

**JADE TRADE AND SOCIOCULTURAL CHANGE:
A CASE STUDY IN HPAKANT JADE MINE AREA,
KACHIN STATE**

PhD DISSERTATION

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**UNIVERSITY OF YANGON
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**JADE TRADE AND SOCIOCULTURAL CHANGE:
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KACHIN STATE**

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A CASE STUDY IN HPAKANT JADE MINE AREA,
KACHIN STATE

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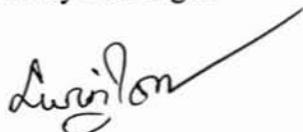
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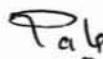
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ABSTRACT

The term sociocultural system is the real-life expression of designs for living in particular environments. Sociocultural change comes about through processes and events that are either internal or external to a society. The title of this thesis is "Jade Trade and Sociocultural change": A Case Study in Hpakant Jade Mine Area, Kachin State. This study explore jade trade effects on economic system in the study area, describe the influences of the economic system on sociocultural aspects of a community, elicit how jade trade affects the natural environment in the study area. This study was done through the approach to culture of consumption, from an economic anthropological point of view. This thesis was conducted by descriptive study design involving case study design. This study was done qualitative method. In this study, data were collected by using participant observation, key informant interviews, in-depth interview and focus group discussion. Jade mining and marketing is the main source of economic survival not only for the locals but also the migrants. Before 2000, jade mining was carried out through the use of simple technology and simple tools thus harming the natural environment to a small extent. After 2000 with the advent of jade companies, jade mining is carried out through the use of modern technology and modern machines, thus harming the natural environment considerably. However, the use of modern machines make for production of various kinds of jade. Therefore, family's income increased for jade business and associated with other economic activities. Then, businessmen dependent on jade mining and marketing bring in consumer goods for sale. When fortune seekers from various regions arrive in jade mine area, their relations with locals develop, leading to more general knowledge on the latter's part. They concentrate more on children's education, and health care for the family. Moreover, the locals' lifestyle begin to change, especially in the styles of food, clothing and shelter constituting the basic needs of human society. Under government's direction the companies have come in and their working with modern technologies in jade mine causes much economic development. For this reason sociocultural change which has accompanied the economic development were explored in this study.

Keywords : consumption culture, socio-cultural change, environmental change, economic system, subsistence patterns

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CHAPTER (1)

INTRODUCTION

1.1 Background

Every society has cultural rules for determining who has access to particular resources and what can be done with them. There are three types of resources namely; human resource, natural resource and man-made resource. Natural resources are land, water, plants, animals and minerals. In considering the capacity of various environments to support human life, both the quantity and the quality of natural resources must be taken into account (Serena Nanda 1991, p-157).

Man's actions have changed the fundamental balances in nature. For example, cutting down forests can change patterns of rainfall and cause serious erosion; the use of chemicals and firearms can kill off species of animals and birds that have survived for millions of years. The full effects of human actions on nature often take decades or centuries to develop; thus, many side effects of human activity can never be fully predicted (Paul G. Hiebert 1983, p-90).

Due to the different activities for different purposes of human beings natural resources are facing with gradual erosion /decreases. Although most of the natural resources such as forest, fishery products are renewable, some resources such as mineral resources as Jade; one of the natural resources is nonrenewable natural resource because it cannot be regenerated after using it. Every society has access to natural resources- land, water, plants, animals and minerals. If the people exceedingly utilize natural resources by only a single economic outlook, the natural resources will drop dramatically within centuries.

An economic system is the part of a sociocultural system that deals with the production, distribution, and consumption of goods and services within a particular society (Serena Nanda 1991, p-179). Anthropologists have found that the economy is closely connected with the environment, subsistence base, demographic conditions, technology, and division of labor of the society. All economic activities are to consume. The end point of producing and distributing is consuming. Every aspect of consumption is determined by cultural rules (Paulag, G. Rubbel & Rosman, Abraham, 1995, p-156).

Consumption is not a matter of responses to human "needs" or to a greedy desire for objects; rather, consumption or demand is a function of a variety of social

practices and an aspect of the overall political economy of societies. Consumption- the idea that capitalism had become a “consumer society” arose, at least in Western Europe, in the 1950s, in response to increase affluence and changes in the economic and industrial structure (a move away from traditional heavy industry and towards new technologies and service provision) after the Second World War (Anrew Edgar & Peter Sedgwick 1999, p-80). Nor was the consumption culture just a product of the market economy or the use of money; organized markets and money have existed for millennia, economically linking villages, towns, and cities in all of the major civilizations. All people use and consume material goods. They eat food, build shelters, make tools and use of land. In their relationships to their natural environment and to their bodies, all people make rational observations of cause and effect and of the relationships between things (Paul G. Hiebert 1983, p-298).

John H. Bodley said that culture of consumption is derived from his earlier conclusion that since 1800 autonomous tribal peoples through the world had been deprived of their resources, territories, and independence because of a seemingly insatiable demand for resources emanating from the industrial nations. At the time he hesitated to label the culture of consumption “Capitalism” because commercially driven unsustainable consumption may take many forms, but by the end of the twentieth century, with capitalism triumphant worldwide and resource consumption accelerating, there was no doubt that capitalism was the dominant culture of consumption (1999, p-71).

Consumption, rather than production, became a subject of widespread scholarly research only in the 1980s. The most important task is understanding how the culture of consumption originated, how material benefits were distributed, and what increased consumption means for human problems and sustainability. Increased consumption also cannot be explained by human greed or selfishness because these traits are presumably universal (John H. Bodley, 1999, p. 72-73).

The United States is without question the leading example of a culture of consumption. Shortly after World War II, it had become the world’s major consumer of nonrenewable resources on both an absolute and a per capita basis. In 1970 Americans accounted for 35 percent of the world’s energy consumption. By 1996, the United States, with less than 5 percent of the world’s population, managed to slightly increase its annual per capita energy consumption to the equivalent of 8,051 kilograms of oil for a total consumption of the equivalent of 2,134,960 metric tons of oil, which

represented 23 percent of the world's total consumption (cited in John H. Bodley, p. 80).

Worldwide economic development meant that the rest of the world was catching up with America in energy consumption; nevertheless, in 1996 total American consumption was still more than all the energy consumed by China, Japan, and India combined. China, with 21 percent of the world's population, consumed less than 12 percent of the world's commercial energy, about half the American total. The historic pattern of American consumption illustrates important trends that may be generally characteristic of consumption cultures (John H. Bodley 1999, p-81).

Culture is the major way in which human beings adapt to their environment. Any culture that continues to accelerate consumption in a fixed environment will eventually be forced into trade-offs between environmental quality and continuation of its consumption pattern. Environment refers to the totality of the external influences such as natural or manmade which impinge on man and affect his well being (Helman, C.G 1990). Men struggle to survive in sociocultural environment. The nature of sociocultural system is always changing. In their way of life they struggle to survive in their environment, and pass their cultural patterns, economic technologies to new generations. The emphasis here is on culture as a behavior system that includes technology, ways of economic and political organization, settlement patterns, social groupings, religious beliefs and practices, values, and so on. From this perspective, the term sociocultural system seems better than culture, because the term sociocultural system includes the real-life expression of designs for living in particular environments, not just the designs (Serena Nanda 1991, p- 59).

Sociocultural change comes about through processes and events that are either internal or external to a society. Some common ways in which such changes occur include (1) environmental events, (2) invasion and war, (3) cultural contact, (4) innovation, (5) population shifts, and (6) diffusion (Beth B.Hess, Elizabeth W. Markson, and Peter J. Stein 1991, p-479).

1.2 Rationale

This research intends to describe "Jade Trade and Sociocultural change" in Hpakant Jade Mine Area, Kachin State. Hpakant Township is the largest jade production area in Myanmar. So, the local people's economy is based on jade business. Jade is the main mineral product for domestic and foreign markets. Important jade

mines are located in Hpakant, Tawhmaw, Lonekhinn, and Haungpa. By marketing jade business, there are so many profits such as communication, economic development and improvement of social status within the community. On the other hand, there can be seen unbalancing of weather, earth collapse and etc. Jade is the natural product. If jade is over consumption, how it affects the environment. By studying these, how their lifestyle of change can be known and described the sociocultural change. With the economic growth, there can be advantages and disadvantages in human life. So, Hpakant is chosen as field area.

1.3 Aim and Objectives

The aim of this thesis is to describe jade trade influences on sociocultural changes of a community.

The specific objectives of this research are:

- (1) to explore jade trade effects on economic system in the study area,
- (2) to describe the influences of the economic system on sociocultural aspects of a community and
- (3) to elicit how jade trade affects the natural environment in the study area.

1.4 Conceptual Framework

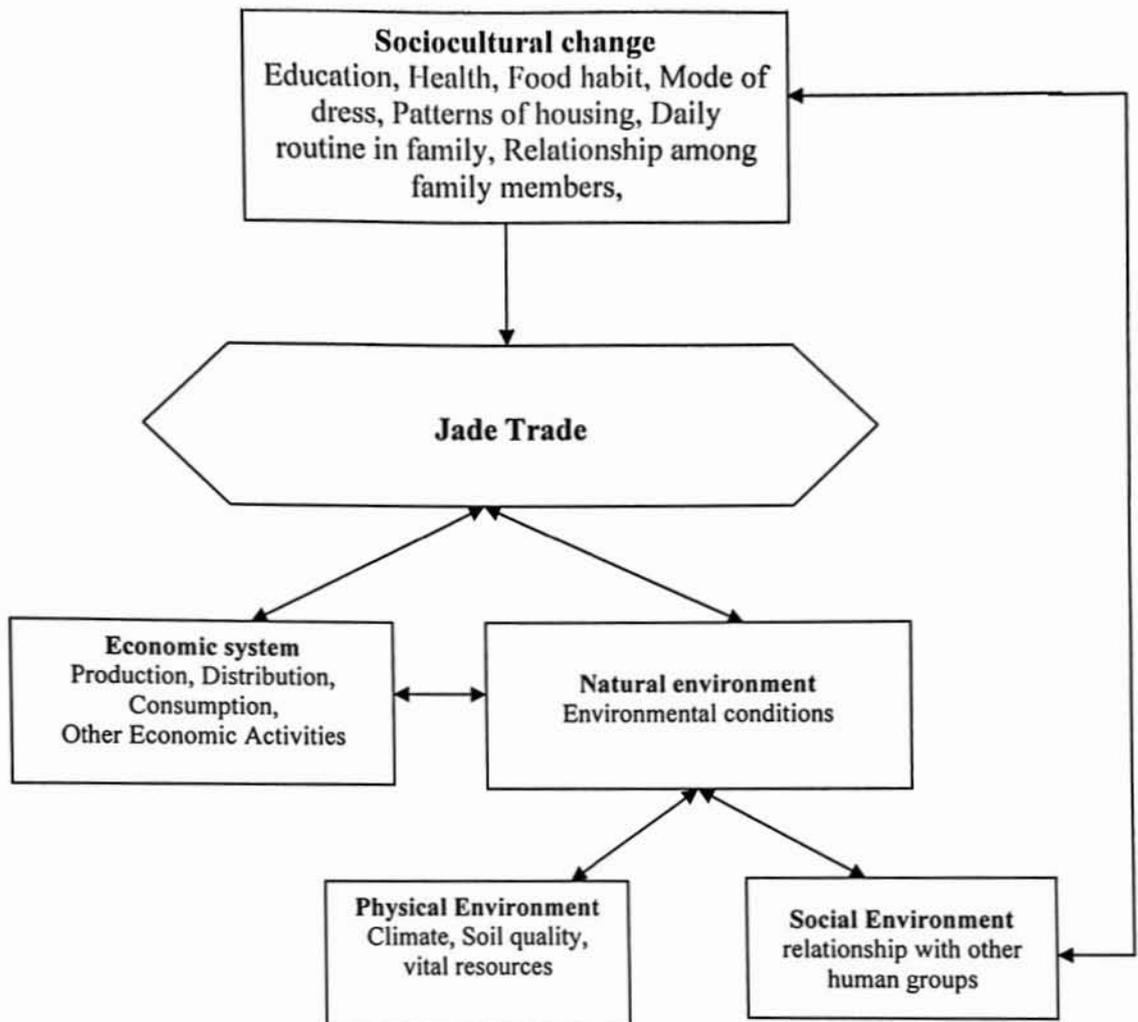


Figure 1. Conceptual Framework of the Study

We, residing in richy resourceful environment, make use of soil quality and vital resources extant in our natural environment. So climate change is observed to have come about through exploitation of natural environment by human beings for their existence, in addition to other effects on the natural environment. Besides, social environment changed because of relationship with other human groups. In research area, jade mining exists because of its jade resources. Distribution follows through marketing of jade which ends up in consumer's hands. Moreover, other economic activities are observed which are dependent on jade mining. With enhanced jade marketing the income of locals increased. When migrant people from all across the country arrive in jade mining area for their economy, behaviors and ideas come in inaccompaniment. Then, the lifestyle of locals is found to undergo a change through advertising in television broadcasts and other mass media.

1.5 Composition of Thesis

This thesis totally has eight chapters. Chapter (one) covers introduction, and chapter (two) is literature review. This thesis makes uses of approach to consumption. Literature review contains anthropological consideration on Economy, anthropological consideration on environment, anthropological consideration on trade and environment, and anthropological consideration on sociocultral change and technology. In chapter (three), research methodology was composed with study design, study site, study population, data collection method, data analysis, study period and ethical consideration.

In chapter (four), historical background of jade trade; the popularity of Myanmar jade, development of jade trade in Myanmar and background of study area were presented. Moreover, this chapter explained the quality of jade, when the jade trade started and how it has evolved to date, and background of research has been described.

Chapter (five) is economic system of jade; explaining production, distribution, consumption, environmental conditions, and other economic activities. This chapter described the stages from jade production up to jade consumption, how the natural environment is affected by jade production, and other jade-related economic activities for the locals and migrants.

Chapter (six) is sociocultural changes of lifestyle; education, health, covering food habit, mode of dress, patterns of housing and relationship among family members

is written. This chapter described how the lifestyle of local people and migrant people have changed due to jade production and distribution. Moreover, interactions among family members in light of jade business and changes in education and health sectors as a consequence of jade business were explained.

Chapter (seven), it was discussed about the changes in demography and transportation due to jade trade, patterns of jade consumption and sociocultural changes of lifestyle. Finally, chapter (eight) includes conclusion and recommendations.

CHAPTER (2)

LITERATURE REVIEW

2.1 Anthropological Consideration on the Linking of Economic and Environment

2.1.1 Anthropological Consideration on Economy

Economy is a system for managing the production, distribution and consumption of goods and services. Economics is the study of how men and society end up choosing, with or without the use of money, to employ scarce productive resources which could have alternative uses, to produce various commodities and distribute them for consumption, now or in the future, among various people and groups in society (Samuelson and Nordhaus, 1985, p-4). According to Stuart Plattner (1994, p-1), economic anthropology is the study of economic institutions and behavior done in anthropological places and in ethnographic style. Economic anthropology as a formal discipline became popular in the 1950's and 1960's, when anthropology grew along with other scientific disciplines, and has developed a rich literature since then. The main task of economic anthropology is to explain how production and distribution of necessary goods are organized in the absence of a market system or of central government control (Paul Bohannan 1992, p-122).

Economic anthropologists have traditionally viewed as more than just a way to produce and distribute energy and materials. The field of economic anthropology has mainly, worked on the description and interpretation of small-scale societies, but by principle and method, it is not limited to them. It is moving into problems of economic and social change, and illuminating the relations of economy and society, and the causal interaction of economic variables and other parts of society and culture (Jesse D. Jennings & E. Adamson Hoebel, 1972, p-466). The exchange is deeply rooted in a web of social relationships and may exist independently of material wants and needs. In effect economic exchange can be completely understood only in terms of assigned social value.

Our need to examine the emerging social and cultural context has never been so urgent. Of course we need to secure and predictable economic institutions, but they will not be like those of yesteryear, a new kind of institution must face the fact that we live in a global economy, that we are more than just consumers (Paul Bohannan 1992, p-298). The study of consumption is important in many fields of social science,

including anthropology, sociology, economics, and psychology. A key definition of consumption is one that reflects our use of the term in daily life. That is, consumption may be defined as the personal expenditure of individuals and families that involves the selection, usage, and disposal or reuse of goods and services. Therefore, Consumption includes production, distribution, utilization and trading.

2.1.2 Anthropological Consideration on Environment

The origins and historical development of economic systems are closely linked to the human group's adaptations to their environment (Hess, Markson & Stein 1991 p-335). Environment refers to the totality of the external influences such as natural or man-made which impinge on man and affect his well-being. Economic and ecology converge in the study of human energetic (Dohnald L. Hardesty 1977, p-89). Ecology is the science that studies the way in which all living things adapt to one another and nonliving part of their environment. Ecosystem makes a very important contribution to our understanding of the relationship of human populations to their physical and social environment. Steward's work was relevant to ecology because it considered the relationship between human society and environment and because it focused on social changes through time. Cultural ecology recognizes both cooperation and competition as processes of interaction, and it postulates that environment adaptations depend on the technology, needs and structure of the society and on the nature of the environment. Steward argued that the links between environment and culture were particularly clear in societies. Steward outlined three basic steps for a cultural-ecological investigation.

“First, the interrelationship of exploitative or productive technology and environment must be analyzed.”

“Second, the behavior patterns involved in the exploitation of a particular area by means of a particular technology must be analyzed.”

“Third, in the analysis is to determine how behavior patterns entailed in exploiting the environment affect other aspects of culture.”

This three-step empirical analysis identifies the cultural core, “the constellation of features which are most closely related to subsistence activities and economic arrangements”.

By emphasizing human adaptation and the varying relationships between human societies and natural resources, cultural ecology provided both the analytical

focus and the empirical bases for Steward's theory of culture change: multilineal evolution (Julian Steward, 1973, pp. 40-42).

Steward believed that some sectors of culture are more prone to a strong environmental relationship than other sectors and that ecological analysis could be used to explain cross-cultural similarities only in this "cultural core". The culture consisted of the economic sector of society, those features that are 'most closely related to subsistence activities and economic arrangements' (Jerry D. Moore, 2004, p.40).

James A. Clifton said that "Steward has attempted to show the functional interrelationships that exist between a particular environment and the culture that has developed to exploit the environment. Steward wrote, cultural ecology is the study of the processes by which a society adapts to its environment. Its principal problem is to determine whether these adaptations initiate internal social transformations of evolutionary change" (1968, p-184).

The ecological approach in anthropology has traditionally accepted such a "materialistic" interpretation of social and cultural behavior. Actually, it is more correct to see the ecological correlates of social organization as not just economic but as all environmental problems. The carrying capacity of an environment depends upon the subsistence methods available to a population and can be changed by technological innovations making possible more efficient exploitation or production. Geertz believes that the concept of the ecosystem is the logical conclusion to the idea of constant interplay between culture, biology, and environment (Donald L. Hardesty 1977, p-75).

An ecological approach to culture sees cultural patterns as adaptive responses to the basic problems of survival and reproduction. White's theory was that cultural development proceeds by an increasingly efficient transformation of energy, which leads in turn to population growth, increased productivity, and economic specialization. According to Steward, the explanation of cultural forms or stages is to be found in the relationship between natural environment, level of technology, and patterns of work in a society (Serena Nanda 1991, p-58).

Ecological anthropologists do recognize that adaptation is an ongoing process and the primary means by which we adjust to and cope with our environment. In the animal kingdom, human population and its environment are situating as an interacting ecosystem. Ecosystem makes a very important contribution to our understanding of the relationship of human populations to their physical and social environment. Physical environment consists of climate, soil quality, existing plants and animal life, the

presence of vital resources and man-made resources. Social environment is the relationship with other human groups.

Ecology is the science that studies the ways in which all living things adapt to one another and to the nonliving part of their environment. Environment refers to the totality of the external influences such as natural or man-made which impinge on man and affect his well-being. Natural environments place limits on the characteristics of the cultures that societies have developed in different parts of the world. Each environment contains the particular resources that a society may use to meet its people's survival needs. The relationship between the environment and culture is not one-way. The environment affects culture, and culture also affects the environment. The ways in which people get food and the ways in which people live all have an impact on nature. The management of resources is clearly a pressing problem in the world today (Serena Nanda 1991, p-65).

2.1.3 Anthropological Consideration on Trade

Trade is the exchange of goods between persons or groups where the parties enter into the transaction on more or less equal terms. The use of the term implies that the economic aspect of the transaction is paramount. The study of trading relationship is an important element of economic anthropology, and the formal and symbolic aspects of trade have also been studied as expressions of the forms of integration and reciprocity which link local groups to one another. Different forms of trade express the social relationship which exist between the parties (Charlotte Seymour-Smith, 1986, p-279).

Trading relationships are not studied in anthropology purely in the strict economic sense, that is, as exchanges of goods. For example, cowry shells and green stone axes were traded for each other on a north-south axis across what is now Papua New Guinea. The cowry shells originated on the south coast, and the green stone axes on the north coast. Small Egalitarian Societies have systematic exchange systems, and objects may travel a very great distance by this means. For example, an important part of the Kula expeditions in the Trobriand Islands of the Pacific was the organized trading between visitors and hosts, quite apart from the delivery of the kula valuables.

Trade has the effect of making foreign objects (and perhaps some services) available locally. Virtually all human societies have been involved in such trade. Among the effects are to increase the range of goods and resources available in a given

locality, which presumably increases the ability of the local people to manage their environment. There may in addition be the social advantage of maintaining peaceful social interaction with neighboring societies. Trading partners can be a source of refuge in case of trouble. Finally, individuals or corporations can trade across polity boundaries. Though extremely important there has been very little systematic study of the social and occupational roles of the long-distance trader and the merchant who crosses political boundaries (Thomas Barfield, 1997, p-469).

Earliest Myanmar jade, Khotan and Yakand lay on the trade route between China of the Han dynasty and the Roman Empire of the West. At such times jadeite stones from the Kachin State of Myanmar were exported in large quantities to Yunnan province of China. In the 15th and the 16th centuries, gem merchants from the Western countries came to Myanmar to purchase rubies. In their accounts they mentioned about the ruby mines in Mogok and Kapalkan accounts they mentioned about the ruby mines in Mogok and Kapalan (Kyatpyin) their ruby trade, but there was no mention of jade. Jade trade was carried on in the extreme north, very far from the Capital. So European gem merchants were unaware of Myanmar jade. In the latter part of the 18th century, Myanmar's foreign trade both by land and sea developed considerably. Among the commodities which Myanmar exported to China cotton and jade were the major items. Bamaw, a frontier town in the Kachin State became an emporium of Myanmar-Yunnan border trade. Bamaw was the center for jade trade. Mr. Warry's remark that Myanmar's jade trade with China began only in the latter part of the 18th century (Dr. Khin Maung Nyunt, 1996, pp-250-258).

2.2 Anthropological Consideration on Sociocultural Change

Cultures have always undergone change, whether slow and evolutionary or rapid and revolutionary. Sometimes these changes make people's lives better and sometimes they make them worse. In the past, anthropologists have looked at cultures as if they were static, unchanging entities for the purpose of analysis. Today, many anthropologists focus upon culture changes within the society. Cultural change is both a process underway in all societies and a field of study in anthropology which has undergone complex development and several important transformations (Rubel & Rosman 1995, p-6).

The forces for change in the modern world are numerous and powerful. The major form of cultural change is a result of contact between individuals and different

cultures. It can occur in a variety of ways and each case may appear to be different from any other case. Some of these variables include land policy, resource exploitation, kind of labour recruitment and intensity and kind of missionary activity.

Sociocultural change comes about through processes and events that are either internal or external to a society. Some common ways in which such changes occur include (1) environmental events, (2) invasion and war, (3) cultural contact, (4) innovation, (5) population shifts, and (6) diffusion.

Environmental changes include both (1) natural events, such as earthquakes, disease, and climate shifts and (2) situations produced by people, such as pollution or overuse and overkill of natural resources. Any one of these environmental factors could produce changes in the economic base and social ties of a group. When floods occurred in Buffalo Creek, not only were homes destroyed but the entire social structure of the community was altered.

Invasion of the group's territory by other tribes, colonial powers, or economic interests is another major source of social change, as is war. Either may require adaptation to new customs and beliefs, or result in geographic relocation of a group, with changes in the mode of subsistence. For example, when European settlers colonized South Africa, they not only displaced the native residents but alter their economies and created a stratification system based on color. Historically and culturally distinct tribes were essentially homogenized by the white colonists as "blacks" serving the economic interests of whites. As a consequence, many native Africans have been ghettoized. Similar experiences have faced native populations in South America, Southeast Asia, and the United States.

Culture contact with people from other societies, in which one group learns how the other has coped with the tasks of survival, is a frequent source of change. For example, through everyday activities one tribe may accidentally meet another, or contact will be deliberately made for the purpose of trade or exchanging marriage partners. Culture contact can also be imposed by explorers or invading armies, a significant factor throughout history.

Innovation is used to describe both discovery and invention, for the two processes are often interrelated. A discovery involves the awareness of some aspects of nature that already exists but had not been recognized before, such as the laws of relatively, the infection theory of disease. Inventions involve the combination of existing parts of culture in a new way. Population shifts, or changes in the size and

composition of the population, are another source of change. The size of different age groups and the sex composition of a population produce important social change.

Diffusion is the most important process of change. Diffusion describes the process by which new ideas, actions, technology, beliefs, and other items of culture spread from person to person, group to group, and society to society. Fire, animal traps, and ways of keeping track of the seasons, for example, have been discovered in only one or two places and then diffused by culture contact through the inhabited world. A common example of diffusion today is that of consumer goods (Hess, Markson & Stein 1991 p-479).

Noreene Janus (1983) in his "Advertising and Global Culture" describes changes that are occurring on a global scale. The change agents (those creating the change) are transnational corporations and transnational advertising agencies. Through their efforts, Western goods and Western values are being introduced throughout the Third World, causing significant cultural transformation. The symbols of transnational culture-automobiles, advertising, supermarkets, shopping centers, hotels, fast food chains, credit cards, and Hollywood movies- give the feeling of being at home. Transnational culture is a pattern of cultural beliefs and behaviors characteristic of elites throughout the world and often spread through mass media. The common theme of transnational culture is consumption. Advertising expresses this ideology of consumption in its most synthetic and visual form. Advertisers rely on few themes: happiness, youth, success, status, luxury, fashion, and beauty. In advertising, social contradictions, and class differences are masked and workplace conflicts are not shown. Transnational advertising is one of the major reasons both for the spread of transnational culture and the breakdown of traditional culture. Janus also pointed out that transnational culture strives to eliminate local cultural variations and cultures change because a society's is pulled into the world economy (1983, pp-288-291).

The Price of Progress by John Bodly (1998) shows that cultures are always changing and the direction of that change is toward a single world system. In this article, economic development increases the disease rate of affected peoples in at least three ways. First, to the extent that development is successful, it makes developed populations suddenly become vulnerable to all of the diseases suffered almost exclusively by advanced peoples. Among these are diabetes, obesity, hypertension, and a variety of circulatory problems. Second, development disturbs traditional environmental balances and may dramatically increase certain bacterial and parasite

diseases. Finally, when development goals prove unattainable, an assortment of poverty diseases may appear in association with the crowded conditions of urban slums and general breakdown in traditional socioeconomic system (1998, pp-292-300).

Peggy F. Barlett and Peter J Brown (1999) also describe the relationship between agricultural development and the quality of life using concepts and examples from cultural anthropology. In this article, three ethnographic examples help illustrate the complex interaction of agricultural development and the quality of life. It examined both the concepts of agricultural development and quality of life in the framework of cultural relativism and cultural evolution. They focused on the systematic patterns of trade-offs inherent in economic and social transformations. It is also mentioned that agricultural development can change the objective conditions of life, but it can also alter perceptions and goals, and these changes can sometimes move in opposite directions, both to increase and decrease quality of life (Barlett PF. & Brown PJ 1999, pp-107-114).

Globalisation has contributed to economic development in Myanmar and socio-cultural changes also. Especially lifestyle changes have occurred thanks to Television advertising. Myanmarers are familiar with Thai food and Chinese food because Thailand and China are their neighbours. European (Continental) food is not so familiar. Getting ideas from mass media, people attend parties and often eat out as family's relaxation. They embrace the ever changing dress style, and better home decoration. In Education, Basic Education High School (Private) has been initiated and students can continue to study in foreign colleges and schools which are linked with those inside Myanmar. Similarly, people are able to use private clinics and hospitals inside the country as well as go abroad for medical treatment.

Natural environment is observed to have changed thanks to human beings' exploitation of natural resources as well as natural disasters. In 2008 Nargis Cyclone hit the Ayeyarwady Delta, greatly destroying tidal forests, human habits and infrastructure (Restoration of Mangrove Ecosystems and Ten Years in Pyindaye, 2012, p. 131). That area is still being rehabilitated, but the lifestyles of locals have changed.

The above statements are showing that the cultural changes for all developments are not completely successful for the goals of societies. Development refers to a process of change through which an increasing proportion of a nation's citizens are able to enjoy a higher material standard of living, healthier and longer lives, more education, and greater control and choice over how they live. In this research, the jade trade is considered as the source of development and how the natives expect for the jade trade is one of the key points. Jade, one of the natural resources is

nonrenewable. Jade trade has been a traditional business for ages in this Hpakant area. Besides, jade trade is one of the ways to get foreign exchange and now the government is also providing for the jade business. How can nonrenewable product make nation's citizens to be able to enjoy a higher material standard of living, healthier and longer lives, more education, and greater control and choice over how they live? What are the changes in their life and their environment? This research illustrated these problems from an economic anthropological point of view and contribute to the anthropological consideration on culture of consumption in the study area.

2.3 Technology

Every society makes use of a technology which includes tools, constructions (such as fish traps), and required skills (such as how to set up a fish trap). Societies vary considerably in their technologies and in the way access to technology is allocated. For example, food collectors and pastoralists typically have fairly small tool kits; they must limit their tools (and their material possessions in general) to what they can comfortably carry with them. As for access to technology, food collectors and horticulturalists generally allow equal opportunity. In the absence of specialization, most individuals have the skills to make what they need. But in an industrial society like our own, the opportunity to acquire or use a particular technology (which may be enormously expensive as well as complex) is hardly available to all. The tools most needed by food collectors are weapons for the hunt, digging sticks, and receptacles for gathering and carrying. Most hunters know the bow and arrow; Andaman Islanders used them exclusively for hunting game and large fish. Australian aborigines developed two types of boomerangs: a heavy one for a straight throw in killing game and a light, returning one for playing games or for scaring birds into nets strung between trees. The Semang of Malaya used poisoned darts and blowguns. The Congo Pygmies still trap elephants and buffalo in deadfalls and nets. Of all food collectors, the Eskimos probably have the most sophisticated weapons, including harpoons, compound bows, and ivory fishhooks (Elman, R. Service, 1979, p. 10).

Hunting and gathering societies were thought to have simple technologies and comprise the primitive base from which more sophisticated agricultural and industrial civilizations evolved.

The northwest coast Indians had a technology, including fishtraps, whaling boats, and log houses, that was more advanced than that found in many agricultural

societies.

Technological Development ; Societies with simple technologies, limited to hand tools and human energy, are often small. In areas of the world where natural food supplies are limited, the absence of a technology for storing food other than drying it, means that only limited amounts can be accumulated and that long-range planning is not easy. Furthermore, in many cases, the people lack the technology to use all the food, sources available in their territory.

The development of complex economic systems is characterized by technological advance and structural differentiation. In technology, there is a shift from simple to complex tools and from human and animal power to machines driven by chemical and nuclear power. Consequently, with technology, people are able to exploit more of their natural resources (Paul G. Hiebert, 1983, pp.300-302). In Lonekhinn-Hpakant Jade Mine Area, jade companies exploit with modern machinery of the natural resources.

CHAPTER (3)

METHODOLOGY

This chapter describes the background information of methodology on which the study was based, how the informants were selected, which method were used, how the data were collected, the processes followed in data collection step and how data are analyzed.

3.1 Study Design

This thesis was conducted by **descriptive study design involving case study design.**

3.2 Study Site

The selected area for this thesis is Lonekhinn village tract, Lonekhinn-Hpakant jade mine area, Hpakant Township, Kachin State. It is situated 69 miles from Mogaung, over 120 miles from Mohnyin, and 112 miles from Myitkyina. Kachin State includes 4 Districts: Myitkyina District, Mohnyin District, Putao District and Bamaw District. Mohnyin District is divided into three Townships: Mohnyin, Mogaung and Hpakant.

Mohnyin Township was upgraded to district on 1-11-2004. According to State Peace and Development Council, Hpakant Township was founded on 28-5-1996. It is 1007 feet above sea level. Hpakant Township includes 15 village tracts including Lonekhinn village tract.

In olden days, it was difficult to travel in this region, because most people go from Mogaung to Hpakant on foot and it took at least three days for that journey. Today, Lonekhinn-Hpakant reaches within a day by car and motorcycle. Lonekhinn-Hpakant is the largest jade mine area in Myanmar. So many people work in Lonekhinn-Hpakant jade mine area. Due to economic development, their lifestyle has changed.

Lonekhinn village tract was selected as study area because :

- (1) There is a commemorative inscription which claims to be witness to a historical record of Lonekhinn-Hpakant jade mine area in Hpakant Town;

- (2) There is Jade Mine Office, under Myanma Gems Enterprise, Ministry of Mines, at Lonekhinn village;
- (3) There is active mining of jade around Lonekhinn village;
- (4) Waste earth from jade mines are discarded by the side of Uru creek where “Yemasay” (ရေမဆေး) (means jade recovered from the waste mound of loose earth which has not been washed with water yet) stone searchers as well as would be buyers of that stone are active and
- (5) Lonekhinn village has Station Hospital, Circle Health Centre, Village Dispensary, Affiliated Basic Education High School, Basic Education Primary School, Development Committee Market, Myanmar Army Unit, P.C.O, Administrator’s Office, and Fire Services building, pagodas and monasteries, church, village library, village administration office.

Therefore, Lonekhinn village tract, Hpakant Township was selected for this thesis. In this thesis, the investigator was used Lonekhinn-Hpakant jade mine area because of commemorative inscription.

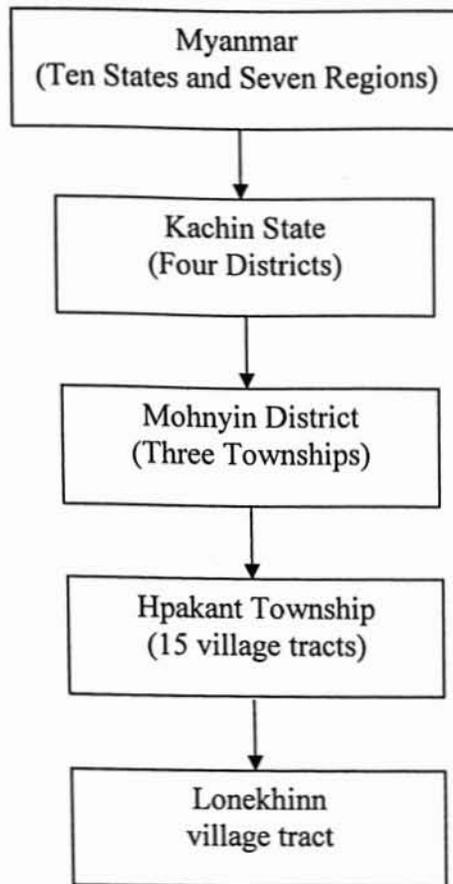


Figure 2. Study village tract

3.3 Study Population

The study population was selected as follows :

To get the objective (1) **Jade Trade affects on economic system in the study area**; in the study area local people and migrant people were interviewed. The purpose of it is the fact that jade trade has been a traditional business for ages in Lonekhinn-Hpakant Area whereas the government has permitted to open jade companies only after 2000. From that time, the changes of economic system can be seen because of the government policy. Therefore, local people and migrant people may know about the changes of economic system. Total (52) persons were interviewed.

To obtain the objective (2) **the influences of the economic system on sociocultural aspects of a community**; resident people in Lonekhinn-Hpakant Area were investigated. They can be assumed to be knowledgeable about the changes of lifestyle than other people who have lived less than 15 years in Lonekhinn-Hpakant Area. Total (37) persons were interviewed.

Besides, to get the objective (3) **how jade trade affects the natural environment in the study area**, any local people who have lived over 15 years in Lonekhinn-Hpakant Area were interviewed because they can talk about the past and present situations of the weather and geographical background. Total (13) persons were interviewed. Therefore, informants are altogether 102.

3.4 Data Collection Method

Library research and documentary research was conducted at first. For the field research data were collected, analyzed and prepared by using qualitative methods. In the field research, data were collected by using Participant observation (PO), Key informant interviews (KII), In-Depth interview (IDI) and Focus Group Discussion (FGD).

For participant observation, two types of family had been chosen- one where in both household head (male) and wife are engaged in family's economy and the other is where only the household head (male) is engaged in family's economy. Participant families were five each from these two types. Living with the local people asked about their daily activities, economic circumstances, and leisure activities. Then, visiting waste earth dumps, "yemasay" (ရေမဆေး) stone searchers about their daily activities and social life were asked.

For key informant interviews, five jade miners (male) aged above 65 and five company owners were chosen. Meanwhile the technical changes in jade mining and its marketing, before 2000 and after 2000, were asked of them. Moreover, five families ; each of the family type wherein both husband and wife conduct their economy and of the type wherein only the household head (male) conducts the economy were chosen. Then those families' economic status, family members' living, health care, and outlook on children's education were inquired. Therefore, key informants are altogether 30.

For in-depth interviews, five males and five females aged above 65 were chosen. Meanwhile their views on jade business, situation of natural surroundings, and economic circumstances before 2000 and after 2000 were inquired. Some facts were asked of three village elders. Then, 10 "yemasay" (ရေမဆေး) stone searchers, working for their own economic circumstances, were queried about their social condition the waste-earth dumps. Therefore, participants in in-depth interviews are 23.

Informal interviews were conducted while shopping at the shops on their economic situation. Moreover, local homes were visited in the afternoon and evening of relaxation time to ask about jade business. Queries were made of company employees including supervisors and heavy truck drivers about the jade production.

For Focus Group Discussion, a total of 42 company employees were queried: through two groups at a company and six groups at three companies. Each one group was included seven informants. In other words, two sessions of meeting for a group each of companies were conducted. Moreover, questions were asked of seven “yemasay” (ရေမဆေး) stone seacher whose living had been provided for by the rich entrepreneur. Therefore, there are altogether 49 informants.

Firstly, basic facts were first gathered before research started. Research period is required a visit per year to the field area because the data can be more completed. But two visits only were made due to the political instability there. But some necessary data were solicited through communication with that area by telephone and fax. During the first field trip, while staying with the locals, their daily activities were observed. And then, company work-sites, waste-earth dumps were visited. To get the data, government offices were queried. But obtaining data from government offices often proved difficult because Lonekhinn-Hpakant jade mine area is economic potential.

On the second field trip, government offices considerable data were obtained. More activities followed; departmental personnel at various levels of District, Township, and Village were met with and queried: jade business was asked the locals while staying at their homes; visited to the ten shops were made to inquiry about their economy. The locals was asked about the jade business because of governments policy changed.

Field Trip was gone in March at Lonekhinn-Hpakant Jade Mine Area. Collecting data obtained from this observation was analyzed. In the field research lived with local people to get knowledge of their perspectives on jade in their life.

3.5 Data Analysis

Recorded tape was listened to several times to gain familiarity with content, tone and feelings while local terms were clarified as wordings and noted down what needs for further investigation.

Before organizing data, the transcripts was read over and significant phrases extracted from each sentence through segments to identify themes. In analyzing data, the association between variables was identified. Each new unit of information was compared with previous unit of information. Repetition units of information were retained. Information was synthesized into emergent theme clusters under the major heading of themes. Data were continually compared across and within potential cluster and moved accordingly. All decision rules for inclusion of significant phrases in theme clusters and the significant phrases themselves were examined. Data summaries were made valid by participants.

A final validating step was achieved by before returning from research area to each participant asking about the findings. The reliability and validity of the findings were studied for underlying similarities in the process of their beliefs, behaviors, actions, and interactions until consistently detect these similarities under standard conditions and multiple levels such as individual, family, and community.

3.6 Study Period

Study period was taken from June 2009 to May 2013. To get the data, and to grasp the native perspectives on “Jade Trade” in their life, in the study area was stayed 15 days for each field research. In jade mine area, jade production starts from October to May every year. So, jade working period was stayed.

Table 1. Time Frame

Year/Month	Thesis activities
2009/ 6-7	Data collection for thesis
8-9	Thesis proposal writing
10	Seminar for Thesis Title
2009 / 11-12	Data Collecting and Writing (Literature & Methodology)
2010/1	Meeting and Discussion (with Supervisor & Co-supervisor)
2	Writing for regular seminar
3	Regular seminar for first Ph.D
4	Writing for credit seminar
5	Credit seminar for first PhD
6	Correction

7	Meeting with Supervisor & Co-supervisor
8,9	Collecting and writing (Literature & Methodology)
10, 11	Data Analysis and Writing
12	Regular seminar for second Ph.D
2011/1	Meeting and Discussion (with Supervisor & Co-supervisor)
2	Question preparation for field trip
3	Conducting field work
4	Data analysis and writing for credit seminar
5	Credit seminar for second PhD
6	Correction
7	Meeting with supervisor & co-supervisor
8,9	Data analysis and writing (Literature & Methods)
10, 11	Data analysis and writing (Finding)
12	Regular seminar for third PhD
2012/1	Correction
2	Meeting and Discussion (with supervisor & co-supervisor)
3-4	Data analysis and writing
5	Credit seminar for third PhD
6	Correction
7-8	Data analysis and writing
9	Meeting and Discussion (with supervisor & co-supervisor)
10	Regular seminar for fourth PhD
11/12	Data analysis and writing
2013/1	Credit seminar for fourth PhD
2	Preparing for defence
3	Field trip for defence
4	Data analysis and Discussion (with supervisor & co-supervisor)
5	Thesis defence

3.7 Ethical Considerations

The basic principles of ethics will be adhered to in the study as far as is concerned. Permission for research work to be carried out in the study area was firstly obtained from Township Administer; then the village committee chairman proceeded

to fulfill research needs. Firstly, they were given an explanation why this research needed to be made. Then question and answer session and dialogue followed. In such an investigation the privacy of informant's name and data concerned with his psychological, social and physical aspects need to be protected. For reliable evidence audiotaping was performed, in addition to photos taken with the subjects' permission. At company worksites, permission for research was obtained of its owner, then his representative, supervisor and workmen were queried during their breaks.

CHAPTER (4)

HISTORICAL BACKGROUND OF JADE

4.1 The Popularity of Myanmar Jade

The term '**Jade**'; literally means **green stone** or **Kyauk-sein** in Myanmar Language. Chinese word for jade is "**yu**". English word "**Jade**" is derived from a Spanish word "**ijada**" which means the stone that cures the kidney disease. Greeks called "**kidney stone**" because they discovered that it cures the diseases of the kidney. The Aztecs and Mayas of Mexico and Central America believed that jade possessed medicinal properties to cure ill kidney. Jade has a vast range of color variations from pure white or black to different shades of blue, green, yellow, red, brown, striped, spotted etc (Nyan Thin 1972, pp-37-85).

According to the geologists, there are two types of jade- namely (1) jadeite (2) nephrite. Jadeite was first discovered in about 7000 years ago, while nephrite was first used in the region of King Honti in China about 5000 years ago as a revered stone (Nyunt Naing 1996, p-9). Jadeite is calcium magnesium amphibole whereas nephrite is sodium aluminum pyroxene. The density of jadeite is 6½ to 7 and its specific gravity is 3.3. The density of nephrite is 6 to 6½ and its specific gravity is 2.9 to 3.1.

Nephrite is found in Chinese Turkestan, Khotan, Siberia, New Zealand and Alaska, and Jadeite is found in Upper Myanmar, Yunnan, Tibet, Mexico and South Africa. But geologists after scientific analysis confirm that only those jade stones from Upper Myanmar are real jadeite and the rest are all nephrite. So the Chinese word "**yu**" are mostly used to mean nephrite (Dr. Khin Maung Nyunt, 1996, p. 248).

The Chinese people treasured and venerated jade. Chinese monarchs revered jade as sacred stone. Jade of different colors was used for making six precious tablets for the worship of Heaven, Earth and Four cardinal directions. A round tablet of dark green jade was for the worship of heaven, an octagonal tablet of green jade for the worship of the East, a tiger tablet of white jade for the worship of the West, a semicircular tablet of black jade for the worship of the South. White jade is used also for the worship of the moon. Jade has long been used in religious rituals and as a symbol of power and wealth for emperors and dignitaries. However, many people in Asia also believe the stone holds the power to assure good health and good fortune for

those who wear it as amulet (The Myanmar Times journal, Vol 11, No.125, Yangon 10.5.2004).

In Myanmar, jade was first discovered in Beikthano (Vishnu City), which flourished between the 1st and 4th century A.D. The city dwellers there wore as necklaces beads of jade, amber, agate and coral, etc (Annual Report for 1959-60 by director of Archaeology Department, Yangon, Central Press, 1965, p-7). In Srikestra and Hanlin, known as the cities of Pyu, jade beads and small jade pieces assembling the shape of elephant was discovered (The Ancient Pyu, 1960, p-14). Therefore, it can be assumed that the Pyus had used jade since the prehistoric period. The importance of jade is recorded in King Bandon's region (1732-1819) of Konebaung period.

Jade was first used in ancient writings during the 17th century of the Christian Era when the Nyaung Yan Dynasty was ruling in Myanmar. The following is a translation and paraphrase of the Myanmar verse or poem composed during the Nyaung Yan period.

“Nine staffs used by the Shan Sawbwas and
 Nobility as emblems of rank and authority,
 Nine Mong or Shan towns ruled by Nine Shan Chieftains
 Nine Swords worn by the Sawbwas as symbols of authority, Rubies, Jade,
 The Nine Precious Gems, Gold Tax, Silver Tax and Pearl, Coral,
 Where precious gems and jewels abound,
 That wonderful Region is where the Blessed Buddha prophesied that the
 Sasana will endure or last for 5000 years” (U Pe Maung Tin and J.S Furnivall
 1960, p-8).

Regarding Myanmar jade, there are many success and luck stories. Such stories are always connected with the Chinese. Because this stone is the favorite gem of the Chinese who use it for different purposes, ornamental, social, religious, medicinal and ceremonial. They believe that jade has supernatural powers, and transcendental values. Jade can fulfill physical and spiritual needs of its owner or wearer. Jade wards off the evil, protects the wearer from all dangers, gives good health, cures diseases, and prolongs life. So jade and the Chinese are inseparable twins (Dr. Khin Maung Nyunt 2008, p-115).

Ancient Chinese belief in life hereafter developed the custom of burying jade objects with the dead. Mortuary jade objects were generally of two kinds-first, representatives of articles of which the dead person was particularly fond of and

everyday items which he or she had used, and second, charms and amulets which would keep the body intact and help its resurrection when the spirit returns to its abode. Those who could not afford jade made paper dummies to be burnt at the grave. So jade is the panacea, the elixir of life, preserving for things material, concentrate of ethical spiritual values, the most revered stone of religious and ritual importance and symbol of luck and social status (Dr.Khin Maung Nyunt 2008, pp-31-33).

Jade was the special gift given in the conduct of China's diplomatic relations and this particular stone played no small role in religious and social affairs of the ancient Chinese. To the Chinese, jade is regarded as a king of the Gems. They believe that jade would be intelligent, just, brave, safe and secure, as well as healthy. Records show that Chinese ministers and chiefs were allowed to wear jade jewellery in accord with their social status and ranks in the older times. Utensils made of jade were unearthed from burial ground of high-ranking Chinese officers in China centuries dating back to the prehistoric times (Nyunt Naing 1996, p-14). The ancient Chinese were the people who first knew about the production of jade in Myanmar. The use of jade by Chinese in five sacred acts which were

- (1) bejewelling the crown
- (2) wearing as a badge or title
- (3) awarding a hero as jewellery
- (4) making a hairpin
- (5) wearing ear drops (Nyunt Naing 1996, p-64).

According to the jade traders, there are three kinds of jade. They are **Imperial Jade, Utility Jade, and Commercial Jade**. Many commercial names of Myanmar and Chinese origin came into use to identify jade varieties on the basis of their color, translucency and texture.

The following names are noteworthy:

- (1) Mya yey or Mya Kyauk (Myanmar word) is a translucent and uniformly glassy green in color Jade. It is the most precious variety. (Today it is called imperial jade.)
- (2) Shwelu (Chinese word) is a light green jadeite with bright green spots and streaks.
- (3) Latt yey (Myanmar word) is a clouded jadeite used for making bracelets, buttons, hatpins, ornaments, drinking cups, etc.

- (4) Hmaw sit sit (Chinese word) is a dark green variety, rather soft and brittle, used in the manufacture of jewellery.
- (5) Konbi (Chinese word) is the red or brownish variety, only found in boulders embedded in red earth.
- (6) Chwan or Lant (Chinese word) is a blue or purple jadeite used for jewellery, beads and rosaries, or artistic objects.
- (7) Kyauk-atha (Myanmar word) is a white translucent jade used for making bracelets, spoons, flower pots, cups, saucers etc.
- (8) Pan Tha (Myanmar word) is brilliant white in colour and translucent used for decorative purpose such as inlaying tables and furniture.
- (9) Kyauk ame (Myanmar word) is the black variety used for making buttons, brooches and figurines, etc (Dr. Khin Maung Nyunt 2008, p-68).

Jade is mostly produced in ten Uru Villages (ten villages of Uru) of Upper Chindwin, and Hpakant and Tawhmaw of Kachin State, which are all known as jade mines. Jade is also found in Mohnyin, Mawhan, Mawlu, Khamti (Sagaing Division) of Indaw Township, Putao, Mawtone or Mogyo Pyit Hill. Geographically, the area of the jade production lies between Latitude 25° 25' N and 25° 35' N and between longitude 96° 0' E and 96° 26' E, covering about 800 square miles in area. The famous Hmaws were as follows:

- (1) Kansi Hmaw
- (2) Ngo Pin Hmaw
- (3) Sapi Hmaw
- (4) Sapwe Hmaw
- (5) Hsan Kha Hmaw
- (6) Hseikmu Hmaw
- (7) Tammakhan Hmaw
- (8) Taw Hmaw
- (9) Hpakant Hmaw
- (10) Phapyin Hmaw
- (11) Ma Mon Hmaw
- (12) Mahsa Hmaw
- (13) Ngopan Hmaw

- (14) Man Tein Hmaw
- (15) Le Hse Hmaw
- (16) Lonekhinn Hmaw
- (17) Haungpa Hmaw
- (18) Uru-se Hmaw

The word “Hmaw” comes from the Shan language, means “Jade Mine” (Badanta 1961, p-54).

4.2 Development of Jade Trade in Myanmar

In early times, the discovery that green jade of fine quality occurred in northern Burma (Myanmar) was made accidentally by a Yunnanese trader in the thirteen century (W.A Hertz 1960, p-117). In old China, appointment orders were engraved on jade discs and insignias of office were made of jade stone. Jade was the special gift given in the conduct of China’s diplomatic relations and this particular stone played no small role in religious and social affairs of the ancient Chinese. Therefore the largest market for jade had been China. In the past China was the major exporter of silk and jade which was her import acting as a counterweight to balance her trade (Dr. Khin Maung Nyunt 2004, p-13).

In 1888 records of the Chinese Consul Mr. Warry, it was said that a Yunnan trader, who on his return from Myanmar, picked a piece of rock and placed it on the bag on his mule so that it would be in balance with the other bag on the other side but later found out that the rock was a large piece of jade. Then people came to the place to search for others, but in vain. In the 14th century, the Yunnan government made efforts to find jade in the area, but was not successful. Only in the late 18th century did Sino-Myanmar jade trading begin.

The switch to jadeite began in the late 18th century when the emperors of the Qing Dyansty extended their dominion into Yunnan province in southern China and over the border into Kachin territory in Northern Burma (Myanmar). But since the mountainous region was remote and inaccessible, many Yunnanese traders died of malaria fever and some were killed by the indigenous tribesmen living on the mountains. In the Chinese temple at Amarapura, it is a long list containing the names of upwards of 6000 Chinese traders deceased in Burma (Myanmar) since the beginning of the 19th century (W.A. Hertz 1960, pp-117-118). This might suggest how strong the Chinese influence had been over the jade area of the Myanmar.

The Chinese workers worked in jade mines; they had to come down into Myanmar every year, through three routes. The first route was to travel to Chansi via Moe-mein to jade mine and cross the Ayeyarwaddy at Yin ma above Talo, and reaches Seit-mu on the bank of the Uru river, and continues to the jade mine (J. George Scott 1900 p-280). The second route was to go down the Ayeyarwaddy from Bhamo to Inwa (Ava), and from Inwa to Monywa, and then, go up the Chindwin up to Uru Se (Ten villages of Uru). However it took a long time over this long route, and made people find out a new route. The third route was to go down the Ayeyarwaddy from Bhamo to Katha, and from Katha via Mawlu proceed Mohnyin and Intawgyi on front to the jade mines (J. George Scott 1900 p-280). These three routes had been in use every year to reach the jade mines. Nowadays, many people go to Mohnyin to Hpakant, Mogaung to Hpakant, and Myitkyina to Hpakant by car and motorcycle.

In 1806, a Myanmar Collectorate was established at the site of what is now the town of Mogaung, and a guard of some thirty Myanmar troops under a Military officer was regularly stationed at the mines during the working season to protect the trade and maintain order. Thus Mogaung had become a centre for jade trading. The period of its (jade trade) greatest prosperity is comprised within the year 1831-1840, during which time at least 800 Chinese and 600 Shans were annually engaged in business or labour at routes to Yunnanfu, at that time the great emporium of the trade. The business there (Yunnanfu) was mainly in the hands of Cantonese merchants, who bought the rough stone in large quantities and carried it back to be cut and polished at Canton (W.A Hertz 1960, pp 119-121). In 1861 the first Cantonese merchants arrived in Mandalay. They bought up all the old stocks of jade and conveyed them to China by sea, realizing a large fortune on this single venture. Only in the 18th century did the Sino-Myanmar jade trading begin.

Myanmar's jade trade which could be traced a long way back to the ancient time of the Pyus, flourished during the Konebaung Dynasty (A.D. 1752-1885) and the reached its peak in King Mindon's time (1861). In that year Rupees 27000 was collected as taxes from the jade trade. In 1866, Rupees 60,000 was brought in to fill the royal treasury from the jade trade after royal permits had been granted to collect taxes during a three year period (W.A Hertz 1960, p-122). Early in the 19th century, the Myanmar Kings seem to have become aware of the importance of the jade trade and of the revenue which it might be made to yield them. As huge sums of money flowed into the royal treasury from the jade trade, King Mindon began to think of turning it into

royal monopoly. Jade thus became a royal article of merchandise. King Mindon passed the Jade Law or Edict which contained twelve articles or sections of Myanmar Era 1231(A.D 1869) (Dr. Kyaw Win 2006, p- 63).

King Mindon's Jade Law is as follows:

Article 1

The public is hereby notified that jade mining and trading at the ten Uru villages and in the valleys of the Ayeyarwaddy River and the Chindwin River is strictly prohibited with the effect from Tawthalin (September) of the year 1231 M.E. (A.D. 1869). Township Officers and village headmen are hereby instructed to notify Commissioners of Jade and Gems at Bamaw and Mogaung, Myosas, Ywasas and other Townships and Village Tracts and Officers in charge of the Royal Jade House to take statistics of all jade stones mined and bought before the said date. They are also directed to prepare lists showing names and addresses of owners of jade stones, weight, size, colour, quality and estimated value of the jade stones and submit the inventories duly signed to His Majesty.

Article 2

Jade miners who take neither wages nor cost of living but who at their own expenses bring up jade stones out of the Uru stream bed must hand over half of their finds to Majesty's Commissioners of Jade and Gems. The remaining half must be sold to His Majesty's Commissioners of Jade and Gems at the prevailing rate fixed by the local valuers. The Commissioners must submit a list of jade stones thus purchased to His Majesty's Officers in due course.

Article 3

In addition to jade workers, miners want to work at the Royal Jade Mines are entitled to receive wages according to local custom and required to hand over all their workings to the Commissioners of Jade and Gems. Those who do not take wages but only cost of living must hand over half of their finds to the Commissioners of Jade and Gems.

As in the case of the jade workers who bring up jade stones at their own expense, miners who neither take wages nor cost of living must hand over half of their finds to the Commissioners of Jade and Gems and sell the remaining half as aforesaid in the preceding Articles. Anyone who wants to work on any of these terms may report to the Commissioners of Jade and Gems and sign up for work. He must hand over the products of his labour to the Commissioners of Jade and Gems and shall enjoy his

rights. No jade stone must be sold to an outsider. Commissioners of Jade and Gems alone have the right to buy up all Jade stones.

Article 4

Owners of jade stones which have been registered with the Royal office at Bamaw and Mogaung may sell their jade stones to the Commissioners of Jade and Gems at the prevailing rate of the locality. If they want to sell them direct to Royal Jade House at the Capital City a sale tax shall be charged. The Commissioners of Jade and Gems must prepare lists showing owners' names and addresses, number and description of their jade stones and estimated value and dispatch them to His Majesty's Officers. Prices shall be fixed according to the prevailing rate. Jade stones may be taken to and sold in any part of the country provided that a permit is obtained from the Hluttaw and sale tax paid thereon.

Article 5

In addition to Bamaw and Mogaung, jade stones registered in order to townships and village tracts may be sold on condition that Myosas and Ywasas concerned apply for and obtain sale permits from the Royal Jade House. If jade stones are to be sold elsewhere, the provision of Article 4 must be observed. Owners may sell their jade stones stored in the Royal Jade House, provided they obtain sale permits from the Hluttaw, at the Royal Jade House.

Article 6

Owners of jade stones which have been purchased with Hluttaw's permission may cut their jade stones only after they have registered them with the Royal Jade House.

Article 7

Those who mine or deal in jade stones without Hluttaw's mining or trading licence after the month of Tawthalin, 1231 M.E. and those who fail to surrender jade stones mined or purchased before that date shall be jailed three months, and their jade stones confiscated and should they be men of rank, their titles and decorations be forfeited and they be summarily dismissed from office.

Article 8

Jade workers of the Uru stream and miners of other areas are hereby notified that if they are found hoarding jade stones, they shall be punished as prescribed in Article 7.

Article 9

If owners of jade stones which have been registered at Bamaw and Mogaung are found surreptitiously buying or selling their jade stones without obtaining Hluttaw permits and without paying sale tax, both buyers and sellers shall be brought to the Law Court, jade stones and money confiscated and both parties be jailed for three months. If only one party is caught he shall suffer punishment for both. If he is a man of rank he shall be summarily dismissed from office.

Article 10

In addition to Bamaw and Mogaung, jade stones which have been registered at other townships and village tracts shall not be moved out of the locality without the consent of the local authorities and the Hluttaw. Those who surreptitiously buy or sell these jade stones and those at the Royal Jade House without Hluttaw's permission shall be punished either one or both parties, as prescribed in Article 9.

Article 11

Informants who report illegal jade mining and trading and those who capture law-brokers and bring them to the authorities shall be rewarded with some money amounting to 20 percent of the fines levied on the law-breakers. But authorities who ignore such illegal transactions and law-breakers shall be jailed for three months. Bribe-taking shall be fined double the amount of the bribe and bribe-taker be jailed for three months.

Article 12

If a law-breaker applies for a reprieve he shall pay a fine of one thousand kyats.

Done at the North Royal Park, on the first day of the waxing moon of First Wazo, in the Year of 1231 Myanmar Era.

The Edict is signed by Nawarahta Sithu, keeper of the Royal Seal, and printed by Saya Apada, Royal printer. After the enactment of this law, jade revenue increased every year. The following table shows the average amount of duty annually collected on jade stones. It covers the period from the reign of King Bagyidaw to the end of King Thibaw's reign in 1885. This table indicates the prosperity of Myanmar jade trade of that period (Dr. Khin Maung Nyunt 2008, pp-62-63).

Table 2. Table showing the Average amount of duty annually collected on jade stones.

Period	Average amount of duty Annually collected on Jade stones	Remarks
1831-35	Rs. 6,000	
1836-after	Rs. 21,000	
1840-after	Rs. 3,000	
1864-after	Rs.27, 000	
1866-68	Rs.20, 000	Tax farming
1870-72	Rs.12, 000	
1874	Rs.60, 000	
1876-78	Rs.20, 000	Tax farming
1880	Rs.50, 000	Lease of the royal Monopoly
1884	Rs.10, 000	/
1885	Rs.15, 000	/
1886	Rs.20, 000	/

Source : Dr. Khin Maung Nyunt, 1996, p. 267

On 29 November 1885, the Upper Myanmar Kingdom was annexed by the British. Burma (Myanmar) was declared to belong permanently to the British Empire ruled over by Empress Victoria from 1 January 1886. Myanmar was ruled as part of India by the British and military rule was declared until 1897 (D.P.S.L Ghals 1980, p85-86).The following table shows jade being exported from 1897 to 1908.

Table 3. Table showing jade export to Yunnan from 1897-1908

Year	Weight. Cwts	Value £
1897	4036	41780
1898	4532	42120
1899	3130	58955
1900	4531	46377
1901	3015	31713
1902	4220	47676
1903	2638	55435
1904	3778	50726
1905	2685	45474
1906	2566	64433
1907	2636	49643
1908	3211	73400

Source : Dr. Khin Maung Nyunt, 1996, p. 277

Every year under the British Colonial Government, the British Commissioners of Sagaing auctioned off the jade mines and collected the revenue from the jade trade. In the Colonial Period, only the Kachin Duwas (Tribe leaders) had been collecting taxes in jade mines. Then, the administration was handed over to the British government according to the Rules and Regulations, issued in 1940, and as the Second World War broke out, all the jade mine businesses had come to a stop, starting from April, 1942. After the Second World War, the borderland administration department made efforts to re-open the jade mines. Most of the jade that had been bought by Chinese merchants carried the precious stone to Yangon and from there sent it by ship to Hong Kong or some other Chinese ports (Arnold Wright & Others 1910, p-235).

On 4 January 1948, Myanmar became an independent country. The Myanmar government made preparations for the Province and Mainland developments. The Vice Consultant Minister Sama Duwa Sin Wa Naung of Kachin State Borderland Administration Department submitted new rules and regulations to the Secretariat, Yangon, on 8 October 1947, with the objective of developing the Kachin State, to re-open the jade mines in 1947. Sama Duwa Sin Wa Naung made

efforts to re-open jade mines so as to solve the unemployment problems of the local people of Myitkyina and Bhamo and to raise the standard (Jade Manual 1950, p-15). On 1 April 1948, at the board meeting of the union of Myanmar government Ministry, the new bill was tabled for discussion. It was decided that should the Minister of Kachin State, Minister for Forest and Agriculture and Minister for Finance Affairs and Tax Department reconsider the bill and given their approval, it would not be necessary to table the agreement once again to the Myanmar State Ministry. Then, that law was discussed for the final decision on 24 April 1948, and the Union of Myanmar Government issued the 1948 jade mine law on 4 May 1948 (Jade manual 1950, p-16). The following are as follows:

- (1) Tax rate percentage: to collect tax of $33 \frac{1}{3}$ percent over the value of jade excavated.
- (2) Sagaing High Commissioner was to put on auction for one-year function.
- (3) A group of six assessors were appointed to make tax rates for the government.
- (4) $33 \frac{1}{2}$ percent of the value of jade was collected by the assessor's group, under the influence of capitalists, the permit of taxation being put on auction.
- (5) No capitalist jade merchants and traders must be included in the assessors' group.
- (6) Persons from the parties of the state government were usually appointed as members of the assessors' group.

The jade mining industry requires a lot of capital, so the national traders who do not have much capital pool their money, but it is not easy to compete with the Chinese jade merchants.

Although Myanmar jade had been recognized as the best of its kind in the World, only the Chinese had cherished jade in East Asia, and so the principal market had been in Shanghai, China, before World War II.

After World War II, Hong Kong had become the principal jade market. However the real customers purchased jade through such countries as China, England, France, West Germany and USA. So Myanmar, the original source of jade, and the customers of other countries had been exploited by the jade merchants of Hong Kong. Moreover, the jade was purchased for a bargain, and there were also malpractices in

foreign exchanges, thus causing losses to the country. So Myanmar entered and participated in Foreign Trade Fairs for selling Myanmar gems in the Myanmar market, and direct contacts were made through trading missions to other countries. Thus, offers were received to come and visit Myanmar on trading business (Myanmar Gems Exhibition Report 1964 pp-4-5). On March 1962, the Burma Army staged a coup d'etat, and after forming the Revolutionary Council, laid down the state economic policies, thus setting up the Socialist Economy System. On 11 April 1964, the export of Myanmar gems was privatized, and measures were taken to lay down the guidelines for systematic trading of gems. The jade trading business was undertaken by Myanmar Mining and Mineral Extension Corporation since 1964. The following table shows that the sales of jade in the gems exhibitions from 1964 to 1973.

Table 4. Annual Jade Sales of Myanmar Gems Exhibition

Exhibitions	Polished Commercial Jade Weight (Carat)	Crude Jade Rocks Weight (Kilo)	Total Sale Value (Kyats)
1 st (1964)	-	645.00	188309
2 nd (1965)	-	7449.00	2224204
3 rd (1966)	306.00	6684.00	1077615
4 th (1968)	511.00	1598.86	1746914
5 th (1969)	2570.70	23856.00	4535214
6 th (1970)	879.18	29850.00	3014665
7 th (1970)	1385.09	39759.00	9350948
8 th (1972)	2924.28	35649.00	9834548
9 th (1973)	2028.76	49694.00	20731227
Special (1973)	-	41694.00	25353495
Total	10605.00	248503.86	78057139

Source : Myanmar Gems Exhibition Collection, Jade Paper 20

Thus, with the efforts of the Myanmar government, through jade production and trading are towards the progress of the economic sector of the state.

After 1988, Myanmar Government licensed individual private jade miners for jade excavation and trading. During these years, jade excavation's technology developed. So, there are over 500 jade companies in Myanmar 2008. Moreover,

Myanmar gems organization began on 1 August 2007. There were 2517 members in this organization in 2009. Gems exhibition had been held 80 times from 1964 to 2010. Today, the world's jade market has found way into Myanmar.



Figure 3. Welcome Sign to Hpakant Town



Figure 4. Motto of Ministry of Mining



Figure 5. Jade Mining Centre, Lonekhinn



Figure 6. Village Tract Peace and Development Council

4.3 Background of the Research Area

Hpakant Township is one of the 18 townships constituting Kachin State in northern Myanmar. Formerly it was a village tract in Kamaing Township. Having since been economically developed with a much greater population, Hpakant was declared a town by Notification Order issued by Ministry of Home Affairs, Government of the Union of Myanmar dated Ref : 1/7/MaHta (2), 16-3-1995. Hpakant has acquired township features in a short while, accompanied by rule of law and order, so that it has been turned into Hpakant Township, replain of Kamaing Township, thanks to Ministry of Home Affairs-issued Notice dated Ref: 3/200/MaHta (2), 12-7-1996. Township-level departmental officers have also relocated there. Hpakant Township with its abundant jade resource is a major economic centre.

Hpakant Township in Mohnyin District, Kachin State lies between North Latitudes 25° 18' and 25° 52' and East Longitudes 96° 7' and 96° 1'. It is surrounded in the east by Myitkyina, in the west by Homalin Township, Sagaing Region; in the south by Mogaung Township, Mohnyin District; and in the north by Tanai Township. At an elevation of 1,008 feet above sea level, Hpakant Township has an area of 2339 square miles (1496877 acres). In summer the whole area has a maximum temperature of 105°F and in the cold season maximum 55°F-65°F. Average annual rainfall is 90.85 inches. Hpakant Township has considerable plains, highlands and some mountain ranges reaching up to a height of 3000 ft above sea level. The Uru creek flows cutting through the centre of the town .

It's first name was Aungmingalar. Aungmingalar village was established above the mouth of Myaukphyu creek by U Pulwaihein plus six in 1194 ME (AD 1832). Thereabouts stand a big rock hill in the form of a giant slab. Aungmingalar village was founded according to the saying “ကိုးကေနဝစတု၊ လူတွေစု၊ တည်ပြုရပ်ရွာ၊ အောင်မင်္ဂလာဖားကန်၊ ပထမရွာ” (It's direct meaning is the first village of Hpakant was founded in 1194) and was called First Hpakant (Village). A few years later, the rocky hill broke down leading to the use of 'Hpakant' (Hpa in Shan = slab of rock; kant in Shan = breakdown) instead of Aungmingalar village. Astrologically the number '7' is assigned to 'Hpakant', according to Numerology. The numeral 7 is deemed lucky almost universally.

After the rocky hill's breakdown, Second Hpakant was re-founded. Maybe it

was meant to better the landslide condition and village location. According to the saying: “ဥဒြနဝ၊ အဋ္ဌာပြ၊ တောင်ကိုလာကြည့်ကြ၊ ဖားကန့်နာရည်” (It’s direct meaning is the second village of Hpakant was founded in 1198). Those coming to view the disintegrated hill called it Hpakant. The village was established in 1198 ME (AD 1836). Today Jade Mine Area is filled with many prosperous villages.

After the second establishment of Hpakant, it’s villagers tried to again find another site of easier communication and better economic opportunity. The best route is by boat along Uru Creek to Kanse, Haungpa, Hasezin, and thence to Homalin.

Again the village site shifted to level ground by the side of the creek according to the saying : “ဦးကောင်းဦးနှောက်၊ ချောင်းဘေးဖားကန့်ရောက်၊ တတိယ အကြိမ်မြောက်” (It’s direct meaning is the third village of Hpakant was founded in 1210). The village was established in 1210 ME (AD 1848). Two years after founding of Third Hpakant village the creek was in spate, leading to a search for new site for the fourth time. The Fourth Hpakant (present day Hpakant) was found to be most suitable, what with the scenic hill by the side of Uru creek. The Fourth Hpakant was founded in 1212 ME (AD 1850). Therefore the Fourth Hpakant was established at the present day Hpakant (Tourism Guide to Kachin Land, 2000, pp. 43-46).

The location of Hpakant Township has few plains but a lot of hills and mountain slopes. This hilly township situated in Subtropical Zone has a cool climate. The major creeks and streams in Hpakant Township are Uru Creek, Nantkaung Creek and Indaw Creek. Width headwaters in Lamarbwam, Kanse, Uru Creek passes by Lonekhinn, Hpakant town, Haungpa and Hasezin villages and flows into Chindwin River inside Homalin Township, Sagaing Region.

Including Kamaing, the area of Hpakant is 2339 square miles (1496877 acres). It constitutes a total of 6 wards, 15 village tracts, and 54 villages. Lonekhinn village tract is a part of Hpakant Township. It is to the east of the Uru creek, 5 miles from Hpakant. It would take about thirty minutes from Hpakant to Lonekhinn by car or on motor bike.

The first Lonekhinn village in Hpakant Township was founded in 1884. In 1900 it was shifted to present site. The first settlers were the Kachin who dammed up the Uru creek for fishing. ‘Lonekhinn’ comes from ‘Lonekhant’ in Shan (lone- descent

and khant = dam). Over time Lonekhant has become Lonekinn of today. The Lonekin village tract six miles distant from Hpakant has an area of 633 square miles or 405271 acres. It borders on Warzut village tract in the east, Sagaing Region in the west, subownship of Kamaing and Nammamyit village tract in the south, and Tanai Township in the north. It comprises a total of 5 Wards: Ward 1, Ward 2, Ward 3, Ward 4, Ward 5 and Nyein Chan Tharyar ward.

Lonekhinn village is the best place for jade stones to be collected and stored. The state-owned Jade Enterprise (Corporation 19) stood at the junction of Uru creek and Kamaing-Hpakant motor road. In the past that village had a small airfield fit for Otter-plane use golf-course nearby provides for jade merchants relaxation.

4.3.1 Uru Creek and Local Culture

Uru creek flowing across jade mine area is commercially important. Creeks and streams are like arteries of lifeblood to the area. Beginning in Kanse, the Uru Creek flows pass through Lonekhinn, Hpakant, Seikmu, Tamakhan and Haungpa into Chindwin River near Homalin.

The Shan majority towns and village by the sides of Uru Creek are famous for marketing of jade. Within hours many prospectors have turned millionaires, billionaires, or even trillionaires. Uru creek follows a meandering but unstable course: it goes from a bend to straight course to a bland again. Jade mine area cannot be complete without Uru Creek, with interconnections between both. Mining for jade around Uru Creek, some hit upon a great fortune, and some go bankrupt. A great variety of foods and relaxation mode are available for money, with stores and service centres named Macao, Taiwan, Swasikhant, Ambapali, etc. Players in jade Mine Area have come abreast with the times.

The region around Uru creek was and is, prosperous with villages what with good communications, agriculture, and convenient flow of goods. Mostly Shan villages by the sides of Uru creek have seen different cultures passing on one after another. Currently the area is almost noisy with economic activities characterized by the traffic of motorcycles, cars, karaoke parlours, etc.

The word 'Hmaw' is in currency in Jade Mine Area. It is Shan word means 'where the mineral can be mined'. 'Hmaw' is also used to call a working block. An expanse with many such blocks is called Hmaw Area. According to Maniratana jade treatise authored by Ven. Neyyabhivamsa, abbot of Thirimingalarzeyyon brick

monastery, Hpakant, there exist mine Hmaw Areas, with 350 Hmaws, namely: Kanse, Lonekhinn, Hpakant, Ma mon, Hwekha, Haungpa, Le Hse, Uru-se village and Neingyapatoknam (Tourism Guide to Kachin Land, 2000, pp. 47-49).

4.3.2 Demography and Transportation

Table 5. Population in Hpakant Township (2009 census)

Township	Building	Household	Under 18	18 and above	Male	Female	Total
Hpakant Township	10713	10873	23346	36126	29579	29893	59472
Hpakant Town	2068	2076	5377	8101	6496	6982	13478
Lonekhinn village tract	647	641	3588	5463	4834	4217	9051

Source : General administration of Hpakant Township

Table 6. Racial and Ethnic Groups Residing in Hpakant Township (2009)

No.	Nationality	Hpakant Township	Hpakant Town	Lonekhinn village tract
1.	Kachin	36100	7313	6795
2.	Kayin	73	16	21
3.	Chin	338	151	51
4.	Bamar	4078	1422	621
5.	Rakhine	58	21	9
6.	Shan	16784	3803	1254
7.	Others	2041	750	300
	Total	59472	13478	9051

Source : General administration of Hpakant Township

Table 7. Population by Religion in Hpakant Township (2009)

No.	Religion	Hpakant Township	Hpakant Town	Lonekhinn village tract
1.	Buddhism	26918	6160	3969
2.	Christianity	28247	5813	4100
3.	Muslim	168	81	15
4.	Hindu	89	6	-
5.	Others	4060	1418	967
	Total	59472	13478	9051

Source : General administration of Hpakant Township

Population has not been properly recorded because there is a great difference between the number on paper and the current residents.

1. The recorded native residents
2. Unrecorded Kachin State natives who have settled down for business purposes
3. Business people from all parts of Myanmar
4. Jade dealers
5. Company staff
6. Panners of gemstone
7. Those who move on hearing about good prospects in panning places on another site.

The majority of the residents in the area are Shans, and Kachins. Other than that, there are also Rakhines, Bamars, and other people of various faiths and religions. Commencing from 1988, 93 concrete bridges, 9 wooden bridges, 3 pipelines, 7 bridges of wood and boulders, 80 wooden bridges, 2 pipelines, were built, making up a total of 96 constructions. It was observed that roads have been mended and bridges have been built.

During the period from 2000-2001 to 2008-2009, a tar road of 24 miles 0.45 furlongs, a concrete road of 2 miles 3.58 furlongs, a granite road of 1 mile 1.37 furlongs, and an earth road of 4 miles 0.5 furlongs, making up a total of 31 miles 5.9 furlongs were built. There has been no precedent for this.

Tributaries such as Hmaw Won creek, Hmaw Maun creek, Sabyi creek, Ma mon creek, Hpakant Gyi creek, Nant Sapane creek, Nant Pin creek and Hweykha creek flow into the Uru creek, a rivulet of the Chindwin River.

	Passage to Hpakant would cost : (2010-2011)	(2000-2001)
From Mohyyin to Hpakant	30,000 Kyats	10000 Kyats
From Hopin to Hpakant	25,000 Kyats	8000 Kyats
From Mogaung to Hpakant	20,000 Kyats	7000 Kyats
From Myitkyina to Hpakant	20,000 Kyats	7000 Kyats

For freight and goods, it would cost approximately 5,000 kyats to 10,000 kyats, depending on the amount of goods. Where there had been only hiking routes to Hpakant taking a person three days of walking, there are now roads and bridges so that one could get to Lonekhinn-Hpakant in just one day. Vehicles such as motorbike, Hilux, van, and a 4-Wheel Drive are commonly used. The Hilux vehicles are mostly used for carriage of goods.

4.3.3 Folklore and Omen

There are a lot of folk tales and metaphors regarding jade. Folks of the ancient times held to a belief that jade has existed even before the beginning of the earth. When evolution first started, human beings had to survive among other creatures. They had to be living in fear of the wild beasts. So a kind and sympathetic god created a jade weapon out of a rainbow and threw it down for the human beings to be able to protect themselves from the beasts. This is what they believed to be the origin of jade.

There are strong archaeological evidences to prove that Stone Age civilization had existed in Myanmar. At the archaeological site of Hanlin near Shwebo, Upper Myanmar, was discovered a jade artifact of oval shape with a hole in the center. In the language and folktales of the Kachins and Yunnanese, the word 'jade' appears quite often. One tale pertaining to the origin of jade stone is as follows:

"A female dragon and the Sun god fell in love, and the dragon laid three eggs. Out of one egg was born a human male who became the first king of China. Out of the second egg was hatched another human male who later became King Pyu Saw Hti (A.D. 167-242) of Bagan. The third egg was carried away by the currents of the Maikha and Malikha rivers and it smashed against stone boulders which were turned

into jade stones."

This fable somehow indicates some kind of association between the Chinese, the Myanmars and jade (Dr Khin Maung Nyunt, 1996, p.251).

Millions of Chinese still worship the Jade Emperor known as Yu Huang as almighty god. According to the ancient folklore, Yu Huang resides in a jade palace built on a jade hill with a 3,000-mile base, and 3,000-mile elevation. At the foot of the hill is a jade pond with a jade tree on its bank. The fruit of that tree is believed to be immortal. There is also a jade princess, who rules the maroon and sky-blue clouds. This princess is believed to watch over women in childbirth and is held in reverence until today. Thus it is believed in China that jade is a precious gem from heaven.

There is an unusual assumption that should maidens want jade they have to go and look for it naked in streams at midnight. It implies that ladies have the female quality called 'Yin' which attracts jade, which has the male quality called 'Yan'.

There are also many folk tales which give moral support to people looking for jade. Once there was a hunter called Ninja from Sanka village got to a place which is now a mining site "Hmaw". He used three stones to make a tripod stand to make a fire for cooking. While he was cooking rice, one of the stones broke and he found precious jade inside. Another story is that in 1907, an officer, together with a Kachin hunter went after a wounded elephant. When they got the elephant, they picked up a stone to scrape the tusk to get rid of the stuff sticking to it. When they struck the tusk with the stone, it broke and they found that the stone was a very good quality jade.

The natives also believe in omens regarding jade. A 37 year-old female jade trader recounted,

"I bought a piece of jade for three hundred thousand kyats (3 lakhs). The moment the stone was brought to my house to be shown, a huge butterfly came and rested on my altar. I knew then that I would get money. After a day or two, I sold the stone back for 140 lakhs. When that sale was concluded, the butterfly flew away."

A sixty-year old man a farmer said,

"I grow cauliflowers in my farm. One night my son had a strange dream. In his dream, he saw a huge snake about 9'6" round and 13' 6" long writhing in the field. This dream is an omen and my son who was working on a jade site got a piece of

jade which is worth over a hundred lakhs".

A thirty eight-year old woman gave an account.

"I have been in the jade business since my parents' time. I had a dream one night (2010) this year. I dreamed that my brother who is a trader at a jade site chopped off the head of a dragon. About a week after that, a jade stone, he had was evaluated at over a hundred million kyats."

From all these accounts, could gather that luck most important to people in the jade business. Furthermore, jade has promoted the standard of living of these people. In Myanmar, there are sayings that "Carriage of a spear is visible whereas carriage of luck is not." and "People may be the same but their luck may differ." It can be inferred that jade trading very much involves loyalty and trustworthiness as well.

CHAPTER (5)

ECONOMIC SYSTEM

Economic system is a part of sociocultural system that deals with production, distribution, consumption of goods and services within a particular society. In Myanmar, jade mining business was first begun by the Chinese. Before the 18th century, they spent their time in searching for the original sources of jade. When they knew that hoards of jade can be mined in Myanmar, the Chinese came into Myanmar from the Yunnan Province. Only in the 18th century they began mining jade around the Uru river shores. Then the local Shans, Bamars and Kachins too joined them.

When the Chinese started jade mining in Myanmar, they only used the ancient ways of mining. When the jade is found, if the block is too big, they heat the stone with firewood and break it with hammers.

The business or job of jade mining is a very risky one. The jade mines in Hpakant are found in very far away in deep forests where traveling is very difficult and dangerous. It can only be reached on foot. All the equipments and baggages have to be carried by on foot, boat, cart, mules and human beings on the shoulders and on the head. Sellers would come on foot, walking through the deep forests, climbing up the hills, carrying foodstuff such as eggs, fruits, liquor, and cheroots on their shoulders, backs and heads. Chicken and ducks are put in baskets and carried across the shoulder with a pole/yoke. Cows, pigs, and goats are driven in herds right to the mine. Because of these sellers their food problem was solved to a certain extent. But there were also cases when such a seller, after walking so many miles, would lose all he had carried because the road was so rough, he broke all the eggs and bottles, which wiped out his capital.

The journey is rough and the region where malaria can easily be infected. In addition there are robbers, wild animals and poisonous animals, so that one could easily be fatally harmed all these dangers. In the 18th century, jade mining was very old fashioned and the miners had to risk their life. The method itself is dangerous for the miners. They have to go down a deep pit tied with a rope and dig with an iron rod. Sometimes the pit has no dykes, so the walls of the pit may fall and kill the miner. In addition, they have to dig under water. They pump air with three pumps and with a pipe in the mouth, the miner dives under the water and digs.

The jade miners of olden days have used these ancient methods for many years. The jade mining in Kachin State is heavy rainy region. The miners can dig only in the summer, but from November to February, they are busy emptying the water from the jade mines.

In the olden days, the jade miners' life is hard and poverty stricken. It is the kind of job where they can meet harm anytime. Their life is full of dangers: bad weather conditions, malaria disease, and digging in the cliffs of the mountains in deep pits. The food they eat is poor, living in terrible conditions far away from their family; they try to forget their woes in drinking and smoking opium. Those who made it also cannot handle the wealth. However hard the life of a jade miner may be, they feel that once they get a valuable jade stone, their life will be entirely changed. This great hope keeps them risking their lives for it.

5.1 Production

Production refers to the processes of acquiring resources and transforming them into useful objects and actions. The jade-mining area is known as "Hmaw". There are two kinds of "Hmaw", namely: (1) Taw-Hmaw, and (2) Hmaw- Gyi. Depending on the type of "Hmaw" the jade stone mining is different and the mining techniques also are different. In searching for jade in Taw-Hmaw, they use dynamite or stone drilling machine. They carve or break off the raw jade stone with dynamite. The techniques for mining jade in Hmaw-Gyi are:

- (1) Jade mining by digging the earth, such kind of jade-mine is called "Kyin".
- (2) Build a dyke across a stream with a bamboo wall and earth. Scoop out all the water with a pumping machine. Such kind of jade mine is known as "Set Kyin".
- (3) Using the force of water to wear off known as "Myaw tite" technique of mining jade is called "Myaw".

In the jade mining business, according to the geological nature of the jade found, there are two ways of mining it: - (1) mining along the vein of the jade; (2) mining the jade-stones from the Zayitphyone (ဇရစ်ဖြူနီ) stones.

Mining along the vein of the jade; in ancient day when they found an "outcrop" of jade, they broke off it and dig down underneath. It was easy to dig the top part. As the jade miners dig deeper, there is a danger of flood if the water cannot be pumped out. The second risk is of loose earth wall falling down. In olden days the water is

pulled up by letting down buckets and using long bamboo poles and pumping it out. After 1930 they use Diamond drilling machines and Dynamite.

In mining jade from Zayitphyone (ဇရစ်ဖြူနီ) stone; whether it is on land or in rivers and streams the following steps have to be done.

- (1) Removing the covering layer of earth
- (2) Choosing the jade blocks when they reach the jade-vein of rock
- (3) Pump off the underground water

There are five layers in jade mine. The first layer is the silt layer left by the mountain streams during the rainy season. The second layer is called “Cut Kyaw” (gravel bed layer), which is tightly filled layer of small stones and pebbles. Underneath this layer is the third layer called “Kyauk Kyaw” (jadeite layer). It is in this layer that you first begin to see small jade stones. The next layer is the fourth layer of sand stone (sand layer) that you find big blocks of natural jade. In the lowest fifth layer called “Pha”, there is no jade to be found, so the digging stops at the fourth layer only. Nowadays using machine drills, they pierce the “Pha Kyauk” (bed rock) rock bottom and by which they get the jade.

Most of the old people of over 70 said that:

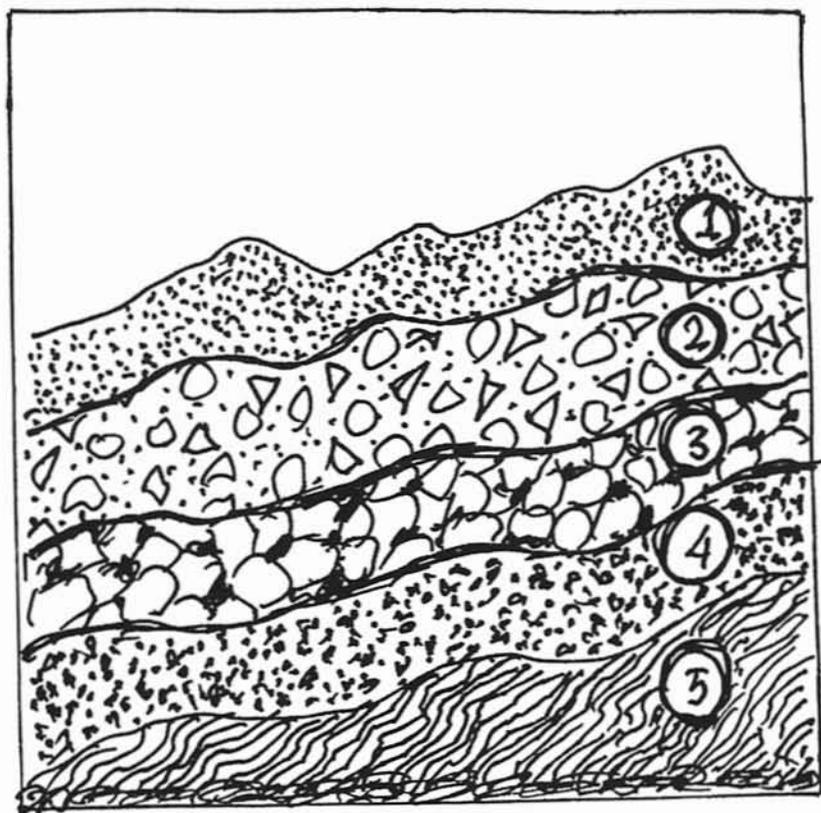
*“There are three techniques of mining jade. They are earth pit, water pit (or) machine dug pit, and sluicing. **The earth pit;** as soon as the cold season harvest of paddy is done, we start digging the pits for jade mining. We need at least 3 to 5 men. We start first with the earth pit. It is like digging a pit for the toilet. We use the spade and mattock to dig the ground. Two people dig the earth and one put the loose earth into a cane basket to the top. Two more persons on the surface carry away this loose earth. The pit sides have no wooden dykes. So there is the danger of the pit walls breaking down on the pit diggers and burying them. We stop digging to the “Pha Kyauk” bottom layer”.*

*“**The water pits** are in Uru stream and Maw-won stream, Hpakant Gyi stream, Whey-kha stream, and their rivulets. They start digging when the water level is low in the streams in Tazaungmon (November) and Nattaw (December) months.*

Down sandbags into the stream. Then we have to build a dyke with bamboo walls tied to bamboo poles filled with stone posts. The sandbags are piled there and reinforced with the earth, so that water will not flow into the mine area. The water in the mine has to be scooped out with bucket. And then dig the earth and search the jade stone. The machine drilled pits need more people because they are deeper, and the water seeps in. So we cannot dig and look for the jade stone and we have to close the pit and leave. Now we have pump to empty the water, so things are very much successful now”.

“Sluicing is done only in the rainy season when there is a lot of water. We have dug the earth from the site with iron spades and mattocks. We have to build a water tank at the head of the sluice. When the water is full, we open the water gate and the force of the water washed away the dug up earth and stones. Then we look for the jade stone. This method is a less costly way of searching jade”.

Nowadays, excavated earth placed on shelves is hosed down with water to find jade. When the above 70-years-old elderly people were questioned about jade mining, they seem to have the same ideas. The above facts show that jade mining in the past was a very difficult and tire some job. Nowadays the companies came with their modern machinery. They use dynamite to break the “Pha Kyauk” strata and find more varieties of jade stones. The old methods of mining are disappearing. The modern techniques are quick but they are more damaging to the environment. Because of jade companies are digging with modern machines.



- | | | | |
|---|--------------|---|-----------------------------|
| 1 | First Layer | = | Silt Layer |
| 2 | Second Layer | = | Cut Kyaw (gravel bed layer) |
| 3 | Third Layer | = | Kyauk Kyaw (jadeite layer) |
| 4 | Fourth Layer | = | Sand Layer |
| 5 | Fifth Layer | = | Pha Kyauk (bed rock) |

Figure 7. Jade Mine Layers



Figure 8. Jade mining with the use of machinery



Figure 9. The earth pit



Figure 10. Convoy of earth removal trucks



Figure 11. The water pit



Figure 12. Machine drilling



Figure 13. Water being pumped out of the drilled hole



Figure 14. Sluicing



Figure 15. Sluicing



Figure 16. Waste loose-earth being dumped



Figure 17. Yemasay-stone seachers

5.1.1 Types of Workers

There are two types of workers; (1) the workers who are paid once a month, (2) The workers who search for Yemasay (ရေမဆေး) jade stones. Yemasay means jade recovered from the waste mound of loose earth which has not been washed with water yet.

As soon as the cold season, especially young people from all regions head for Hpakant jade mine area. Most of them are young from (16-30) years old and only a few (5-10) only of (40-50) years. When they reach there, they work as drivers for the company cars and working machines like the backhoe, or go to the mines to search for jade stone. In the past, the workers and self-owned rich miners equally shared what they got the valuable jade stone from the mine. But nowadays since the coming of the companies, they work for companies with monthly paid salaries.

The workers are migrants from all other regions like Ye-U, Khin U, Tazae, Kyun Hla, Kanee, Khaung-ton, Thaton, Thaphan, Nyaung Yinkon, Kawlin, Rakhine etc. They work as backhoe car drivers, bulldozer car drivers, machinists, supervisors, search for jade stone, and agents. Their pay depends on their experiences and service.

Most of the company workers said that, they are paddy farmers in their village, they grow paddy and vegetables. They make just enough for our stomach and nothing extra. They heard of easy earnings in the jade mine area. So, they come to jade mine area. When we first arrived they worked as “yemasay” (ရေမဆေး) searchers. But now they are company employees, with salary plus food, shelter and save all our pay. In addition there are bonuses according to the profits the company makes.

A (32) years old worker said :

"I have been here for (10) years. When I first arrived, there were only a few companies and the self-owned rich entrepreneur called "lawpans" who runs a manageable scale of private mining. He hires men to work in his mines on a sharing agreement. The lawpan takes half the sales and the other half is shared by the workers. The lawpan gives money for the workers every week on Sundays to buy the foodstuffs like lentils, dried fish, potatoes, and sardines. The lawpan also provides them with sacks of rice, clothing and shelter. Later the companies came to work on the sites by paying taxes to the government. After that I

became a company worker. I get the monthly salary now. Whether the company gets the jade stones or not is no more our concern".

The company workers work in two shifts, day shift and night shift. They are changed every (15) days. The routine for the day shift workers begin at 6:00 A.M after eating early breakfast and have a break at 11:00 A.M. After a break they went to the company to have lunch. They return to the work site at 1:00 P.M and finishes at 5:00 P.M. The night shift workers work from 7:00 P.M to 11:00 P.M, then rest for one hour. Then they resume work again from 12:00 P.M to 5:00 A.M. The workers are supplied with coffee-mix and instant noodles on the site. There are two supervisors. One supervisor is the leader of the miners on site and the other is the person who gives the signals to the moving dumper truck cars. When the miners find a jade stone they have to show it to the supervisors who informs the agent. The supervisor of the dumper truck has to provide the signal for dumping the earth dug from the mine site. Because of people have not seen who are searching for jade stones in the thrown away earth.

The company workers are mostly farmers who came up to Hpakant to supplement their livelihood of farming which provides them with just sufficient food. The companies take care of the accomodation and food, so that there is a full saving for the family. Besides, there are two types of workers who search for jade stone in the thrown away earth. The first type is those who work on their own, living and eating at their own expense. The second type is those who live and work with the lawpan. Lawpan (လောဝန်) means a rich entrepreneur engaged in jade mining.

A (47) year old man who worked on his own said that:

"I have worked for 7 years searching "yemasay" (ရှေမဆေး) stones. I share a rented room with a friend. As I work in the earth dumps at my own expense, I do not have to share it anyone when I get a valuable jade stone. During the search for "yemasay" (ရှေမဆေး) stone, I get (10 to 100) lakhs and was able to give in charity at my village. I go back to the village as soon as the rains come to work in the paddy fields. I come up to Hpakant, when the rains are over, and search for "yemasay" (ရှေမဆေး) jade in the dumps".

A (38) year old man who worked on his own said that:

"Search for yemasay (ရေမဆေး) stone is dangerous for me, but I have to risk my life to get the precious jade. Sometimes a huge stone may roll down and fall on the yemasay searchers. Sometimes I didn't even find one stone while others who are lucky may pick up stones worth hundreds or thousands. We have to search in the night too, which is more dangerous because we cannot see a huge stone rolling down in the night. The earth dumps are high and we often roll down suddenly and a person can be buried and killed underneath. We can also hurt our legs and get broken. We are working for our families' rice bowl, so we risk our lives. The place is so crowded, each one has only a little space to work, which we have to hold on land".

Before the yemasay (ရေမဆေး) searchers begin their work, they have to inquire among themselves which dyke or company's earth dumps have struck the jade layer and where they have dumped the loose earth. They search day and night with torch lights. The lawpans too wait till daylight to buy the finds. Some earth dumps are (300-400) feet high and can fall on the searchers anytime. It is indeed a very dangerous job for the "yemasay" (ရေမဆေး) searcher. In the world of "yemasay" (ရေမဆေး) stone mining, there is a term known as "Jokey" (ကျော်ကီ). They are the "yemasay" (ရေမဆေး) workers at the mine who help the "yemasay" (ရေမဆေး) searcher lift the heavy jade stone. One of the men hold the diamond hammers in his hand while the other men carry the heavy stone. Seintu (စိန်တူ) means a small hammer for test tapping a stone in search for jade. Tapping the stone frees it of earth sticking to it which then is examined to be jade or not. "Yemasay" (ရေမဆေး) stone may weight from 5 viss to 50 viss. "Yemasay" (ရေမဆေး) stone searcher, numbering on average from 50 to 100, are more concentrated at waste mounds of loose earth which are considered to be of better quality. Such a mound with a base diameter of 30 ' rises up to 35'-50' on average. At a prospective site company supervisors stand ready to direct the earth removal trucks to the spot where their cargo is to dumped. Safety measures are needed because "yemasay" (ရေမဆေး) stone searcher are positioning themselves at the prospective spot of a dump, and they have to be urged aside. Uru creek before 2000 measured

about 200' wide and 35' feet deep. With the advent of the companies after 2000 the creek now measures 100' wide and 15' deep what with its being dammed in some places to search for jade, its direction artificially changed, and loose-earth dumps on its banks. At some places the creek is only 5' wide. These jokeys get one third of the sale and the “yemasay” (ရေမဆေး) searcher gets two-thirds. But a small scale manageable searcher does not need jokeys.

A ten years old schoolboy, who lived in jade mine area said :

"I search the “yemasay” (ရေမဆေး) stone in my school holiday. My father taught me how to examine the jade stone. Within one month, I got 5 jade stones. One stone had been sold for (5) lakhs and another for (2) lakhs. The remaining three are not sold as yet. My father washed the stones and sold them for the family. I have one elder brother, who also is searching in another dump. And I have one elder sister who helps the mother in her household chores. We want to help our parents, so we can do this work only during the holiday".

People who have come to work at their own expense, searching for “yemasay” (ရေမဆေး) stone have to take great risks, therefore their families may be fully provided. Besides during the school holiday you can find some schoolchildren who come to search for “yemasay” (ရေမဆေး) stones. It is an easy way of making money but it is perhaps a distracting influence for them. They may lose interest in education.

For those workers who work with lawpan (လောပန်) to find “yemasay” (ရေမဆေး) stone, the lawpan takes the responsibility for their room and board. The lawpan also provides them with the tools needed for their work, such as, torch lights, Seintu (စိန်တူ), and point shoes.

A (22) years old young man who works with a lawpan said :

"When I find the jade stone, I have to hand it over to the lawpan. If the lawpan is away I mustn't wash the jade stone without the lawpan's permission. Sometimes the lawpan washes it himself and sometimes I wash the jade stone. After the jade stone is sold, I get to share equally with lawpan. We have to leave at 7:00 A.M in the morning and go to the earth dumps. At 11:00

A.M we return home for lunch and a short rest. We go back to the work site at 1:00 P.M and work till 5:00 P.M in the evening. Soon after arriving home and a short rest, we take a bath and have dinner. After watching TV, we go to bed. The lawpan does not make us work at night because it is very dangerous to work at night".

Most of the young people said that;

"We had studied till the Middle School but left because we didn't want to study anymore. We worked as farmers and this year we are working here to search for "yemasay" (ရေမဆေး) stone. The lawpan has taught us about the jade stone and we have got a little already. The lawpan washed the stones himself and we will sell it a lot".

Some of those who work with a lawpan may have up to a middle school education and have left school. Perhaps as boys they are more interested in earning money than getting an education.

The above facts show that most of the workers are people from the neighboring regions than the local people. The local people have knowledge of jade and how to earn money with it. So they buy the rough jade stone and polish it and resell for a profit. In the past, the local people can afford to buy a piece of land to jade mine. Nowadays when the companies came with their land grants, the local private entrepreneurs are about to vanish. Some local people have bought a few acres from the companies and dug on their own.

A (39) years of jade mine owner with (25) years work experiences said that:

"I started working at age 14 years. My father bought me the land. Jade trading has been in our family since the time of my ancestors. We dug a pit like an earth pit. That year (1986) we lost, didn't make any money. But I continued this work and persevered year after year till today. In the past I did all kinds of jade-mining, earth pits, water pits or machine pits, and sluicing. Now I am working in machine- drilled pits or mines. I also do buying and selling of jade".

The job of jade buying, selling and brokering are done by both men and

women. A (60) years old widow woman who lived in Hpakant said that:

"I came to this business of jade trading when I was about 30 years old. I learned the trade from my parents. I bought a piece of land with the money I made, and started jade mining. I was so busy with the work that I neglected my children. So with the easy money they are spoilt and useless now. I cannot depend on them to help me. I cannot buy land to work on my own now since the companies have come. But I still buy and sell and broker in the jade trade".

According to the local people, they prefer to work on their own with the money earned from buying and selling or brokerage. But the coming of the companies lessened the chances of these local mine owner.



Figure 18. Jade stone is being readied for transportation



Figure 19. Jade stone is carried off

5.2 Distribution

In marketing, distribution is the process of moving a product from its manufacturing source to its consumers. Jade trading in Myanmar had started from the time of the ancient Myanmar Kings. Today jade trading can be done freely in Hpakant township area. But if it is to be transferred out of Hpakant Township, then a permit of carrying it must be obtained from the Lonekhinn Jade Office. The jade stone will be evaluated and the permit will be given to take the jade stone out of Hpakant township.

The company or association who had mined the jade stone must register it and pay the tax at the Jade Office in Lonekhinn for the permit to take it away from Hpakant. After the registration and payment of tax, the owner of that rough stone can :

- (1) In its original rough jade, cut up in bits, as polished gems, and set as jewellery, be sold freely according to certain conditions in the country.
- (2) It can be sold in Myanmar Kyat to Myanmar nationals.
- (3) It can be sold in foreign money to anyone who is allowed to use foreign money.
- (4) It can be exported and sold in foreign money.
- (5) It can be sold in Government Emporiums and Government Gems Shops and other licensed shops.

- (6) Can be sold by inviting foreign gems traders with one's own arrangements according to the rules set down by the Government.

If the company or the association is not satisfied with the evaluation of their stone, they can appeal for re-evaluation to the Central Committee within (30) days. In gems trading business, it is a major factor to do business in the open market. In the Gems Emporiums for international gems traders, today, not only the jade and gems from companies are displayed, but private entrepreneurs have come to sell their gems and jade after they have been appraised.

Myanmar jade has become well-known not only locally but also penetrated into International markets. In 2010 Malaysia held an Internal Gold and Gems Emporium, in the Convention Centre in Kuala Lumpur. It was the greatest show, attended by royalty and the rich of the world. Myanmar was invited. An observer of such International Emporiums remarked that Myanmar Gems traders should attend such shows to get many benefits. In addition Gems Emporium held in Bangkok from 28.2.2010-4.3.2010, an authority from Myanmar fine arts gems said that they will be exhibiting some good quality jades there (Pyi Myanmar Journal 4.3.2010, p-4).

According to the agreement between the government and 8 equal share partners a total raw jade 525415 kg of various kinds of grades reached Myanmar Gems Enterprise (Head Office), Yangon as of 30.6.2003. Then at the following Myanmar Gems Emporiums and Kyat-currency sales USD 15030505 and Kyat 366192319 were realized.

Out of the raw jade produced at Jade Mining Centre, Lonekhinn in partnership with companies, jade of "C" and "D" lesser quality grades were sold through competitive bidding in three events-First from 12-15/5/2001; Second from 2-7/12/2001; and Third from 15-24/12/2002. The sale proceeds according to the companies in partnership are as follows:

Table 8. Showing for Jade exhibition and Sale Proceeds

Event	Company Number	On exhibition			Sales			Extra above floor price (kyat)	Sale %	
		Lot	Weight (kg)	Floor price (kyat)	Lot	Weight (kg)	Sale proceeds (kyat)		Lot %	Sale proceeds %
First	6	130	116690.00	111950000	45	39380.00	87099900	42169900	34.62	193.85
Second	7	204	162130.00	82000000	140	107590.00	322034288	257044288	68.62	495.51
Third	8	501	1146237.50	102524000	494	1137983.50	1419379582	1317705582	98.6	1396.01
Total		835	1425057.50	296474000	679	1284953.50	1828513770	1616919770	81.32	864.16

Source : General Administration of Hpakan Township

The above given Table (7) shows extra money more than the floor price has been gotten. A wealthy gem-mine owner and merchant from Viet-Nam by the name of Dong Truan Coon, in 2009 bought a valuable jade stone from Myanmar. He had arranged to make the world's largest Buddha Image with this jade stone. About 50 artists and sculptors are working on this stone. It is estimated that the statue of the Buddha, when finished will weigh about 20 tons. The Dong Truan Coon hopes to win the Guinness world record.



Figure 20. The world largest Jade Buddha Image is to be sculpted

5.3 Consumption

Consumption is a common concept in economics, and gives rise to derived concepts. Generally, consumption is defined in part by opposition to production ([en.wikipedia.org/wiki/consumption \(economics\)](http://en.wikipedia.org/wiki/consumption_(economics))).

5.3.1 Recorded Inscription of Lonekhinn-Hpakant Jade Mines Region 1988 to Date

The State Law and Order Restoration Council initiated and legalized the Myanmar Gems Enterprise so that jade mining could be carried out legally. On the 11th of March 1990, Announcement (5/91) was made for the Central Organizing Committee to take charge of the establishment of the Myanmar Gems Enterprise. The first ceremony of the signing of contract for the joint venture for the mining of jade was conducted on the 24th of March that year. Joint ventures started to operate in March 1990 with benefits shared between the State (51.4) and the entrepreneur (48.6%).

The Annual National Gem Emporium was conducted. On 17th February 1993, a 1.2 ton block of jade was mined from joint venture (2) site, Hsan Kywe Hmor, Hpa

Kant. It has a dimension of (47" x 30" x 28") and is of good quality. On the 7th of July 1993, preparations were made for the government to have 25% and the entrepreneur 75%. The building of Myanmar Gems Emporium Gallery was completed on the 15th September 1993. Then on 18th September 1993, permits for mining jade by joint ventures were terminated.

With the objective of promoting the Myanmar gems market, the State Law and Order Restoration Council enacted the gems mining legislation where Myanmar nationals are permitted to mine jade without having to form joint ventures. On 13th November 1995, jade mining sites in Lonekhinn were handed over to Union of Myanmar Economic Holdings Limited.

In 1999, under the guidance of the State Leader of the State Peace and Development Council, Contracts for joint ventures were signed for the mining of minerals and production of gems and jewels as follows.

- 20.1.2000 With Jade Dragon Company (Kyauk Sein Nagar) in Hpakant gems region, Hpakant Gyi Hmaw
- 26.4.2000 With Myanmar Sithu Yadanar Company in Hpakant gems region, Ma Mon Hmaw
- 25.5.2000 Jing Hpaw Aung Company in Hpakant gems region, Hpakant Gyi Hmaw
- 16.8.2000 With Shwe Gaung Gaung Company and Yadanar Taung Dan Company in Hpakant gems region, Met Lin Chaung Hmaw
- 25.1.2001 Tet Khan Company Limited in Hpakant gems region, Mite Kye, Hin Tint, Sa Hpaw, Kayin Chaung Hmaw
- 26.1.2001 With Thanlwin Ayeyar Company in Hpakant gems region, Ma Mon Hmaw
- 1.2.2001 With Shwe Myay Yadanar Company in Hpakant gems region, Ma Mon and Hpa Pyin Hmaw

Sales of uncut jade stones mined from the joint venture sites commenced at the Gems Emporium in the year 2000. In July 2000, an uncut jade boulder was mined from a location 40' under the earth's surface at Nant Hmaw site, Hpakant by the Jade Dragon

company (Kyauk Seinn Nagar). The boulder was approximately 300 tons, and measured 70' x 16' with a height of 35'.

In September 2000, another huge uncut jade that weighed 158 kilograms was uncovered by the Sithu Yandanar Joint Venture from Ma Mon site (1), Hpakant. In October 2001, another huge jade stone of 165 kilograms was mined from the Hpakant Gyi site by the Jade Dragon company and was sold off at the National Emporium for US\$ 1468899. The first joint venture exhibition and trade of gems and jade was conducted on 12th May 2001, at the gems trading center of the Jade Mining Enterprise in Lonekhinn. There gems and jade were auctioned in kyats for Myanmar gem traders.

The Ministry of Mines passed a new legislation regarding Lonekhinn and Hpakant in order that the current situation complies with previous legislations on 18th October 2001.

2003

Ministry of Mines

Jade mined in Myanmar during the fiscal years 1995-1996 and 2010-2011 is approximately 240,000 tons. From the fiscal year 2000-2001 to 2010-2011, production of jade is as follows.

Fiscal Year	Jade (Tons)
2000 - 2001	11096
2001 - 2002	8174
2002 - 2003	10879
2003 - 2004	10754
2004 - 2005	14987
2005 - 2006	20005
2006 - 2007	20458
2007 - 2008	20266
2008 - 2009	32921
2009 - 2010	25795
2010 -2011 (January)	34554

Source : Weekly Eleven (11.5.2011)

From observation of the above data, it could be seen that jade production in Myanmar increases with time except for the fiscal year 2001 -2002, and 2009 – 2010. From 2002 – 2005, jade production is around 10000 tons but gradually doubles to 20000 beginning from 2006. Moreover, the fiscal year 2010 – 2011 is observed to be

the most productive during the ten-year span.

Lonekhinn-Hpakant Area's Jade Production and Gem Revenue

Fiscal Year	Jade (Tons)	Gem revenue (lakhs of kyat)
2000 - 2001	5942.10	3499.56
2001 - 2002	6915.94	4063.90
2002 - 2003	9296.76	5904.20
2003 - 2004	9479.83	5910.30
2004 - 2005	12702.13	6951.82
2005 - 2006	16816.78	9766.45
2006 - 2007	17183.42	11700.41
2007 - 2008	16149.56	11279.10
2008 - 2009	19317.71	11572.28
2009 - 2010	23014.08	15907.19
2010 - 2011	19401.95	32889.17
2011 - 2012	1737116.00	582558358

Source : Administration of Hpakant Township 2009

The above data shows there is only a difference of 15000 tons between the nationwide jade production and the jade produced in Lonekhinn-Hpakant Jade Mine Area which is responsible for most of its production. In 2011-2012 the production of Lonekhinn-Hpakant Jade Mine Area was 1737116 tons. Therefore it amounts to eight times the amount of jade produced by the rest of the country in a decade. This data shows higher jade consumption has been followed by greater jade production.

The lifestyle of those engaged in jade mining as well as business people dependent on it has changed, it is observed.

Sales of jade are as follows:

Fiscal Year	
2001 – 2002	US\$ 115 million
2004 – 2005	US\$ 198 million
2007 – 2008	US\$ 435.69 million
2009 – 2010	US\$ 1750.84 million
2010 -2011	(March) US\$ 2800 million

Source : Living Colour Magazine, March 2011

The First Gems Emporium launched at Naypyitaw reached the summit of the jade market in Myanmar. 9157 lots of jade went on sale and 7784 lots were cleared. The lots include (raw utility jade, layer of jade, jade bracelet, whole green piece, clear textured and bodily essence). Moreover, 16939 lots of jade went on sale and 13608 lots were cleared for 2800 million US dollars at March 2011, the 2nd Gems Emporium at Naypyitaw. The Chinese people regard jade as a revered gem. They are the major clients of the Myanmar jade market. Because they have sophisticated machines, equipments and the latest gem technologies, they have the biggest jade market at the moment.

Ever since the jade mining companies come into the picture around the year 2000, jade mining has prospered and the sales of jade increase from year to year which indicates that jade consumption has also grown significantly.

In Lonekhinn-Hpakant gems area there are altogether 630 companies-private, co-operative, and state-owned. Jade mining is spread over 17718 economic blocks, and uses 1032 backhoes, 38 bulldozers and 2112 earth-removal trucks, it is learnt. Out of 630 companies, it is estimated that Lonekhinn village tract are running 64 companies.

Notable changes have been made with the shift from private mining to joint venture projects and mining rights, in line with the policy of the government. Today, a big difference in the production, distribution, and consumption of jade could be observed.

In earlier times, those who could afford would buy land from land owners and employ mine workers to work for them. If they found jade, they would share the profit 50-50. Before the companies came into the picture, labourers work hard with dreaming of finding the one good stone. Now that the government has passed new sanctions to be able to work legally in the mining business, the labourers have changed their attitudes. They do not care whether they find good stones or not. They get a monthly salary according to their service.

For those who are well off, they could start joint ventures with the government or other well off people, establish their own companies, either on their own or form corporative with other companies. Jade mining companies have to apply for purchase of mining lots from the government. Mining could commence at the allocated plot as soon as they have given the tax due.

Should any company want to sell its jade collection, they have to take it to the Lonekhinn evaluators office and have to pay tax. After that they can take the jade to

any part of Myanmar for trading them. Jade pieces found among the discarded waste of the jade companies could be traded legally and freely within the Hpakant Township. However, jade is traded not only within the country but across the borders as well without paying due tax. Thus the region where numerous tons of jade is produced never became the world's jade capital. Only Hong Kong has become one. This is due to the attitude of appreciation of the people towards jade. Just as Myanmar's value gold, so do the Chinese value jade. The Chinese obtain jade from Myanmar and create exotic intricate pieces using their expertise.

Within the city of Shwe Li in China, building of huge gem centers, replacing shops that if they do not sell jade have been observed. Warning shops that do not sell gems to step aside for those that do make them open gem counters in their shops. It could be inferred that the Myanmar jade market has opened up due to the enormous consumption of jade by the Chinese (Living Colour Magazine July 2011).

5.3.2 Myanmar Gems Law

(The State Law and Order Restoration Council's Law No. 8195)

A gem according to this law means : ruby, sapphire, jade, diamond, balas ruby, peridot, thonepanhla stone, rubellite, quartz-like, mineral, cedaung, moonstone, bloodstone, kyansitye, green vitriol, emerald-like stone, amber, palepya or rephrite.

Included among the gems are those declared as such through notifications made from time to time by Ministry of Mines with the consent of the cabinet.

'Gem mining' means the series of work performed to extract the raw gem in its natural state.

'Jewelry making' means the stages of work performed to turn finished gems into jewelry.

'Permit' means a permit issued according to this law to engage in gem mining.

'Licence' means a licence issued according to this law to engage in sales in foreign exchange of raw gems, finished gems, and jewelry through a sales centre opened.

'Gems tax' means a tax levied according to this law for the performance of gem mining, and sale of raw gems, finished gems, and jewelry.

'Company' means a Myanmar company constituted according to Myanmar Companies Act or a Myanmar members only company constituted according to Special Company Law, 1950.

‘Society’ means Basic Consumers Society, Cooperative Syndicate, Federation of Cooperative Syndicates, and Central Cooperative Society.

‘Central Committee’ means Pearls and Gems Supervisory Central Committee constituted according to this Law.

5.4 Environmental Conditions

The Kachin State has a hot humid climate with plenty of rains. Hpakant region is flooded in the rainy season, with the mountain streams flowing into the rivers causing floods. In the cold season, this flooded stream is dry and becomes a motor road. At this time the companies begin to dig the jade mine. The self-owned rich jade entrepreneur who mined jade from a manageable plot of land have vanished. They work in the cold season and the dry season. They built a dam across the stream to divert the river water. These companies have made the mountains bald in their search for jade. Their use of modern machines such as bulldozers, back-hoe, cranes, hydraulic attached ten ton cars, diamond drills and machine toothed spades have left hollows like ponds and lakes. Again the earth gravel they dig up from the pits is thrown away in mounds becoming mountains again.

Along the mountain ranges the natural streams and water holes also became blocked and damaged. As time passed, there was scarcity of place to dump the gravel. So they began to dump the gravel near the Uru stream which used to be 150 feet wide, but now it is only about 3 feet wide in Monywa. Though the Uru stream is narrow in the summer, in the rainy season, it is filled with rains and mountain streams, flowing rapidly carrying away houses and human life.

In July 2009, it rained heavily in Hpakant, causing landslides and floods (The Voice Journal, 20.7.2009 Supplement). Besides July 2010, it rained heavily in Lonekhinn village tract, causing floods (Township Administration Department, 2011, p-8). Observing the above factors have shown that doing jade mining by building a dyke across the stream causes the banks to be infirm. There is a Myanmar saying, “The climate depends on the forest”. The Kachin State is a mountainous region with heavy forestation. But the mining company’s machines have shaved the mountains bald. It has definitely caused climate change in the region. Man is to blame for this desecration of nature. Jade mining has led to frequent occurrences of loosening soil and floods (see fig 23, 24).

Before 2000, jade mining was carried out according to traditional method (see pp.50-52) so there no ecological damage. After 2000 with their entry, the jade companies acquired state-owned pieces of land off the map so that large pieces of farmland owned by locals came to be included among that land for company's mining work. A former farmland-owner now aged 70 said :

“Now I have retired for old age and am surviving with my children's support. I lost 13 acres of my farmland to the company but was paid kyat 200 lakhs in compensation. Added with contributions from my children, I have built for myself a two-storeyed building at a cost of nearly Kyat 400 lakhs.

The above facts show that though the farmers have lost a great deal of agricultural land, their living standard has risen to be found. Moreover, their lifestyle according to jade business also has changed for this major resource being exploited through the use of modern machinery.

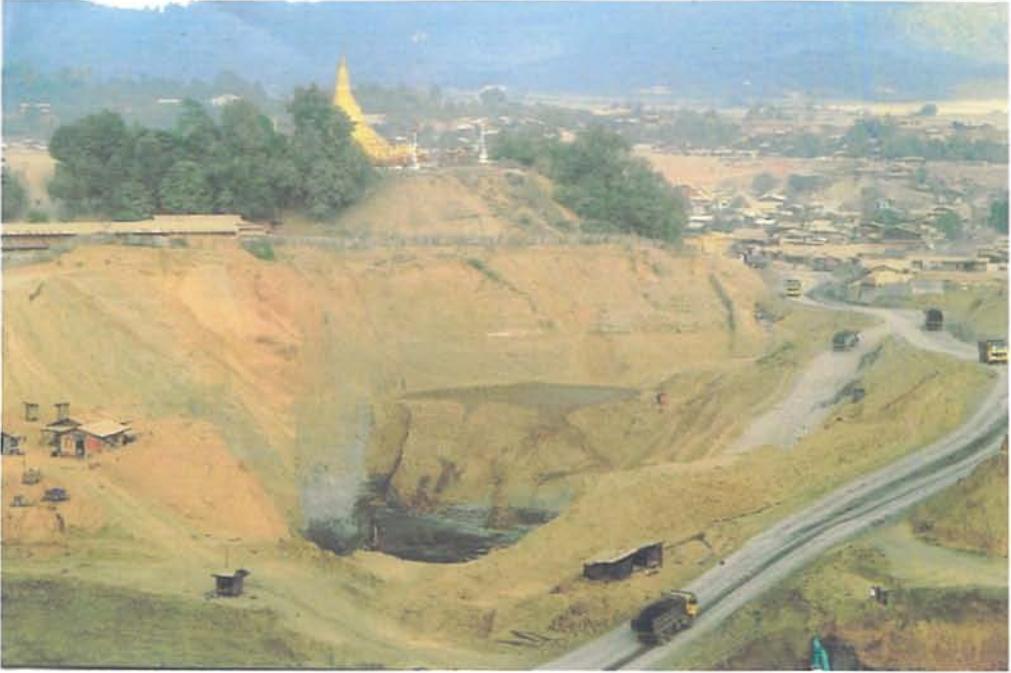


Figure 21. Digging jade mine hole



Figure 22. Living quarters for company employees



Figure 23. Flooding in Lonekhinn village tract



Figure 24. Earth loosening in Lonekhinn village tract

Table 9 Annual Rainfall Records in Lonekhinn-Hpakant Jade Mine Area (From 2001 to 2012)

Monthly	Days of average rainfall	average rainfall in inches	2001		2002		2003		2004		2005		2006	
			days of rainfall	rainfall inches										
January	1	0.3	-	-	-		1	0.51						
February	2	0.32	-	-	-		1	0.47					3	0.88
March	3	1	-	-	-		4	1.54			5	4.54	2	0.16
April	5	2.32	5	6.77	-		4	2.05	12	2.6	3	1.77	7	1.51
May	13	9.62	9	7.49	11	11.71	1	6.22	16	4.64	12	5.72	13	14.89
June	23	21.72	26	13.68	16	21.78	23	21.09	28	11.55	22	22.19	24	27.62
July	26	29.05	15	17.84	27	26.81	24	31.32	29	22.7	23	19.58	22	11.19
August	19	19.38	15	19.92	15	12.13	15	24.57	21	17.76	25	18.95	12	16.28
September	13	10.32	18	8.03	11	9.94	2	0.75	20	16.09	11	9.84	14	9.96
October	9	7.8	9	16.23	8	3.83	2	5.39	7	7.26	10	7.76	6	4.88
November	3	1.16	10	7	1	0.2	-	-	4	2.06			3	0.24
December	1	0.42	-	-	3	1.42	3	1.34					1	0.98
Total	118	103.41	107	96.96	92	87.82	80	95.25	137	84.66	111	90.35	107	88.59

Continued-

Monthly	2007		2008		2009		2010		2011		2012	
	days of rainfall	rainfall inches										
January	1	0.2	5	2.01	1	0.3			2	0.4	5	0.44
February	9	1.4	1	0.16	2	0.32			1	0.71		
March	1	0.08	6	1.47	3	1	4	1.14	5	3.85	6	1.59
April	7	2.01	3	1.16	5	2.32	6	3	4	1.64	8	4.1
May	12	10.46	16	13.29	13	9.62	14	7.19	17	16.84	10	8.15
June	26	30.78	26	33.08	23	21.72	17	13.71	24	24.92	24	27.42
July	30	39.55	25	26.84	26	29.05	26	45.58	24	21.5	26	26.56
August	21	21.14	24	18.78	19	19.38	18	24.93	20	16.89	18	17.49
September	17	17.05	14	8.87	13	10.32	9	12.36	15	13.98	22	24.81
October	15	13.58	14	4.79	9	7.8	6	6.47	11	3.15	12	12.13
November	2	0.5	2	0.4	3	1.16					2	0.91
December					1	0.42						
Total	141	136.75	136	110.85	118	103.41	100	114.38	123	103.88	133	123.6

Source : Myanmar agriculture service Hpakant Township

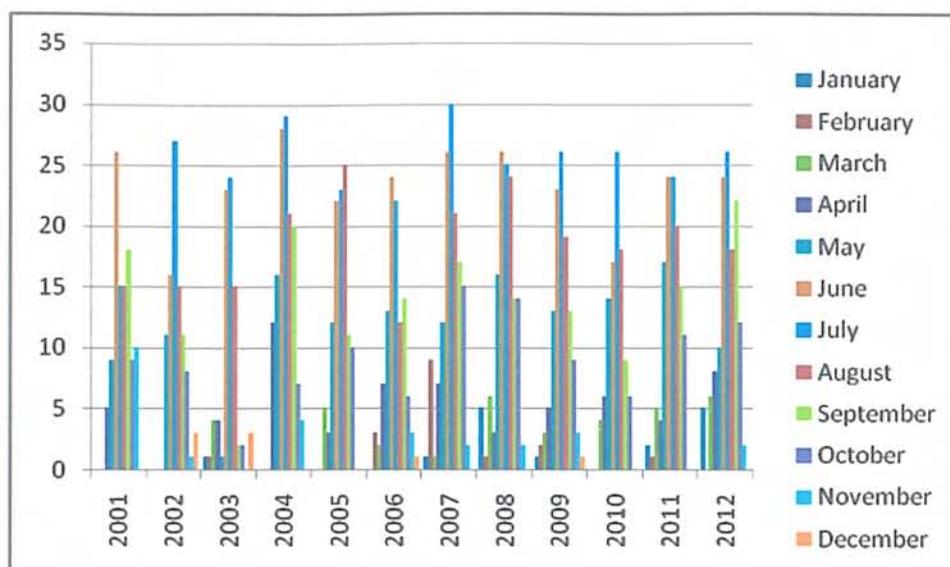


Figure 25. Annual rainy day chart

According to data from Myanmar Agriculture Service, Hpakant Township, the number of rainy days in the month shows sharp ups and downs from month to month.

Most of the old people over 70 years, who lived in Hpakant jade mine area said that: Compared to when they were young, the climate has become worse. The forests have been destroyed, diverting the rivers and streams and blocking the natural spring and water holes. It has made the weather extremely hot, and when it rains there is so much water and hailstones, it makes their life uncomfortable.

Table 10. Hpakant Township's use of Land

Year	Agricultural land	Uncategorised land	Virgin soil	Remark
2005	22022	196	354214	
2006	23276	830	352538	
2007	37420	-	347620	
2008	44437	-	339977	
2009	60005	-	326603	
2010	95064	-	295760	
2011	102122	-	185987	
2012	100134	6507	185775	
2013	61247	7166	185775	

Source : Land Records Department, Hpakant Township (2013)

Land use at Lonekhinn village tract is as follows :

1. Agricultural land	4505 acres
2. Paddy land	2265 acres
3. Farmland (non-paddy)	950 acres
4. Hillside farmland	940 acres
5. Area of perennial crops	350 acres
6. Virgin soil	396261 acres
<hr/>	
Total	405271 acres

Source : General Administration Department, Lonekhinn Village (2009)

Jade mining by companies means cleaning up of trees and bushes leading to deforestation. Agricultural land often falls in the working blocks of the companies but its area does not lessen because vacant and virgin land is being exploited.

On the other hand, because of the companies' jade mining the villages in Hpakant Township are faced with risks of landslides and floods in the rainy season.

So the mountainous wooded Hpakant is becoming a waste land. The authorities should be aware of it and give educational talks on the dangers and preservation of natural resources of forests and water resources. The present jade production site has only a decade left and as it is a nonrenewable resource, the jade production should carefully be measured for long-term benefits to man and nature. If this natural resource is not safeguarded, the lives of the people of the region as well as Myanmar people who depend on this jade trade for their livelihood will be threatened. Therefore measures must be take to preserve both the environment and the peoples' livelihood in jade business, machines are used, thus the need of workmen are less. So there are more people searching for Yemasay (ရေမဆေး) stones.

Jade, which is the natural resource of this region, is the life-blood of the local people of this region. Jade mining and jade trade, their natural livelihood, provides them with man's greatest need of food, shelter and clothing. It also raises their standard of living. It has also helped people who come from the other regions for the extra earnings they need. If they are lucky to pick up one valuable stone, the fortune of an entire household to be able to live a better life comes within reach.

The government of Myanmar has been able to have Gems Emporiums not only in the country but also penetrate the world markets by its international shows.

Myanmar gems and jade are known worldwide today. As the demand increases, the production is beginning to harm the environment. It is therefore important to be aware of the damage and find the way to prevent this natural disaster to man and the environment.

5.5 Other Economic Activities

The major economy of Hpakant Township evolves around the jade business such as mining, trading and dealing. Those who are not involved with trading earn their living at hardware stores, fuel pumps, tea shops, stores, restaurants, electrical goods stores, motorcycle repair shops, betel dumplings shop, or at the stone cutters'.

Responses from interviews are as follows,

- A 45 year-old man who works at a hardware store: *"My parents had a restaurant about twenty years ago. Just over a year after that, they opened a hardware counter at their restaurant. Later on, they closed down the restaurant but kept the hardware store where they sell building materials and household accessories"*.
- A woman who owned a diesel oil shop: *"I came to Hpakant with a friend of mine about 10 years ago. When I was at my own village, I worked on a farm and could not afford much. When I first got here, I tried to sell all sorts of things and kept thinking what would be the best thing to do here. I noticed that diesel oil is essential in this place. Therefore, I started selling diesel oil. I've been selling diesel oil for eight years now."*
- A tea shop owner: *"My shop is opened until midnight. Most of the people who work here are males, so my shop is never vacant. The boys in this shop cannot even rest. Therefore we had to work in shifts. During the football season, you can't even get seats."*
- a sixty-year-old store keeper: *"I have had this book shop for over 10 years now. I had a store attached to the book shop now. I also sell cosmetics. Last year I had a promotion program for the cosmetics. People can use money here and they like quality stuff. My shops sell well."*
- A 45 year-old lady restaurant owner: *"It has been four or five years since I opened this restaurant. People come here when they have meetings, or when they want to celebrate something. The restaurant sells better with a beer"*

counter. We focus on Shan and Chinese food here. Sales come up to 20 lakhs a day. There are altogether 20 workers in my restaurant. Most of them are my relatives. It is more or less a family business with us."

- A 55 year-old electrical goods shop owner: "I used to be a tailor. I knew a lot about electrical goods. I would help out people who came and asked me for help. When I go to the south, people would ask me to buy electrical goods for them. In this way I gradually became an electrical goods shop owner. I also collect applications for Naypyidaw phones and take charge of the application process."
- A 38 year-old owner of a motorcycle repair shop: "It's been three or four years that I have this shop. I came from Taundwin Gyi. I met my wife while I was repairing motorcycles in Hpakant and I settled down here. Since almost everyone here goes on motorcycles, I have repair jobs everyday. The roads here are very muddy and full of earth. Therefore I also do motorbike washing."
- A 45 year-old woman who sells betel dumplings: "Betel dumplings sell very well in this place since there are lots of men around here. I have been selling betel dumplings for 14 or 15 years. I do not have to worry about the basic needs of my family. I could even build a house. I sell over two lakhs worth of betel dumplings everyday".
- A 39 year-old stone cutter: "Me and my brothers set up this business. It's been about 10 years that we are at this job. My brother-in-law's stone cutting platform is the largest in this village. At first we started with the manual machine. Later on, we used the electric machine with a generator and a motor. We had jobs the year round but there are fewer jobs in the Rainy Season. We charge our customers according to the size of the stone. Charges are not set. There are people who made a profit of thousands of lakhs from the stones we cut."

As mentioned above, there are many people who are not directly involved in the jade mining business but whose occupations are dependent on it. As the jade business grows, the standard of the people there is raised all round. The faster the goods flow, the greater they could spend and the higher the living standard gets.



Figure 26. Diesel Oil Shop



Figure 27. Tea Shop

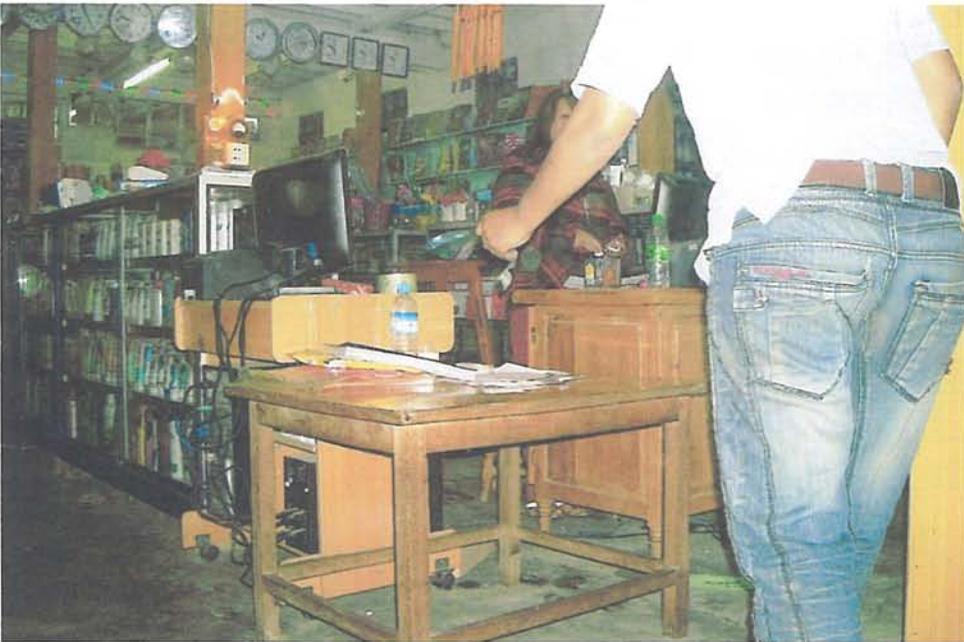


Figure 28. Store



Figure 29. Restaurant



Figure 30. Electrical Goods Shop



Figure 31. Motorcycle Repair Shop



Figure 32. Betel Dumplings Shop



Figure 33. Stone Cutting

CHAPTER (6)

CHANGES OF LIFE STYLE

Education, health, food, clothing and shelter constitute the major role in our life. Lifestyle tends to change depending on circumstances and events. So lifestyle changes due to jade mining in the research area have been studied. Thus this chapter tries to describe the changes of lifestyle such as education, health, food habit, mode of dress, patterns of housing, daily activities of a family, and relationships among family members.

6.1 Education

Hpakant Township in 2011 had a total of 88 schools, namely: Basic Education High School-2; Basic Education High School (Branch)-5; Basic Education Middle School-11; Basic Education Primary School-70.

Table 11. Hpakant Township's Schools, Teachers and Students

No.	Year	School				Total	Teachers			Total	Students			Total
		H	H (b)	M	P		H	M	P		H	M	P	
1	2000	2	5	55	-	62	22	63	92	177	770	3624	39415	8309
2	2001	2	5	55	-	62	22	63	98	183	791	3743	4012	8546
3	2002	2	5	55	-	62	22	63	112	197	811	3811	4156	8778
4	2003	2	5	55	-	62	22	63	112	197	920	3954	4336	9210
5	2004	2	5	55	-	62	25	87	333	445	931	4911	5426	11268
6	2005	2	6	55	-	62	25	116	414	555	947	5883	6621	13441
7	2006	2	6	55	-	63	26	123	429	178	965	6051	6915	13931
8	2007	2	6	55	3	66	30	142	444	616	1254	8151	11088	20493
9	2008	2	6	55	3	66	35	145	479	659	1871	10524	16567	28962
10	2009	2	6	55	5	68	40	147	508	695	1883	10505	17611	29999
11	2010	2	7	54	8	71	44	153	517	714	2482	10746	17946	31174
12	2011	2	7	54	9	72	48	162	512	722	2324	10649	18013	30986

Source : Office of Township Education Officer (2010)

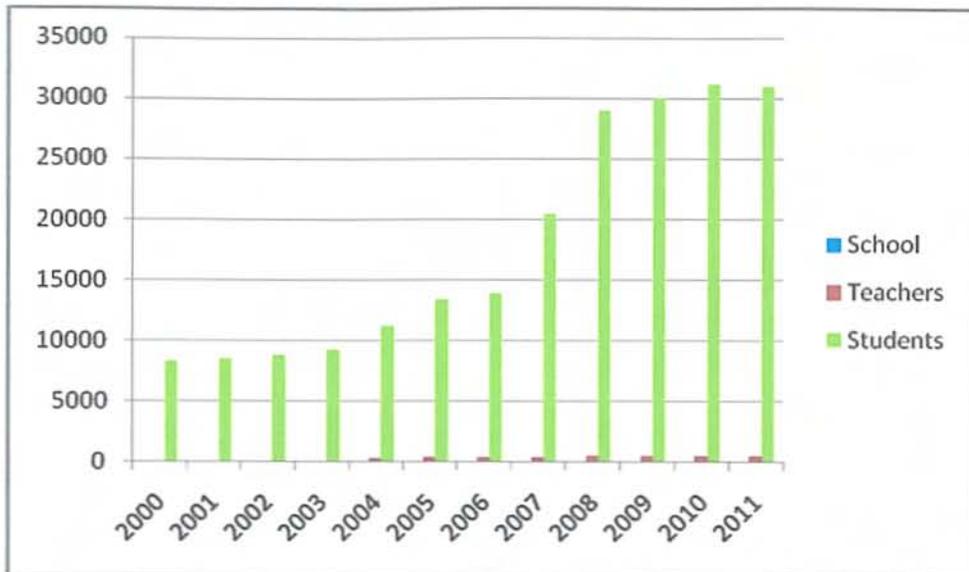


Figure 34. Hpakant Township's Schools, Teachers and Students Chart

Above the figure shows that students are annually increased. But teachers are not sufficient. So, teachers are needed for the students.

Table 12. Enrolment of School-aged Children

No.	Academic Year	School enrolment (%)
1	2005-2006	97.13
2	2006-2007	97.13
3	2007-2008	98.60
4	2008-2009	99.00
5	2009-2010	99.20

Source : Administration of Hpakant Township (2009)

Table 13. Basic Education High School, Grade 11th Pass %

No.	Academic Year	Candidature	Actual candidates	Passed	%
1	2003-2004	747	696	158	22.76
2	2004-2005	972	920	239	25.97
3	2005-2006	1012	930	224	24.08
4	2006-2007	1107	1022	266	26.03
5	2007-2008	1324	1216	389	31.99
6	2008-2009	1152	1052	418	39.67

Source : Administration of Hpakant Township (2009)

A looked at above data reveals matriculation percentage has increased. Lonekhinn village had Basic Education High School (Branch)-1, Basic Education Primary School -1 and Buddhist Culture Pre-Primary School-1. That Basic Education High School (Branch) in Nyein Chan Tharyar ward, was formerly a Basic Education Middle School and has been recognized Basic Education High School (Branch) since 2010. Strength of its teaching staff and students at these schools are as shown below:

Table 14. The Basic Education High School (Branch), Lonekhinn village

Year	Primary Level			Middle Level			High Level			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1999-2000	261	229	490	306	320	626	0	0	0	566	549	1115
2000-2001	293	239	532	352	365	717	0	0	0	645	604	1249
2001-2002	319	255	574	372	415	787	0	0	0	691	670	1361
2002-2003	291	268	559	406	424	830	0	0	0	697	692	1389
2003-2004	302	263	565	423	417	840	19	34	53	744	714	1458
2004-2005	330	283	613	440	403	843	78	78	156	848	764	1612
2005-2006	343	303	646	438	452	890	111	111	222	898	866	1764
2006-2007	412	400	812	573	461	1034	175	175	350	1117	1036	2153
2007-2008	416	440	856	619	497	1116	189	189	378	1172	1126	2298
2008-2009	424	453	877	601	580	1181	191	190	381	1189	1223	2412
2009-2010	403	440	843	622	571	1193	184	184	368	1187	1195	2382
2010-2011	420	405	825	603	668	1271	190	190	380	1190	1263	2453
2011-2012	463	460	923	680	691	1371	152	204	356	1295	1355	2650
2012-2013	431	429	860	583	627	1210	200	217	417	1214	1273	2487

Source : Basic Education High School, Lonekhinn (2013)

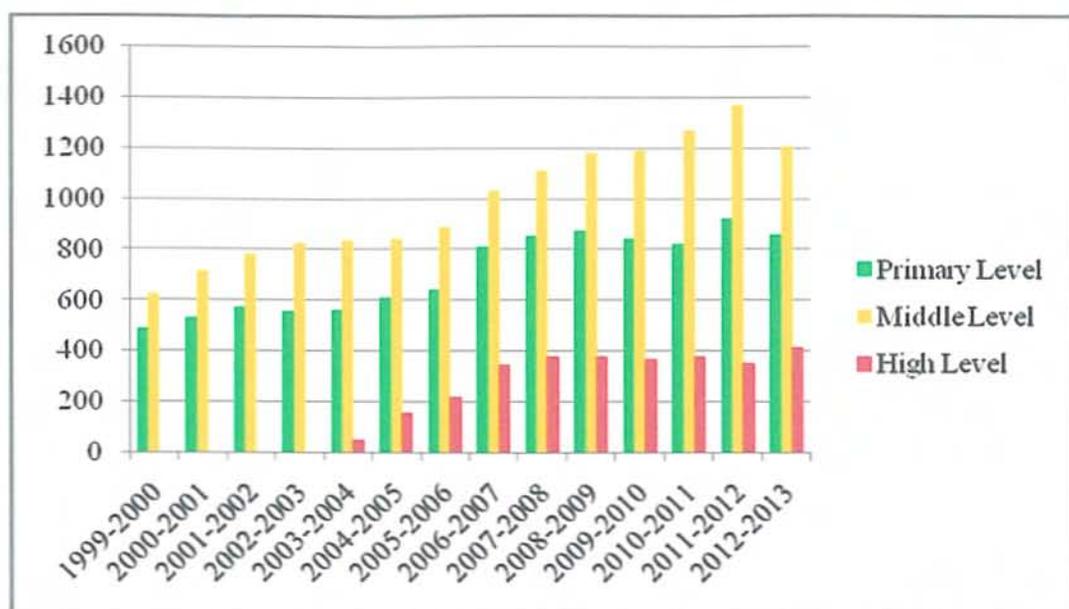


Figure 35. The Basic Education High School (Branch), Lonekhinn Village Education Levels Chart

Above the figure shows that students are increased year after year.

The Basic Education Primary School, Lonekhinn village, situated in Ward 1, opened on 1-8-1991.

Table 15. The Basic Education Primary School

2010-2011	Male teacher	Female teacher	Total	Schoolboy	Schoolgirl	Total
	0	9	9	1691	194	355

The Buddhist Culture Pre-Primary School at Lonekhinn monastic compound, Ward 3, opened on 18-6-2008.

Table 16. The Buddhist Culture Pre-Primary School

2010-2011	Male teacher	Female teacher	Total	Schoolboy	Schoolgirl	Total
	0	3	3	25	35	60

The school day for Pre-primary, Primary and High Schools goes : Start 9:00 AM; Recess 10:30 AM-10:45 AM; Another Recess 12:15 PM-1:15 PM; and Giving over at 3: 30 PM.

Before 2000 a family's livelihood was undertaken only by male household head. Jade business has three division, namely : 1, sale/purchase 2) brokership, and 3) jade mining. The housewife stayed at home, looking after parents and children. On this a 73 year old man trader said :

"I am the youngest among siblings of seven brothers. Father passed away when I was aged three, and household livelihood was earned by mother and brothers. Myself and another brother were entrusted for education with a Shan abbot at this monastery in Mogaung. Mother said the monastery is a safe haven and we should do well enough if we knew reading, writing and arithmetic."

Another 50-year-old man broker added :

"In my youth's time parents usually did not encourage their children to pursue education. Grades were merely passed by going to school, coming back home and doing some study. By Eighth Grade, I lost enthusiasm in schooling. Dropping out, I went for jade mining, for making money. Now I am ardently seeing to children's having a good education".

A 40-year-old entrepreneur explained :

"I went to school until Grade 10. In 1990 when I failed Graded 10 exam, I left school and have gone into business since. Now I take special care of the education of my two sons and daughter. This should prove to be their real inheritance. We are Buddhists, so our property will go the way of our karma. I think my children would be successful in life if they are well-educated and follow parental advice. Today in big cities there are schools jointly run with foreigners which will allow the children to study further abroad. Again, there are international schools accessible on Internet. These opportunities were virtually nil in my youth. When I went down to Yangon on business my friends urged me to improve the quality of my children's education. So I am always directing my life to put emphasis on children's education while I am busy building my fortune".

Another 26-year-old male trader said :

“I became a graduate majoring in Zoology five years ago. Since then I have been in jade business, my parents’ livelihood. I have a two-year-old daughter and am imagining her going to school in big cities, which are superior to the schools in our region in knowledge, teaching aids and technique. I am working hard in business with high hopes for the little daughter later.”

And a 35-year-old stall-keeper said :

“I run a stall at Lonekhinn market, my husband search for yemasay stones. We were migrants from a village near Ye U, and have two children-a girl aged eight and a boy aged six. They go to school here. We save what money we could. When the children reach Middle School level they will be sent to live with grandparents in our native village to continue schooling”.

A library called Naywunthit [The New Sun] was opened at Lonekhinn village on 8-1-2011. It is found to have books on general knowledge, journals, collected short stories, novels, newspapers, and books on Buddhist Doctrine. Books and audio tapes on Buddhist Doctrine can be borrowed free of charge. All the books at the library, worth about kyat 100 lakh, were donated by U Nyo-Daw Htwe and son Ko Nay Lin family who have relocated here for business from Shwe Hlan village, Taze Township. This library with 83 members stands in Lonekhinn monastic compound. They had recently come upon a very precious jadestone.

Opening a village library is meant to benefit locals as well as outsiders arrived here to seek their fortune. The library, open from 9:00 AM-11:00 AM and from 5:00 PM-8:00 PM, has a reading room and also lends out books.

In consideration of family circumstances it is found that before 2000, parents mainly concentrated on business and making money, supposedly with little pressure on children to raise their educational level. After 2000 with the advent of companies the locals have become knowledgeable about the outside world, and developments in the education field often presented on the Television screen. They begin to realize that it pays more to be educated than to be financially successful in social life. Thus they are found, while making considerable money themselves, to be goading their children to be well educated. After 2000 with higher economic development in the region the

parents come to have wider knowledge and outlook, leading to their emphasis on securing a good education for their children. In addition, they know that it is essential for one to be educated in approaching government departments and accessing state economic directives and policies concerned with jade business.



Figure 36. Basic Education Primary School



Figure 37. Basic Education High School



Figure 38. Buddhist Culture Pre Primary School

6.2 Health

Major disease regularly found in the region is malaria. In the past the Lonekhinn-Hpakant jade mine area was a deep forest with bamboo thickets. It forested mountains are home to mosquitoes and sand flies. Always chilly, the region seems to have the rainy season and cold season only. The residents have to use warm clothing most of the day, except for a few hours around mid-day. Malaria is endemic hereabouts, to the detriment of locals and migrant business people.

Moreover, most men in the jade mine area use, for prevention against malaria, Khatpon (local name for opium). Some men drink Kachin liquor. Some others consume both liquor and opium, believing this habit will guard against malaria. However, from these intoxicating drugs the user advances to use No. 4, or heroin. An Information and Public Relations Department Staff said:

"Back in 1989 Khantpon the size of a catapult ball cost only 25 kyats only. The growing number of workers laboring in Hmaw use it to prevent against malaria. So the price increase to 45 kyats to 1000 kyats per ball finally. Rooms for smoking khantpon proliferated everywhere, the 'tawpaboos', devised used for smoking Khantpon, become dirty and foul-smelling for multiple use by different people. All sorts of users leads to unclean environment to high incidence of tuberculosis.

At that time youths and pit diggers used No. 4 through their cheroots without much ado. Lonekhinn-Hpakant jade area is amenable to a quick cash flow; almost anything could be had for money there. The contiguous diseases are happening to both sexes. The girls get infected by way of working at a Karaoke or beauty parlour, or engaging in prostitution. The men become so through drug use and womanizing.

In the past only opium smokers and heroin addicts searched for yemasay stones for their living. They were physically weak and mine owners did not employ them. To earn their living, they search for yemasay stones by digging in piles of waste earth.

Lonekhinn village have three private clinics. One general practitioner said,

"Malaria and contagious diseases are endemic here, with every sort of people with habits good or bad. I have been in practice here for 19 years, and am treating patients with malaria or contagious disease almost every day".

Table 17. Nine Forms of Preventive Measure

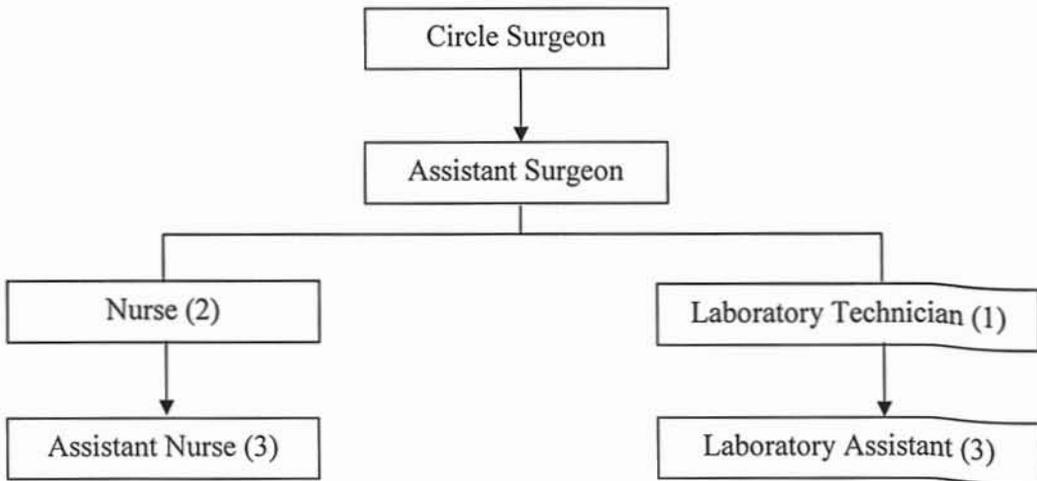
No.	From	2007				2008				2009			
		Case	Prosecuted	Closed	Remainder	Case	Prosecuted	Closed	Remainder	Case	Prosecuted	Closed	Remainder
1	Gambling	9	9	-	-		6	-	-	10	9	-	1
2	Narcotic drugs	104	104	-	-		104	-	3	66	59	-	7
3	Code 54	12	12	-	-		24	-	-	26	24	-	2
4	Police Act	989	989	-	-		667	-	-	444	444	-	
5	Residential confinement	25	25	-	-		16	-	-	17	17	-	
6	Excise	23	23	-	-		18	-	-	24	24	-	
7	Illegal arms	14	14	-	-		18	-	-	8	8	-	
8	Prostitution	9	9	-	-		19	-	-	5	5	-	
9	5-night emergency	-	-	-	-		-	-	-	-	-	-	
	Total	1185	1186	-	-		872	-	-	600	590	-	10

Source : Administration of Hpakant Township, 2009

Above data shows use of narcotic drugs and prostitution exist while income significantly increases thanks to brisk jade marketing locals' health is found to be suffering somewhat.

Hpakant has a Township Health Hospital and Township Health Department. Lonekhinn village has a Station Hospital and Rural Health Centre. Moreover, Lonekhinn-Hpakant jade mine area has Maternal and Child Welfare Association, Red Cross Society and Social Welfare Association as well. The villages in Hpakant Township have a Rural Sub-Health Centre each. The Lonekhinn Station Hospital, established in 1994, is organized as follows :

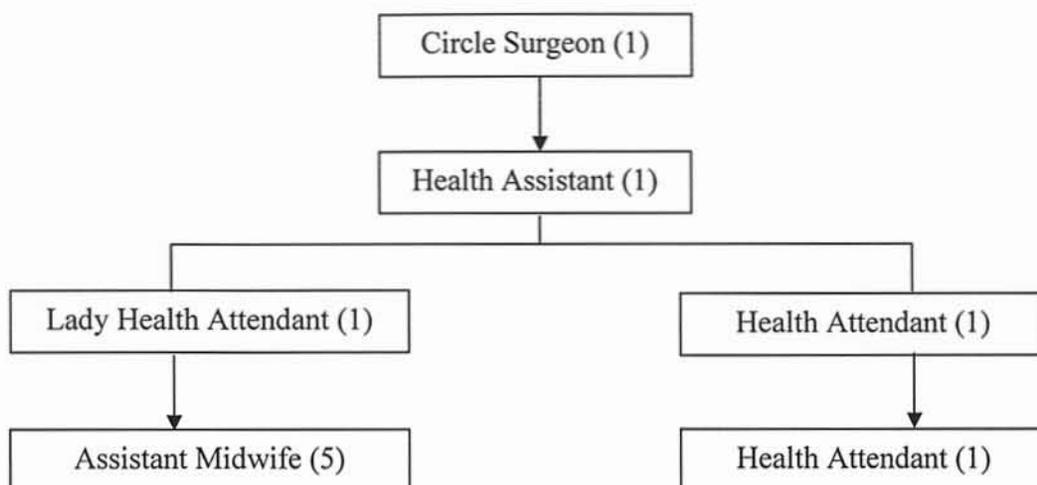
Organization of Lonekhinn Station Hospital



The Station Hospital is responsible for child delivery, surgeries, illnesses, and accidental cases.

The Lonekhinn Rural Health Centre opened in 1995, is responsible for family health, school health activities, a monthly inoculation campaign in village tracts and 'Hmaw' (jade mine) areas, prenatal care, child delivery, inoculation of under 2 infants, and distribution of anti-malarial medicines. Its organization is as follows :

Rural Health Centre



The Red Cross Society, Lonekhinn village, founded in 2004, has been functioning since that time to date with a core membership of 20. In summer they conduct educative courses in public health and First Aid. Moreover, they cooperate with Rural Sub Health Centres in public health activities such as vaccination programme and providing oral medicines for under 5 children, anti-malaria campaign and preventive measures against cholera, and also help out in preventive measures against fire, floods, landslides and other natural disasters.

The Rural Health Centre jumps into action when serious diseases break out in village tracts, and its other undertakings include overwatching family health and school health, monthly inoculations at villages, and inoculations for expectant mothers and under two children.

The Lonekhinn Village Welfare Society was established in 2008, with a membership of 400 and two motor vehicles, which has remained available funeral purposes without discrimination among the people. Apart from a monthly trip of a medical team to village for free medical services, the society keeps a free dispensary at Village Administrator's Office for free treatment of people without discrimination as to race or religion. Free medical services are provided to anyone while it opens during 12:00 AM-5:00 PM, Monday to Sunday.

Before 2000, health care for locals was weak, because of difficult communications, poor knowledge and a disproportion between population and health care personnel.

Health care status

- | | |
|--|---------|
| 1. Ratio of doctor to population | 1:7999 |
| 2. Ratio of nurse to population | 1:5090 |
| 3. Ratio of health assistant to population | 99.30 % |

Above data shows that there can be seen disproportion between population and health care personal.

Arisen after 2000 with the advent of companies are: improved communications; broader knowledge thanks to mutual relations between the hilly region and plains; and better health care made possible by increased income. A 75-year-old man said:

“For any fever in our area before 2000, we would scratch the Mackalaung suppurating sore and receive an injection. There was almost no occasion to go down to Mandalay, Yangon for medical treatment. But when I was infected in 2002 with hepatitis I went to Nyein Clinic in Mandalay for treatment, on the direction of a friend of my sons”.

A 47 years old businessman also said :

“I have been in jade business since my forefathers’ time. When more rights were given us in accordance with state policy our marketing has become brisk and brings in a lot of income. So, after my father-in-law suffered a fractured thigh bone. I took him to China and had that bone implanted with a steel rod on I could afford the expenses.”

These examples show that the status of health care before 2000 and after 2000 has undergone quite a change. Health care organizations have come to be organized in the locality which, being jade mine area, is now accommodating a dense population. Care for public health in functioning well.



Figure 39. Lonekhinn Village Tract Station Hospital



Figure 40. Circle Health Centre



Figure 41. Free Medical Service

6.3 Food Habit

Before 2000, the locals usually took three meals (cooked rice and curry) every day. Some used to have a regular meal in the morning. Some ate Shan noodles, warmed tofu, steamed glutinous rice and assorted fritters. For lunch and dinner at least a meat curry and soup were cooked. The meat was usually fried; the regular sauce-like dish was rare. Chicken and pork were much preferred to fish. Vegetables, being produce of rich highland soil, were clean and fresh. In cooking, little amounts of edible oil, chili powder and turmeric powder were used but larger amounts of ginger, onion, garlic and tomatoes were in favour. The locals liked to take their food while it was still warm. For snacks they ate glutinous-rice doughnut, *Mont Pyathalat*, assorted fritters, won tofu (made from gram) and hsan tofu (made from rice) and Shan noodles. They use edible oil for cooking.

Self-sufficiency in edible oil percentage

4. Edible oil produced	452690 viss
5. Demand of edible oil	455880 viss
6. Sufficiency	99.30 %

Above data shows resident people mostly use groundnut oil for cooking because self sufficiency in edible oil is, at 99.30%, almost complete. The use of groundnut oil partially contributes to locals' health.

With the advent of companies after 2000 commodity flow has become quick and income turnover greater. Then the number of restaurants dependent on jade activities increased, namely, Mon traditional food restaurant, Thai restaurant, Kachin restaurant and Chinese restaurant. In the morning people consume tea, coffee, Chinese dumpling, palata, deep-fried doughy sticks, instant noodles, steamed-chicken noodles and meat-ball noodles. For lunch they have a normal meal of cooked rice and curry but the whole family may eat out. Their guests and trade friends may also be entertained at restaurants. The foods they order at restaurants include cold drinks, different labels of beer, roast chicken and meat, tonyang sweet/sown soup, fish head soup, Japanese beancurd-cake soup, soup with feather back flesh balls, meat fried dish, fried sweet/sour dish, fried noodles, fried vermicelli, fried rice and marlar (vegetables) dish.

The various snacks the locals consume include kyay oh (dish of thick soup containing vermicelli, meatballs, etc), hamburger, and cakes and delicacies local-made or foreign-made. Even J'donut from Yangon is available. This butter cake, transported to Myitkyina by air, was again brought to jade mine area by car.

6.4 Mode of Dress

For mode of dress, menswear are pasol (nether garment of males) or pants, sport shirt, shirt and leather slippers. Womenswear are longyi (nether garment of females) and blouse and beautiful slippers. Children, boy or girl, have their garments custom-made, taking a piece of cloth to the tailor's shop; they also wear slippers. After 2000, businessmen reliant on jade mining and trade bring high-priced consumer goods for sale, namely, jeans and ready-made shorts and shirts with famous brand logos of Nike, Arrow, Baleno, Guy Laroche, etc. Men are using expensive boots, walking shoes and sandals.

The womenswear in vogue are kinds of ready-made blouses, jeans, shirts with various lengths. They use high-heeled shoes or slippers. Most of children garments are ready-made and considerably priced. The latest fashion items, about one month after appearing first in Yangon, can be bought at Hpakant Township.

On this a 35 year-old wife of a jade trader said:

“Womenwear arrive here soon after their first appearance in Yangon, and the garment shops inform us immediately. A blouse with Queen label which costs K 18000 in Yangon is to be bought at K 35000. Yet I and sister-in-law bought two blouses each. Sometimes a garment worth K 55000 in Yangon is sold for up to K 85000 here”.

After a business deal is done, men also buy for themselves famous-brand menswear and accessories.

The wife of a company owner said:

“My husband’s clothes mostly bear the labels of Guy Laroche, Nike, Baleno, and Crocodile, have opened an account at the store, and clear up a month worth of bills for the family at the end of the month”

Male locals with enough money buy expensive clothes only. They use foreign-made shoes and slippers including high-heeled ones. Mostly, the effects befall the locals residing in large villages like Hpakant, Lonekhinn, Seikmu, Haungpa and Tamakhan.

It is cold and very rainy in jade mine area. As to warm clothing, such goods are imported from China and Pyin Oo Lwin. On sale here are knitwear, jerkins, Chinese-made fur-lined coats, etc. Here is proof to man’s nature his preference for better things in life for his consumption. Jade mine area is having a quick turnover of money because of jade mining and trade. Other businessmen reliant on jade mining and trade always try to expand their market, importing expensive goods of human consumption from big cities, including cosmetics such as MG5 and Code 10 brand hair lotions, and famous label garments for sale in jade mine area.

6.5 Patterns of Housing

The house pattern is 2 khan × 3 khan, 3 khan each all around, or 4 khan × 3 khan, with a khan meaning distance between two adjacent house posts which is usually 10 feet. Usually two-storeyed, a houses’s area depends on the size of the family to occupy it. The ground floor is brick-walled while the first floor is plank-walled, which is brushed with oil dregs from time to time. The roof is usually made of iron sheets. Some houses are thatch-roofed and all the walls are made of bamboo matting, which is brushed with oil dregs from time to time. While the kitchen is

attached to the house, bathing quarters and the latrine lie separately at the back of the house. Materials of house construction are bamboo matting, planks, thatch, bricks, and Iron sheets. Brick house or house with walls of planks, the floors are made of planks which are either teak or pyinkadoe. The first floor consists of the alter and sleeping quarters of grandparents, while the ground floor consists of bedrooms for parents and their children. The parlours has settees and a Television set. Almost all houses have a well each whereat a pail with rope and pulley is used.

The working class people build for themselves stilted 3 room houses which are thatch-roofed, walled with bamboo matting and floored with planks. Merchants and brokers usually build for themselves two storied houses, walled and floored with wood planks, and roofed with galvanized iron sheets. And rich people build for themselves two-storeyed brick houses with Iron sheet roofing. But the majority of houses have separate kitchen and latrine at the back of the house. Residents wash themselves with water from wells drawn up in pails, at a place backwards of the houses.

After 2000, all brick buildings become most common, which are painted very colourfully. Roofed with aluminium sheets, the house has the kitchen, bathroom and laterine inside the house. But some houses have the kitchen, bathing quarters and laterine standing separately at the back of the house. The parlour is filled with settees, television sets, speaker, water cooler, referigerator, stand fans, etc. Several houses have 2-foot satellite dish, 5- feet satellite dish, or SKY NET dish can get much knowledge.

Hpakant jade mine area's climate is rather cold, but it is a brisk importer of deep freezers, refrigerators, water coolers and exercise machines, which are seen here just one month after their appearance in Yangon. Retail stores often have computerized cashier machines, just like City Mart supermarkets in Yangon. At Hpakant events like cosmetic show and stage show are often held.

Treadmills and jogging machines are found in some houses. They have steel storage tanks for water which is pumped up by electric power out of tube wells. A few houses stand about five feet above ground on house posts but a storeroom or two are found underneath.

Before 2000, masons and carpenters from Kachin State were hired in house construction. After 2000, more contractors from Ye U, Taze, etc together with their own groups of workers come to work in house construction. A house owner-to-be

entertains, though he has paid up the cost of house construction to the contractor, the construction workers to a breakfast (steamed glutinous rice, tea, coffee, deep-fried dough sticks, etc) and also to mid-afternoon snacks (fritters, rusk, tea, coffee, etc).

In house construction after 2000 the verandah is often found to be made of steel piping and steelwork, while the bathroom, laterine and kitchen are floored with porcelain stone tiles. Some brick houses are painted colourfully while others have smooth-stuccoed walls only.

6.6 Daily Routine in Family

A family usually has a male as its head. He is responsible for all family needs (food, clothing and shelter) while his wife is responsible for housework and management of household expenses and savings. Before 2000, the family income was the husband's main responsibility. After 2000, companies come to invest, using sophisticated machinery. Jade production has risen sharply and commodity turnover has become quicker. Moreover other businessmen reliant on this prosperous area are coming over, leading to more knowledge and insight on women's part. Thus both man and wife are often engaged in economic activities now.

The housewife, usually risen from bed at 6:00 am, brushes her teeth, washes her face and opens all the doors, believing this would allow in gains and profits for the family. Closed doors, quarreling or baby's crying in the morning will bring ill luck, it is believed. And then, she changes clothing and goes to the bazaar, where she buys fish and meat, vegetables and foods for her children's breakfast. Once back at home, she boils water in a kettle and prepares to cook rice. Their breakfast usually consists of Shan noodles, Chinese dumpling, deep-fried dough sticks, and tea or coffee. At about 8:00 am she wakes up her children who, after brushing their teeth and washing their faces, sit down for breakfast. Then, carrying school books in satchels, they go to school. Now that the rice has been cooked the wife offers a little of it to the Buddha at the altar. While eating her breakfast, she has to prepare cooking of food for lunch. Rising from bed at about the same time as his children, the husband brushes his teeth, washes his face and has his breakfast, after which he goes out on business. While cooking food at home, the wife conducts business if visitors come for that purpose.

Then, after cooking of food and a bath, the wife also may go out to seek business. Near the school recess time she comes back home to have lunch with her

family then follows a rest for all. At mid-day children go back to school and the couple go out on business. Before the school gives over in the evening the wife comes home to wash family clothing or have it done by a hired woman who is paid by the month. After cooking dinner, the wife and her children, now arrived back from school, take a bath and then a little rest. Afterwards the husband would arrive back from his business. He takes a bath and then the whole family sit down for dinner. Sometimes the wife does not cook the evening meal, so the whole family eat out at dinner time. Then it is time for study on children's part, while man and wife discuss business deals done for the day and the latter puts away the money. After the children have finished their study all family members relax watching television and then go to bed at about 10:00 pm.

A 35 year old woman, a broker in diamond jewellery, said ;

“Formerly my husband was the sole earner of money in the family. After companies have come in more varieties of gems are found and business is brisk. The advertisements carried by TV prove interesting to women, who then fancy diamond and platinum jewellery. I have a constant flow of diamond jewellery merchants of 16th Street, Yangon as visitors at home. As a local I act as a broker. Business is good because buyers here do not insist much on bargains”

Thus, when both husband and wife are engaged in business which is thriving the family income increases so as to enable them enjoy a high living standard.

6.7 The Relationship among Family Members

At Lonekhinn village of Hpakant jade mine area two types of family are found the basic family and extended family. When children get married some opt for neolocal residence, some have their spouses move in to live together with parents, and some set up a separate house in the compound of parents' house. Unmarried children take food together with parents out of the same pot, so to speak. Children in different households send a dish each to parents every day, while the latter look after their children and grandchildren. Married children in a separate house in the compound of parents' house have their separate kitchen also, while sharing the same bathing quarters and latrine as their parents. Every house has its own power generator,

motorcycle, household goods. When there is no water at cooking or bathing time one has to run his own power generator to pump up water.

Whatever the mode and type of their housing, married children getting hold of a jade stone would offer it for shared ownership among the siblings.

On this a 32-year-old jade businesswoman said:

“First I would buy a jade stone that appeals to me, to sell it later. I am also a jade broker. One day I bought a jade stone for Kyat 8 lakhs. At home I showed it to siblings, two or whom decided to share its ownership. Then there were three owners. A week later the stone was sold for Kyat 135 lakhs, resulting in kyat 45 lakhs each for the three.”

This attitude shows affection and unity existent among siblings, though each belongs to a separate household.

Before 2000, men of the locality had relations with outsiders in the line of jade business, while women had familiar contacts with parents, siblings, relatives and parents-in-law. But after 2000 when wives become engaged in economic activities relations with outsiders develop leading to less family contacts as the children are now taken care of by their grandparents. So domestic help from among relatives is to be sought. However, some housewives can take more care of the families' health and education matters. Therefore familial relations are found to have decreased a little while relations with outsiders have increased.



Figure 42. Local's House

CHAPTER (7)

DISCUSSION

This thesis aims to point out the sociocultural changes due to the jade trade. The study site is in Lonekhinn-Hpakant Jade Mine Area, Kachin State. It covers: how jade trade is thriving; and changes in mining techniques as well as lifestyle of locals, between before-2000 and after-2000.

According to Julian Steward (1968), economic sector of society is most closely related to subsistence activities and economic arrangements. In other words, to understand the economy of society there must be studies about the subsistence patterns and their management.

Therefore, the economic subsistence patterns and their management on the part of Lonekhinn-Hpakant Jade Mine Area locals have been focused, at the same time exploring how the socio-economic and socio-cultural patterns have exchanged. In this study jade trade is considered as a culture of consumption.

7.1 Changes in Demography and Transportation due to Jade Trade

Lonekhinn-Hpakant Jade Mine Area is, for its jade mining and related businesses, an economic centre for a large number of people come from all across Myanmar. Officially the local population of Hpakant Township is 59472 (2009 census) and that of Lonekhinn village is 9051 (2009 census), but actually resident peoples are a lot more. There are 630 companies in operation in Lonekhinn Hpakant jade mine area, out of which Myayamon Company has about 700 workers. According to findings there are crowded people because of migration. Donald L. Hardesty (1990) stated that population growth can be understood as the product of birth, death, and migration. Therefore, it can be found that in Lonekhinn-Hpakant jade mine area, there are so many migrant people for jade business and associated with other jobs.

Population density is suggested by Morton Fried (1967) to be an important cause of social stratification and political centralization. In study area, companies were allowed to be established to undertake jade mining in accordance with State government's directives in Lonekhinn-Hpakant jade mine area. Besides, it can be said that company owners, after registering their companies with the government, many work jade mining blocks after paying taxes. Their enterprise is of two types---private

and equal share; the former is owned alone by an individual and the latter a joint venture between the individual and government.

Owing to jade trade, people in civil service, company employees, vendors, merchants and other migrants have arrived in jade mine area, contributing to the high population density of the locality.

Basing his conclusions on a review of the relevant literature, Morton Fried (1967) feels that increasing population density leads to difficulty in obtaining access to resources and social groups with limited membership will evolve to hold and manage such resources. In study area, many migrant workers have come for their livelihood related to jade mining and associated with jade business. Increased mutual relations between migrants and locals, higher income, and general knowledge via mass media have contributed to the locals' view on ideas, values, and outlook. Then, jade business is one of the sources of population growth and changes in demography. It can be said that jade trade has expanded in line with how the native people and migrants use natural resources.

According to the jade trade, in the transportation session, before 2000 it was three days journey on foot from Mogaung to Lonekhinn Hpakant Jade Mine Area. By train, fortune-seekers disembarked at Mogaung, then had to journey on foot to Lonekhinn -Hpakant Jade Mine Area. At nightfall they stayed overnight at the station they had reached, and resumed the journey the next day. Hpakant Jade Mine Area is distant from Mogaung by about 67 miles.

After 2000 with the arrival of jade companies, roads and bridges were mended so much. Therefore, communications have become good and within-a-day trip, by car or motorcycle, to Lonekhinn-Hpakant from Mohnyin, Mogaung, and Myitkyina has become possible. With better communications, the security, peace of the locality and their economic activities improve. It can be found that local people's socio-economic life changed in the study area.

7.2 Patterns of Jade Consumption

Consumption is not a matter of responses to human "needs" or greedy desire for objects; rather, consumption or demand is a function of a variety of social practices and an aspect of the overall political economy of societies. The price of progress by John H. Bodly (2001) showed that "Cultures are always changing and the direction of that change is toward a single world system".

Jade production, jade distribution, and jade consumption are mentioned in chapter-5. Serena Nanda's (1991) book says an economic system is the part of a socio-cultural system that deals with the production, distribution, and consumption of goods and services within a particular society. Therefore, it can be found that jade business in study area is a part of sociocultural system, most of the local people and migrant people in jade mine area are working associated with jade business.

Paul Bohannon (1992) viewed that the main task of economic anthropology is to explain how production and distribution of necessary goods are organized in the absence of a market system or of central government control. But in study area was found that the companies in Lonekhinn-Hpakant jade mine area, after paying taxes for their stones at jade mine office, can transport and sell them to anywhere (ie, Emporium, Mandalay, Yangon) for sale. Yemasay stone searchers may take their finds, free from government control, anywhere inside the jade mine area for sale. Similarly, in Jade Mine area, Central government controlled the jade business in the presence of market system.

Stuart Plattner (1994) said that economics is the study of how men and society end up choosing, with or without the use of money, to employ scarce productive resources which could have alternative uses to produce various commodities and distribute them for consumption, now or in the future, among various people and groups in society. According to Mirror Newspaper 9.3.2011, Myanmar jade is well-known gem in the world. Besides, Dr. Khin Maung Nyunt (2008) stated that the Chinese and jade are not separateable twins. The Chinese believed that jade as the most precious gem and the most valuable gem, because jade brings lucky to them. Therefore, Chinese buy Myanmar jade mostly. For this reason, jade production has increased. That is why Myanmar jade is bought most by the Chinese. So, it can be found that jade production has increased in Lonekhinn-Hpakant jade mine area and distributed them for consumption with money at Gems Emporium.

In Hpakent area, before 2002 the natives owned the land in future Jade Mine Area. Local people sold some part of their land and worked some other part for jade mining. Some other people did not sell any land, working their land for jade mining together with family members and their relatives. In jade mining, simple technology and simple tools like iron rod, mattock, spade, and saungkyaw (local name for bamboo-matting basket). So, there are causing less damage to the natural environment. After 2000, jade companies came in buying land off the map from the

government through auction at prescribed rates per acre. A lot bought is permitted to be worked for three years. As a result jade of various types are abundantly produced thanks to modern machinery being used. Commodities flow becomes faster but exploitation of natural resources is found to be increased.

Jade production needs a lot of human labor and machinery use so population density becomes high and air pollution is unavoidable. Use of modern machines and tools quicken the environmental degradation. In jade mining hill after hill is broken up, and the resultant loose earth, for not being properly carried away to waste, causes landslides, blocking of creeks, and floods. Thus, proper dispensation of loose earth and re-use of wasteland are needed.

Polyanic (1995) stated that in all societies, goods and services are exchanged. The distribution or exchange of goods is also embedded in relationships that have primarily social and political purposes, as is consumption.

Before 2000, raw jade could be transported to anywhere within jade mine area but not outside of it. But, there are (a lot of jade stone) carried outside. Lintner (1991) stated that “the real profit... is made when the jade reaches the Thai border, usually the first frontier point on the long smuggling route from Burma’s Kachin State to Hong Kong”. For this reason, after 2000 with the advent of Jade Companies raw jade can be transported to anywhere within the country. Besides, everyone can carry jade stones within Lonekhinn-Hpakant jade mine area. Anyone, after registering his raw jade at Jade Mining Department (Lonekhinn), may take it anywhere. And jade merchants began selling their purchased jade at Jade Emporiums held by the Union government. Then, jade companies as well as private entrepreneurs are gaining a lot of profit from jade business. So, the businessmen have expanded jade businesses for their profits.

Paul G. Hiebert (1983) suggested that the consumption culture was not just a product of the market economy or the use of money; organized markets and money have existed for millennia, economically linking villages, towns, and cities in all of the major civilizations. Therefore, it can be found that there has relationship between local people and migrant people. All people use and consume material goods. They eat food, build shelters, make tools and use of land. In their relationships to their natural environment and to their bodies, all people make rational observations of cause and effect of the relationships between things. Chinese Traders buy the majority of Myanmar jade. In Jade Emporium, it was found that Jade is consumed by way of

sculpting jade Buddha images or turning it into hairpin, brooch, seal, table, chair, crockery, necklace, statute, bedcover, car seat-cushion, bracelet, ring, or pendant. With the economic growth, the lifestyle of locals is found to have changed. Increase of jade consumption is supposedly a solid foundation for the locals and migrant people's economic survival.

With the advent of companies in Lonekhinn-Hpakant jade mine area advantages and disadvantages are observed there. Advantages are : advanced living standard of family; value consumer goods are used; better health care of the family; and increased support for better education children.

The disadvantages are: higher population density for being an area of economic potential deforestation; air pollution thanks to carbondioxide coming out of vehicles and machines in operation and more consumer goods are needed to satisfy population on the increase.

7.3 Sociocultural Changes of Lifestyle

In education sector before 2000, most parents concentrated on their economic activities only, while most mothers, because of their housework and taking care of parents, could not pay much attention to the education of children. The majority of boys on entering adolescence (7/8 Grade in schooling) dropped out to begin jade mining or broker's business.

After 2000 with the advent of Jade companies residents in the area gain through mass media a lot of general knowledge, including educational services at various levels. They realize that education is a sound foundation for their children's future, especially as it can facilitate their approach to government departments on business.

The rich families send their children to big cities as boarding students, and parents with lesser means still enroll their children in Basic Education High School (Hpakant) or Basic Education High School (Lonekhinn). Therefore, parents are found to be prioritizing their children's education.

Above factors show that, the value accorded to education has been recognized.

In health sector, Lonekhinn-Hpakant jade mine area before 2000 enjoyed little health care because of difficult communications, unstable security, and scant general knowledge, it is learnt. Hpakant town has a Township Health Hospital and Township

Health Department. Lonekhinn village has a Station Hospital and Rura Health Centre. Moreover there were few public health personnel.

The Price of Progress by **John Bodly** shows that cultures are always *changing* and the direction of that change is toward a single world system. In this *article*, economic development increases the disease rate of affected peoples in at least *three* ways. First, to the extent that development is successful, it makes developed populations suddenly become vulnerable to all of the diseases suffered *almost* exclusively by advanced peoples. Among these are diabetes, obesity, *hypertension*, and a variety of circulatory problems. Second, development disturbs traditional environmental balances and may dramatically increase certain bacterial and *parasite* diseases. Finally, when development goals prove unattainable, an assortment of poverty diseases may appear in association with the crowded conditions of *urban* slums and general breakdown in traditional socioeconomic system (1999, pp 292 300).

After 2000, Hpakant Township has a Township Health Hospital and Township Health Department. Lonekhinn village has a Station Hospital and Rural Health Centre. Their health care services are being reinforced by activities of Maternal and Children Welfare Association, Red Cross Society, and a social welfare society. Besides, the locals are found to be going to Myitkyina, Mandalay, and Yangon for health care and medical treatment. According to the findings, it is evident *that the* locals have come to enjoy a growing income, whereby families are found to *put* emphasis on their health care.

Food, clothing and shelter constitute the major role in our life. According to Malinowski (2000), development refers to a process of change through which an increasing proportion of a nation's citizens are able to enjoy a higher material standard of living, healthier and longer lives, more education, and greater control and choice over how they live. Therefore, it can be found that Lonekhinn Hpakant jade Mine Area, migrant people and local people get development in their life, *such as* nutritious food, medicine, education according to environmental impact. After 2000 *with* the advent of jade companies, jade-related businesses are expanded so as to increase the family's income all the more.

Noreene Janus (1983) in his "Advertising and Global Culture" *describes* changes that are occurring on a global scale. The change agents (those creating the change) are transnational corporations and transnational advertising *agencies*.

Through their efforts, Western goods and Western values are being introduced throughout the Third World, causing significant cultural transformation. The symbols of transnational culture-automobiles, advertising, supermarkets, shopping centers, hotels, fast food chains, credit cards, and Hollywood movies- give the feeling of being at home. Transnational culture is a pattern of cultural beliefs and behaviors characteristic of elites throughout the world and often spread through mass media. The common theme of transnational culture is consumption. Advertising expresses this ideology of consumption in its most synthetic and visual form. Advertisers rely on few themes: happiness, youth, success, status, luxury, fashion, and beauty. In advertising, social contradictions, and class differences are masked and workplace conflicts are not shown. Transnational advertising is one of the major reasons both for the spread of transnational culture and the breakdown of traditional culture. Janus also pointed out that transnational culture strives to eliminate local cultural variations and cultures change because a society's is pulled into the world economy (1983, pp-288-291).

For food before 2000, the majority of locals had three meals (cooked rice & curries) daily. For morning breakfast, most of the family members together have cooked rice and curries, Shan noodles, steamed glutinous rice (paungtin) and pounded glutinous rice (khawpoat) all prepared at home or locally made delicacies. For lunch and dinner, the family members have to do prepare them in their home. By the changing of diet system, the eimpact on better health shows their social standard.

After 2000 with the advent of Jade companies to do jade mining the communications improved to allow import of many kinds of foodstuff. Restaurants and tea shops have since increased and most men usually have morning breakfast at the eateries, some of which are known as *Miba gonyee* tea shop, *Mon* dining shop, *Mogaung* Restaurant, Thai-style chicken and rice shop, etc. After a commercial deal has been made the relevant parties and departmental personnel feast together at a restaurant. Some family members want to relax by way of eating at restaurant in the evening. But vendors and working class people usually eat at home.

According to the findings, the restaurateurs are making their fortune based on the patronage of traders, brokers, rich families, and their guests. Moreover, it amounts to inviting new business partners related to jade mining. Moreover for older people's nutritious consumption Ovaltine, milk powder, tins of cookies, Knorr brand rice gruel and Brand's chicken essence, etc are available. Those foods mainly feature among the

offerings presented to the older persons on days of religious significance. Children have various snacks to choose from. So, breadwinners-vendors, merchants, and brokers are found to especially take care of parents and children in food matters. According to the finding, it is evident that the resident peoples' income increased.

Kachin State borders on China, so Chinese-made warm clothing, blankets, and textiles in abundance are on sale at Jade Mine Area. In dress before 2000, most of the local people (adults or children) wore clothes made at a tailor's shop, often bringing along pieces of cloth. Dress designs were ordinary and unattractive. Thanks to prosperous jade business after 2000 with better communications, readymade garments of various brand logo's, for man's, woman's and child's wear. Businessmen and businesswomen imported them from Yangon-Mandalay and sold in the area. All kinds of goods, expensive or inexpensive, to suit all strata of society are found to be on sale. Therefore, it can be found that dressing style of native people and migrant people use readymade fashion style, show their life expectation dependent on their economy. By using materials, there can be seen their social standard and prestige. Out of these, expensive items are bought by businessmen's families and less priced items are bought by working class people and stall-keepers for their consumption.

Mostly forested Kachin State is favorable to house construction as a lot of timber and bamboo can be produced. Most of jade workers' houses have thatch roofing and bamboo-matting walls, with plank flooring. Jade merchants and rich men build iron sheet-roofed houses with plank walls and flooring, bamboo-matting and wooden parts of which are regularly brushed with oil dregs. Some of the rich men build similar houses whose ground floors have brick walls. But, there are any accessories in their house. Turnover of income after 2000 has become quicker, so the residents consume a lot of personal and household goods. Dependent on their income, the rich men build brick buildings, aluminium-roofed and decorated with stainless steel tubing and fabrications. Most locals make an agreement with a contractor to build a house. They possess inside the houses are Television set, speaker, stand fan and water cooler which show the growing living standard of its owner. Similarly, vendors and working class people build iron sheet-roofed, with plank walls and flooring. Inside their house has at least a television set for easy viewing and relaxation. For this reason, it can be said that both their housing style and lifestyle are found to have changed. By using materials, there can be seen their social status and prestige, because of better economic situation.

In the family setting, before 2000 a housewife does cooking and looks after parents and her children. Her other chores are concerned with relatives and social events of the locality. Her husband, household head, only was responsible for livelihood of the family. After 2000, Companies do the mining with sophisticated machinery leading to more varieties of jade mined and a larger jade market. At the time, the housewife becomes involved in jade business with her husband. That is the improvement of their family's fortune. With the increase in family income, the housewife's role in the family has changed and income structure also changed. Besides, the siblings after their marriage may live in separate residence or together with parents; they are often engaged in the jade business in unity. This attitude shows affection and unity existent among siblings.

Because of jade mining the lifestyle of local and migrant people has changed; especially the basic needs in regard of food, clothing and shelter, education and health have been fulfilled. Moreover, the family life of the vendor, merchant, broker, yemasay stone picker and the rich has changed: namely shop keepers gain great benefit by selling more crops, garments and consumer goods to an increasing population of company personnel merchants and brokers have more business and consequently more profit after 2000 than before 2000 because of more categories of jade mined; yemasay stone pickers are enjoying a higher living standard for obtaining jade.

According to results, it can be found that lifestyle of locals and migrant people has been changed educational knowledge, family health care, food, clothing and shelter.

CHAPTER (8)

CONCLUSION AND RECOMMENDATIONS

8.1 Conclusion

Myanmar's natural environment---water bodies, land, forests and mountain-is full of valuable natural resources, including jade. Among many areas bearing jade, Lonekhinn-Hpakant area is the most productive. A village in Kamaing Township for many years, Hpakant for its economic activities concerning jade, was designated as a town on 16 March 1995, and as Township on 15 July 1996. This jade-bearing area stands as a place which can provide for the living needs of local people as well as the migrants.

In Lonekhinn-Hpakant jade mine area are those engaged in jade mining work and others in businesses related to jade mining. Therefore jade mining and related businesses are found to be connected to local people's lifestyle. That area for its possession of jade resource sees many economic systems in operation like jade mining, distribution or exchange, consumption and other economic activities associated with jade business.

When commodities are sold direct to the consumer the businessman usually makes more profits. People living in the mountains have their lifestyle changed for their mutual relations with those in the plains and more general knowledge gotten through the media. The Union Government has opened up jade mining, and with its help jade entrepreneurs are able to participate in gems emporiums to their much profit.

Before 2000, jade could be transported anywhere within the locality for sale but it could be done so outside of the locality if necessary taxes had been paid at Jade Mining Office, Lonekhinn. Nowadays the jade mined can be transported anywhere within the locality or outside of it for sale.

The arrival of migrants means needs for their living. The locals prosper by renting new houses to them, and selling foodstuffs. However, with increasing density of population the environment is found to suffer, especially in deforestation, air pollution (coming out of the vehicles and machines in operation).

With the advent of companies and good maintenance of roads communications have improved. And that area has caused a great inflow of foodstuffs and other consumer goods especially health care practise, attitude for education.

Before 2000, simple tools and simple technology were used in jade mining and a little variety of jade was obtained. But the natural environment remained almost intact. After 2000 with the use of modern machines in jade mining a great variety of the gemstone has been obtained, adding to State revenue. But the natural environment has been damaged in the process. The jade mined was marketed, leading to an increase in family income, a great deal of jade mining done has caused deforestation, which in turn is causing climate change.

The role of the business owner and workers in jade mining on self-sustainable basis has disappeared thanks to the jade mining being done by the companies which are properly registered with the government department concerned. The company system has made the workers monthly salaried employees.

Jade mining through the use of modern machines requires huge manpower and cost. It is using up a great deal of human resource. Moreover jade mining workers of the company are not skilled enough, leading to a wastage in the mineral being mined.

Yemasay-stone pickers at waste loose-earth dumps sometimes recover jade stones which could be worth from 100,000 kyat to 100 million of kyat resulting in a great loss to State revenue.

The disadvantages due to jade mining are : damage to top soil; landslides because of unstable earth; flooding; destruction of housing; and fatalities. In the rainy season loose-earth dumps turn to areas of slushy silting when they are being eroded by stream waters. New ditches are formed when the creeks are dammed up. Depressions have become hillocks and vice versa. The natural environment changes again and again thanks to man-made causes.

More consumer goods are bought by the families with a rising income. Local peoples' lifestyle has changed because of their general knowledge formed by mass media and of their new social practices.

It can be concluded that jade trade effects local and migrants people lifestyle have changed.

Before 2000, parents paid little thought to children's education because they were mainly focused on satisfying the food, clothing and shelter family. After 2000 with the advent of companies local people have more knowledge and better world

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outlook. Television programmes also cover educational courses and other services. Before 2000, health matter of the locality is important because Lonekhinn-Hpakant Jade Mine Area, deep-forested and mountainous, is very much home to malaria.

After 2000, other businessmen dependent on jade miners began to distribute opium heroin, W pills, phensedyle etc. Moreover some girls go for prostitution which provides easy money. Therefore propagandistic activities required for the sake of men and women in the area are educative talks and training on health, billboards, and distribution of pamphlets explaining the risks of misbehavior.

After 2000, jade companies came in and income flow has been quicker, leading to a change in the lifestyle of the locals. The root causes: the very big jade mining and trade has greatly attracted things from outside. Moreover, because of jade business people in the mountains and mainland came to have relationships, and more general knowledge. Local nationals happen to see latest household and personal goods via Television. Other businessmen reliant on jade business bring in expensive consumer goods for sale and they prove irresistible to locals. Humans by nature like what is good in food, clothing and shelter, but for those changes to occur, capital and time are required.

Before 2000, locals eat the regular meal of cooked rice and curries. After 2000, women also get involved in jade business. Therefore, a family would often eat out in the evening. The local restaurants are similar in food practice to the people because they use little edible oil and no chili powder or turmeric powder. So the locals' choice of food is found to be running smooth. For snacks they had Shan noodles santofu made from rice, which are being supplemented with city fare like hamburger, kyay-oh, etc. Close to the China border, the locality has Chinese-made foods and delicacies for sale.

Eating out at restaurants is good for local's health because they use groundnut oil for cooking and fresh vegetables for the dishes and salads. And their culinary practice is almost the same as the locals. Moreover, eating out is relaxing to businesspeople to some extent and contributes to their health.

In clothing, as income turnover has become quick the storekeeper is selling cheap as well as expensive garments. Most locals with enough money buy expensive clothes only. Wearing modernized brand garments is indicative of the locals' social status.

Before 2000 house construction local carpenters and masons were hired to

usually build a two-storied house with iron sheet roofing, all plank-walled, with ground floor brick-walled and upper floor plank-walled, or all brick-walled, while the kitchen and latrine stand separately at the back of the house.

After 2000, most locals make an agreement with a contractor to build a house who, after hiring teams of workers from Ye U, Taze, etc, offer to construct a house as piecework. Contractors would also offer to construct a RC (reinforced concrete) building, to be roofed with G.1 (galvanized iron) sheets or aluminum. There will be gutters at the eaves, and the verandah will be decorated with lath-fashioned wooden posts, ironwork, or steel tubing. In a RC house the kitchen and latrine are usually contained in the building. Electronic machines and gadgets are much in use now.

In house construction, a brick house can stand the elements well and makes secure shelter for the family, aluminum is long-lasting. Use of such materials indicates the higher income and living standard of local people. Use of deep freezers and refrigerators at this area, an area of cold weather, shows the prosperity of local people. Moreover, it enhances the family's prestige and invites trust of other people in jade trade.

Before 2000 a housewife does cooking and looks after parents and her children. Her other chores are concerned with relatives and social events of the locality. Her husband household head only was responsible for livelihood of the family. The wife is required to manage the Housework while wisely spending and saving the husband's earnings at the same time. After, 2000, companies do the mining with sophisticated machinery, leading to more varieties of jade mined and a larger jade market. Thanks to the exchanges between the mountainous region and mainland the housewife becomes more knowledgeable and insightful; she becomes involved in jade trading also So grandparents have to look after her children at home. The siblings after their marriage may live in separate residence, together with parents, or in a house built inside the compound of parents' house, but they are often engaged in an economic activity in unity. In jade business they would favor a sibling over a stranger.

Lonekhinn-Hpakant jade mine area is located over 700 miles from Yangon. But according to jade business their life style changed can be found.

8.2 Recommendations

In this research, the following are recommended :

1. Jade, a nonrenewable resource, should be mined within limits and control for jade mining. Otherwise this natural resource will be used up.
2. Jade, if sold as manufactured handicrafts rather than as raw mineral, will add more to State revenue.
3. The natural environment should be retained in so as to benefit the locals dependent on jade mining as well as the future life of the migrants.
4. To help prevent landslides and floods and jade production association should be organized systematically with the locals.
5. In Lonekhinn-Hpakant Jade Mine Area, local and migrant people's lifestyle and jade business should be done not only qualitative but also quantitative research.
6. Further research should be done to how the local people and migrant people lifestyle will be changed in the future because of government policy change.

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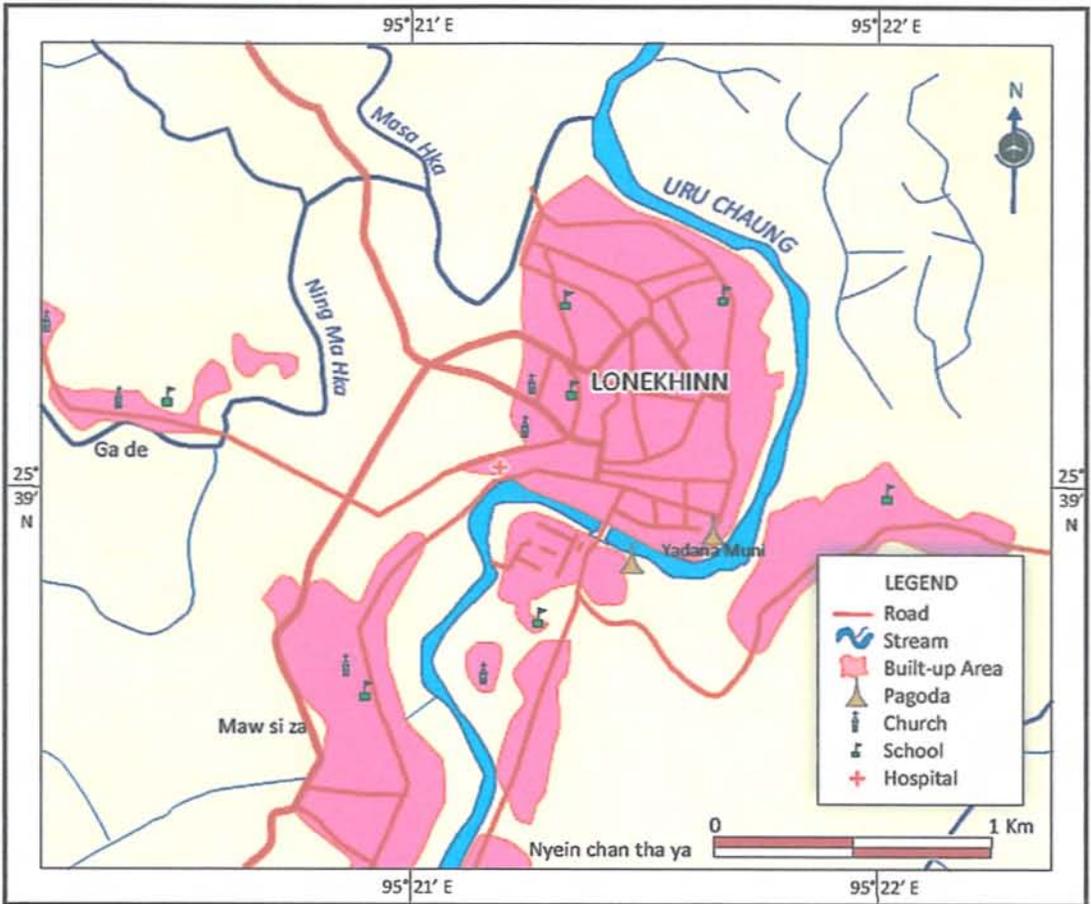
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Annex 3. Location of Lonekinn



Annex 2. Location of Hpakant

