive or regressive, permanent or

temporary, manipulating or natural, and advantageous or disadvantageous.

1.5.6 **Cultural changes** define changes in lifestyles of people in Thungkhawat sub-district such as structural social changes of the people in several aspects as religions, beliefs, traditions, customs, economy, occupation, language, communication, arts, recreation, health and hygiene, disease treatment, food consumption, education, and social refinements.

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1.6 Conceptual Framework



CHAPTER II LITERATURE REVIEW

2.1 Concepts Relating to The Research

2.1.1 Concepts on economic, social and cultural changes

1) Definition of Change

All societies and cultures undergo an ongoing change. The occurring changes are inevitable and can take place at any place at any time (Pongpun Maneerut, 2521:1). Changes started occurring since the beginning of the world or even before that. Great religion founders of the world emphasized on the ideas and provided teachings about this truth. Buddha once articulated that all physical beings are unstable, with uncertain changes, meaning that all physical beings are always under alterations (Surichai Wunkaew, 2535:155). Similarly, all occurrences of the cultural contexts in this globalization are subject to changes. All societies change unavoidably in different aspects such as technology, population, environment, economy, politics, etc. Changes are one characteristic of human society which always undergoes development. For example, Thai society is changing rapidly according to the globalization. As a result, before understanding the changes, we need to make clear of the definition of change.

Nisbet (Cited in Sanit Samukan, 2542:2) stated that "Change is a succession of differences in time in a persisting identity".

Tittaya Suwunchot (Cited in Ruchaneekon Setto, 2528:274) stated that "Change is a difference occurring from one time and the other which can be differences in materials or abstracts; Changes in human society is ordinary and constant"

It can be concluded from the definitions above that changes define differences of one thing occurring from one time to the other, comparing them over time by which they can occur in every type of society and at any time. Yutthana Auitakul Literature Review / 12

2) Concepts on Economical Changes

Somsuk Srisunsook (2539:19) stated that economical changes are structural changes revealing production system, dispense, consumption, and exchange. In the past, economic context in the local areas were of traditional characteristics as seen in production, exchange, consumption and dispense only for adequate self-consumption within one's family. At present, the economic contexts have changed into a more capitalistic manner which, by definition, involves much with money and cash.

Economic changes can be seen in governmental investments in which the money is put into providing various basic public utilities. Impacts from such development involve changes from simple lifestyle with sufficient economy into a village with marketing and trade relying much on product costs at national and global levels.

Contact and dependence between rural and urban livings increase dramatically. Urban livings have developed into industrialized societies which directly rely on national resources from the rural areas. This resulted in changes in occupation of the local rural residents from only agriculture to business owners and stakeholders who feed the resources onto industries. One common change in occupation is from farming to laboring in the manufactures.

Contact and communication between urban and rural areas occur more intensively than in the past especially through the spread of trading. Trading results in money savings. However, people have different potentials of saving money, thus, creating a space between rich and poor people as never has happened before. The most valuable form of treasure is land property. Accordingly, land possession leads to the social class divisions and rankings in economic villages.

Ecosystem conditions of those areas also alter and have direct impacts on improvement and development of the agriculture as a result of geographical alterations. Improvements in topographic landscapes result in rich and fertile lands which then affect improvement in living conditions of the local people.

Sunya Sunyawiwut (2520:15) stated that changes in the local economy means that the local residents learn about technologies and innovations which are mainly provided by the government.

Kanungnit Sintu (2540) stated that economic changes are structural changes within the village including production system, dispense, consumption and exchange.

From definitions above, it can be concluded that economic changes define structural changes of production system, dispense, consumption and exchange.

3) Concepts on Social Changes

Lundberg, Schrag and Larsen (Cited in Pongpun Maneerut, 2521:15) stated that social changes define any visible changes in a particular time.

Kinsley Davis (Cited in Pongpun Maneerut, 2521:15) stated that social changes define changes in structure and role of a particular society.

Herbert Spencer (Cited in Ruchaneekon Setto, 2528:280) stated that social changes are processes of changing from military society to productive society.

Carl Marx (Cited in Ruchaneekon Setto, 2528:280) stated that social changes are processes of changing from feudalism to capitalism.

Ruchaneekon Setto (2528:282) stated that social changes define structural changes occurring in relationships of humans living in a society including visible changes in sustaining lifestyles, or in short, the cultural changes. This reflects changes in relationships of humans from what it used to be.

Surichai Wumkaew (2535:155) stated that social changes define all aspects of changes in society, patterning processes, social formats such as customs, family format and governing. These changes can be progressive or regressive, permanent or temporary, manipulating or natural, advantageous or disadvantageous.

Sunya Sunyawiwut (2523:285) stated that social changes define changes in relationships of at least two people up to bigger group of people involving the whole society.

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Puttaya Saihoo (2515:585) stated that social changes define changes occurring in relationships of people in the same group and setting. The changes occur as a result of alterations in boundaries and roles of different people from what it used to be.

Somsuk Srisuntisook and Suwun Buatuan (2536: 71-81) stated that social and cultural changes define an occurrence where rural and urban societies are in closer contact in such a way that dependency in rural society reduces, that family and relatives relationships which used to be the center of economy, society, and culture have changed their roles as a consequence of replacement by governmental offices such as school, bank, co-operatives, etc.

As a result of an increase in population and a decrease in national resources, people need to expose to the external world for more job opportunities and earnings from sources other than their own area.

Distribution and dissemination of urban cultures into rural areas in such aspects as social acceptance and self confidence occurred through the success in occupation, and as modernization acceptance lead to intensive personal pride, thus, altering traditional beliefs such as respects for the seniors, ancestor admiration and praise, lineage pride, and the holdfast to the traditions and ceremonies.

Governmental participation and involvement such as schooling alter the social contexts and beliefs of the local people. For instance, education becomes accepted and believed to create higher and better job opportunity for the youngsters. The desire for children to have a well-paid and dignifying job replaces the agricultures and farming of the local people.

Distribution of cultures in such aspects as advancement in medicine, science and technology from urban to rural areas leads to acceptance within the society of such distribution, thus, resulting in behavioral changes in illness prevention and treatment within the areas.

Experiences in working or traveling of individuals lead the persons to observe urban cultures including language, tradition, and fashion which, of course, result in utilization of such language and costumes relevant to the urban ones.

Advancement in public communication is dramatically distributed into rural areas. Accordingly, people accept the urban lifestyles and apply those to their own lives both in materialistic and moral settings. For instance, there are now more recreational and relaxing activities than in the past.

It can be concluded from the statements above that social changes define structural changes in relationships of people living in the same society. These changes can be progressive or regressive, permanent or temporary, manipulating or natural, and advantageous or disadvantageous.

4) Concepts on Cultural Changes

Kinsley Davis (Cited in Pongpun Maneerut, 2521:16) stated that cultural changes define any changes occurring in all branches of cultures such as arts, science, technology, philosophy, etc, as well as changes in structures and rules of social organization and arrangement.

Ruchaneekon Setto (2528:280) stated that cultural changes define changes occurring in individual lifestyle such as beliefs, thoughts, law, values which are social norms for each society.

Surichai Wunkaew (2536:156) stated that cultural changes define changes occurring in different aspects by which humans invent and create, most importantly, in aspects as standard values and symbols in a particular society.

It can be concluded from the statements above that cultural changes define lifestyle changes of people and social contexts within a society ranging from morals, values, worthiness, virtues, personalities, thoughts, and intellect as well as behaviors and manners towards physical and mental beings, human relationships, understandings, consideration and knowledge of humans towards natural environment until there is inheritance of the changes unto other generations.

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5) Characteristics of Changes

Social and cultural changes possess characteristics which can be explained by several concepts and theories such as evolutionary theory, revolution theory and development theory.

5.1) Evolutionary Theory

Generally, evolutionary theory is influenced by the biological theory of Evolution postulated by Charles Darwin (Sontaya Ponsri, 2545:153). Sociologists believing in the theory proposed that social changes are a process of systematic alterations from one step to the other in a progressive manner. There are changes from society with simplicity to a more complex society and continues to progress until it becomes a perfect society.

Yongyut Burasit (2547:25) refers to the evolutionary theory as a presentation of facts about human behaviors in a well-defined principle; for instance, things sequentially changed from simplicity to complexity, from low to high, from crude to fine, etc.

This theory was initiated through the pre-existing phenomena relating to humans. Back then there were arguments from thoughts and evidence and people started to question about it as is obvious in the case of earth and its beings.

There is a question regarding how the earth was formed and evolved as a consequence of two theories of the creation of the earth.

- 1) Perfect creation of the earth: stated that God instantaneously created the earth out of nothing, as per se, "Let there be earth, and there is earth".
- 2) Conditional creation of the earth: stated that God created the earth from the pre-existing matters and that the matters and God are the two infinites but the matters were unorganized so God used them to create the earth.

The contradiction here is that the earth is of no significance to God and why God created the earth and that "the creation cannot be created from nothing".

Evidence found as contradicted to the theories of earth creation and served as a foundation of the evolution theory are as follow.

- 1) Astrological evidence showed that it takes an exceedingly long time for the condensation of the sun and the planets to allow the cooling down and solidification of earth crust, mountains and valleys.
- 2) Geological evidence showed that different soil surface layers occurred by solidification of liquid matters and by precipitation of other substances such as mud and sand over an immeasurable length of time.
- 3) Biological evidence showed that species existing in present time were evolved from the pre-existing species during the very first periods through species division and re-organization and they were evolved from lower to higher levels.
- 4) Comparative anatomical evidence showed that arm bones of humans are front legs of dogs and horses, and wings of birds. All these parts are of the same appearance which signifies that they were all evolved from the very same existence.
- 5) Embryological evidence showed that the first stage embryos of reptiles, avian, and mammals are structurally identical with embryos of fish and amphibians.
- 6) Archaeological evidence showed that preceding rocks consisted of less organic compounds where the subsequent rocks, more organic compounds.

The evidence suggest that the earth cannot be created in a glimpse of time but slowly evolved from lower to higher levels through countless length of time.

Herbert Spencer (Cited in Yongyut Burasit, 2541: 28), a British sociologist, referred to social evolution as having the same characteristics as biological evolution which consists of growth and development from simplicity to complexity. Society takes place when there is a gathering of people, living together, protecting themselves from all sorts of harms, there is an increase in number of population and food scarcity that there is a need for more food supply that people have to have different roles and responsibilities, thus, creating a more complicated structure. He believes that weak, unsteady society will soon be destroyed by war and replaced by a stronger, more perfect society. There is an ongoing advancement and complexity.

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Herbert Spencer postulated that evolutionary processes proceed from simplicity to complexity, similarity to difference, and uncertainty to certainty. "Evolution is a slow and organized change" This occurs through 3 main principles as the followings.

- 1) Integration. This refers to the gathering of matters or substances and energy both in fundamentals and in other higher levels which ultimately gives rise to lives with distinct characteristics. Fundamentally, it can be explained that matters were scattered in disarrangements. Later, the matters started to integrate systematically, for instance, evolution of the universe. The scattering nebula was integrated into the solar system. Similarly, the biological system occurred by the integration of scattered matters into an organic compound or by the absorption of organic substance from outside into the internal tissues.
- 2) Differentiation. This occurs when there is a life existence according to the previous principle. Then the existence differentiates itself according to several factors such as environment, climate, and temperature until it becomes distinctive beings. For examples, differentiation of unicellular into multi-cellular into different families and species such as plants, and animals and animals can further differentiate into human, elephant, etc.
- 3) Determination. After differentiation, the beings are patterned and determined to be what they are meant to be.

In conclusion, evolution is a change occurring to re-organize the disorientations, or in other words, from chaos to system. This is different from dispersion by which system is scattered into chaos.

5.2) Revolution Theory

An important figure in social and cultural revolution is **Carl Marx** and Ingles (Yot Suntasombut, 2538:4-9). They agreed that the revolution of laborers took place around the years 1848-1849 in France. Marx was the leader of a revolution in Brussels because he noticed that the European society was occupied with unjust social rankings which led to prejudice and imposture among different social classes and class

consciousness within the labor class. Marx believed that corporation of the laborers to protect their rights and to fight with the rulers would eventually lead to a revolution.

Ingles stated that the instinct of Marx was a revolutionist who was born to overthrow the capitalism and any institutions created by its influences. His revolution would lead to freedom of the laborers. Marx condemned the tyranny and inequality in the economy and society caused by capitalism. He was aware that to be able to overthrow the capitalism, it was essential to make a clear comprehension of this complicated system first.

Sanit Samukan (2542:14) referred to revolution as a rapid occurrence of changes which results in swift impacts that further influence lifestyles of people living in the society and the influence may distribute to other societies, resulting in a massive change. For example, The First Agricultural Revolution occurred 9,000 years ago was the change from an economy of animal hunting and seeking supplies from the woods to an agricultural economy where people learned to cultivate their own plants and farm their own animals instead of searching from what existed in nature.

Another important revolution is the Industrial Revolution. This revolution leads to changes in lifestyles and living conditions of a number of people in the following generations only 200 years afterwards. People migrated from fields and farms of which their ancestors used to make a living from for thousands of years into urban areas as a result of commerce and industrialization. Then it is found in present time that people residing in the urban areas of industrialized countries are employees in different forms of laboring as it has never happened before in the world of ancient agriculture.

Pawinee Pengsat (2534:30) referred to revolution as a rapid and violent occurrence of basic changes in such organizations as politics, authority relationships, social rankings, and property possession.

Chalmers Johnson (Cited in Pawinee Pengsat, 2534:30) analyzed revolution based on 3 principles: 1) Target of action, such as government, individuals, and

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political authorities, 2) Characteristics of operators, such as public masses or leaders and 3) Goal and dogma, such as groups of nationalism and leader-ism.

Revolution does not always involve violence, for instance, scientific, philosophical, or educational revolutions such as that of Nicholas Copernicus who found that the sun is the center of the solar system with the earth revolving around it which changed the whole ideas of the former knowledge on solar system entirely.

5.3) Development Theory

Daranee Tawinpiputkun (2549:14) stated that social changes can be explained through development theories. It is postulated that social changes in a developing countries are a slowly moving, precipitating type of changes which will eventually lead to development. This change takes place as a result of structural economic impacts from western countries. It is believed that the structures in developing countries will become identical to the one in the developed countries and that the changes will eventually lead to industrialization.

Rostow (Cited in Daranee Tawinpiputkun, 2549:14) used historical methodology to explain that social changes in developing countries occur systematically according to the development of industries and economy. These systematic steps consist of Precondition for Takeoff which is the period when society started transforming from ancient to modern society which relies on changes of social structures; Takeoff continues through when the resistance of development wears off and the advancement in economy expands; and last stage, Self-sustained Growth, is when the society sustains its economic growth and development and there is an ongoing expansion of the economy with constant use of new production technologies.

Moore and Hoselitz (Cited in Daranee Tawinpiputkun, 2549:14) perceived social changes as a process called modernization resulting from industrialization. Moore defined modernization as a complete transformation from original society to westernized structures which characterize technology, advanced social organization, prosperous economy and political stability.

Somsuk Srisuntisook (2536:69-70) stated that the concept of novelty acceptance involves both materialism regarding technology and non-materialism such as feelings, attitudes, and principles within a particular community which occur according to 3 main sources as follow.

- 1) Discovery. When local residents discover resources or agricultural plants, they tend to change their occupation into using the novel discoveries in making more income. For instance, the newly discovered plants yield more production per area of farming, farmers switched into farming this particular plant which brings them higher income.
- 2) Invention. When there are inventors making new innovations which are beneficial to the community, people pay more attention and use this new invention increasingly. For instance, an inventor created a small machine used for water pump in replacement of manual pumping so that people can benefit from its convenience.
- 3) Distribution. This refers to an acceptance of novelty by other communities. This can be thought of as a distribution from one society to the other. For instance, local farmers accept new techniques of farming from the western world.

Rogers (Cited in Somsuk Srisuntisuk, 2536:69-70) referred to acceptance process as having 5 main steps as the followings.

- Awareness. This occurs when people are aware that there is an innovation.
 The news may come from different sources such as related staff, parents, relatives, friends, merchants, and mass media.
- 2) Interest. After being aware of what is happening, people tend to be interested in the novelty and its details and usually seek further information about it from different sources such as district head farmer, sheriff, and other leaders in the field.
- 3) Evaluation. This is a critical period of choosing between having advantages or disadvantages regarding the novelty.
- 4) Experiment. This is an important step of trying the novelty. If it yields good results, it can be further utilized in practice.

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5) Acceptance. This takes place when the novelty has been tested upon and the individual must decide whether it yields good or bad results. It may take a long time in this step for an individual to accept or deny.

Acceptance, which defines either slow or rapid salutation for the novelty, consisted of 2 considerations.

 Novelty characteristics. This defines any characteristics of the novelty which leads to acceptance. It includes cost, instruction complexity, compatibility, expediency and dissemination.

Population characteristics. This means the differences of individuals in the process of acceptance. People are different in such aspects as age, social and economic status, professionality, leadership, and contact to the external world.

6) Factors Influencing Changes

Bunpot Weerasai (2520:76) stated that there are 4 factors which influence social changes.

- 1) Ecological factors such as geographic and population environments
- 2) Novelty creation such as invention, discovery
- 3) Technology changes as a result of human's capabilities in utilizing technologies, thus creating structural and institutional social changes
- 4) Conflict and competition as a process influencing social changes

Pawinee Pengsat (2534:35) stated that there are 4 factors which influence the process of changes

- 1) Social factor. It explains that each society possesses its own orientation and pattern. How changes impact the contexts depend on reputation, contact, alliance, social ranks, authority, suitability and participation.
- 2) Psychological factor plays an important role in acceptance process as it deals with motivation and individual influences.
- 3) Cultural factor plays a role in determining individual acceptance or denial in the social changes because culture is the traditional patterns to ways of life of people. For instance, people are influenced by beliefs in religions, fate and ceremonies.

4) Economic factor involve in social changes in such ways as limitations in production costs, available profits, and limited resources.

Somsuk Srisuntisook and Suwun Buatuan (2536:71-81) stated that important variables influencing social and cultural changes are as follow.

- 1) Cause variables. It is a factor that initiates influences or leads to changes in social and cultural contexts such as the following
 - Ecosystem, ecological status and natural resources. These can be stated as being optimally abundant or not abundant
 - Novelty acceptance. This states the acceptance and denial of novelty including both agricultural and non-agricultural innovation.
 - Cultural dissemination. This refers to popularity of the distributed cultures such as education system, trading, and urban lifestyle.
 - Individual characteristics. It means the differences in characteristics
 of individuals in such aspects as gender, education, experiences,
 attitudes, leaderships, etc.
 - Mass media. It refers to tendencies of communication and media awareness. Mass media is considered the external factor which is influenced by the government in terms of stimulating the development in social and cultural aspects.
 - Basic public utilities. This refers to the possibility and usefulness in being able to acquire the utilities.
- 2) Effect variables. These variables are changes in social and cultural contexts and the two changes are inseparable. Social and cultural changes are always put together in explaining any circumstances and ways of life within the society. They become separable when considering only the rates of changes which consist of slow or rapid rates. Moreover, the variables comprise of living condition development, transformation from rural to urban and modern lifestyles and these can be further separated into material and moral developments.

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3) Relationships of cause and effect variables

Ecosystem and socio-cultural changes are always on the flow. Basically saying, if a particular community is not in an abundant state of resources, it will undergo a slower rate of social and cultural changes than the one with abundance. Chuepaeng (Cited in Somsuk Srisuntisook and Suwun Buatuan, 2536: 72) stated that drought leads to migration especially the young generation moving out for laboring, servicing or even prostitutions in the urban areas like Bangkok and the southern urban cities. This leads to an economic change within the community as the youth transfer money home, thus improving the living conditions of their family members. On the other hand, changes in social aspects are in negative direction. The young people demonstrate a modern lifestyle which is not yet acceptable within the community, thus, instead of being thought of as improvement, they act as aggravation for the society.

Moreover, ecosystem has a direct impact on the living condition of the residents. This means that if the geographical environment is in a good condition, the lands for cultivation are in turn fertile, thus, increasing incomes and improving the living conditions that follow. Additionally, ecosystem can also influence and bring about modernization.

Novelty acceptance plays an important role in social and cultural changes, both in agricultural or non-agricultural terms, because it provides a rapid stimulation and support for further changes in social institutions. It also helps develop individual and family life quality which of course will lead to modernization.

Cultural dissemination involves directly with social and cultural changes in a rapid manner. It is immensely influenced by external factors which then lead to living condition improvements as a result of urban lifestyle.

Individual characteristics also play a role in social and cultural changes. Generally, individuals are different to a certain degree and these differences involve directly with how the social and cultural contexts will change. Highly educated individuals tend to accept novelties and modernization easily and the rate of change is more rapid than those with lower education. Characteristics also include those of gender, age, working experiences, and leadership which are all variables in social and cultural changes.

Mass media influence social and cultural changes by means of radio, television, and other communication devices.

Basic public utilities are referred to those provisions from the government such as streets, school, and electricity towards villages to improve the life quality of the residents.

It can be concluded from the information above that internal factors define those within the community which have impacts on changes of behaviors, social and cultural contexts while external factors define those from outside sources which have the similar impacts on changes of behaviors, social and cultural contexts.

7) Impacts of Changes

Pawinee Pengsat (2534:41) stated that social changes can have both positive impacts and damages to the society. The resulting impacts can be ample or diminutive, direct or indirect depending on status, definition and evaluation of individuals. The impacts of changes may result in normal, continuous functioning of the society or may lead of society dysfunction. For example, considering the advancement in economy, this is of course a by-product of resource devastation. When the resources are squandered in all their minerals and forests, they cannot be identically replaced. This leads to resource scarcity and subsequence diseases, environmental toxicity, mental impairment, and other social problems such as an increase in mentally ill patients, drug abuse and criminals. It all takes place only to bring the society into modernization but the resulting damage is massive.

William F. Ogburn (Cited in Pawinee Pengsat, 2534:41) divided general characteristic of impacts from innovation into 3 categories. 1) Dissemination or impact of similar machinery innovations 2) Impact of an innovation leading to innovation discrimination and 3) Connection of various innovations.

Ogburn recorded the impacts of innovations towards society in their different levels and types of how they can change people's habits. For example, if a woman has a chance for higher education, she will be changed in her status. Moreover, he also viewed the social philosophy to be changed according to arrivals of new invention.

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Berger (Cited in Pawinee Pengsat, 2534:41) pointed out that there is no social change without loss.

Somsum Srisuntisook and Suwun Buatuan (2536:29) referred to impacts of social changes as having 2 characteristics.

First, it brings expediency. For instance, new inventions create more conveniences at work, and help develop the country into a better condition.

Second, it brings incongruity. For instance, if the rate of change is unequal such as in the case of material culture moving faster than the moral culture, it will create conflicts within the society. Problems arose are, for examples, increase in population, unemployment, slum, and prostitution.

2.1.2 Concepts on Economics

1) Marketing Concepts

Winit Songpratum (2532:9) stated that marketing concept concurs that if the marketing proceeds on its own capacity without government intervention, benefits will fall for all those involved in the process especially the consumers who will receive high quality products which meet their demands and the producer who produce only high quality products with low costs and good profits. The theory suggests the invisible hands that help the market proceeds into a self-balancing market.

Marketing theorists believe that free-trade mechanisms are the most efficient resource managers. Demand and supply will guide product costs into balance and will set out suitable production. Consumers will be responded efficiently as there are marketing competitions in the form of good quality products with reasonable and stable prices. Government intervention does nothing but obliteration through its irrational rules and regulations which are against the nature of marketing, resulting in losses of efficiency and resources being squandered.

2) Marxist Theory

Paul Baran and Harry Magdoff (Cited in Winit Songpratum, 2532:21) proposed the ideas of modern capitalism, through a belief that there is the Laws of

Motion residing in social relationships which are assembled into capitalistic production. Examples are as follow.

- Competition brings about concentration and centralization of capital which then lead to capitalistic competition and inevitable monopolies.
- Capital concentration and centralization are unstable and are not moving towards balance.

Chuttip Natsupa (2543:54) stated about Marxist Theory in term of its Asian production orientation that Asian society is different from European society in such a way that in Asian society, there is a succession of ancestor community influencing the present beings and there occurs a government occupying the community. Asian society comprises only of 2 institutions: community and state (Government). Fundamental structures are the community villages. Each community is now different from the past in such a way that there is no need for bribe collection to the government. Private property is a production relationship found within slave and feudal societies. Later, European capitalism merged with Asian society.

In other words, Marxist Theory explained Asian production style as being occupied by the government, thus, obstructing independent capital investments. Moreover, he suggested that at a community level, there is a strong bond, preventing the division of classes into bourgeoisie.

Karl Kautsky (Cited in Maneemai Tongyoo, 2546:26) pointed out, by using theories of Marxist and Lenin regarding agricultural changes, that there are exceptional characteristics of agricultures when confronting the power of capitalism. Kautsky's analysis began with the proposed idea that ancient farmers were not genuine farmers because they were still involved extensively with handicraft manufacturing as to yield adequate supplies for an increasing demand of their farming. Capitalism destroyed the handicraft component of the farming life. This resulted in the so called Agriculturalization of the Peasant, causing them all to become purely farmers. Along with this there occurred a process called Commercialization of Peasant Production which drew farmers into trading type of farming with specialties only in certain type

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of economic plants. Farmers become dependent on the global market and prices as a result of expertise in mono-crops sent out for trading only.

2.2 Related Research

Dararut Mettarikanon and Somsuk Srisuntisook (2529) studied the economic, politic, and socio-cultural changes in a north-eastern village.

It was found that economic changes within the area demonstrated an ongoing sufficient economy. At the same time, there is an appearance of production for trading which starts to play a role. In political aspects, it was found that at the beginning, the village leader was as well a leader in politics, beliefs, and represented the village other than the government. Later, this structure altered that the village leader represents the government. Changes of politics and rulings within the community were very influenced and initiated by the governmental offices and its officials. In socio-cultural aspects, it was found that traditional beliefs are still intact. However, Buddhism started playing roles in the community. In public health aspects, it was found that villagers become more acceptant to modern medicine. Recreation and relaxation within the community are found to be more prevalent than in the past especially after electricity became available. In educational aspects, it was found that villagers see education as an important factor for a better living condition and tend to support their children for higher education.

There are several factors influencing the economic, politic, and socio-cultural changes. For examples, factors in such aspects as public utilities, public services, ecosystem, capitalism dissemination, race, government and its offices, experiences, and religious Buddhist beliefs. All factors served as hypotheses, as a consequence, some factors were as hypothesized while some are were not.

Considering the impacts those changes have on the society, it was found that there are applications of technologies in agriculture while there are very little investments with high tendency of people having debts. In political aspects, it was found that the head of a household demonstrates good attitudes towards changes and development; the villagers are confident in presenting ideas and there is a high occurrence of corporation. However, there are conflicts in several terms. There is socio-cultural tendency of utilizing modern facilities. The most significant impact is

the problems of illegal lottery and drug abuse which are more intense than in the past 15 years.

Buntawong Charoenpalitpon (2544) studied the adaptation of villagers undergoing economic, socio-cultural changes of Hmongs, a hilltribe living in the northern part of Thailand, under the government development plan in Pobpra district, Tak province.

It was found that Hmongs migration from Toongyainaresuan and Umpang national conservation parks to Pobpra district in 17 villages brought about social adaptation of Hmongs immigrated and Hmongs confiscated of their lands. Economic adaptation occurred as changing in occupation, farming for trading replaced farming for self-consumption. There was an acceptance of urban cultures into their lives, resulting in changes of the pre-existing cultures. There occurred an urban lifestyles, competition, and political conflicts. These changes further lead to severe social problems such as drug abuse which result in problems like orphans as a consequence of jailed parents. The adaptation of Hmongs under the government development plan brought about both positive development and destruction of the traditional cultures, all at the same time.

Somkid Chumnongson (2544) studied the adaptation from socio-cultural change within the community around Rojana industrial park, Utai district, Ayuddhaya province.

It was found that 1) Rojana community is a local community with rice farming as the main occupation 2) There are 2 factors influencing the changes which are internal and external factors, external factors being policies reinforcing investment, city plan expansion, basic public utilities, and entrance of industrial park, and internal factors being community problems, farmlands put on sales, community economic status, increase of population, individuality, alterations in values, geographic factors and resource availability and 3) Villagers' lifestyles are transformed from agricultural to sub-urban context. The village residents sold their farmland to the industrial parks and stakeholders; they adapted themselves to becoming labors within the park, their economic status improved from selling their land and from having varieties of jobs

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such as trading, leasing apartments, and laboring. The social conditions turn into chaos with individuals living on their own without assistance and support for other people as it used to be. Water supply from natural ponds and creeks are no longer utilizable and the people started having problems with their respiratory system, more waste increases from the changes within the community.

Kanchana Nori (2004) studied the possibility of reinforcement in biological golden bananas farming for farmers under the Royal Patronage Huaysai Development Project. She investigated 6 possibilities according to conditions and factors as the followings.

- 1) Marketing: Marketing for biological golden bananas both domestic and international are in positive trends.
- 2) Finance: Banana farmers are in profitable investments; moreover, community investment sources are open for loans.
- 3) Appropriate physical characteristics such as abundance in water, wind, humidity, climate, suitable farmland
- 4) Supportive social characteristics such as farmer's participation and corporation in making use of the beneficial farming project
- 5) Good management system such as transportation, household labors and the organizations involving in the management play an important role in making the farming project successful
- 6) Technology: Farmers possess good understanding of how to apply technology to their agriculture and of the foundation of appropriate technology for their biological golden banana farming.

Furthermore, activities of this project also rely on the royal ordinance of the king, emphasizing the sufficient and self-reliance development. Moreover, the modern theories also support all the six possibilities to a more complete system by emphasizing farmers to use their intellect and wisdom in reducing chemical uses. The farmers also apply the practice in their other types of cultivation, thus, resulting in more income per household and a dissemination of the practice into other areas.

CHAPTER III RESEARCH METHODOLOGY

The research in the title of "Socio-Cultural Changes of Farmer Growing Biological Golden Bananas in Thungkhawat Sub-District, Lamae District, Chumphon Province" is a qualitative research holding research procedures as the followings.

3.1 Research Location

In choosing an area of study, the researcher used the purposive sampling, selecting Thungkhawat sub-district, Lamae district, Chumphon province. The study areas comprise of 8 villages, namely, Moo 1 Baan Thungkhawat, Moo 2 Baan Thungkhaungdee, Moo 3 Baan Thungkha, Moo 4 Baan Saiyai, Moo 5 Baan Tubmai, Moo 6 Baankhaochonglom, Moo 7 Baan Hinloogchang and Moo 8 Baan Neunsunti.

3.2 Sampling Population

Farmers growing biological golden bananas in Thungkhawat sub-district, Lamae district, Chumphon province, altogether 104 households, one from each household being a member of the Thungkhawat Gardening Management Group

3.3 Documentary Study

The researcher has reviewed through documents and references and analyzed related studies in order to utilize the information obtained in application of constructing conceptual framework for this research.

Furthermore, concepts and theories are used as guidance in this research, for examples, concepts on economic, socio-cultural changes and on economic plants.

3.4 Tools used in Field Study

Tools used in data collection in the field study are interviews, surveys, notebooks, voice recorder, and camera.

3.5 Methods of Data Collection

3.5.1 In-Depth Interview

In-depth interview was exploited on key informants of the farmers growing biological golden bananas. Questions emphasized are in regards with social and cultural changes of the farmers and their characteristics and impacts on other types of farming.

Individual in-depth interview was done through question guidance and by general conversation.

3.5.2 Observation

One method of data collection performed in this research was through observation which comprises of two characteristics: participant and non-participant observations. The information was collected through observations on general contexts of the research location in order to understand the social and cultural changes of the farmers and how this type of biological golden bananas farming affects the other types of farming.

3.6 Data Verification

Data verification was done along with data collection when on field study. The researcher used the data recorded, interviewed and surveyed including any unclear information and underwent data classification and management according to the research objectives. Then all the data were verified for their appropriateness and adequacy in being analyzed and concluded. If there were any information lacking clarity, more data were collected to complete the contents.

3.7 Data Analysis

The data obtained in this research were qualitative data from observations and in-depth interviews which were recorded daily and re-arranged through processes as the followings.

- 1) Data classification and organization
- 2) Data verification

- 3) Periodic data analysis using induction by drawing conclusions from concrete and the existing phenomena which brought about partial conclusion of the research
- 4) Overall data analysis through theories and concepts such as concepts on economic, socio-cultural changes and on economic plants

3.8 Research Presentation

The current study is a qualitative research being presented by using descriptive writings and providing rationales relevant to theories and concepts. The research is then bound into a thesis manuscript and presented to the thesis committees in Masters of Arts Program, Rural Development Studies, Mahidol University.

CHAPTER IV

SOCIAL AND CULTURAL CHARCTERISTICS OF RESIDENTS AND FARMERS GROWING BIOLOGICAL BANANAS IN THUNGKHAWAT SUB-DISTRICT

This research emphasized on social and cultural changes occurring within Thungkhawat community of farmers growing biological golden bananas. Characteristics of social and cultural contexts are as follow.

4.1 General Characteristics of Chumphon Province



Figure 1 Chumphon Provincial Emblem

The standing statue represents the blessing angel of the province and his troop during wars. The trees on the two sides are fig trees which are abundantly found within the province. The camp and towers at the rear represent the history of magnificent warriors gathering around before war as Chumphon used to be a frontage province of the country in the past.

Provincial Motto

"Gateway to the south Head bow for the prince

Visiting coffee ranch Nice sand on our beach

Good piece finger bananas Reputa on bird's nests"

Chumphon is the uppermost province of the southern part of Thailand with a bottle-neck shape, situated on latitude 10 of the 29 northern minute, longitude 99 of the 11 eastern minute. It is approximately 498 kilometers away from Bangkok through a highway number 4 (Petchakasem Road) or about 476 kilometers through southern railroad. It connects to other parts of the country as the following.



Figure 2 Location of Chumphon Province

(http://dnfe5.nfe.go.th/localdata/RSouth/chumporn, 11 January 2550)

Geographic characteristics of Chumphon comprise of Tanaosri and Phuket mountain ranges setting up on west side as a border between Thailand and Myanmar. This generates a slope characteristic from west to east side. General topography is comprised of mountains and forests which serve as origins of important watercourses and creeks running towards east side such as Tatapao, Lungsuan and Sawi rivers. Central part of the province demonstrates surging lowlands; and the plains around watercourses are highly and abundantly fertile which is suitable for cultivation, covering ¼ of the province.

Transportation in Chumphon offers convenient connections within the province as well as with Bangkok and other provinces as shown below.

Highways are divided into 2 routes, one is the state highway number 4 (Petchakasem Road) starting from Bangkok down to Chumphon and continues to Ranong and other southern provinces; the other is the Asia highway number 41 starting from Chumphon at the Patompon junction down to Suratthani and other southern provinces.

Railways are the most convenient transportation to Chumphon as all southern railways pass through nearly all districts of the province except Tasae and Pato districts. There are approximately 24 trips of trains going to and from Chumphon daily including normal, rapid and express trains.

Airplanes are another route of transport to Chumphon. The Department of Aviation has set up an airport, situated in Chumco sub-district, Patew district which is approximately 32 kilometers away from the city of Chumphon. The air transports are run by PB Air which serves both one-ways and roundtrips between Bangkok-Chumphon routes on weekends from Friday to Sunday according to its timetables.

Watercourse transports include traveling by sea to several tourist attractions. There are private companies operating for tours around a number of islands of Chumphon, and other islands of Suratthani, namely, Tao, and Nangyuan islands. The services provide both normal and speed boats as the latter choice becomes more popular among tourists nowadays.

Generally, Chumphon is an agricultural province with 90 % of its population residing in rural areas, having agricultures as their main occupation. This is a consequence of geographic and topographic landscapes enabling agricultures especially economic plants such as fruits which requires enormous amount of watering. However, as a result of drought, ecological imbalance, typhoons, and forest

uprooting; it brought about unstable climate changes; and farmers have to generate human-made ponds to supply water for their gardening. Farmers corporate well in improving water resources by hollowing up shallow creeks for water preservation. If the water resource generations and improvements require a lot of work, there are assistance from governmental offices such as small irrigation projects like dam construction, pond excavation, and underground water supply.

There are approximately 452, 319 people in Chumphon, comprising of 227,814 men and 224,505 women (http://dnfe5.nfe.go.th/localdata/RSouth/chumporn, 11 January 2550). Most population are Buddhist (97.20 %) while some are Muslim (1.86 %), Christians (0.22 %) and the others are of distinct religions such as Brahma and Hindu (0.22 %).

There are 8 districts, 70 sub-districts, and 683 villages in Chumphon province. Muang Chumphon (Chumphon City) comprises of 17 sub-districts and 161 villages, Lungsuan comprises of 13 sub-districts and 143 villages, Sawi comprises of 11 sub-districts and 101 villages, Tasae comprises of 10 sub-districts and 98 villages, Patew comprises of 7 sub-districts and 66 villages, Lamae comprises of 4 sub-districts and 40 villages, Thungtako comprises of 4 sub-districts and 42 villages and Pato comprises of 4 sub-districts and 32 villages.



Figure 3 Demonstration of District Division

(http://dnfe5.nfe.go.th/localdata/RSouth/chumporn, 11 January 2550)

Education in Chumphon is reinforced in such a way that there are all education levels from pre-school, primary school, secondary and high schools and university. There are altogether 355 education providing centers.

Economic characteristics of Chumphon comprise of mostly agriculture. Main provincial earnings, approximately 44.63 % are from agricultures, 14.90 % export and retails, 7.91 % services and tourism, 6.36 % industries, and 5.52 % construction. An average annual income per individual, regardless of occupation, is approximately 31,943 Baht (http://dnfe5.nfe.go.th/localdata/RSouth/chumporn, 11 January 2550).

Cultural characteristics of Chumphon demonstrate an outstanding context. For instance, there are local Chumphon musical lyrics used in harvesting periods of local farmers such as "Pleng Na" which is locally written and decorated with distinctive patterns from other songs used in other areas and are commonly sung during harvest to create entertainment and to put exhaustion away.

Traditional rowboat contest (Prapenee HarePraKangRua) is considered a significant cultural heritage ensuing for a long period of time. It creates community harmony and unity which is the outstanding characteristic of Chumphon. The contest takes place on a special day set according to Thai calendar which falls on the 1st moon waning date of the 11th month of each year. This date is considered the day of the Buddha itinerary. In the past, villagers will row a boat carrying Buddha image along the Lungsuan river, passing through many temples and got off at Danprachakon Temple for celebration. In the ceremony, there are alms provision and offerings of monk robes after the Lent. After the ceremonies, there is a rowboat contest when people bring in their own boat and dress in colorful costumes and pair up for boat rowing. During the contest they will sing cheerful songs. The winner will get a colorful piece of fabric used to wrap around the boat's top front. At the end, the boat rowers who have got the most pieces of fabric will actually become the final champion. Those colorful pieces of fabric will be tailored and donated for the temple's curtains.

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This rowboat contest has a unique means of judgment. Normally, in any types of race, the winner is the one who reaches the finish line first. However, in this type of contest, the boat rower is allowed to reach out for one of the flags situated on the buoy at the finish line. Though he may row slower, getting the flag first means victory. Accordingly, the competition relies on both harmonious rowing of the rowers and the capacity of the headperson and stern-person. The stern-person needs to control the boat stern to a very straight position, pointing the boat directly to the flag and letting the headperson cling onto the head of the boat without overturning the boat. It does not matter which boat is on the lead, if the headperson cannot grasp the flag; if the flag falls into the water; or if the boat overturns before it reaches the flag, it is considered defeat. The speed of the boat is by no means the roadway to victory. The headperson needs to be precise when clinging onto the top of the boat because the topmost position enables the person to grasp the flag more easily. However, if there are more than one headperson being able the grasp the flags at the same time, they are all winners.

Another interesting custom is Chumphon is called "KuenTum" or cave worship festival which is found in almost all districts over Chumphon. This tradition demonstrates bonding and beliefs of people towards caves which served as human shelters in the ancient time. The tradition is succeeded until present and is distributed to every place where there is a cave. For instance, KuenTum Rubraw cave in Tasae is scheduled on 13th moon waning of the 5th month and takes place around the Rubraw cave. There are several kinds of traditional entertainments such as Taloong shadow show, Manora local dance, boxing, Likay folk drama, musical debate and traditional dance. The next morning will be the KuenTum ceremonies to pay respect to the cave and Buddha image. During the same day around midday, there are more festivals such as Manora local dance, and boxing. After finishing all entertainments and celebrations, villagers of Tasae and surrounding districts regard it as the time to restart their work for the year.

In Taloong shadow show, "I Khun" is considered the clown of the show who represents all other characters. He is a unique character and is like no other characters

of Taloong shows in other provinces of the southern part of Thailand. He plays important roles both to the audience and to the character representatives because he makes good sense of humors, and colors the other characters of the show. The Taloong shadow show reflects social contexts which are delivered through representative's conversation in terms of thoughts, ideas, criticisms and religious beliefs.

Chumphon is also a province with varieties of tourist attractions to choose from because it comprises of both mountainous areas and coastlines with beaches and islands. Tourist attractions within Chumphon are as follow.

Patew district: There are several bays such as BangBued-Tumtong, Thungmaha, YaiGai, and Thungsang; peninsula and beaches such as LamTan peninsula, BoMao, Sapi, and Thunghualan beaches; islands such as Wiang, Rung, Kai, Jorkae, Sigong, and Teab islands; mountains and highlands such as Jadee, Tatane, Yaichee, and Ploo, and cave and water source such as Lullae Tungyaw waterfall.

Tasae district: There are Kapaw waterfall national park and Rubrawneun 491 cave.

Muang Chumphon district: There are Chumphon estuary, Paradonparb beach, Prince Chumphon shrine and its viewpoint, Chaomuang hill and its viewpoint, Panungtuk bay, Talu, Samed, Muttra, Tonglang, Matapone, and GamYai GamNoi islands, Prayai temple, the young soldier monument (World War II), city shrine and Pang mountain.

Sawi district: There are Sairee (Sawi) beach, Pratat Kuanmuang temple, Pratat Sawi temple, Tippreeda cave, Tanlod Noi-Yai cave.

Thungtako district: There are Arunotai beach, Tubchang and Klongpao waterfalls.

Lungsuan district: There are Lamson and Kawkao beaches, Pituk island, Kaogen and Kaokriang caves, Somdetprasrinukkarin park and Hinchangsi waterfall.

Lamae district: There are Tawanchai beach and Kaoploo hot spring Pato district: There are Laewloan waterfall, and places for rafting.

4.2 General Characteristics of Lamae District

Lamae is under the governing administration of Chumphon. Lamae city hall is situated in Lamae sub-district which is approximately 80 kilometers away from Muang Chumphon district, and 585 kilometers away from Bangkok. It covers an area of 296.1 km² with territories connecting to the following areas.

North Connects to Lungsuan district

South Connects to Tachana district, Suratthani province

East Connects to Gulf of Thailand

West Connects to Pato district

Lamae District Motto

"Visit Lamae city, see our treasures, pictures of mountains, plain caves and water, pleasure at hot spring, bring health and joy, enjoy our beaches"

Historically, Lamae used to be a sub-district of Khungeun, Lungsuan province. It was a small community with coastlines abundant in shrimps, mussels, craps and all other kinds of fish. On April 11th, 2435, Lungsuan province dropped down as one of Chumphon's districts, Khungeun changed its name to Lungsuan where the city hall was remained at the same location. Lamae grew in size with increasing population and the city hall could not take up those many people and their documentary information due to its distance and boundaries. On July 1st, 2514, the Ministry of Interior upgraded it as district branch consisted of three sub-districts, namely, Lamae, Suantang, and Suanluang. Then on April 13th, 2520 there was an addition of one more sub-district which was Thungkhawat and the district branch was upgraded to a Lamae district.

Governing administration of Lamae, according to recent information provided in 2543, consists of 4 sub-districts, namely, Lamae, Thungluang, Suantang, and Thungkhawat with altogether 26,839 residents.

By definition, it was speculated that Lamae is a word influenced by ancient Khmer (Cambodian) language contexts which are used to call different types of utensils, animals, trees, islands and mountains. There is one mountain sitting on the east side of a train station in the city which looks like a rat crouching on the floor whether viewed from any sides of the city. According to a Khmer dictionary, "Lamh"

means "rat" which is still used until present. Consequently, it is highly possible that before Thai people migrating down the area, the local people were Khmer and Thai people adopt the word and applied it to their place for thousands of years and now it is slightly deviated to "Lamae"

Geographic landscapes of Lamae comprise of mountain ranges in the west, all the way through the district territory. There are mainly forest areas and most of the forests are within the national conservation park named "Lamae Woods", under the control of Lungsuan Cooperative Settlement. The general landscape is of lowland and plain all the way down to the Gulf of Thailand. The lands are fertile for all types of plant cultivation with natural water resources like Lamae creek running from the west side down the Gulf of Thailand.

Transportation is convenient through highway number 41 as the main communication within the district. Moreover, provincial highways and local highways pass through important communities within sub-districts and villages as well. There are also railways providing several daily normal, rapid and express trains.

Lamae is a district with extreme economic alertness especially on agricultural growth. Most of the populations have agricultures as the main occupation with cultivation of various economic plants such as rubber tree, oil palm, and coconut. Average annual income is 10,000 Baht/person (http://dnfe5.nfe.go.th/localdata/RSouth/chumporn, 11 January 2550). However, drought creates a big problem during summer time as a result of geographic landscape with low plains sloping down towards the seas. Additionally, a number of farmers still lack appropriate tools and equipments for their farming.

Information on socio-cultural changes of farmers growing biological golden bananas within the sampling location is mainly obtained by both observations and interviews with community leaders such as sub-district municipal chairperson, district chief, village headman, president of the Thungkhawat Gardening Management Group, abbot of Thungkhawat temple and the farmers, altogether 104 households. Details on information obtained in this research are shown below.

4.3 General Characteristics of Thungkhawat Sub-District

4.3.1 History of Thungkhawat

History of Thungkhawat can be traced back for not a very long time. An occurrence of anything in the world must have its causes or factors influencing the beings. Similarly, the beginning of Thungkhawat started off with a horrible cause from natural disaster called "The disastrous windstorms of Taloompook peninsula". People were faced with nature's cruelty and the subsequent great loss. Those people needed to escape and find a safer place and shelters to protect their lives and their loved ones.

The migration of people suffering from the windstorms brought about a settlement in this new area around the year 2505. The migrants include residents from Nakonsritummarat, Suratthani, Pangan island, and Samui island. Uncle Roy Pitukpuchayakul, formerly a Samui islander referred to the windstorm back in his homeland "I saw a seagull dead that day, like it was some kind of a premonitory circumstance. Until around 6 o'clock in the evening, we were about to light up our lamp, several trials would not do and there were madness of winds outside. I guess there must have been something wrong so I took all my family members out of our beachfront house to a cave nearby until the winds cleared away. Oddly enough, our house was not much damaged but we had got a bad starvation for several days because all rice and food supplies were gone. Ships from the shores would not leave for our island, guess they were still afraid of the storms. So we had to fish. From the windstorms, and lack of places to make a living, I decided to move out for other better places" (Roy Pitukpuchayakul, 24 May 2006). From the information given, it can be postulated that community environment and other ecologic factors bring about changes in the area.

Later, around the year 2507, there was an intervention by the Lungsuan Cooperative Settlement to allocate lands for people migrating in. This suggests that there is a social and environmental change as a result of migration. An increase in population brings about environment destruction. Land allocation was designated as 40 Rai for one person, thus, more people from other areas came in as well for land reservation. These people are from Puttaloong, Trang, Prachuabkirikhan, Nakonpatom, Petchaburi, and Supanburi. A district chief named Charun Yenchai is one of the migrants from Nakoksritummarat in the year 2508. He worked with the

Department of Lands as an employee estimating land boundaries and borders. He said "The land we are standing on used to belong to Thungluang sub-district; it used to be a rainforest and most of its parts were national conservation parks. Back then, there were about only 5 households, occupying the areas, crops and fruits cultivation, mainly" (Charun Yenchai, 30 May 2006).

In 2515, there were changes on economic conditions within the area, and it drew more people to migrate in. Coffee prices shot so high that people wanted to occupy land for coffee cultivation. Moreover, people in other areas were facing economic problems, their farming products hit the lowest level in the market, and they suffered great loss in investment. Consequently, they migrated into Thungkhawat.

Originally, the area was under the administration of Thungluang sub-district, Lamae district. From 2535, a number of people migrated in, thus, creating a difficult task for Thungluang leader to keep track of his population. As a consequence, Thungkhawat drew itself out and started governing its own administration and named the area Thungkhawat from its outstanding characteristics of having weed grass all over the area and that there was a temple nearby, so people name it Thungkhawat, literally means 'Weed grass fields surrounding a temple'.

The independent administration from Thungluan started off with establishments of 6 villages; Moo (Village) 1, 2, 4 separated from Moo 5 of Thungluang, Moo 3 from Moo 6, and Moo 5, 6 from Moo 13. In 2542, there was an increase in population residing in Moo 5, it is later segregated into Moo 7 and 8. Each village has its own nomination history as described below.

Moo 1. There were hundreds of yards of weed grass, thus, named Thungkha (Weed grass field)

Moo 2. In the past, this area was a low plain paddy field with a creek flowing all year round. People occupied the area and utilized it as cultivation and farming and it yielded productive results, thus, named Thungcheungdee (Good foothill field)

Moo 3. Originally, villagers called this area Baan Nong Hoy (Snails swamp) because there was a swamp with enormous amount of pond snails and apple snails. Moreover, in the past, there were not many people living in the area and there were

fields full of weed grass and a temple nearby, people later named it Thungkhawat (Weed grass fields surrounding a temple).

Moo 4. This area used to be a natural rainforest. Later there was a forest concession and people simply cut down trees, uprooted them and burned the area. The forests had changed its condition and it was left empty without any cultivation for 4-10 years and other types of tress and grass covered the lands. People called it Pasai (Driven forest). With its large area, people then called it Pasaiyai (Big driven forest) or Baansaiyai. However, the spelling of the word Sai was altered with another vowel with identical pronunciation, thus changing its meaning into a big, clear dwelling.

Moo 5. There was a forest concession in this area. Woods were used as logs and the forest was uprooted to provide storehouse for timbers. People built temporary one-storey shelters for the labors and the shelters are called Tub, thus the name of this village is Baantubmai (New shelter).

Moo 6. In the past this area was fertile and there were wild animals coming for food. The outstanding characteristics of the area are that there are two mountains aligning on each other creating a space for wind to pass, thus, named Baan Kaochonglom (Wind-blow mountains).

Moo 7. There are rocks aligning on each other in this area. The rocks resemble a picture of an elephant sitting in a swamp, thus, named, Baan Hinloogchang (Baby elephant rocks)

Moo 8. Originally it was called Kaan Silung but there were serious conflicts of people fighting for land properties for agriculture. An abbot named Prom from Somsiri temple tried to make peace out of the conflicts so he renamed it Neunsanti (Mound of peace).

Originally the area within this sub-district was fertile and enriched with forests and woodlands especially around the west side of the village. There were mountain ranges with abundant wood trees. Around the year 2517, there was a group of communists who called themselves nationalists established a temporary settlement around the Mount Pai-Baan Tubmai area. When coming down from the mountain, they would behave normal as if there was nothing going on. Khru Paiboon Kuanraht said "The communists and villagers were in no conflicts. Sometimes they even came down to help the villagers during harvest. Sometimes they helped us with disease

treatments like that of malaria. Once it was told that the communists hurt one of our forestry officials living in Yuansai village which used to be situated on the border of Moo 5 and Moo 3. But then people said the beaten official was a corrupted man" (Khru Paiboon Kuanraht: 14 June, 2006).

Communist establishment within the community led to an intervention and suppression by a military force. The work was a co-operation between commandos and air-force armors employing both battle tactics and bombings. The commandos then occupied the former settlement and established a provisional military campsite to prevent recurrence of communism.

It can be postulated that even although the community has been established for not a very long time, it has got quite a historic background. This demonstrates an obvious community change, revealing its factors and driving forces.

4.3.2 Geography, Climates and Populations

Geography

Thungkhawat is an abundant and fertile area enriched with biological varieties. Most areas are forests and low plain which are found in Moo 1, 2, 3, and 4 while Moo 5, 6, 7, and 8 are foothill plain with small hills and highland. The area is full of varieties of different plants and trees especially around Mount Maikaew, Khuntong waterfall, and Jumpoon waterfall. Mr. Nuam Jairuk, aged 73 years said "I moved from Samui island in 2510. My place used to be full of weed grass, tons of them. Up on the mountains there were huge forests and people were just too afraid to invade and live up there because of tigers. Migrants gathered around and remained at the foothills" (Nuam Jairuk: 27 June 2006).

Jumpoon waterfall is considered a very important origin of watercourse in Lamae, the Lamae canal. This canal divides up Thungkhawat and Lamae districts. Within Thungkhawat, there are streams and creeks and public wells, highly suitable for agriculture. The water resources are classified into natural and human-made sources. Natural ones are consisted of 12 streams and creeks and 4 ponds while human-made ones are 13 dams, 34 shallow wells, 18 underground water wells, 14 ponds and 1 water reservoir.

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Considering from geographic characteristics of Moo 1, 7, and 8 with appropriate landscape and water resources, farmers in these villages do more biological golden banana cultivation than any other areas of the sub-district.

Climates

Thungkhawat is part of Lamae district; as a result, the climates are like other areas of the district. Lamae is situated on the shore to the Gulf of Thailand on the east side; consequently, it is hot and humid. There are monsoons from northeast and winds from southwest, resulting in year-round rains. Heavy rains come around May to November of each year. Average rainfalls are 1,800-2,000 ml with average temperature of 27.5°C. Consequently, Thungkhawat comprise of 3 seasons:

Summer: February-April

Rainy: May-November

Mild winter: December-January

Location and Boundary

Thungkhawat is situated on the west side of Lamae municipal office. The sub-district covers an area of approximately 48.24 km² or about 22,116 Rai. It is around 9,500 meters away from Lamae district. The boundaries include:

> North Meets Moo 7 of Thungluang sub-district, Lamae and Pato district

South Meets Moo 8 and 9 of Lamae sub-district, Lamae district

East Meets Moo 3 of Thungluang sub-district, Lamae district

West Meets Moo 16 of Lamae sub-district and Moo 19 Praruk subdistrict, Pato district

Populations

Thungkhawat is under an administration of Thungkhawat Municipal Administration. Total population is 4,867 residents, comprising 2,539 males and 2,328 females. There are altogether 1,254 households. (Thungkhawat Municipal Administration: Tri-Annum Development Plan 2550-2552, 20 July, 2548). There are 8 villages, shown below.

Table 1. Thungkhawat Population

Village	Moo	Households	Population		
			Male	Female	Total
Thungkha	1	198	396	397	793
Thungcheungdee	2	77	150	171	321
Thungkhawat	3	77	145	135	280
Saiyai	4	138	297	287	584
Tubmai	5	256	551	457	1,008
Kaochonglom	6	130	257	224	481
Hinloogchang	7	152	298	250	548
Neunsanti	8	226	445	407	852
Total	8	1,254	2,539	2,328	4,867

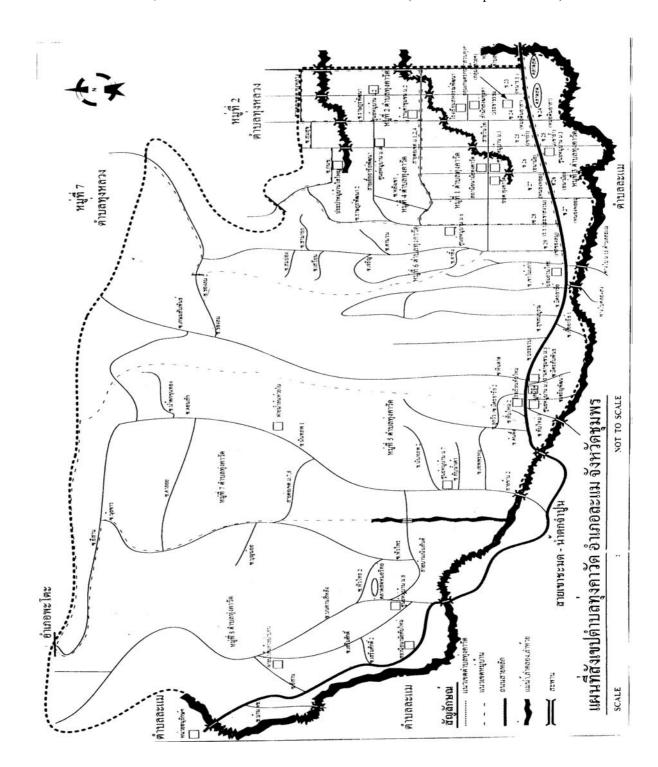


Figure 4 Thungkhawat Boundary (<u>Thungkhawat Municipal Administration</u>: <u>Tri-Annum Development Plan 2550-2552, 20 July, 2548)</u>

4.3.3 Social Characteristics

Characteristics of Family and Lineage Relationships and Seniority

Due to migration of either one individual or one single household, family and lineage relationships of Thungkhawat residents are considered very weak. People tend to live isolatedly and intimacy is found only in groups of people coming from the same place at the same time and those who are relatives.

Fascinatingly, respects to senior citizens are still in practice because they are the group of people driving the community. These driving forces are stored up as experiences and used to preach the younger generations, reinforcing them to become noble.

It is obvious that relationships of community people in the younger generations become closer, possibly as a result of marriage of people from different families, pushing them to come closer in contact.

Similarly, farmers joining the Thungkhawat Gardening Management Group were first very isolated as there were very little members. However, as they joined and became more convinced about what the group can do, they reassure relatives and friends to as well participate. To be an active member of this group, they must join the monthly meetings, thus, resulting in closer and more intact relationships.

Community Leaders

All communities have got a leader, whether it be at a district, sub-district or village level. Thungkhawat residents have good confidence and respect towards their leaders, both the district chief and the village headman. Both leaders have great relationships with their people. If there are unsolvable issues, the villagers will think of their leaders first. However, there is now a government intervention with officials who ignore the importance of villagers and work against their needs. There is quite a serious criticism on the matter but fortunately they still have got strong, enthusiastic, and well-cooperative leaders who help them sustain and improve the community to a better condition.

Another important figure of the community is the monks. If there are intensely unsolvable issues, monks are the villagers' last resort.

Providentially, Thungkhawat has got high-potential leader with wisdoms and knowledge for community development. They welcome new methods of farming like the biological golden banana farming when a number of people viewed that as impossible. The leaders went on investigating about it and made sure it is practical for the area and decided to set up the gardening management group.

Housing and Living Conditions

Thungkhawat is an area of varieties of social contexts as a result of mixtures and multi-cultures of migrants. At the beginning, there was a small gathering of people moving from the same place, or a gang of criminals escaping from other areas. Nonetheless, these gangsters fought around with themselves and died from their own fights.

Gatherings of people are classified into Samui group, Pa-Ngan group who gathered around Moo 1 and 3 of the community, and Nakonsitummarat and Songkla groups gathered around Moo 6, 7, and 8.

Land occupancy is divided into 2 zones. The first zone covers plains along the local highway from Mount Chamod-Jumpoon waterfall around Moo 1 and 3. This area is occupied by migrants from Samui and Pa-Ngan islands. The second zone covers the remainders of the land with migrants from many provinces such as Nakoksitummarat and others nearby.

At the beginning, land occupancy was furious and aggressive. Because of attractive geographic landscapes of Thungkhawat, there were problems of people fighting for the same area of land that some people were murdered out of it.

After the fury, people from other parts started migrating in and there increased in number of population and extensions on village divisions as seen with altogether 8 villages.

Living conditions and housings were simple at the beginning. People built most shelters out of bamboos with bamboo strip floorings and whole bamboo walls, and weed grass roof.

Construction of houses is mainly within one's own areas and the houses tend to sit far away from each other because each family owns enormously large area of land. In present time, houses are renovated to a more modern and stable structure with

various conveniences, utensils, electrical appliances such as television, stereos, refrigerator, fan, and electric rice cooker.

Housing conditions of farmers who are member of the Thungkhawat Gardening Management Group are in modern styles with cements, concrete and ceramics materials. Interiors of the house are usually supplied with all kinds of electrical appliances used in today modern lifestyle.

4.3.4 Religions, Beliefs, and Values

Religions

Most of the populations are Buddhists. They cooperated in building community temples as the center of spiritual well-beings. There are 2 Buddhist hubs in Thungkhawat.

Thungkhaprachatum hub is situated in Moo 1, established in 2506. The land was donated from Mrs. Jai Iumsa-ad, covering an area of 20 Rai and utilized as monk residential are and activity center. There was an invitation to Monk Poom from a temple in Lamae to stay in this center. In 2536, the center was promoted as an official Buddhist hub. At present, Pra Ajarn Chumphon Jittapunyo is titled an abbot with Buddhist faculties of 4 monks.

Pra Ajarn Chumphon Jittapunyo has a good idea of promoting good health among monks as well as promoting good activities and relationships between the temple and the villagers. As a result, he proposed an establishment of an herbal steaming house within the hub. The villagers have agreed and actually have become handy in helping with the constructions. Mr. Prapruet Tisuwun became a leader in renovating the old bathroom and put it into a steaming dome (Shown in Picture 1).

Another Buddhist hub is the Potimuk, situated in Moo 3, established in December, 2548. Pra Suwat Chotito is an abbot of this center with 3 monks, 2 nuns, and 3 residents. Originally Pra Suwat Chotito is a strong believer in Buddhist faith and has traveled to many temples around the country. However, later he realized that within his mother's homeland, there was not a single temple, so he returned and founded one. He is now 35 years old with a strong urge to reinforce Buddhist faith and bonding of the community.

Migrating from different places around the country makes it hard for people to have trusts in each other. However, there are religious centers in which people can join and participate in various activities as most of them are Buddhist. Buddhism draws people's hearts and trust together and form unity, especially the elderly who are quite religiously strict and demonstrate strong faith in Buddhism. People join in temples during religious occasions and perform religious activities together.

Since most of the farmers from the gardening management groups are faithful believers, they also join with each other during those occasions within the temples as well.

Customs

Traditional customs within the community derived from a combination of various customs from people's original birthplace. Nonetheless they are, mostly, originally from southern parts of Thailand. Consequently, nearly or all traditions are southern based that have been succeeded from generations to generations. One of the most common traditions is the Sart Festival or Boon Ta Yai (Merits for grandparents) Festival. This festival is based on a belief that the deceased ancestors such as grandparents and other relatives end up in hell and suffer from their sins. These ancestors will rely on the living generations to provide merits for them so that they will not suffer. The sinful ancestors, known as "Prate" (Ever-starving ghost) will be released from hell on the 1st moon waning day of the 10th month to this earth and return to hell on the 15th moon waning day. As a consequence, the living generations have to take foods and provide merits at temples during this time to show gratitude towards the deceased.

The festival of merit provision lasts from the 1st to the 15th moon waning days of the 10th month. Generally, people have two days for the special ceremonies. The first day is called "Wun Rub Ta Yai" (Welcoming the grandparents) which falls on the 1st moon waning day. It is believed that the souls of the deceased will return home on that particular day. The living generations will return to their hometown on this day to participate in the ceremony which is performed in the morning of the day. Food and desserts are provided such as rice, rice side-dishes, Kanom La, Kanom Pong, Kanom Kong or Kanom Kai Pla, Kanom Ba, and Kanom Dee Sum. These desserts are

meaningful in the festival as they symbolize different types of things needed by the deceased to use in the other world. Kanom La symbolizes fabrics and clothing; Kanom Pong symbolizes boat used for crossing over the worlds; Kanom Kong symbolizes jewelries and accessories; Kanom Ba symbolizes Saba seeds used to play during Songkran Festival (Thai new year); and Kanom Dee Sum symbolizes money. Other provisions include any favorite items of the deceased. These foods, desserts and other items are put into trays with a list of names of people participating in the provision; this is also believed to inform the deceased of who have provided them the items (Shown in Picture 2). In the evening, they will have supper together.

The second day is called "Wun Song Ta Yai" (Sending off the grandparents) which falls on the 15th moon waning day. People will gather again in a temple with preparations of foods and other cooking ingredients put into a sack or basket. This preparation is thought to be given to the deceased to take with them to the other world. In present time, there are too many preparations of foods, so people tend to provide money in a dome footed tray instead. This money provision is believed to offer an easy carriage for the deceased as it is not heavy and that there won't be too many foods and stuff left at the temple to create burden for the monks.

This festival provides an opportunity for people to show gratitude to their ancestors as well as to gather around the relatives and children who moved to other places. It takes place when cultivations of several plants start to be productive. As a result, farmers believe that this creates a good fortune for their agriculture. Moreover, the 10th month is when the rainy season starts, thus, making it hard for monks to journey out every morning for food. Consequently, people provide foods and other supplies for the monks and these can be kept and used throughout the season.

Other traditions resemble those in other parts of the country. For example, Songkran Festival—with water bath (In fact, only sprinkles on the shoulders) for the seniors, sand carriage into a temple, and sand construction; and others such as Light Festival and New Year.

Ceremonies

Ceremonies are performed when there are special occasions regarding religions and traditions. For instance, Long Pra, Long Sai, Buddha image bath, senior

citizen bath, Chuk Pra, Todkatin, Todpapa, monkhood ordainment, wedding, funeral, and new year.

Beliefs

Beliefs are personal; Thungkhawat residents believe in spiritually holy matters such as monk and Buddha images, spirits occupying lands, forests and mountains, fortune telling, termitarium, some certain trees such as Pho trees, Sai trees, amulets, and swearing. Certain beliefs differ from one individual to the other. Examples of these belief are seen in ceremonies taking place when people have got a new house, there is alo a tiny spirit house within the residence and that a local spirit man will perform the ceremony for them. Another example is revealed by Mrs. Kuakoon Meechai who said "Women with difficulty bearing a child usually go for Mount Mod Grandpa, a spirit watching over the mountain, and beg for a child. All five women who did that got a daughter. You have to pay back though. Normally what people do is they bring in Taloong Shadow Show for the Grandpa to watch" (Kuakoon Meechai: 9 July 2006).

Farmers growing biological golden bananas usually cultivate other types of plants as well on their own lands. Most of the members believe in spirits watching over lands and places and they pay respects to the spirits. This respect-paying belief is distinctive from one individual to the other. For some farmers, there will be twice-a-year ceremonies of paying respect for their garden and its spirit. Local spirit man invited is usually a well known figure, being trusted by many villagers. Another example is that for some farmers, they will mention their spirits when going for merits-making ceremonies in a temple.

Values

- Costumes

There is no specific dress code for Thungkhawat villagers. They wear the same clothes as other people in Bangkok do. Ordinary clothing includes easy-to-find and inexpensive T-shirts, shirts, and pants. Normally, clothes that they choose to wear are the ones convenient in their gardening. For the farmers, their clothes also resemble those of the other villagers. However, there is an exception for employees in the

factory packing the bananas because they have to wear a certain type of uniform, reinforcing hygiene when at work.

Marriage

Marriage is considered one means of connecting people together to a more intimate level. At present, marriage demonstrates both prides of the bride and the groom families. Locally, the bride's parents will request a dowry no less than 100,000 Baht. In the case that the groom has insufficient amount of money, he will secretly borrow it from the bride's family.

For the farmers mostly the men are married. Some of them stated that in the past, whenever two individuals fell in love, parents would support them immediately in providing a simple marriage. On the other hand, nowadays money seems to be a very important factor.

4.3.5 Economic Characteristics

During the time of initial migrations, the area was green and full of tropical rainforests. People back then uprooted and mowed those lands for the use of plant cultivations. During those times, there were no modern equipments to help them do the destruction, they simply used "Meed Pra" (Large, sharp type of garden knife) or buffalos and cows in helping with cutting down forest trees. Mr. Rawi Chunson who moved from Nakonsitummarat in 2510 said that "Before getting a piece of land for one kind of plant cultivation, our hands were swollen, they even became insensibly stiff. Once, it was so close to rice harvesting, there was a fire, it ate up all my crops, so very much wanted to give up on it but just could not. We had to move on. We were all from different places, coming alone, farming alone but it got a little better when we helped each other" (Rawi Chunson: 10 July 2006). At the beginning, the area was a highland along foothill so there was not an irrigated type of rice farming. However, they did cultivate rice using a dry method common for other types of crop cultivation called highland rice instead.

Apart from rice, there are other plants such as chili cultivation. Moreover, there are other occupations such as rattan wild-crafting, logging (forest concession), illegal mobile plantation, cultivations such as peanuts, watermelons, bananas and some

parts, marijuana. Later there was an introduction of coconut as the main economic cultivation during that period.

In the past, to be able to sell their products, farmers had to travel by foot with their products carried on the back into Lamae market which took around 2 hours. If not walking, they had to wait for the logging truck which went up and down the mountain twice a day.

After the forests had been uprooted and mowed, other types of plant cultivations took place. Popular types are those with short life that can be harvested and fed in a short period of time. However, there are more plants with long life that need a longer time till harvesting but can be productive and profitable in a long run. These plants are considered economic plants and become famous among the farmers. Nonetheless, plant types are chosen according to farmer's expertise on it as well. There were a number of economic plants to choose from, namely, coffee, rubber tree, durian, mangosteen and rambutan. Around the year 2515, coffee had become more and more popular as it yields as high income as 80-100 Baht per kilogram, thus, a number of coffee farmers got a bit wealthy as a result of its price. Following the coffee booming period, palm had become well known as well. During the year 2530 or so, lands became increasingly expensive and a number of farmers chose to put their lands on trades and moved to other locations.

Most of the population possesses their own real-estate for farming by owning a land title deed document. Nowadays, about 95% of the villagers are farmers in such cultivations as rubber tree, oil palm, coffee, durian, coconut, rambutan, longan, orange, golden banana, longong, and other animal farming. Another 4 % falls onto general labor works such as banana screening for the gardening management group. The other remaining 1% falls onto government officials. Average annual income of the population is 37,345 Baht per person (Guidance of Agricultural Development of Thungkhawat Sub-District, 2547). It has been an increasing trend for farmers to grow biological golden bananas and this provides them with more income weekly.

Characteristics of agricultural trends of farmers within Thungkhawat can be classified into the following table.

Table 2. Demonstration of Agricultural Choices

Agricultural Choice		Popular Breeds		
1.	Rubber tree	RRIM 600		
2.	Oil palm	D X P		
3.	Coffee	Robusta		
4.	Durian	Mon Tong		
5.	Coconut	Local		
6.	Rambutan	Rong Rean		
7.	Mangosteen	Local		
8.	Longong	Local		
9.	Orange	Local		
10.	Golden banana	Gros Michel Banana		
11.	Longan	Ecoh, Petchsakon		
12.	Chicken	Local		
13.	Pig	Mixed LarWhite, Landrech, Durox Jersey		
14.	Cow	Local, Mixed, Brahman		
15.	Bee	Prong Thai, Din		
16.	Fish	Catfish, , Tilapia, Common barb, Perch		
		fish		

Debts

Social and economic growth demonstrates increasing needs of the local residents. This, unfortunately, goes against the financial capacity of the farmers, thus initiating debts among them. Furthermore, thrive for survival brings about such debts. Basically saying, investments put into the farming do not bring reasonable profits and sometimes even great loss. Consequently, as financial needs such as education of children still await, the farmers have to move on by getting loans from different sources. Khru Somsuk Iumsa-ad said that "Some people are in the middle to low class with not much money but they want to have what other people have. If some household has got a pickup truck and others want it too, they will simply borrow some money from somewhere to buy one and pay back in installments but then later cannot do it anymore so the truck is eventually confiscated" (Khru Somsuk Iumsa-ad: 26 June

2006). Approximately 80% of the total population has debts especially from the Agricultural and Cooperative Bank and other commercial banks, relatives and friends.

4.3.6 Public Utilities

Electricity

Electricity became available since 2530 with services covering the whole areas of Moo 1, 2, 3, 4, 5, and 6 while Moo 7, 8, and 9 there were only partial services and some areas utilized the power derived from the sun called solar system pad. There are a total of 955 households with electricity.

Water Supply

There are two types of water supply within Thungkhawat. One is the ground supply by which water is pumped from different natural resources and stored in the constructed container. The water is then added with alum or lime powder to help with the precipitation and pH adjustment. The water is then undergone filtration and pumped up onto a huge container up on a tower to encourage far distance distribution. This ground based supply is distributed to Moo 1, 2, 3, and 4. Another type is the mountain based supply by which puddles are made at mountain springs to store the water. Then it is sent unto nearby villages such as Moo 5, 6, and 7.

Telephone

Telephone lines are available in Moo 1, 2, 3, and 4. Some of the remaining areas are supplied with networks for mobile phone while the rest does not have any utilities at all.

Other Utilities and Services

The community has formed since 2505. Since then until now there are a variety of public services and utilities. These are shown below.

- 1 Post office
- 2 News broadcasting towers
- 2 Gas stations
- 22 Manual gas dispenser stations

- 2 Community convenience store
- 5 Oil palm ground
- 1 Druge store
- 4 Rubber purchasers
- 31 Local grocery stores
- 9 Food shops
- 1 Thungkhawat Gardening Management Group
- 1 Municipal administration

Transportation

Transportation back in the past was possible only by foot. Originally there was only one lumpy laterite road cutting through the community and this road was only the by-product of forest concession by Mrs. Wirut Ua-aree which needed a roadway to transport logs from the upper area of the community.

Consequently, to travel from one point to the other, people usually walked or otherwise they waited for the logging truck which traveled by twice a day. Roy Pitukpruchyakul said that "When I first got here it was quite difficult. When returning from somewhere, I had to walk from the train station from 10 o'clock in the morning and did not get home until 2 o'clock in the afternoon. Only by foot took us to places, or else we just had to wait the log truck" (Roy Pitukpruchyakul: 24 May 2006).

Nowadays the transportation has improved dramatically. There are several roadways separating themselves from the main highways at Lamae junction to the west side by the local Mount Chamod-Chumpoon waterfall road passing through the center of the community. This road is an asphalted pave, 14 kilometers in length. Within the community itself is consisted of 71 local roadways which connect all parts of the community. Three of these roads are asphalted, 5 are concrete and 63 are laterite.

Transportation within the community has become much easier with a number of roads connecting each other throughout the areas. Nevertheless, it is still not very convenient since most of these roads are lumpy laterite which becomes wet and muddy during rainy season. It is this season that harvest takes place and products need to be transported.

Education and Social Refinement

Education

One of the most important settings in Thungkhawat is education center. There are altogether 3 education centers and 1 child care center to help educate and teach the children knowledge and values. Originally there were only 2 centers: SahakonPattana School and Prachasaguan School. These two schools are in close distance. This makes it hard for children, living further out of the area on the upper side connecting to Para district, to travel to school. As a result, one more school is established: Baan Tubmai School.

SahakonPattana School was established in 2514 by Mr. Pratin Supanakon, chief on the Lungsuan Lands Development Office. There was no school at all in the area so he would like to have one established. Mrs. Jai Iumsa-ad was one of the migrants from Samui who views education as vital. She donated two pieces of her land which covers an area of 30 Rai to school and another 20 Rai for a temple, all situated in Moo 1. The first headmaster was Mr. Chiew Kulmart. It first opened only for primary education levels 1-2. Now it provides both primary and secondary schooling from grades 1-9. There are altogether 600 students with Mr Chanin Nooyen as an administrator.

Prachasaguan School was established as a result of district deputy Wirut Wongwarotai seeing the children traveling a long distance for schooling to SahakonPattana School. The land for school was donated by Mr. Saguan Bunchongpet which covers an area of 20 Rai, situated in Moo 1 and adjacent to Moo 6 with Mr. Komet Sukwimut as the first headmaster. It first opened for only secondary education levels 1-2. At present Mrs. Duangjai Suksom is an administrator of the school which now provides secondary education levels 1-6, altogether 100 students.

Baan Tubmai School was established in 2525, situated in Moo 5. The land was requested from The Royal Forest Department because it sits within the national conservation park. Mr. Tongchai Mipian was the first headmaster with initial primary education levels 1-2. At present, Mr. Sanae Chotedumkeung is an administrator. The school now provides both primary and secondary education from grades 1-9. There are altogether 400 students.

Toddler Development Center of Thungkhawat Municipal Office was established in 2546, situated in Moo 1. It provides opportunity for toddlers to prepare for their education before actually starting school as well as helps with parents who need to work day time as a labor in different places and cannot take care of their own children.

To be able to live a happy life, the community and family have to provide a strong moral foundation for the growing generation. Important factors refining the social and moral values are family, community leaders, household leader, senior citizens, school and religious centers such as temples.

Schooling provides important information and knowledge to the community. As a result, the Thungkhawat Gardening Management Group established an organic agricultural school with financial support from the Agricultural and Cooperative Bank in Lamae district (Community enterprise promotion) with a total of 500,000 Baht. This school provides trainings and education in the fields of organic agriculture and in promotion of chicken excrement wastes production.

Niwat Su Chivit Mai Project (Male), Duang Prateep Foundation

There has been an increasing extensive drug abuse problems distributed throughout the society. Youngsters are the main targets of drug dealers. They become victims, inevitably and literally speaking, unconsciously. These mistaken and misleading behaviors need to be rescued and rehabilitated. The children need an opportunity to return to the society and live a normal life. Niwat Su Chivit Mai Project was established to rescue these kids since 2529. It provides therapies and rehabilitation for children addicted to drugs both in physical and psychological aspects.

Niwat Su Chivit Mai Project (Male) is situated in Baan Tubmai, Thungkhawat sub-district, Lamae district, Chumphon in a 150 Rai land surrounded with natures like varieties of plants and natural water resources. The environments create a therapeutic setting for healings towards physical and psychological aspects of the drug addicts using natural therapies. In addition, instructors, staff, and volunteers of the project provide love and care instead of providing confinement (Lom Ruk Tan Rua).

As the success in rescuing male drug addicts proceeds, the female addicts started becoming more intense. Furthermore, female drug addicts face more

secondary, complicated problems than do males. For examples, they are raped from people close to them or even a family member by forcing or are persuaded towards prostitution. By employing the same principles, the project re-established for female rescues and is situated in Baan Tungsala, Muang, Kanchanaburi in 2539. The project provides opportunity for both young females and female children experiencing the same detrimental issues.

At present, the Niwat Su Chivit Mai Project (Male) provides both 3 and 5 years curricula. The cured individuals will be given a certificate. In addition, the youth will also be given extracurricular education from grades 1-12, vocational occupation trainings such as small and medium mechanics, hair barbering, wickerwork, and gardening. At the end of any education or training, the trainee will be given a certificate from The Department of Skill Development. Moreover, there is a reinforcement of higher education to university level at the Rajabhat Suratthani University and in Japan.

4.3.7 Health and Illness Treatment

Health

An early settlement of people was within forest areas. As a consequence, most people were infected with malaria. However, at present, malaria has vanished because there are interventions of public health services. There are now 2 health stations: Thungkhawat health station situated in Moo 1, responsible for monitoring and caring for health status of people with 5 villages which are Moo 1, 2, 3, 4 and 6 and the other one is Baan Tubmai health station situated in Moo 8, responsible for monitoring and caring for health status of people with 3 villages which are Moo 5, 7, and 8 as well as villagers from Thungluang sub-district.

From health screening information from Thungkhawat and Baan Tubmai health stations during January 1st to December 31st, 2548, it was found that people suffer most from common cold, acute pharyngitis, hypertension and muscle train, respectively. The health stations provide basic primary care for the sick.

At present, the Thungkhawat health station holds a project to promote healthy community and to prevent hemorrhagic fever which is now spreading among young children. There are preventive activities provided at school such as the ULV sprays 8 times annually, and mosquito larva screen every Friday. There are also community preventive activities such as putting chemical 'Abate' into any water retaining areas every 3 months in households presented with mosquitoes.

Additionally, there is a locally traditional therapy employed in the community. The Thungkhawat health station provides herbal steam room utilizing heat from gas on Thursdays and Fridays, twice weekly. The service charge is at 10 Baht per use. The origin of herbal steam was derived from steam house in the Thungkhawat Prachatum Buddhist Center. Pra Ajarn Chumphon Jittapunyo wanted to create a heat or steam room used for monks as they do not get a chance to exercise, thus resulting in unhealthiness. He invited a villager to join in which was Mr. Prapreut Tisuwun who became the leader in renovating the former bathroom into a steam dome. The heat is derived from wood firing. People coming for the service will bring their own herbal remedies such as grass, turmeric, camphor, lemon grass, wild ginger, leech lime, etc. Herbal steam is provided twice daily. The first round, monks and other male villagers will go in follow by the second round of female villagers. The villagers coming for this steaming technique mentioned that it helps with their joint pain, helps reduce fat deposit and helps increase appetite.

4.3.8 Arts and Local Wisdom

Language

The language used in this area is mainly the southern Thai language. Though there are people from other parts of the country, they speak southern contexts with other accents such as Suphanburi accent.

The farmers get a chance to learn a little bit of Japanese language because they also have an opportunity to go for training in Japan. Moreover, there are some Japanese students coming to reside temporarily in some of the residence of the farmers to observe the production of the bananas. This in turn increases knowledge for the farmers.

Local Wisdoms

Thungkhawat villagers possess various kinds of local wisdoms which are unique, interesting and can be taught to other people, for instances, Thai traditional

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message and medicine, mixed gardening, bee farming, wickerwork, herbal usage, and Taloong shadow show. Uncle Suchut Sitti said about bee farming that "I do natural bee farming, no investment needed. There is no need for chemical uses for gardening as well, or else I think the bees will be gone by now. Last year I earned 40,000 Baht from doing this, like I said, no investments was put there, purely profits" (Suchut Sitti: 8 September 2006). This type of wisdom and others are in need to reinforce the sufficient living because farmers can actually earn without having to lend money from anywhere and that they do not use any chemicals, it makes the agriculture even better. If this can be applied to modern agriculture and society, it will lead to fewer problems as mentioned earlier.

Taking into account the Thungkhawat Gardening Management Group who employs a non-chemical method into their farming, it refers back to the old traditional farming when there was no chemical involved.

From the investigation of social and cultural characteristics of Thungkhawat villagers and the farmers, it was found that the farmers play an important role in designating how social and cultural contexts will become. In other words, social and cultural changes of the community have started long since there was a migration of people from other areas. However, changes continue as villagers live by and one of the influences come from the farmers and their practice.

CHAPTER V

THUNGKHAWAT GARDENING MANGEMENT GROUP AND PROCESS OF BIOLOGICAL GOLDEN BANANA FARMING

This research on social and cultural changes of farmers growing biological golden bananas shows that the establishment of the group together with processes of farming the bananas demonstrates an interesting development and principle. Details of such development and principle are described below.

5.1 Thungkhawat Gardening Management Group

5.1.1 Group Development

Thungkhawat Gardening Management Group originated as a consequence of one Japanese student's visit. The student, named, Jun Koyama entered Thailand for a study in Khonkan province, fluent in communicating with Thai language. He came down to do a project with his classmate, Mr. Sanae Sodawichit, in Thungkhawat. In his project, he surveyed possibilities of the community in manufacturing agricultural products for export. Personally, Mr. Jun was a businessman, importing international products into Japan. Consequently, he invited the villagers to set up a project for export into his country.

Mr.Koson Komin, one the group member, said that "At the beginning, we did not know what to do yet. There were several ideas of exporting products such as mussels and shrimps but the topography in Thungkhawat was not appropriate for those. So we proposed a banana farming" Back then Mr. Koson was a member of the municipal office and he proposed the idea to the official meeting and it got approved. "There was an initial survey of where in the country a banana export already existed. It was found that there was one run by an agricultural cooperative in Tayang, Petchaburi. Then members of the group were sent for inspection and came back to discuss the possibility of the group for banana export. Most members agreed that Thungkhawat

had an advantage over Tayang so we started growing our own bananas and signed a contract with the Japanese import-export company" (Koson Komin: 8 December 2006).

At the beginning the farming was not of massive size. Two hundreds kilograms of bananas were sent by airmail for the Japanese to taste. Members the import company in Japan liked it so much so they ordered more, 7 tons monthly. At present, 58 tons of bananas are exported each month through coordination in transportation and distribution from Pan Pacific Foods Cooperation, Ltd. The company distributed bananas to a number of Consumer Cooperatives in Japan, namely, Chitoken, Chingaka, Rakichyo, Yokangawa, Chitoku and Totori cooperatives.

Thungkhawat Gardening Management Group is situated in Moo 1, Thungkhawat, Lamae district, Chumphon. It was first established on 12 July 2536 under a license of Golden Banana Group of Lamae. Later it was registered on 21 March 2538 as Thungkhawat Gardening Management Group to export bananas to Japan.

Objectives of the groups are to increase sideline incomes for the farmers and to encourage members to assist each other in their farming. There are activities reinforcing environmental conservations such as plantation without chemical usage, building consciousness of chemical harms by encouraging reduction, isolation and cancellation of chemical uses in all kinds of plantations.

The group built up networks, distributing to 6 districts of Chumphon, namely, Lamae, Lungsuan, Pato, Sawi, Thungtako and Muang and one district of Suratthani, Thachana district. There are altogether 16 agricultural units, namely, Thungkhawat, Mitaree, Neunsunti, Jumpoon Waterfall, Sakao, Klongsong, Klongklang, Huaysaikao, Huamad, Pungwan, Praruk, Naithung, Kaotaloo, Thachana, Prasong and Kuanjumpa. Currently, in December 2548, there are 439 members with 2,760 stock shares calculated as 276,000 Baht. Farming areas cover 1,862 Rai with 356 plantation beds.

At present, in 2549, the group distributed more plantation locations from Chumphon into Ranong, Prachuabkirikun, and Surratthani. The structures of group management are described below.

5.1.2 Group Structures

Structures of group practice in the year 2549 consist of the following.

1. Group committee

Mr. Chutchai Paisan President, responsible for international

marketing

Mr. Somnuek Kaewchumrut Vice president, responsible for policy and

plan

Mr. Koson Komin Secretary, responsible for member

registration and records

Mr. Bumrung Tongkum Treasurer, responsible for financial

matters

Mr. Tawee Kunjun Committee, responsible for manufacture

matters

2. Administration committee, altogether 16 units

3. Group staff

Mr. Kumnuan Pengsakul Manager

Ms. Chachaya Julaprom Accountant

Mrs. Kuakoon Meechai Treasurer

Ms. Jarunya Wanitchareon Project accountant

Mrs. Somsri Pitukprachayakul Head of personnel

Mr. Wiang Suwunpukdee Supplies personnel

4. Affair inspectors

Mr. Tichakon Jaipleum

Mr. Kai Dechnakarin

Mr. Buncha Sena

5. Packaging staff: 45 staff

6. Accountancy inspector

Mr. Waratep Suriyachon

5.1.3 Group Management

There are 2 annual official meetings, monthly committee meetings, and monthly unit member meetings.

If any farmers would like to start cultivating biological golden bananas and supply them to the groups, they have to become a member of the group first. The group runs the management by setting up criteria for banana cultivation as the followings.

- Inform the local unit of member inquiry to coordinate agricultural staff in inquiry inspections, and analysis of plantation field to prepare for readiness.
- In inspection and analysis of plantation field, it is based on the fact whether bananas will be cultivated in isolation as a mono-crop or in combination with other plants. In such as case that it is a mixture of plantations, bananas are encouraged to be avoided from plantations with following ages of plants:= palms above 2 years, rubber trees above 3 years, and rambutans above 4 years and the plantation field should be supplied with adequate water sources. Bananas are strictly prohibited in cultivation with fruit trees such as orange, and durians as they have high potentials of using chemicals such as insecticides.
- Whether the requested farmers will be allowed to cultivate bananas or not depends solely on the inspection and analysis outcomes.
- If the outcomes are positive and farmers are allowed to cultivate the bananas, they have to strictly follow the suggestions from the group's staff.

Processes of biological golden banana cultivation

- Follow the instructions regarding production, maintenance, procedures stated in a booklet
- No use of chemicals in the cultivation except scientifically formulated fertilizer

- Deliver only those bananas from the informed and inspected fields to the group
- No bananas from other farmers or farming areas other than the one inspected are allowed to be delivered to the group.
- Follow other agreements proposed and approved by members during meetings

Members of the group need to follow the rules and regulations stated strictly in farming the bananas in order to prevent severe damages to self or to the group. If any one member, either unintentionally or intentionally, takes this for granted in using any chemicals in their farming, it will give direct impact to the group.

When the farmers deliver their products, the bananas need to be inspected and screened before being packed into boxes for export. The process is done as the following (Shown in Picture 5).

- Inspection of pulp coloring: if the bananas are delivered in bunches, at least one banana from each of the topmost and lowermost hands will be sliced off; and if the bananas are delivered in hands, at least one banana of the hand will be sliced off and color of the pulp around innermost core and seed rows will be inspected. Those standard colors for export are from numbers 2-4.
- Dressing: below-standard bananas will be excluded; sharp knife is carefully used to cut those out and not to ruin good ones aside. The joints at the top of a banana hand will be carved to semicircular shape with thickness not more than 1 inch.
- Weigh measurement: standard bananas weigh not less than 110 gram each.
 (Bananas inspected on pulp colors will be soaked and remained in water to ensure freshness until weighed and washed).
- Secondary dressing: contused and streaked bananas will be cut off.
- Washing: bananas will be washed with soap, rinsed and wiped off with sponge or soft fabric to prevent contusion.

- Blow dry: the cleansed bananas will be dried using blower. Spots where water may be remained such as corners between bananas, carved joints, and sliced areas are stressed to prevent fungus development. Insects and their eggs especially flies are also inspected during this process.
- Marking: bananas are marked with stickers to classify which boxes belongs to which farmers
- Packaging: bananas are packed in such a way that they will not run into each other and move around during export. Shock absorbers are put in between hands of the bananas. Bananas are stacked below the edge of each box and weighed not less than 12 kilograms per box.
- Refrigeration: packed bananas are kept in a huge refrigerator under temperatures controlled between 13-16° C (Processes from inspection, screening, packing until refrigeration must not exceed 8 hours).

The group is responsible for all procedures from inspection, screening, packing and refrigeration until loading unto trucks provided by Pan Pacific Foods Cooperation, Ltd. When bananas are loaded, the group's responsibilities end there. If there are any damages to the bananas from inspections to loading, it will be responsible by the group. Other damages afterwards are responsibilities of the Pan Pacific Foods Cooperation, Ltd

At present, our very important export competitor is the Philippines because of their lower production costs and shorter distance from Japan.

Bananas produced by the group are of medium size, dense pulp, scented, sweet and chemical-free.

The group assigns product delivers to be on every Wednesday, Thursday, and Friday. Weekly average products are 25-30 tons, priced at 10.50 Baht per kilogram. The bananas are delivered 4 times monthly. Incomes and productivity of this banana export are summarized in the following table.

Table 3. Demonstration of Productivity and Incomes from Banana Export

Production Year	Banana Weight	Number of Boxes	Incomes (Baht)
	(kg)		
2538	343,020.48	20,671.00	3,027,653.75
2539	301,269.80	26,346.00	3,721,805.50
2540	112,273.00	10,178.00	1,403,412.50
2541	83,247.60	7,458.00	1,089,794.25
2542	304,943.70	26,290.00	3,968,880.00
2543	652,899.00	55,065.00	8,174,810.00
2544	736,345.90	63,063.00	9,582,701.75
2545	415,524.70	35,834.00	5,029,051.25
2546	908,528.58	75,710.00	12,265,135.75
2547	1,113,381.5	93,440.00	15,115,062.30
Total	4,971,434.26	414,055.00	63,378,307.05

5.1.4 Group Endorsement

Considering from outcomes of the productivity and incomes of the group, it can be stated that biological golden bananas are well acknowledged by Japanese costumers. However, popularity of banana cultivation has decreased dramatically as a result of farmers viewing it as being an annual cultivation, not as long-lasting as perennial trees. In addition, banana plantation and maintenance are more complicated. The group also sees this and encourages farmers to grow them as secondary plant along with other main plants. Moreover, there may be risk of drought which causes damages to the whole banana plantation areas and it requires nearly a year for the field to recover.

At times, there is too much banana production that it exceeds market demands and orders from Japan. Consequently, the group tries to solve this problem through product preservation such as dried bananas, banana chips or banana flour for cake and baking or to freeze and store them for export in the following month.

At the beginning, there was not much investment in constructing an office building, and a storehouse to store and screen bananas. The group scrounged an area

within Thungkhaprachatum temple and used it as their temporary office. Later there were several organizations, which saw its high potentials, sponsored in several forms of promotions as demonstrated in the following table.

Table 4. Group Development and Sponsorships

Year	Process	Sponsors	Budget (Baht)
2538	Construction of storehouse	Consumer cooperative	250,000
	Electricity installation	Consumer cooperative	200,000
2539	Purchase of 7-Rai land	Group budget	700,000
	Construction of production barn	Cement Thai Funds	700,000
2540	Activities of novel theories	Department of skill development	270,000
2541	Restoration Funds	Yodongawa cooperative	170,000
2542	Establishment of group cooperation	ve Members	83,288
2543	Cooperative convenience store	Member's stocks	70,000
2545	Restoration Funds-gratuitous type	Yodongawa cooperative	500,000
2546	Construction of product screen building, purchase of machines equipments		4,200,000
	Chicken wastes (Manure) storeho	use Group budget	200,00
2549	Development of organic agricultu	re Agricultural institutes	1,000,000

From the ongoing operation, it is obvious that the group regards members as extremely important and tries to build strong foundation of production strength. That is, they reinforce farmers in concentrating on their farming. The concentration arises from inspiration in farming such as attractive amount of incomes and profits and no risks in production costs. As a result, there are several projects established to ensure readiness both in material and psychological aspects. Such projects are, for examples, trainings on banana tissue culture and plant diseases and on formulation of compost

fertilizers and promotion of savings within the units, assigning official meetings, monthly meetings and sending members for job inspection in Japan. The main objectives of these projects are to provide understandings, news and information on their production. It encourages farmers to feel the acquaintance and pride in growing biological golden bananas and in being a member of the group. This in turn creates a strong foundation of the group and ensures long-lasting stability of the production.

5.2 Procedures of Farming Biological Golden Bananas

Members of the Thungkhawat Gardening Management Group consist of 104 households, 1 member from each household, comprising of 79 males and 25 females, aged between 30-59 years. Most members are married. Education levels of the members range between primary to secondary school. Details are illustrated below.

Table 5. Members of the Thungkhawat Gardening Management Group

Villages	Moo	Number of	Number of Members	
		Households	Male	Female
Thungkha	1	23	13	10
Thungcheungdee	2	7	6	1
Thungkhawat	3	11	7	4
Baan Saiyai	4	2	2	0
Baan Tubmai	5	11	7	4
Baan	6	3	3	0
Kaochonglom				
Baan	7	13	11	2
Hinloogchang				
Baan Neunsanti	8	34	30	4
Total	8	104	79	25

All members of the group are farmers with main products of different types of plantations such as rubber trees, palms, and fruits like durian, rambutan, and mangosteen. Their secondary occupation is employment of the group in different

processes of banana export. All farmers own their farming land with an official title deed.

Products of their farming depend on seasonal fruiting of each fruit. Incomes are unstable, depending on the number of available products. If there is not much production, incomes are low. As a result, fruit gardening nowadays is in increasing risks in several aspects such as high investment, and unstable product price. As a consequent, if there is a new fruit gardening that provides fewer risks, farmers will pay more attention to growing that particular one. Correspondingly, members of the Thungkhawat Gardening Management Group are interested in growing biological golden bananas which comprise of cultivation process and maintenance as described below.

Farming biological golden banana aims in producing organic bananas, and reducing the use of chemicals. Accordingly, appropriate cultivation consists of the following procedures.

1) Field Preparation

Preparation is based on the characteristics of the plantation beds, consisting of 2 main techniques

Technique 1: Plowing Preparation

This technique is suitable for flat or plain plantation beds with slope of not more than 35 degrees. It does not require a lot of labor but is high in machinery use and expenses.

Technique 2: Non-plowing Preparation

This technique is suitable for lands of most members because most of the lands have already been cultivated with other types of plants. This technique is practiced by mixing bananas with other cultivations and is best in reducing production cost and investment.

2) Soil Preparation

Farmers are advised to measure pH values of the soils within plantation beds to ensure optimal level for cultivation. An appropriate value runs between 5.5-7.0. If the

pH level is not appropriate, soils need to be adjusted in order to yield premium products.

3) Selection of Banana Shoots

Important considerations must be taken into account when selecting banana shoots

- Features of the original banana plant must be faultless which yields bananas with ideal weight and premium quality. There must not be any signs of diseases. Mr. Koson Komin, the very first generation of members, said that "At the beginning there were no shoots available. We had to buy them from Petchaburi, around 2 Baht per shoot" (Koson Komin: 8 December 2006).
- Age of the shoot must not exceed 2 months and there should consist of 5 leaves.
- Ratios between head size (Diameter) and trunk (Length to top) fall around 1:5.
- No diseases and insects found
- Well known breeds are Kabkao, Kabdum, and tissue culturing plantation breeds. Mr. Sompong Konsue said that "When I became a member for only a year, I got shoots of the tissue culturing plantation breed, around 150 shoots. This type of shoots is good in a way that they all grow at the same rate, making it easy to take care of" (Sompong Konsue: 9 December 2006).

4) Plantation Plan

Farmers must manage a good plantation plan, based on the following issues.

- Bedding arrangement and distance between each plantation
- Wind direction and temperature are very important. If plantation beds obtain constant or strong wind blow, it may damage or leave streaks on the banana skins or blow the banana tree down. Additionally, if the

- temperature is too high, it may result in downfall of the banana shaft and termination of the banana growth.
- Water supply is one of the most important factors. Manmade water sources should be available in case of drought otherwise it may result in great loss to the farmers.

5) Plantation

- Bedding arrangement should be made that each bed sits away from the other. Beds should be paired, each pair is 3 meters away from the other pairs, each bed within a pair is 1.5 meters away from each other, and each plantation plot is as well 1.5 meters away from each other.
- Plantation holes are 30 centimeters deep and 30 centimeters wide with 1 kilogram of either compost or animal manures, mixed well with soils, laying the holes.
- Plant the shoot inside the hole and cover surface around the plant base stem with soils, pack the soils tightly.
- Avoid plantation with perennial trees of the following ages: palms above 2 years, rubber trees above 3 years, and rambutan above 4 years.

6) Maintenance

- From plantation to 1 month: Beware of maggots eating up the shoots, check at least once a week. Water the shoot at least once every 15 days. When the shoots reach a month old, apply 2 kilograms of compost or manure per plant and pile up the base part of the plant with soils of about 30 centimeter high. Cut off the original shoot to adjust them to the same height.
- At 45 days old, add 1 spoon of scientifically formulated fertilizers at 21-0-0 formula, water every 15 or 7 days as appropriate.
- At 2-3 months old, trim off dry leaves, add 2 kilograms of manure or compost, cut off any weeds and water once a week (Shown in Picture 3).
- At 4-5 months, add 4.5 kilograms of manure or compost, trim off leaves and new shoots to leave with 2 shoots per one plant, cut off weeds, water

once a week (Amount of fertilizers at this point depends on soil condition). Village headman named Somnuek Keawjumrut, one of the members, stated about the maintenance that "In fact we do not have to keep the garden tidy. Once in 2-3 months is enough for weed cutting. Some people keep their garden so free of weeds because they are afraid that other people might think they are lazy. If we listen to others too much, we are the one getting tired" (Somnuek Keawjumrut: 20 November 2006).

- At 5-7 months (Booting stage of banana), fertilizers given should be the scientifically formulated: 15-15-0, given at 100 grams per plant. Fertilizers should be distributed around the base part of the tree. Trimming is continued and water once a week.
- When the bananas start giving its blossoms for up 2 blossoms per bunch, cut off the blossoms, switch the formula of fertilizer to 0-13-21, 100-200 grams per plant. Trimming continues with watering once a week.
- About 55 days after blossoms have been cut off, products can now be harvested.

7) Harvesting

The bananas should be harvested with extreme care to prevent streaks, contusion, and scratches. The following processes should be followed.

Management prior to harvest

- Cut off the blossoms once a week; mark the plant and record all data, inform the data recorded to the group.
- Start harvesting 55 days after the first blossoms have been cut. Check pulp color, should be as ripe as 75-80%.

Harvest

When the products meet the standard, they can be harvested. Incised bananas should be hung on a prepared area and are never placed on the ground. Bananas can be delivered in 2 ways (Harvest time should not exceed 12 hours)

- Delivery in bunches: place shock absorber in between hands and rows of bunches.

- Delivery in hands: cut each hand of bananas out of its bunch, rinse well to prevent resins sticking on the fruits, wrap with shock absorber.

Product Delivery

When harvest is done, the products can now be delivered to the group. It is another process which needs extra care and handling in order to prevent damages to the bananas (Products should be delivered within 12 hours after harvest). Information on procedures below should be followed.

- Delivery in bunches: set the bunch upright, place shock absorber around bunches again. Put them on a vehicle; be careful with its mobility as this may cause contusion to the bananas. Place them horizontally in single layers.
- Delivery in hands: underlay the floor of a vehicle with sponge or thick fabric (Not less than 1 inch thick), arrange the hands in upright position, place shock absorber in between hands and fill up the floor. When the first layer is filled, underlay the top surface with the same material, put banana hands in a downward position, and fill the space, be careful not to let them sit on each other to prevent contusion. Use shock absorber in between every layer.

In product delivery, the most appropriate type of vehicle is a pickup truck framed with metal (Shown in Picture 4) to be able to contain massive amount of bananas. Before delivery, it must be informed to the group at least 1 week prior. Indeed, when the first blossoms are cut, it is advised that the farmers inform the group so that it can be arranged for delivery on Wednesdays, Thursdays or Fridays.

The farmers will be informed of what date they should deliver their products, without proper queuing as it is on a first come first serve basis. Consequently, farmers in a far distance or those with enormous amount of bananas will have to arrive since early morning. Some may even wait in their truck since the night before appointed date. Commonly, members will know how much of banana delivery will be on a particular day or they can check from the group. This provides good preparation for the farmers who need to deliver their products.

The proceeding banana farming yields reasonable incomes for farmers. Product outcomes are summarized in the following table (Somnuek Keawjumrut: 30 January 2007).

Table 6. Demonstration of Incomes of One Farmer Growing Biological Golden Bananas

Date	Banana (kg)	Weekly income	Sum of Monthly
		(Baht)	income(Baht)
1 February 2549	118.4	1,184	
8 February 2549	107	1,070	
23 February 2549	146	1,460	3,714
2 March 2549	95	997	
9 March 2549	114.3	1,200	
16 March 2549	133.7	1,144	
23 March 2549	163.1	1,712	
30 March 2549	104	1,010	6,063
5 April 2549	223.9	2,350	
12 April 2549	227.9	2,393	
20 April 2549	208.8	2,192	
27 April 2549	286.6	3,009	9,944
4 May 2549	185	1,858	
12 May 2549	260.5	2,600	
19 May 2549	404	3,650	
26 May 2549	123.1	1,150	9,258
2 June 2549	88.1	836	
9 June 2549	167.3	1,600	
16 June 2549	116	1,218	
22 June 2549	114	1,200	
30 June 2549	205	1,988	6,842
7 July 2549	53	530	

Table 6. Demonstration of Incomes of One Farmer Growing Biological Golden Bananas (Cont.)

Date	Banana (kg)	Weekly income	Sum of Monthly
		(Baht)	income(Baht)
14 July 2549	148	1,554	
21 July 2549	123	1,290	
19 May 2549	404	3,650	
26 May 2549	123.1	1,150	9,258
2 June 2549	88.1	836	
28 July 2549	115	1,207	4,581
4 August 2549	150	1,575	
11 August 2549	162	1,700	
18 August 2549	178	1,869	
25 August 2549	128	1,344	6,488
1 September 2549	131	1,286	
8 September 2549	122	1,232	
13 September 2549	133	1,272	
20 September 2549	143	1,501	
27 September 2549	130	1,417	6,708
4 October 2549	141	1,480	
11 October 2549	197	2,068	
18 October 2549	178	1,869	
25 October 2549	114	1,197	6,614
1 November 2549	128	1,344	
8 November 2549	129	1,564	
15 November 2549	161	1,577	
22 November 2549	210	2,205	6,690
6 December 2549	239	2,124	
13 December 2549	69	714	
21 December 2549	224	2,148	
28 December 2549	94	980	5,966

Table 6. Demonstration of Incomes of One Farmer Growing Biological Golden Bananas (Cont.)

Date	Banana (kg)	Weekly income	Sum of Monthly
		(Baht)	income(Baht)
1 January 2550	135	1,386	
11 January 2550	195	2,050	
18 January 2550	135	1,470	
25 January 2550	204	1,984	6,890
Sum of Annual			79,758
Income			

The table illustrates only the income of a village headman, Mr. Somnuek Keawjumrut, one of the many members of the group. He grew a total of about 1,200 banana shoots along with other main plants. His average income from bananas alone is about 1,595 Baht a week, summed up to about 6,646 Baht monthly. This shows that banana farming provide good income sources for farmers beside other fruit products which yield mostly once a year income.

Banana price falls around 10.50 Baht per kilogram, sometimes lower as a result of too many bananas delivered on that particular week. The over supply of bananas are even out among farmers and given the same price in return. Basically saying, total bananas from all farmers are calculated and compared with the market demands. If the demand is only 60-90% of the total delivery, these amounts are priced at 10.50 Baht per kilogram while the remaining 10-40% is priced at 5-7 Baht per kilogram.

Most farmers cultivate around 1,000-1,500 shoots per one household. This yields an average annual income of 65,000-90,000 Baht per household. This production outcome depends solely on how much concentration farmers take into account on their farming. If they beware of all precautions and follow the instructions from the group well, they receive quite an attractive income.

CHAPTER VI ANALYSIS

This research investigated social and cultural changes as well as changes in agricultural practices of farmers growing biological golden bananas in Thungkhawat. In addition, it examined processes and factors of such changes in social and cultural contexts of the farmers.

It was found that social and cultural contexts within the sampling location undergo constant changes over time. For examples, farmers are better in agricultural capability; relationships of people within the community are increasingly more intimate; and people are more aware of their own health the environmental conditions. Changes can be analyzed and described as the followings.

6.1 Social and Cultural Changes of Farmers Growing Biological Golden Bananas

Characteristics of social and cultural changes of farmers growing biological golden bananas are a mixture of evolutionary and patterned developmental changes. The characteristics are described below.

6.1.1 Social Changes

Social contexts in the past demonstrated distant relationships between members of the society as a result of migration from different places. Intimacy was found only among people originally migrating from the same place. However, as time proceeds, it is found that local people are now more intimate and there are stronger bonds among people. This is thought of as a result of marriage of the later generations which automatically draws people closer to each other.

Similarly, this as well happens to the farmers who have become members of the Thungkhawat Gardening Management Group. At the beginning, there were not many members joining the group. Nevertheless, as people became more assured about how the group works and more confident on the profits this agriculture might bring,

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they became interested and took part as a member of the group by means of invitation and encouragement from relatives, friends, and neighbors. As a member, they have to gather around at least once a month for the monthly meetings, thus, resulting in a more intimate relations and association.

Fortunately, Thungkhawat has got distinct leaders who visualized the possibility and potentials of the group and introduced the practice into their community. Though other people thought of the practice as impossible, the leaders continued to prove the practicality, and then they distributed this biological golden banana farming to the community.

In the past, migrants built their houses with simplicity, made mainly from bamboos: bamboo flooring and walls with weed grass weaved together as roof. Nowadays, people rebuilt their houses within their own regions as a result of occupying a large area of land, using cements and tiles. Within houses are full of convenient utensils.

Public utilities such as electricity started being installed in the community around 2530. Electricity covers entire areas of Moo 1, 2, 3, 4 while Moo 5, 7, and 8 are supplied only partially. However, these areas utilize power from sunlight called solar cells system. There are altogether 955 households with electricity.

There are two types of water supply within Thungkhawat. One is the ground supply by which water is pumped from different natural resources and stored in the constructed container. The water is then added with alum or lime powder to help with precipitation and pH adjustment. The water is then undergone filtration and pumped up onto a huge container up on a tower to encourage far distance distribution. This ground based supply is distributed to Moo 1, 2, 3, and 4. Another type is the mountain based supply by which puddles are made at mountain springs to store the water. Then it is sent unto nearby villages such as Moo 5, 6, and 7.

Telephone lines are available in Moo 1, 2, 3, and 4. Some of the remaining areas are supplied with networks for mobile phone while the rest does not have any utilities at all.

Since the first community formation from migration in 2505 until present, the community has changed and improved dramatically. This can be seen in a number of

public conveniences provided such as post office, news broadcasting towers, gas stations, manual gas dispenser stations, community convenience stores, oil palm ground, drugstore, rubber purchasers, local grocery stores and food shops.

Transportation back in the past was possible only by foot. Originally there was only one lumpy laterite road cutting through the community. Nowadays the transportation has improved dramatically. There are several roadways separating themselves from the main highways at Lamae junction to the west side by the local Mount Chamod-Chumpoon waterfall road passing through the center of the community. This road is an asphalted pave, 14 kilometers in length. Within the community itself is consisted of 71 local roadways which connect all parts of the community. Three of these roads are asphalted, 5 are concrete and 63 are laterite. Transportation within the community has become much easier with a number of roads connecting each other throughout the areas. Nevertheless, it is still not very convenient since most of these roads are lumpy laterite which becomes wet and muddy during rainy season. It is this season that harvest takes place and products need to be transported.

One of the most important settings in Thungkhawat is education center. There are altogether 3 education centers and 1 child care center to help educate and teach the children knowledge and values. Originally there were only 2 centers: SahakonPattana School and Prachasaguan School. These two schools are in close distance. This made it hard for children, living further out of the area on the upper side connecting to Para district, to travel to school. As a result, one more school is established: Baan Tubmai School.

Schooling provides important information and knowledge to the community. As a result, Thungkhawat Gardening Management Group as well established an organic agricultural school with financial support from the Agricultural and Cooperative Bank in Lamae district (Community enterprise promotion) with a total of 500,000 Baht. This school provides trainings and education in the fields of organic agriculture and in promotion of chicken excrement wastes production.

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An early settlement of people was within forest areas. As a consequence, most people were infected with malaria. However, at present, malaria has vanished because there are interventions of public health services. There are now 2 health stations: Thungkhawat health station situated in Moo 1, responsible for monitoring and caring for health status of people within 5 villages which are Moo 1, 2, 3, 4 and 6 and the other one is Baan Tubmai health station situated in Moo 8, responsible for monitoring and caring for health status of people within 3 villages which are Moo 5, 7, and 8 as well as villagers from Thungluang sub-district.

Additionally, there is a locally traditional therapy employed in the community. The Thungkhawat health station provides herbal steam room utilizing heat from gas. The origin of herbal steam was derived from steam house in the Thungkhawat Prachatum Buddhist Center. Pra Ajarn Chumphon Jittapunyo wanted to create a heat or steam room used for monks as they do not get a chance to exercise, thus resulting in unhealthiness. As a result, he as well invited villagers to join in.

Changes in the society in various aspects such as relationships, seniority, community leaders, housing, living conditions and settlements, public utilities, transportation, education and public health services provide a concept of evolutionary development. In other words, the society changes from simplicity to complexity with an ongoing improvement and development. Besides evolutionary development, these changes also suggest a concept of patterned and stepwise development. The farmers play an important role in shaping the community into a well organized society.

6.1.2 Cultural Changes

Migrating from different places makes it hard for people in Thungkhawat to trust each other. However one factor binding them together is through activities. Intimacy was built up in not a very long time because most villagers are Buddhist and they go to temple on a regular basis. Temple and religious activities draw these people's hearts and trust together and form unity, especially the elderly who are quite religiously strict and demonstrate strong faith in Buddhism. People join in temples during religious occasions and perform religious activities together. Since most of the

farmers from the gardening management groups are faithful believers, they also join with each other during those occasions within temples as well.

Traditional customs within the community derived from a combination of various customs from people's original birthplace. Nonetheless they are, mostly, originally from southern parts of Thailand. Consequently, nearly or all traditions are southern based that have been succeeded from generations to generations. One of the most common traditions is the Sart Festival or Boon Ta Yai (Merits for grandparents) Festival. This festival is based on a belief that the deceased ancestors such as grandparents and other relatives end up in hell and suffer from their sins. These ancestors will rely on the living generations to provide merits for them so that they will not suffer. As a consequence, the living generations have to take foods and provide merits at temples during this time to show gratitude towards the deceased. This festival provides an opportunity for people to show gratitude to their ancestors as well as to gather around relatives and children who moved to other places. It takes place when cultivations of several plants start to be productive. As a result, farmers believe that this creates a good fortune for their agriculture. Moreover, the 10th month is when the rainy season starts, making it hard for monks to journey out every morning for food. Consequently, people provide foods and other supplies for the monks and these can be kept and used throughout the season.

Other traditions resemble those in other parts of the country. For example, Songkran Festival with water bath (In fact, only sprinkles on the shoulders) for the seniors, sand carriage into a temple, and sand construction; and others such as Light Festival and New Year.

Ceremonies are performed when there are special occasions regarding religions and traditions. For instance, Long Pra, Long Sai, Buddha image bath, senior citizen bath, Chuk Pra, Todkatin, Todpapa, monkhood ordainment, wedding, funeral, and new year.

Beliefs are personal; Thungkhawat residents believe in spiritually holy matters such as monk and Buddha images, spirits occupying lands, forests and mountains, Yutthana Auitakul Analysis / 88

fortune telling, termitarium, some certain trees such as Pho trees, Sai trees, amulets, and swearing. Certain beliefs differ from one individual to the other. Examples of these beliefs are seen in ceremonies taking place when people have got a new house, there is also a tiny spirit house within the residence and that a local spirit man will perform the ceremony for them.

Farmers growing biological golden bananas usually cultivate other types of plants as well on their own lands. Most of the members believe in spirits watching over lands and places and they pay respects to the spirits. This respect-paying belief is distinctive from one individual to the other. For some farmers, there will be twice-a-year ceremonies of paying respect for their garden and its spirit. Local spirit man invited is usually a well known figure, being trusted by many villagers. Another example is that for some farmers, they will mention their spirits when going for merits-making ceremonies in a temple.

For values on costumes, there is no specific dress code for Thungkhawat villagers. They wear the same clothes as other people in Bangkok do. Ordinary clothing includes easy-to-find and inexpensive T-shirts, shirts, and pants. Normally, clothes that they choose to wear are the ones convenient in their gardening. For the farmers, their clothes also resemble those of other villagers. However, there is an exception for employees in the factory packing the bananas because they have to wear a certain type of uniform, reinforcing hygiene when at work.

Marriage is considered one means of connecting people together to a more intimate level. At present, marriage demonstrates both prides of the bride and the groom families. Locally, the bride's parents will request a dowry no less than 100,000 Baht. In the case that the groom has insufficient amount of money, he will secretly borrow it from the bride's family.

For the farmers most men are married. Some of them stated that in the past, whenever two individuals fell in love, parents would support them immediately in providing a simple marriage. On the other hand, nowadays money seems to be a very important factor.

The language used in this area is mainly the southern Thai language. Though there are people from other parts of the country, they speak southern contexts with other accents such as Suphanburi accent.

The farmers get a chance to learn a little bit of Japanese language because they also have an opportunity to go for training in Japan. Moreover, there are some Japanese students coming to reside temporarily in some of the residence of the farmers to observe the production of the bananas. This in turn increases knowledge for the farmers.

Thungkhawat villagers possess various kinds of local wisdoms which are unique, interesting and can be taught to other people, for instances, Thai traditional message and medicine, mixed gardening, bee farming, wickerwork, herbal usage, and Taloong shadow show. These wisdoms can be applied in modern lifestyle to reinforce sufficient living.

Taking into account the Thungkhawat Gardening Management Group who employs a non-chemical method into their farming, it refers back to the old traditional farming when there was no chemical involved.

From the investigation of changes in the cultural contexts including religions, traditions, ceremonies, values, language, and local wisdoms on the farmers, it suggests an evolutionary development. This is obvious when considering traditions and beliefs of the farmers which still stick to an old belief in combinations of religions and black magic. On the other hand, some farmers accept more practices in the modern lifestyles as seen in values on costumes, some kinds of ceremonies and other sets of lifestyles. Nonetheless, traditional beliefs of agriculture are always on the go and bring about more advantages than damages. Basically saying, the practice of biological farming which follows the traditional concept of ancient farming when there were no chemicals involved is still very practical and yield good results than bad and it also increases the farmers' awareness on organic fertilizer application in their farming.

6.1.3 Changes in Occupational Practices of Farmers

At the beginning, the area was a highland along foothill so there was not an irrigated type of rice farming. However, they did cultivate rice using a dry method common for other types of crop cultivation called highland rice instead. Apart from Yutthana Auitakul Analysis / 90

rice, there are other plants such as chili cultivation. Moreover, there are other occupations such as rattan wild-crafting, logging (forest concession), illegal mobile plantation, cultivations such as peanuts, watermelons, bananas and some parts, marijuana. Later there was an introduction of coconut as the main economic cultivation during that period.

After the forests had been uprooted and mowed, other types of plant cultivations took place. Popular types are those with short life that can be harvested and fed in a short period of time. However, there are more plants with long life that need a longer time till harvesting but can be productive and profitable in a long run. These plants are considered economic plants and become famous among the farmers. Nonetheless, plant types are chosen according to farmer's expertise on it as well. There were a number of economic plants to choose from, namely, coffee, rubber tree, durian, mangosteen and rambutan. Around the year 2515, coffee had become more and more popular as it yields as high income as 80-100 Baht per kilogram, thus, a number of coffee farmers got a bit wealthy as a result of its price. Following the coffee booming period, palm had also become well known. During the year 2530 or so, lands became increasingly expensive and a number of farmers chose to put their lands on trades and moved to other locations.

On 12 July, 2536 the Thungkhawat Gardening Management Group was established as a result of Mr. Jun Koyama's visit and invitation for export.

Initially there were only 36 members and there was a survey of where in the country a banana export already existed. It was found that there was one run by an agricultural cooperative in Tayang, Petchaburi. Then members of the group were sent for inspection and came back to discuss the possibility of the group for banana export. The farmers started growing bananas and signed a contract with the Japanese import-export company.

At the beginning the farming was not of massive size. Two hundreds kilograms of bananas were sent by airmail for the Japanese to taste. Members the import company in Japan liked it so much so they ordered more, 7 tons monthly. At present, 58 tons of bananas are exported each month through coordination in transportation and

distribution from Pan Pacific Foods Cooperation, Ltd. The company distributed bananas to a number of Consumer Cooperatives in Japan, namely, Chitoken, Chingaka, Rakichyo, Yokangawa, Chitoku and Totori cooperatives.

At present, agriculture (95%) is the main occupation for most villagers. Such agricultures are, for instances, plant farming such as rubber tree, oil palm, coffee, durian, coconut, rambutan, mangosteen, orange, longong, golden banana, longan and other types of animal farming. Another 4 % falls into general labors and merchant such as banana screening employment. The other 1% falls into government official. Average annual income is approximately 37,345 per person.

Social and economic growth demonstrates increasing needs of local residents. This, unfortunately, goes against the financial capacity of the farmers, thus initiating debts among them. Furthermore, thrive for survival brings about such debts. Basically saying, investments put into the farming do not bring reasonable profits and sometimes bring, instead, great loss. Consequently, as financial needs such as education of children still await, the farmers have to move on by getting loans from different sources. Approximately 80% of the total population has debts especially from Agricultural and Cooperative Bank and other commercial banks, relatives and friends while the remainders have no debts.

From the changes since 2505 when people did highland rice, chili cultivation, rattan wild-crafting, logging (forest concession), illegal mobile plantation, other cultivations such as peanuts, watermelons, bananas and some parts, marijuana and coconut to 2515, people started growing more coffee because of its price and there were also other plants such as rubber trees, fruits like durian, rambutan, mangosteen and palm.

In 2530 lands had become increasingly expensive so most villagers decided to put their real-estates on trades and moved to other areas. In 2536, the Thungkhawat Gardening Management Group was established and lasted until present.

At present, main occupation of villagers are agriculture such as farming of rubber tree, oil palm, coffee, durian, coconut, rambutan, mangosteen, longong, orange,

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golden banana and longan and animal farming. Other less popular occupations are government officials, general labors, and merchants.

In general, the farmers of Thungkhawat Gardening Management Group cultivate around 1,000-1,500 banana shoots per one household. Generally bananas are priced at 10.50 Baht. This yields an average annual income of 65,000-90,000 Baht per household.

It is obvious that changes occurring within the Thungkhawat Gardening Management Group and its farmers are development-oriented. In other words, popularity in farming sits in biological golden bananas and in doing so, there are factors influencing production such as market demands and prices. Moreover, this is in accordance with the concept of novelty acceptance that the farmers are more open to the external world and let it influence their lives. Another matching concept is of the cultural dissemination when the banana exports were adapted from Tayang, Petchaburi and applied in Thungkhawat, Chumphon. This plays a vital role in changing types of plants in agriculture of the society.

6.2 Process of Social and Cultural Changes of Farmers Growing Biological Golden Bananas

There are several driving forces in the process of social and cultural changes of farmers growing biological golden bananas in Thungkhawat. Basically, the farmers themselves play a vital role and are the main driving forces of the changes. Processes of changes are described below.

1) Opportunity Acceptance

Contact with foreigners or foreign countries is considered very unlikely for most farmers in rural areas. Normally, agricultures in those areas are in no direct contact with the external world. If agricultural products are for export, the farmers' job is to produce them and usually there will be merchants coming and get them for export. Farmers provide the basis of production and their job ends right there. This means that it goes on like this as a circle and farmers have no power in fixing product prices as they have no other chances of selling their own products but through

merchants who designated the price for their own maximum profits. If farmers ever try selling products on their own, it creates high risks of getting only loss due to the lack of marketing background. As a result, a group of community leaders saw the possibilities of making a change out of this and try to get the benefits back to the community without losing so much through merchants. Consequently, they proposed the establishment of gardening group to supply products directly out of the country by an investment of foreign import-export business. The leaders and the foreign businessmen agreed on the establishment, providing a win-win solution for both sides. This occurrence is in accordance with the concept proposed by Somsuk Srisuntisuk and Suwan Buatuan (2536:72) which stated the idea of novelty acceptance and being open-minded for new things to happen. This acceptance, either agricultural or nonagricultural, brings about stimulation and encouragement for further changes in several social contexts including living conditions of self and of family which certainly will lead to modernization.

This opportunity acceptance is the beginning of other new occurrence of the community. At first, farmers did not know what to do for the export, though there were several proposed ideas such as seafood farming like mussels, fish or shrimp. There was no goal back then but the farmers knew that it should be something profitable for the community and farmers themselves.

2) Group Assembly

From an attempt of the leaders in seeing great opportunity, there followed an assembly of a minor group of people who possessed similar views towards the change. At the beginning, there was no concrete thought of the profit-making setup and the assembly was only a group of 36 people on 12 July 2536, under a name Lamae Golden Banana Group.

This group assembly can be explained according to the concepts proposed by Rogers (Cited in Somsuk Srisuntisuk 2536: 69-70) which mentioned about the process of novelty acceptance. It was postulated that changes occur through acceptance of new things with processes consisting of 5 steps as the following which can be thoroughly explained in the case of assembly of the farmers.

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2.1 Awareness. This occurs when people are aware that there is an innovation. The news may come from different sources such as related staff, parents, relatives, friends, merchants, and mass media. In this case the farmers found out that there was going to be a gathering group to export something to Japan and the information might come from community leaders, friends and family.

- 2.2 Interest. After being aware of what is happening, people tend to be interested in the novelty and its details and usually seek further information about it from different sources such as district head farmer, sheriff, and other leaders in the field. In the case of the farmer, this stage is very obvious. They searched for information of where there could be an export and sent people for inspection in Tayang, Petchburi, in search of details regarding plantation, harvest, delivery, packaging, and production costs.
- 2.3 Evaluation. This is a critical period of choosing between having advantages or disadvantages regarding the novelty. When the farmers returned from Tayang, they agreed that Thungkhawat had an advantage over Tayang in terms of topography and they decided to give it a try, then, signed a contract the Japanese business.
- 2.4 Experiment. This is an important step of trying the novelty. If it yields good results, it can be further utilized in practice. At first, the trial plantation was not of massive production. Only 200 kilograms of bananas were airmailed to Japan for them to taste and it happened that they liked it very much that they ordered more.
- 2.5 Acceptance. This takes place when the novelty has been tested upon and the individual must decide whether it yields good or bad results. It may take a long time in this step for an individual to accept or deny. As a consequence of great taste, the Japanese people ordered 7 tons of bananas monthly and increased to 58 tons at present. The Pan Pacific Foods Cooperation, Ltd deals with transportation, delivery and distribution of the bananas for the farmers. The bananas are distributed to a number of Consumer Cooperatives in Japan, namely, Chitoken, Chingaka, Rakichyo, Yokangawa, Chitoku and Totori cooperatives

3) Group Development and Members

The group runs its management by having regular meetings, namely, 2 annual official meetings, monthly headmaster and committee meetings, and monthly member meetings.

When farmers would like to grow golden bananas and supply them to the group, they have to become a member of the group first and follow the rules and regulations provided by the group strictly.

The farmers joining the group must follow rules, regulations, and advice very strictly to prevent damages to self and to the group. If they ever take the matters for granted and get involved in chemical uses either intentionally, unintentionally, it will also have an impact on the group.

From an establishment in 2536 under the name of Lamae Golden Banana Group until 2538, the group was registered under the name of Thungkhawat Gardening Management Group. At the beginning, the group scrounged an area inside a temple as a temporary office. Later the group was able to find a land to construct product storehouse and install electricity. Then other developments came along such as a purchase of 7 rai land, reinforcement of activities regarding alternative agriculture, initiation of restoration funds, group cooperative, group convenience store, initiation of restoration funds-gratuitous type, purchase of machines and equipments, and construction of chicken waste storehouse. In addition, there is a promotion of organic agricultures. Initially, there were networks distributed through only 6 districts in Chumphon. However, in 2549, the networks expand into surrounding provinces such as Ranong, Prachuabkirikhun, and Suratthani.

Development of the group must go along with member development. Development of members is persuaded through building strong basis of faith among the group. For examples, there are product price and maintenance discussions, there are trainings provided such as banana tissue culture, plant disease, formulation of compost fertilizers, promotion of savings within the group, regular meetings and sending farmers for inspection in Japan.

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Both group and member developments bring about evolutionary changes which are in accordance with the concept proposed by Herbert Spencer (Cited in Yongyut Burasit, 2541: 28). The concept referred to social evolution as having the same characteristics as biological evolution which consists of growth and development from simplicity to complexity. Society takes place when there is a gathering of people, living together, protecting themselves from all sorts of harms; there is an increase in number of population and food scarcity that there is a need for more food supply that people have to have different roles and responsibilities, thus, creating a more complicated structure. He believes that weak, unsteady society will soon be destroyed by war and replaced by a stronger, more perfect society. There is an ongoing advancement and complexity. Similarly, the group demonstrates a clear evolutionary change. Result of group assembly brings about advantages to the community in terms of increase in incomes through banana farming and employment for banana processes before export. There is also a group of villagers running food shops nearby the group building; so this provides one sort of income distribution within the community.

Group and member developments demonstrate good principles. Processes occur in the development reveal gradual industrialization which is according to the concept proposed by Daranee Tawinpiputkun (2549:14). The concept stated that social changes can be explained through development theories. It is postulated that social changes in developing countries are a slowly moving, precipitating type of changes which will eventually lead to development. This change takes place as a result of structural economic impacts from western countries. It is believed that the structures in developing countries will become identical to the one in the developed countries and that the changes will eventually lead to industrialization.

4) Job Analysis

Job analysis is done through assessment of strengths and weaknesses of the group and its members. Previous performances of the group are accepted and supported by many organizations such as consumer cooperatives in Japan, Cement Thai Funds and Department of Agricultural Extension. Moreover, there is good response from the community itself as seen in participation of villagers in becoming

new members or becoming employees of the group. Strengths and weaknesses of the group can be described as the following.

Strengths

- Strong leaders
- Well organized management
- Inspection and screenings of products and plantation fields
- Reinforcement of new information acquirement
- Provision of markets
- Stable product price
- Good quality product

Weaknesses

- There is a decreased responsiveness from villagers as a result of strict rules and regulations. If chemical use is ever inspected, the group will automatically cease obtaining products from the farmers. Processes in product screening require too much detailed inspection in order to obtain only standard products. Consequently, if only little products delivered by the farmers meet the standard, they may feel offended as they have put much investment into it. This may result in withdrawal from group membership.
- Community leaders under government officials do not support the group development. Even though previous and ongoing performances are accepted by several organizations and bring advantages to the community, governmental leaders do not see this as strength and provide no support.
- Changes in climates bring about lasting droughts, affecting the farmers and their bananas which take quite a long time recover from damages.

Assessments on strengths and weaknesses of the group and its members demonstrate an ongoing development. The group and its members desire for stability and confidence in growing biological golden bananas. This is in accordance with the concept proposed by Herbert Spencer which stated, in brief, that social changes are somewhat identical to biological evolution, evolving from simplicity to complexity, occurring by a gather of people to defend themselves from harms and to thrive for

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food that people have to have different roles and responsibilities, thus, creating a more complex structure.

From an increasing number of members and group development, it brings about expansion of cultivation areas with branches of networks distributed to other areas. However, export competitor is also an issue of concerns as well a reduction in members in Thungkhawat unit. Additionally, climate change also give direct impact the farming. The group assesses strengths and weaknesses in order to provide practical and effective solutions for the farmers. For instances, there are fund raisings for water reservoir construction; reinforcement of membership in order to learn how the group operates along with its problems and to help find proper solutions. This reveals development of the members in acquiring new information and learning group operation and its practices.

5) Group Manifestation

Group manifestation stresses mainly on advantages upon farmers and villagers. Apparently, the community has responded well with the group performance during the past 2-3 years. There are several sorts of incomes toward the community, namely, employment for the group, becoming members and supply their products to the group. However, this has reduced dramatically. This is a result of several factors. For instances, farmers are strictly prohibited from using chemicals in their farming, too much detailed instructions must be followed, and that a number of farmers still feel confident in growing other types of plants which require less maintenance than biological golden bananas. Regarding these, the group should discuss with its members and community villagers and to let more participation of the villagers so that it creates a feeling of unity.

On the other hand, manifestation from outside reveals more acceptance because most of the products are delivered from outside the community and they are actively participative in this farming. Moreover, there are several organizations sponsoring and supporting in various aspects. Nonetheless, community organization takes this for granted which is a disgrace. People should encourage good understandings of the issue which will bring about advantages back to the community itself.

Group manifestation can be explained by the concept proposed by Rogers (Cited in Somsuk Srisuntisuk 2536:69-70). The concept mentioned about novelty acceptance, defining acceptance of the society members, whether slow or rapid, depending on the process. Components concerned are the characteristics of the novelty, defining characteristics of what the novelty bring to the society such as production costs, complications in assimilating in the society, visible advantages, and good distribution. Apparently, growing biological golden bananas was not well accepted by the community at the beginning but from proven performances with low investment and suitability to the community topography, people became more interested and became members of the group as evidenced by the rise in number of only 36 members at the beginning up to 104 members in present.

It was found that processes of social and cultural changes are slowly preceded and accumulated systematically. The characteristics reveals both evolutionary and developmental changes. Apparently, the farmers demonstrate good progress in the development as they become professional in the practice with systematic and well organized production.

6.3 Factors Influencing Social and Cultural Changes of Farmers Growing **Biological Golden Bananas in Thungkhawat**

A group of people in Thungkhawat was interested in a type of agriculture which yields good quality products to consumers and to self in terms of safety in consumption and to environments. That group of people is The Thungkhawat Gardening Management Group. From cultivation using chemicals to increase productivity and to prevent diseases, these people turned into farming without chemicals which certainly has direct impacts on the farmers themselves. Factors influencing changes are described below.

Internal Factors

1) Community leaders are considered an important driving force of the group. Leaders in this case refer to former teachers, village headmen, district chief, and members of the municipal office. These leaders cooperate well in their works and Yutthana Auitakul Analysis / 100

agree that works from group assembly are much stronger than from individuals. They also visualize stable markets as the source of income promotion to villagers which certainly bring about better life qualities. Although there were people going against the idea and viewed export as impossible, the leaders remained confident and proceeded in gathering a group of farmers. This becomes a good source of information for farmers and even outsiders as well as provides them opportunity for brainstorming, and opening to an external world.

2) Community leaders play a vital role in these changes which is in accordance with the concept proposed by Somsuk Srisuntisuk and Suwun Buatuan (2536: 71-81). The concept stated that individual characteristics are related to social and cultural changes. Generally individual characteristics differ in one way or the other. These differences certainly affect social changes. For instance, people with high education are more likely to accept novelties, transform their lifestyle into a more modernized setting, thus, leading to development to better life quality. Changes occurring to highly educated people seem to be more rapid than the ones with low education. Individual characteristics include gender, age, work experiences, leadership which are all important factors in changing social and cultural contexts.

Consequences brought about to the farmers are considered advantageous. Leaders have potentials of developing the community as well as view advantages towards villagers as the first priority. Consequently, farmers become members because they see good opportunity in earning more income. However, it is a disgrace that there are conflicts in the community between leaders. If all turn around and cooperate well, it may bring even more advantages towards the farmers.

3) Education

Education is very important for people in the community especially children at school age. Parents who would like to see good progress in education and job usually send their children away to bigger cities such as Chumphon city or Bangkok to acquire higher and better education. Within the community there are also more schools than before and there are attempts in reinforcing education such as provision of grants for good-performance students. This is in accordance with the concept proposed by Somsuk Srisuntisuk and Suwan Buatuan (2536: 71-81). The concept referred to

cultural dissemination as involving education, trades, and urban lifestyles together with intervention of government offices in playing roles such as providing school. The changes occur when villagers obtain social values stating importance of education and encourage their children in acquiring higher education in order to become superiors. Agriculture is thought of as hard work. As a result, children acquire higher education and there is less chance of them coming back and continue what their parents have done before.

Higher education of local children brings about development of the community because some of these children return home to work and development their mother's homeland. One interesting point to be noted is that the pioneer of the group was in deed acquiring education at a university level and there he met a Japanese student who invited the community into export. Apparently, education does provide growth and opportunity for students themselves, their community and the villagers especially farmers, in this particular case.

Schooling provides important information and knowledge to the community. As a result, the Thungkhawat Gardening Management Group established an organic agricultural school with financial support from the Agricultural and Cooperative Bank in Lamae district (Community enterprise promotion) with a total of 500,000 Baht. This school provides trainings and education in the fields of organic agriculture and in promotion of chicken excrement wastes production.

Most members of the group see importance of education and encourage their children for as highly educated as possible. After acquiring the satisfactory level of education, they do not force the children in choosing their career. Nonetheless, most of them would like their children to become government officials or employees rather than to become farmers as they are because farming is a hard work although government officials are no longer a stable job like it used to be. Moreover, the farmers tend to keep their lands available in case their children would really like to farm.

4) Environment

Topographic landscapes of Thungkhawat are suitable for growing golden bananas because of appropriate soils and water. Average rainfalls are 1,800-2,000 ml

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with average temperature of 27.5°C. Jumpoon waterfall is considered a very important origin of watercourse in Lamae, the Lamae canal. This canal divides up Thungkhawat and Lamae districts. Within Thungkhawat, there are streams and creeks and public wells, highly suitable for agriculture. The water resources are classified into natural and human-made sources. Natural ones are consisted of 12 streams and creeks and 4 ponds while human-made ones are 13 dams, 34 shallow wells, 18 underground water wells, 14 ponds and 1 water reservoir. This natural abundance draws farmers to becoming members of the group and work their ways out for more income. This is in accordance with the concept proposed by Srisuntisuk and Suwan Buatuan (2536: 71-81). The concept referred to ecological factors as playing important roles in development and improvement of people's quality of life. In other words, to be able to improve the quality of life of people, they have to have good income, from being able to make use of natural resources and make products out of them. Ecological factors also influence changes into modernization.

External Factors

1) Technology

Technological innovations bring about stimulation of better development in production from the group from conservative methods of human labors to using more machines. This is in accordance with the concept proposed by Bunpot Wirasai (2520: 76) relating to changes technologies bring to human life. Technological innovations lead people to acquire more information on their operations and practices, thus, creating changes within the society structurally and institutionally. Apparently, technology leads to employment for those who owns it. For instance, in the past cutting weeds in a farmland means using sharp, long knives with a number of people assisting; nowadays there is machine lawn mower which cuts down weeds in a large area within much shorter amount of time. Instead of asking for a number of labors to help out, the owner of the lawn mower can obtain more income by mowing for other people.

Technology has a direct impact on agriculture as it creates more production through a number of ways. For instance, it helps farmers fight with plant diseases, and increase growth and production and by using enhancing fertilizers. Technology also encourage farmer to acquire more knowledge in understanding its operations, resulting in a more systematic process of production.

Transportation nowadays also makes it more convenient. Technology brings about improvement of roadways from laterites to asphalted and concrete. Farmers can transport and deliver their products to destinations more easily.

Technology advancement also leads to more competition, for instance, marketing of vehicles such as cars and motorbikes. Consequently, vehicles are released at a very low amount of deposits because business owners would like to attract more customers. A lot of farmers put down the deposits and take the vehicles. Unfortunately, most farmers earn their incomes only once a year. As a result, though they are able to leave deposits, they are unable to continue the installments; thus, the vehicles are eventually taken back or else they have to lend money from somewhere and pay back monthly which certainly creates more debts. Technology can be both advantageous and disadvantageous. If not utilized properly, it comes back to hurt the user.

Biological golden banana farming also develops gradually. At the beginning farmers had to use big shoots of banana plant which was difficult for transportation. When technology becomes available, banana tissue cultures are at hand, making it more convenient for the farmers to both transport and maintain them.

Communication technology also provides windows of opportunity for community villagers in acquiring more knowledge and in having wider points of views, for instances, post office, news broadcasting towers, televisions, radios, computers, internet, newspapers, and telephone. People are more aware of what is going on outside of their homes at society and national levels in such news as politics, health, economics, and others that are directly related to them such as gas price as an important production factor in product transport, and product prices at other markets.

Communication is relatively important to the farmers because every product delivery there must be reported on farming records of the next delivery. Farmers are indirectly required to keep up their own records and re-organize the data into a systematic database and present it to the group.

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For the group itself, it is also necessary to report the ongoing developments in various aspects, distribute them in meetings in order for the members to apply the information in their farming.

2) Contacts With The External World

Contacts with the external world are one of the factors leading to new ideas and application. For instance, sending children out of the community for further education may bring in new knowledge applicable to the community. This is in accordance with the concept proposed by Somsuk Srisuntisuk and Suwun Buatuan (2536: 71-81). The concept stated that social and cultural changes define an occurrence where rural and urban societies are in closer contact in such a way that dependency in rural society reduces, that family and relatives relationships which used to be the center of economy, society, and culture have changed their roles as a consequence of replacement by governmental offices such as school, bank, cooperatives, etc. Banks and cooperatives are the place for loans, replacing the traditional borrowing from relatives.

Similarly, community leaders viewed the group establishment as being important. As a result, there was a contact with a golden banana group in Petchaburi and cooperated with them in providing information on establishment, and plantation until a contract was signed between the community group and an external world which is the import-export company in Japan.

At present, the group also serves as a center of learning and inspection for outsiders. The group also cooperates with the company in Japan in exchanging farmers and staff for job inspection, observation and training. One of the great opportunities in contact is the home-stay scheme. When Japanese staff come, they are encouraged to stay in the one or more of the farmer's houses in order to get acquainted with the farmer's way of life and vise versa.

Contracts made with Japanese company also teach the group in some ways. Once, the group would like to increase a product price to only 0.50 Baht per kilogram of bananas, the deal was not made because the Japanese said that 0.50 times weeks and months and years would yield an enormous amount of money. The group

visualizes it as that Japanese people are very precise and careful. They always keep records.

The group also applies this recording method to its members. At fist, some farmers did not pay much attention into doing it because they still thought bananas are inferior to other perennial fruits. Surprisingly, when they started recording, the sum of annual income obtained from bananas alone is compatible to once-a-year income from other fruits. Moreover, fruit prices also vary each year. This makes records very important.

3) Economy

Economy is another important driving force of the group. In the past, farmers chose their own types of farming according to one's expertise on the production. On the other hand, when economic plants dictate how much income will be earned, farmers turned their attention into cultivating those plants such as coffee, rambutan, durian, mangosteen, rubber tree, palm, and now, biological golden bananas.

Changes occurring to farmers growing biological golden bananas affect family economic status. Income from the farming is compatible with employment which yields monthly salary. It can be postulated at this point that if a farmer grows about 1,200 shoot of bananas, he will obtain a weekly 1,595 Baht income which sums up into 6,646 Baht a month.

Occupation of farmers growing biological golden bananas does change overtime according to market trends. This is in accordance with the concept proposed by Somsuk Srisuntisuk (2530: 19). The concept referred to economic changes as being structural change in such systems as production, distribution, consumption and exchange. In the past community economy was traditional in all aspects of production, exchange, consumption and distribution, entirely for self consumption and survival. The economy was transformed into capitalism which involves more with money.

Economic changes involve government intervention and provision of several public utilities which bring about development. Impacts from such development transform the community from simple lifestyle with sufficient economy into trading

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lifestyle involving much with product prices at national and global levels. At present, agricultures involve economic plants farming such as durian, mangosteen, longong, rubber tree, and palm. These plants yield attractive income according to seasonal harvest. Moreover, there are fruits that are not seasonal such as certain lines of durian, Tawai durian, which also provides good income but require high investment as well as chemical enhancers to push the fruits off-season.

Growing biological golden bananas requires complicated plantation and maintenance as well as is strictly prohibited from using chemicals. Nevertheless, farmers are very active in growing them as they provide attractive incomes weekly. The bananas are priced at 10.50 Baht per kilograms and farmers can deliver them 4 times and month. Apparently, other economic plants are priced according to market trends which are often time unstable. On the other hand, biological golden bananas are priced at a fix rate according to the contract made with the Japanese company. Farmers are more secure growing the bananas and supply them to the group.

Originally farmers grow more of fruit plants which require constant use of chemicals. As a result, surrounding environment lacks wild animals such as birds. However, when the farmers started growing biological golden bananas with more awareness of chemical harms and replacement with compost, or organic fertilizers, wild animals resume their natural habitat and weed become more abundant.

Though biological golden bananas provide a number of advantages, there are some farmers resigning from membership. This is a result of complicated processes of plantation and maintenance. It requires honesty to self; farmers need to work harder in order to take care of a garden without using chemicals in controlling weed and diseases. However, some Thai people are lazy, impatient and mind hard works. They eventually resigned from the group.

6.4 Impacts from Social and Cultural Changes of Farmers Growing Biological Golden Bananas

Farmers are well affected by the changes. They learn a number of information and techniques from their leaders, from education as well as technology. The farmers

have better quality of life. They are healthier; eat and live well. Women play more roles in working. This is in accordance with the concept proposed by Somsuk Srisuntisuk and Suwun Buatuan (2536: 29). The concept stated that social and cultural changes bring expediency. New inventions create more conveniences at work, and help develop the country into a better condition. Similarly, the concept proposed by William F. Ogburn (1933: 122-166) stated that innovations brought into a society always bring changes in people's characteristics and aspects. Women with high education are provided with good job opportunities, thus, changing their roles in the society.

In summary, social and cultural changes bring the following advantages to the farmers.

- 1) Increased weekly income
- 2) Application of technological innovation in farming, e.g. banana tissue culture
- 3) Rise in women's roles at work, e.g. working in different positions of employment
- 4) Establishment of group assembly within the community
- 5) Application of data records in daily life
- 6) Increased knowledge on the work by job inspection, observation and training in Japan or with Japanese students

These changes also bring about negative impacts to the society. For instances, traditional cultures start fading away; environment starts being damaged, causing long droughts. This is in accordance with the concept proposed by Pawinee Pengsart (2534: 41). The concept stated that social changes can have both positive impacts and damages to the society. The resulting impacts can be ample or diminutive, direct or indirect depending on status, definition and evaluation of individuals. The impacts of changes may result in normal, continuous functioning of the society or may lead of society dysfunction. For example, considering the advancement in economy, this is certainly a by-product of resource devastation. When the resources are squandered in all their minerals and forests, they cannot be identically replaced. This leads to resource scarcity and subsequence diseases, environmental toxicity, mental

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impairment, and other social problems such as an increase in mentally ill patients, drug abuse and criminals. It all takes place only to bring the society into modernization but the resulting damage is massive. Similarly, Somsuk Srisuntisuk and Suwan Buatuan (2536: 29) also stated that social and cultural impacts can bring incongruity. For instance, if the rate of change is unequal such as in the case of material culture moving faster than the moral culture, it will create conflicts within the society. Problems arose are, for examples, increase in population, unemployment, slum, and prostitution.

Changes bring about both advantages and disadvantages. The group and its members are well aware of the both occurrences and try to come up with solutions to transform disadvantages into better states.

CHAPTER VII

CONCLUSION, DISCUSSION AND SUGGESTION

7.1 Research Conclusion

This research investigated social and cultural characteristics as well as occupational practices of farmers growing biological golden bananas. The investigations included processes, factors and impacts of changes occurring to social and cultural contexts and occupational practices of farmers growing biological golden bananas in Thungkhawat sub-district, Lamae district, Chumphon province. Base on research objectives, it can be concluded as follow.

7.1.1 General Characteristics of Social and Cultural Contexts of Thungkhawat

It can be concluded that Thungkhawat demonstrated a high variety of social contexts as a result of mixture of people migrating from different places. Origins of people are, for examples, Nakonsritummarut, Suratthani, Pangan and Samui islands, Puttalung, Songkla, Trung, Prachuabkirikhun, Nakonpatom, Petchaburi, and Supunburi. Relationships among people were very distant as people tended to live individually or with one's own family. Intimacy can be found only among people who have originally migrated from the same places or are relatives. There are strong community leaders who are enthusiastic and cooperate well in trying to bring the community to a better condition.

Housings are situated in one's own land and are far apart from other people's houses as a result of one's occupancy of large land. Nowadays houses become more modernized with materials renovated using cement and tiles.

Approximately 95% of the population has agriculture as their main occupation such as plant farming like rubber tree, oil palm, coffee, durian, coconut, rambutan, mangosteen, longong, orange, golden banana, and animal farming. Another 4 % falls into employment and merchants such as banana screening employment for

Thungkhawat Gardening Management Group. The other 1% falls into government officials and labors. Average annual income is 37,345 Baht per person. Approximately 80% of the total population has debts from government loans especially from agricultural and cooperative banks.

Most villagers are Buddhist. Consequently, temples are built as centers for people to gather around and to hold themselves intact. There are 2 Buddhist religious centers in Thungkhawat: Thungkhaprachtum and Potimuk centers.

Traditional customs are mostly customs proceeded from people's original birthplace which are southern in contexts. The most important tradition is the Sart or Boon Ta Yai Festival which takes place on the 10th month each year according to Thai calendar. Beliefs of people in Thungkhawat are stressed on holy matters such as monk and Buddha images, spirits occupying lands, forests and mountains, fortune telling, termitarium, some certain trees such as Pho trees, Sai trees, amulets, and swearing. Certain beliefs differ from one individual to the other.

Language used in this area is mainly the southern Thai language. Thungkhawat villagers possess various kinds of local wisdoms which are unique, interesting and can be taught to other people, for instances, Thai traditional message and medicine, mixed gardening, bee farming, wickerwork, herbal usage, and Taloong shadow show. These wisdoms are in need nowadays because people can utilize and apply what they already have in the community without having to purchase and rely on other sources but only adjust them to the modern lifestyle.

7.1.2 Occupational Practices of Farmers Growing Biological Golden Bananas

It can be concluded that members of Thungkhawat Gardening Management Group consist of 104 farmers practicing the following agriculture of banana farming.

- 1) Plantation field preparation comprising 2 techniques: Plowing and nonplowing preparations
- 2) Soil preparation requiring pH values measurement and adjustment to 5.5-7.0

- 3) Banana shoots selection concerning perfect mother plants with no signs of diseases, shoots of not more than 2 months with well known breeds such as Kabkao, Kabdum and tissue culture breeds.
- 4) Plantation bed planning emphasizing appropriate settings of bed rows, distance between shoots, wind directions, temperature, and water supply
- 5) Plantation method, putting shoots properly into the ground
- 6) Maintenance
- 7) Harvest, involving management prior to and during harvest
- 8) Product delivery

7.1.3 Characteristics of Social and Cultural Changes and Occupational Practices of Farmers Growing Biological Golden Bananas

1) Characteristics of Social Changes

Apparently, social changes in such aspects as relationships among relatives, seniority, community leaders, housing and settlement, technological innovations, transportation, education, and public health are both evolutionary and developmental changes. They change from simplicity to complexity, gradually progressing together with patterned and systematic development. The society also becomes well organized.

2) Characteristics of Cultural Changes

Cultural changes in such aspects as religions, customs, traditions, beliefs, values, language, and local wisdoms are evolutionary changes. Traditions are still strongly attached to religious as well as black magic. Some beliefs become more scientific and modernized as seen in values, beliefs, and certain ceremonies. Some others are more attached to local and traditional contexts such as those of local wisdoms.

3) Changes in Occupational Practices of Farmers

At the beginning farmers were doing highland rice, rattan wild-crafting, logging, illegal mobile plantation, cultivations of chili, peanut, watermelon, banana, coconut, coffee, rubber tree, durian, rambutan, mangosteen, and palm. Until now the main occupation of these local people are still agriculture and popular plants are

rubber tree, oil palm, coffee, durian, coconut, rambutan, longong, orange, golden banana, longan, and animal farming. Other occupations are general employment, merchants, and government officials. Apparently, these changes are development-oriented. In other words, types of plant cultivated are adapted and modified according to market demands. This is evidently in accordance with concepts on novelty acceptance and social and cultural dissemination from one society to the other. This has direct impacts on types of plant selected for cultivation within the community.

7.1.4 Processes of Social and Cultural Changes of Farmers Growing Biological Golden Bananas

It can be concluded that the main driving force of changes occurs through the process of novelty acceptance. Contacts with foreigners or foreign countries are considered very unlikely for most farmers in rural areas. Normally, agricultures in those areas are in no direct contact with the external world. If agricultural products are for export, the farmers' job is to produce them and usually there will be merchants coming and get them for export. Farmers provide the basis of production and their job ends right there. This means that it goes on like this as a circle and farmers have no power in fixing product prices as they have no other chances of selling their own products but through merchants who designated the price for their own maximum profits. If farmers ever try selling products on their own, it creates high risks of getting only loss due to the lack of marketing background. As a result, a group of community leaders saw the possibilities of making a change out of this and try to get the benefits back to the community without losing so much through merchants. Consequently, they proposed the establishment of gardening group to supply products directly out of the country by an investment of foreign import-export business. The leaders and the foreign businessmen agreed on the establishment, providing a win-win solution for both sides.

From an attempt of the leaders in seeing great opportunity, there followed an assembly of a minor group of people who possessed similar views towards the change. At the beginning, there was no concrete thought of the profit-making setup and no proof for villagers to see the real benefits. However, group development must go along with member development. This is done through reinforcement of faith among

members in terms of product price, trainings and education on banana tissue culture, formulation of compost fertilizers, savings within the group, and management by having regular meetings, namely, 2 annual official meetings, monthly headmaster and committee meetings, and monthly member meetings as well as sending members for job inspection in Japan. One very important feature is that the group evaluates its performance by assessing strengths and weaknesses for further development.

Group manifestation is stressed on benefits back to the farmers and community as the first priority. Apparently there is a good response from community towards the group performance. Within these passing few years, there are several routes of income promotion for community, for instances, employment of villagers for the group's export process and reinforcement of membership and banana supply for the group. However, this responsiveness has decreased dramatically. This is a result of negative attitudes of some farmers towards to group's rules and regulations in farming biological golden bananas, for example, too detailed plantation and maintenance instructions, strict prohibition of chemical usage, and bananas being thought of as inferior to other perennial fruits both in terms of plantation complications and incomes. With all these negative attitudes, the group should discuss and make understandings with farmers and provide them with opportunity to more participation in order to increase a sense of unity.

Group manifestation demonstrates better reactions from outside the community because most products are delivered from outside and the farmers are more active in their production. Moreover, there are several external organizations supporting a number of projects. On the other hand, organizations within the community itself take it for granted and provide no support. If these latter organizations cooperate better, advantages will certainly fall for both the farmers and the community.

7.1.5 Factors Influencing Social and Cultural Changes.

It can be concluded as the following. Internal factors comprise of community leaders such as teachers, district chief, village headman, and members of municipal office working together in driving the community. They visualize group as stronger than individuals and foresee stable markets as ways to promote more income and subsequent improvement in quality of life of villagers. As a result, the group was

established and becomes a center of learning, brainstorming, and opening to the external world for the farmers themselves and for outsiders inclining to participate.

Education is very important for people in the community. The group initiator himself had his education at a university level and there he met a Japanese fellow who invited and introduced the community to export. Apparently, education provides opportunity for both himself and his community.

Most members of the group see importance of education and encourage their children to be as highly educated as possible. After acquiring the satisfactory level of education, they do not force the children in choosing their career. Nonetheless, most of them would like their children to become government officials or employees rather than to become farmers as they are because farming is a hard work although government officials are no longer a stable job like it used to be. Moreover, the farmers tend to keep their lands available in case their children would really like to farm.

External factors are technological innovations introduced to the community, stimulating further development in farming. Advancement in technology provides farmers with acceleration and increase in production in terms of chemical uses to prevent diseases and to enhance growth.

Transportation nowadays also makes it more convenient. Technology brings about improvement of roadways from laterites to asphalted and concrete. Farmers can transport and deliver their products to destinations more easily.

Technology advancement also leads to more competition, for instance, marketing of vehicles such as cars and motorbikes. Consequently, vehicles are released at a very low amount of deposits because business owners would like to attract more customers. A lot of farmers put down the deposits and take the vehicles. Unfortunately, most farmers earn their incomes only once a year. As a result, though they are able to leave deposits, they are unable to continue the installments; thus, the vehicles are eventually taken back or else they have to borrow money from somewhere else and pay back monthly which certainly creates more debts. Technology can be both advantageous and disadvantageous. If not utilized properly, it comes back to hurt the user.

Biological golden banana farming also develops gradually. At the beginning farmers had to use big shoots of banana plant which was difficult for transportation. When technology becomes available, banana tissue cultures are at hand, making it more convenient for the farmers to both transport and maintain them. Advancement in technology provides more knowledge and information for the farmers.

Contacts with the external world are one of the factors leading to new ideas and application. Cooperation in searching for more information and in establishing the group results in a gathering of people. There was a contact with a golden banana group in Petchaburi and cooperated with them in providing information on establishment, and plantation until a contract was signed between the community group and an external world which is the import-export company in Japan. There are now more cooperation with Japan in exchanging farmers and staff for job inspection, observation and training. The farmers learn how to work effectively especially in keeping records and being precise when at work.

Communication is relatively important to the farmers because every product delivery, there must be reports on farming records of the next delivery. Farmers are indirectly required to keep up their own records and re-organize the data into a systematic database and present them to the group. For the group itself, it is also necessary to report the ongoing developments in various aspects, distribute them in meetings in order for the members to apply the information in their farming.

Economy is another important driving force of the group. In the past, farmers chose their own types of farming according to one's expertise on the production. On the other hand, when economic plants dictate how much income will be earned, farmers turned their attention into cultivating those plants such as coffee, rambutan, durian, mangosteen, rubber tree, palm, and now, biological golden bananas.

Changes occurring to farmers growing biological golden bananas affect family economic status. Income from the farming is compatible with employment which yields monthly salary.

Growing biological golden bananas requires complicated plantation and maintenance as well as is strictly prohibited from using chemicals. Nevertheless, farmers are very active in growing them as they provide attractive incomes weekly. The bananas are priced at 10.50 Baht per kilograms and farmers can deliver them 4

times and month. Apparently, other economic plants are priced according to market trends which are, often time, unstable. On the other hand, biological golden bananas are priced at a fix rate according to the contract made with the Japanese company. Farmers are more secure growing the bananas and supply them to the group.

Originally farmers grow more of fruit plants which require constant use of chemicals. As a result, surrounding environment lacks wild animals such as birds. However, when the farmers started growing biological golden bananas with more awareness of chemical harms and replacement with compost, or organic fertilizers, wild animals resume their natural habitat and weeds become more abundant.

Generally the farmers are relatively healthy. There are no signs of sickness from using chemicals. This may be the result of hiring other people for chemical spraying during farming in the past.

Though biological golden bananas provide a number of advantages, there are some farmers resigning from membership. This is a result of complicated processes of plantation and maintenance. It requires honesty to self; farmers need to work harder in order to take care of a garden without using chemicals in controlling weed and diseases. However, some Thai people are lazy, impatient and mind hard works. They eventually resigned from the group.

7.1.6 Impacts from Social and Cultural Changes of Farmers Growing Biological Golden Bananas

Farmers are well affected by the changes. They learn a number of information and techniques from their leaders, from education as well as technology. The farmers have better quality of life. They are healthier; eat and live well. Women play more roles in working.

On the other hand, these changes also bring about negative impacts to the society. For instances, traditional cultures start fading away; environment starts being damaged, causing long droughts. The farmers are well aware of what is happening and try to find solutions as perceptibly seen in avoiding the use of chemicals in their farming.

7.2 Discussion

From investigation of general characteristics of social and cultural changes of farmers growing biological golden bananas together with studying factors influencing changes, processes of changes, as well as impacts of such changes to the community, it was found that the existence of Thungkhawat Gardening Management Group provides advantages to farmers and community in various aspects as described below.

Women's roles increase in workplaces such as being members and supplying products to the group, being able to work as employees for the banana screening process or for banana packaging before export or as chief in screening department.

Group establishment provides new learning for members such as sending them for job inspection in Japan, trainings on organic agriculture, and promoting loans among members.

Technological innovations are introduced and applied into farming such as banana tissue cultures which yield similar length of growth of all planted bananas, making it convenient for farmers to maintain proper production.

Biological golden bananas provide weekly income earnings for farmers. Moreover, it reduces chemical uses in other fields of plants as well.

Economical foundation of the farmers is at a good level, being mostly middleclass. The farmers own large area of lands and are more reliant on productions of palms and rubber trees than on bananas. They see bananas as providing only secondary incomes rather than being the main choice of farming. More importantly, the group does not reinforce bananas to be the main plant because they may be at high risks of damages by natural disasters. Furthermore, other types of plants do not require as much attention and complicated instructions for plantation and management. Bananas are grown along with other perennial trees in the same field, consequently, when those trees reach maturity, bananas cease. At present, member of the Thungkhawat Gardening Management Group has reduced dramatically.

Nevertheless, bananas should be planted with better attitudes. The group has already provided stable market with fixed price. In addition, his majesty the king has also mentioned a sufficient living with multi-crop type of farming. The farmers should try to apply the statement with their farming in order to live sufficiently as well as to

earn more secondary incomes from supplying the products to the group to be further distributed to provided markets.

7.3 Suggestions

From investigation of general characteristics of social and cultural changes of farmers growing biological golden bananas together with studying factors influencing changes, processes of changes, as well as impacts of such changes to the community, the researcher has found appealing features which require further attention as are listed below.

- 7.3.1 Suggestions for Further Studies
- 7.3.1.1 Comparative studies on golden bananas and other products from the community: Investigate possibilities, risks and promotion in favor of sufficiency of farmers
- 7.3.1.2 Changes in Thungkhawat and its agricultures involve several factors and processes. However, one outstanding element is regarding the application of local wisdoms into their practice. One great example lays in bee farming which is an application of natural farming in replacement of pesticides.
 - 7.3.1.3 Deliberate on guidance for further, perpetual development of the group
 - 7.3.2 Suggestions for Development
- 7.3.2.1 Product delivery should be appointed with fixed timing and queuing in order to facilitate more rapid and effective services.
- 7.3.2.2 Publicize and fascinate farmers with appealing data of incomes presented in weeks, months and years.
- 7.3.2.3 Provide incentives for new members such as discounts on banana shoots purchase, etc.

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APPENDIX

List of Informants

- 1. Mr. Opaht Chotechuang
- 2. Mr. Prayud Pengchan
- 3. Mrs. Ludda Chumtong
- 4. Mr. Klun Pengchan
- 5. Mr. Pradeum Srifa
- 6. Mr. Somdate Iamsa-ad
- 7. Mr. Suchate Kramoot
- 8. Mr. Umpai Tongtip
- 9. Mrs. Tussanee Sukrangkoon
- 10. Mr. Chaiyun Somwung
- 11. Mr. Charoon Rodchit
- 12. Mrs. Chirawun Sooksom
- 13. Mrs. Pissawong Piachareon
- 14. Ms. Suchirut Rukchareon
- 15. Ms. Wunnipa Pensawud
- 16. Mr. Plud Kongsong
- 17. Mr. Tun Kesaro
- 18. Mrs. Noopin Meedate
- 19. Ms. Saowanee Petkong
- 20. Mrs. Sohn Kramoot
- 21. Mr. Komon Chunsohn
- 22. Mr. Sutape Noomaht
- 23. Mrs. Sarapee Ruenpanit
- 24. Mr. Surin Pettong
- 25. Ms. Churairut Boonsin
- 26. Mr. Opaht Krootchanapong
- 27. Mr. Suchaht Samngamching
- 28. Mr. Wissanoo Boonchareon
- 29. Mr. Bunchob Plodtao

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List of Informants (Cont.)

- 30. Mr. Yuttana Chareonsri
- 31. Mr. Nipon Rukchareon
- 32. Mr. Aroonno Boonchuay
- 33. Mrs. Supawadee Silpasohn
- 34. Mrs. Cheub Boonchareon
- 35. Mr. Udomkiat Chayapitukkun
- 36. Mr. Witoon Chairuk
- 37. Mr. Kriangsuk Chamcheun
- 38. Mrs. Kuakoon Meechai
- 39. Mr. Mongkon Somkanae
- 40. Ms. Waroonrut Datedang
- 41. Mr. Narong Promchun
- 42. Mr. Dang Tongkeaw
- 43. Mr. Tin Buatong
- 44. Mr. Koson Komin
- 45. Mr. Samahn Chairuk
- 46. Mrs. Sai Samuichareonsin
- 47. Mrs. Narumon Suwunnawong
- 48. Mr. Sootum Chunpeng
- 49. Mr. Sa-ad Pearkiri
- 50. Mrs. Preeda Narupabenchapon
- 51. Mr. Saneau Ponpla
- 52. Mr. Somchai Sa-ad
- 53. Mr. Sumruam Chaipeum
- 54. Mrs. Somsri Kirtsook
- 55. Mr. Sookput Suwunpukdi
- 56. Mr. Huan Chanpen
- 57. Mr. Pranom Suwunpukdi
- 58. Mrs. Chongkonee Nahkkum

List of Informants (Cont.)

- 59. Mr. Sompit Boonkumnirt
- 60. Mr. Umpai Mengchuay
- 61. Mr. Bumroong Tongkum
- 62. Mr. Sumreung Pitukpruchyakoon
- 63. Mr. Teera Kuanyeun
- 64. Mr. Noppadon Pitukpruchyakoon
- 65. Mr. Somnuek Keawchumrut
- 66. Mr. Wicharn Keawtong
- 67. Mr. Sirichai Sanepong
- 68. Mr. Pratoom Puangdate
- 69. Mrs. Chanee Pitukpruchyakoon
- 70. Mr. Prasert Chareonpun
- 71. Mr. Rabiub Saitong-in
- 72. Mr. Tawee Koonchan
- 73. Mr. Peum Paisahn
- 74. Mr. Rachane Sanepong
- 75. Mr. Prayoon Promkong
- 76. Mr. Tawee Pahnkong
- 77. Mrs. Aree Ongkeaw
- 78. Mr. Somkiat Ruttanamanee
- 79. Mr. Supahp Chookeaw
- 80. Mr. Charun Chunkeaw
- 81. Mr. Sayun Saitong-in
- 82. Mr. Tongpun Kanayaht
- 83. Mr. Rachun Timklub
- 84. Mr. Aroonsuk Nuanpahn
- 85. Mr. Umpon Konseu
- 86. Mr. Krit Rodkliang
- 87. Mr. Punya Tipruttanakeaw

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List of Informants (Cont.)

88. Mi	r. Sontaya Chookeaw	
89. Mı	. Sootin Sookkirt	
90. Mı	r. Plien Saetiaw	
91. Mı	r. Narate Kuapet	
92. Mr. Pichart Longchun		
93. Mr. Sootum Sripet		
94. Mr. Sopon Klinnahk		
95. Mr. Soonit Sunkiri		
96. Mr. Sompong Nachun		
97. Mr. Charnnarong Loylom		
98. Mr. Sachon Duang-on		
99. Mr. Somchai Toechumnong		
100.	Mr. Chareon Chunkeaw	
101.	Mrs. Soonun Chomkumsing	
102.	Mrs. Sompong Konseu	
103.	Mrs. Preeda Kongchun	
104.	Mr. Nikon Kuansri	
105.	Mr. Preecha Ruang-iad	
106.	Mr. Chutchai Paisahn	
107.	Khru Paiboon Kuanraht	
108.	Khru Somsuk Iamsa-ad	
109.	Pra Acharn Chumphon Chittapunyo	Head of the Thungkhaprachatum
		Center
110.	Pra Acharn Suwut Chotetitoe	Head of Potimuk Center
111.	Mr. Roy Pitukpruchyakoon	
112.	District Chief Charun Yenchai	
113.	Mr. Nuam Chairuk	
114.	Village Headman Lunghiang O-pu	ng
115	Mr. Rawee Chunsohn	

List of Informants (Cont.)

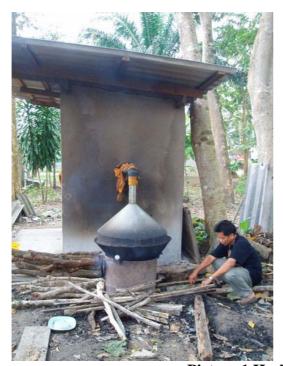
Name

116. Mr. Soochut Sittee

117. Mr. Prapruet Tissoowun

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PICTURES





Picture 1 Herbal Steam House





Picture 2 Sart or Boon Ta Yai Festival





Picture 3 Banana Farming: Maintenance





Picture 4 Banana Delivery to the Group

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Picture 5 Banana Inspection and Screening before Packaging

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