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The Socio-economic Impact of Weaving and Naturally Dyed Textile Production in San Juan La Laguna, Guatemala

by

Heloísa Speranza Modesto



A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the requirements for the degree of Master of Arts

Department of Human Ecology

Edmonton, Alberta

Spring, 2001



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Helaiso S. Modesto

Heloísa Speranza Modesto 10839 66 Avenue Edmonton, Alberta Canada T6H 1Y1



University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *The Socio-economic Impact of Weaving and Naturally Dyed Textile Production in San Juan La Laguna, Guatemala* by Heloisa Speranza Modesto in partial fulfillment of the requirements for the degree of Master of Arts.

Sandra Niessen, PhD.

Elizabeth Crown, PhD.

Naomi Krogman, PhD.

26 January 20:01 Date

Abstract

This thesis explores the economic role of weaving and evaluates the economics of production of naturally dyed textile in San Juan la Laguna, Guatemala – where textile activity is based on the use of the backstrap loom and is controlled by women. Textile returns play an important role in that they complement agricultural income and represent the only form of income women have while still allowing them to remain in their households. Age, personal factors, life experiences, and socio-economic status differentiate the roles these artisans play in textile production. Local social hierarchy has been reproduced within the local artisan groups. The use of natural dyes involves additional knowledge and effort. Because natural dyes knowledge are restricted and the market for natural dyes textiles is unappealing, the number of artisans who use this technique is limited; this in turn reduces the use of dye-material and market competition.

Acknowledgements

I wish to thank the many individuals who have helped to complete the study presented in this thesis. I wish to express my gratitude to the numerous Guatemalans, and especially to the artisan women of San Juan La Laguna (*las artesanas Juaneras*), who unfortunately must remain anonymous. This study would not have been possible without their friendship, cooperation, patience, and willingness to share their experiences and knowledge with me. I would like to recognize the Guatemalan artisans, who through their dedication and perseverance give continuity to the production of textiles of remarkable meaning and beauty.

I am truly thankful for the encouragement and insightful suggestions that I received from Dr. Sandra Niessen, Dr. Betty Crown and Dr. Naomi Krogman. I particularly wish to thank Dr. Niessen for providing me with her expertise, support, inspiration, and friendship.

My research in Guatemala was made possible by the financial assistance I received from the Canadian International Development Agency and the Canadian Home Economics Association, for which I am very grateful.

I wish to express my deepest gratitude to my husband, Kelsey, for being an unfailing source of support, understanding, encouragement, and technical expertise throughout the sometimes difficult path of this degree. His assistance and companionship were essential resources in enabling me to accomplish this project.

I wish to thank my mother, Margarida T. Speranza Modesto, and my father, Walmy Modesto, for first stimulating my interest in community work and sharing their wisdom with me. Both of them, each one in their own particular way, taught me the value of discipline, dedication and an optimistic approach to life.

I wish to express my gratitude to the many friends who offered valuable support during this project – to list all their names would require an additional volume. Also, much thanks to my Change for Children Association family for providing me with a rich community life and a valuable learning environment. Finally, a thank you to Marilyn Nelson for caring about my mental health and encouraging me to take regular breaks from my academic work.

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Chapter One: Introduction

Proyecto¹ Tipica², an indigenous women artisans' group in San Juan La Laguna³, Guatemala (see Figures 1.1 and 1.2), is among the few in Guatemala that use natural dyes for textile production. This thesis explores the economic role of the weaving activity as a complement to agricultural income, and evaluates the economics of naturally dyed textile production. It also describes the reasons why *Proyecto Tipica* uses natural dyes.

The 30 women weavers directly involved in *Proyecto Tipica* use weaving to generate income and subsequently help provide for their families. The need to provide for their families is, in fact, the driving force behind the group's adoption of natural dyes. This thesis explores an important topic because development organizations in Guatemala have recently begun to encourage artisans to use natural dyes (Reiche & Itzep, 1999). The following pages reveal that *Proyecto Típica*, having adopted natural dyes as a response to consumer demand, nonetheless sells the goods to consumers of naturally dyed textiles in Guatemala at retail prices that do not compensate the artisans for their additional efforts in preparing and using the dyes. The information discussed in this thesis is based on ethnographic fieldwork conducted in Guatemala during a five-month period from January to May 2000.

San Juan La Laguna was founded in 1618 during the solidification of Spanish control in Guatemala, in an area settled by the Tzutujil⁴ Maya (Orellana, 1984) on the shores of Lake Atitlán, in the *departamento* (state) of Solalá. The municipality of San Juan has a population of 6380 people, of whom 97 per cent are Tzutujil (Lopez, 1997, p. 4).

¹ The term *Proyecto* is used in the community to designate groups of people organized to produce or work on something together, for example, producing textiles, raising pigs, building houses or schools, etc.

² In order to guarantee the anonymity of the participants in this investigation, I have adopted pseudonyms for all weavers and weavers' groups mentioned in this thesis.

³ In the following pages I often refer to San Juan La Laguna as San Juan.

⁴ Tzutujil is one of the Quichean languages spoken by the Maya in Guatemala and Mexico.

Figure 1.1 Map of Guatemala (After The Software Toolworks, 1993)



Figure 1.2 Map of Lake Atitlán (After Hinshaw, 1975, p. xx)



In San Juan, circumstances (see Chapter Four) have led to the loss of land by the majority of the population (Davis 2000; Olson, 1994; Seminario de Integracion Social Guatemalteca, 1968). This fact has increased dependence on a cash economy. The production of corn, the staple food of the Maya, has diminished as the production of exportable commodity products such as coffee has increased. The indigenous people have become dependent on seasonal migration for employment and on craft production to survive (Olson, 1994). The expansion of coffee production in San Juan over the past decade has created a local alternative to migrant labour. Today, Juaneros⁵ do not migrate to the coastal plantations, but rather work as wage labourers in the local coffee plantations. Although land continues to be the domain of the wealthy and is controlled by indigenous men, women play an essential economic role in San Juan - complementing agricultural income and helping through their weaving activities, to offset the absence of agricultural income in the off season. In this context, the economics of weaving in San Juan is a case study of great relevance because of the vital role of weaving in the local economy (see Chapter Three below for further discussion with respect to the Human Ecological model, and the relevance and meaning of context and environment as used in this thesis).

Theory and Objectives

In an effort to help their families endure shifts in the global economic market, Middle American indigenous women complement community agricultural income with craft production (Nash, 1993). The present study adds to knowledge about the socio-economic role of weaving in San Juan La Laguna, and to knowledge about the organization of backstrap-loom textile production in Guatemala. This is important because it complements the literature, which, at present, is limited to discussions of the current socio-economic role of weaving in specific communities with different economic contexts than San Juan. Over the past few decades, literature has documented the rising competition among textile producers in Guatemala – a fact that caused a decline in the quality of the craftwork and a reduction in artisan returns (Ehlers, 1991). Artisans were reported to have lost control over the design of their products when they were modified to meet the preferences of Western intermediaries (Nash, 1993, Ehlers, 1993 and Stromberg-Pellizzi, 1993).

⁵ The people of San Juan La Laguna.

Literature on the economics of weaving and on the impact of increased textile production on the artisans has previously concentrated attention on artisans who adopted the foot-loom for textile production. In this context, Ehlers (1991, 1993) discussed the formation of artisan groups in a community on the shores of Lake Atitlán where the women lost control over the activities when foot looms where introduced. The weaving context and the weaving techniques adopted in San Juan strongly differ from those in the community studied by Ehlers (1991, 1993). Specific artisan groups in San Juan La Laguna have been the focus of several academic researchers (Davis, 2000; Hamerschlag, 1985; Olson, 1994; Schevill, 1993). However, the literature does not discuss the alternative ways in which back-strap weavers are currently organized in this community, or elsewhere in Guatemala, to produce textiles. This paper will contribute to the literature in its exploration of backstrap loom textile production organization in Guatemala.

Natural dyeing techniques were abandoned at the beginning of this century in Guatemala (Carlsen & Wenger, 1991). During the last two decades, increased interest in naturally dyed textiles in North America (Buchanan, 1990), combined with the German ban on azo dyes (Hill, 1996), expanded the market demand for naturally dyed textiles. The production of naturally dyed textiles has been promoted by NGOs worldwide. Given the potential market for natural dyes, and since the knowledge of natural dyeing techniques has often been partially or entirely forgotten, individual professionals, NGOs and government agencies have facilitated weavers' return to natural dye usage in Southern countries (Anderson, 1998; LWDP/WAYANG, 1995; Morris, 1991; UNDP, 1996). The promotion of natural dyes has been associated with reduced threat to the physical environment (Aageson, 1999; LWDP/WAYANG, 1995; UNDP, 1996), the revival of ethnic traditions, improvement in textile quality (Anderson, 1998; Morris, 1991), and increased returns for the artisans (Anderson, 1998; Morris, 1991; UNDP, 1996).

The literature reveals a failure to carefully assess the impact of natural dye use on artisans, and thus stops short of evaluating whether or not this technique can in fact bring the benefits expected by those promoting its use. In Mexico, Popelka (1991) reported on the additional labour requirements in the production of naturally dyed textiles. In the Guatemalan context, the last available assessment of natural dye use dates back to the 1980s (Lara, 1981) and reports that natural dyeing techniques were no longer being used. Davis (2000) studied the socio-environmental aspects of natural dye use in San Juan La Laguna. In order to evaluate the natural dye revival in Guatemala, more information is needed about the impact this

practice has on the artisans. The present study adds to the knowledge about the socioeconomic effects of the production of naturally dyed textiles on the artisans involved in its production.

This thesis has two separate but interrelated objectives; first, is to understand the context of the weaving activity in San Juan La Laguna and the economic role of the weaving activity in complementing agriculture activity; second, is to understand and evaluate the economic aspects of the production of naturally dyed textiles by *Proyecto Tipica*. The objectives have been met by researching artisan production organizations, motivations, the efforts expended in the production and marketing of naturally dyed textiles, and the returns artisans receive from their activity.

Practical Justification

As indicated above, development organizations and individuals are currently encouraging artisan groups to use natural dyes. The present study adds to the available information on the impact of natural dye use on the artisans, and thus should help development organizations involved with indigenous weavers to develop more informed policies for their activities. This study is a product of the Healthy Dyes Project, in the University of Alberta's Department of Human Ecology, which is concerned with healthier dye options for weavers globally.

Development organizations are likely to try to aid artisan groups in a manner that results in collective rather than individual benefit (Cohen, 1998). Although artisan groups may be officially recognized as projects, associations, or cooperatives, these groups operate in distinct ways that reflect the heterogeneous political contexts in which they are immersed. Development organizations working with artisans have a greater potential to effectively promote the well-being of artisans if they are aware of the artisans' struggles and circumstances. Many development organizations are currently involved with artisan groups in San Juan La Laguna and Guatemala. The present study – by discussing the challenges the artisans face in the production of commercial textiles, the manner in which these artisans are organized, and the benefits each form of organization brings – is designed to increase development organizations' knowledge about the artisan context. It is hoped that this information will help development organizations working with artisans to establish project policies that take into account the realities, needs and challenges of the artisans.

Organization of the Thesis

Literature from human ecology, anthropology and the gender and development theoretical approach were used to design the research for the present study. The research approach and the methods used in the fieldwork are discussed in Chapter Two.

During the past century, the indigenous people in Guatemala have undergone many socioeconomic changes. They have faced the decline of subsistence agriculture and concomitant increased dependence on a cash economy (Nash, 1993). The Guatemalan economy today relies on the production of export goods. Textiles represent an important source of foreign currency in the country, through trade and also because Mayan hand-woven textiles play an important role in attracting foreign tourists to Guatemala (Hendrickson, 1995). For the Guatemalan indigenous population, the emergence of the textile market meant an alternative form of income during a time of scarcity of cash sources. Textile quality, production technology, and artisan production organizations were adapted as competition and the need to meet foreign market demand increased. In Chapter Three, the Guatemalan context, the development of tourism, and the adaptations of textile activity to new market demands are discussed. The chapter presents information at the national level, to serve as background for the subsequent discussion about life in San Juan La Laguna.

After many decades of seasonal migration to the Guatemalan coastal plantations, the introduction of coffee plantations in San Juan La Laguna offered local inhabitants better remuneration and eliminated the need for labour migration. Coffee is the most profitable economic activity in San Juan, and land continues to be the means for producing wealth. Chapter Four presents a description of the San Juan economy, the history of wage labour and the current main economic activities in San Juan.

Most of the commercial textile production in San Juan La Laguna is destined for the tourist market. The artisan organizations had to adapt their textile production in order to meet the new market demands (Littrell & Dickson, 1999). In Chapter Five, I discuss the different textile production organization units found in the community (see also Hamerschlag, 1985; Olson, 1994; Schevill, 1993; and Davis, 2000). This chapter also serves to describe the textile production environment in which *Proyecto Típica* operates.

In San Juan La Laguna, textile activity complements agricultural wage income, and is the main source of women's independent income in the household. Household land ownership affects the household socio-economic status, as well as the roles artisan women assume with their textile activity. In Chapter Six, I discuss the different roles played by weavers depending upon their economic status. Four case studies are presented in order to illustrate the different experiences of artisan women in San Juan La Laguna.

The artisans involved in *Proyecto Tipica* represent different socio-economic statuses, as will be illustrated in Chapter Six. The local socio-political context in which *Proyecto Tipica* originated is reflected in the division of labour, in who has access to the natural dyes, and in the market knowledge employed in the production of naturally dyed textiles by this artisan group. In Chapter Seven, I discuss the motivation of the *Proyecto Tipica* artisans to use natural dyes, the efforts it requires, and the returns on those efforts. Finally, in Chapter Eight, I summarise the content of this thesis, present this study's conclusion, and make academic and practical recommendations.

Chapter Two: Research Approach and Field Methods

Introduction

The present study was designed using a human ecological framework, anthropological literature about labour organization and technology, and the gender and development theoretical approach. These three areas assisted in delineating the environment and relevant subjects investigated during my fieldwork, defining the concepts involved in the present investigation, and determining the relationship among these concepts.

During the period between January and May of 2000, I conducted ethnographic fieldwork in San Juan La Laguna, in the highlands of Guatemala. While most of the findings discussed in this thesis are based on my investigation of *Proyecto Tipica*, my fieldwork also involved investigation of other groups and individual artisans working in San Juan La Laguna and throughout Guatemala. Getting to know other textile producers, textile cooperatives, storeowners, textile buyers and NGOs working with Mayan weavers, I could develop a better sense of the context of Guatemalan textile activity in which *Proyecto Tipica* exists. Moreover, I could gain a general understanding of the current use of natural dyes in Guatemala, and the markets in which these textiles were being sold.

This chapter presents the theoretical approach that assisted me in defining the focus of my research. I also discuss my fieldwork approach, and the research tools I used to gather information on the economics of weaving in San Juan and on the production of naturally dyed textiles by *Proyecto Tipica*. Finally, this chapter includes a discussion of how the data were analyzed and limitations of the present study.

Research Approach

Individual well-being (Westney et al, 1988) or betterment (Bubolz, 1995) is a goal of human ecology. Human ecology views "humans and their environments as integrated wholes, mutually influencing each other" (Bubolz & Sontag, 1988, p. 3). As a result, human betterment and the sustainability of the environment depend on each other. The environment, in the human ecology framework, is usually divided according to its proximity to the individual (Bubolz & Sontag, 1993). Westney (1988) divided the environment into micro and macro environments. In the present study the household, San Juan La Laguna, and the world outside of San Juan represent the micro, meso and macro artisan environments, respectively

(see Figure 4.1). As recognized by the Human Ecological approach, knowledge of context or environment is necessary to understand a social phenomenon. In the present study, the context of the weaving activity in San Juan La Laguna is discussed and taken into account when building an understanding of *Proyecto Tipica*'s organization and activities. While the Human Ecological model is important for its holistic perspective, I chose to focus my attention on the socio-economic aspects of the environment in San Juan La Laguna and in Guatemala in order to meet my research goals and achieve an in-depth understanding of the phenomenon (see Chapter One). However, consideration of other aspects of the environment – such as the cultural and physical environments – are necessary in cases where they closely affect the phenomenon studied (e.g., cultivation requirements for the dye plants used by *Proyecto Tipica*). In this thesis context and environment are used interchangeably and, unless specified, they refer to the socio-economic aspects of the environment studied.

The use of natural dyes is a technological option available to a weaver, and thus has social, economic, cultural, and natural implications (Gregory & Altman, 1989). The present study focuses on the social and economic implications of natural dye use in *Proyecto Tipica* textile production. However, because all components of the human environment are in constant interaction (Westney, 1988), the social and economic aspects of natural dye use reflect, to a certain extent, the natural and cultural aspects of the environment. Natural dyes are technological inputs, and according to Gregory and Altman (1989) the efficient use of a technological input depends on the production organization and on the knowledge of the producer. Moreover, the control of a newly introduced technology can yield important information with respect to the dominant and subordinate groups in society (Gregory & Altman, 1989). In analyzing the division of labour and the returns from the production of natural dyes, knowledge about local control over natural dyeing is an important political issue.

Social control is closely related to the distribution of resources at all environment levels. Social hierarchy directly affects social control over resources (Hamilton, 1987). Labour is a resource that is dedicated to production and reproduction activities (Gregory & Altman, 1989). Although the production of textiles for foreign tourists entails the interaction of the macro, meso and micro environments, the present study will focus on the economic organization within the micro and meso environments. The production organization investigated in this study refers to the division of labour, capital control and decision-making control in the production of naturally dyed textiles.





The present study makes use of the gender and development (GAD) approach. The focal point of GAD is not women *per se*, but rather gender relations (Young, 1997) and the different roles and expectations of women and men (Rathgeber, 1989). Gender is a socially built concept – it differs relative to area, culture, and time (Feldstein and Jiggins, 1994). Women, from the GAD perspective, are not considered to be a homogeneous category of analysis. Class, age and ethnicity are examples of factors of differentiation (Feldstein and Jiggins, 1994; Young, 1997). The reproductive and productive aspects are both considered integral parts of social life (Rathgeber, 1989; Young, 1997). Women are considered active agents in the development process, and their organization at all societal levels is important in helping to raise their political voice (Rathgeber, 1989; Young, 1997).

"Development is viewed as a complex process involving the social, economic, political and cultural betterment of individuals and of society itself. Betterment in this sense means the ability of the society and its members to meet the physical, emotional and creative needs of the population at a historically acceptable level" (Young, 1997, p. 52). Cash income on its own is not necessarily believed to improve women's conditions of life. GAD considers the organization of women as an important step towards not only economic self-sufficiency, but towards political self-reliance as well (Young, 1997). According to Young (1997), when investigating the impact of economic development in any segment of society through a GAD perspective, one would examine the beneficiaries and the subordinates, and the economic and political implications for women and men and among social groups.

According to Feldstein and Jiggins (1994, p. 4), when a gender perspective is integrated into research, three fundamental questions arise. These questions are as follows:

- 1. "Who does what, when, and where?"
- 2. "Who has access to, or control over, resources for production?"
- 3. "Who benefits from each enterprise?

These three questions have centrally guided the research undertaken in preparation for this thesis.

The Fieldwork Process: Approach and Methods

As discussed, the primary objective of this study was to investigate the social and economic organization of *Proyecto Tipica*'s naturally dyed textile production, the subsequent socio-

economic effects on the artisans involved in this production, and the context in which *Proyecto Tipica* operates. Secondly, this study aimed to understand the importance of the weaving activity in San Juan La Laguna, and the local alternative textile organization production units. In order to achieve these goals, I needed to understand the cultural context and the social dynamics of San Juan La Laguna, so that my "outsiders' perceptions" were mitigated by research knowledge. I wanted to understand the local population's reasons for weaving and for using natural dyes as an income activity, and the other income-raising alternatives available. An ethnographic approach was adopted for the present study to stress the specific cultural aspects of human activities and their environments (Hammersley & Atkinson, 1993).

The assumption that low-income artisans are all poor in the same way "obfuscates more than it explains" (Cook and Binford, 1990, p. 101). Such an assumption disregards the diversity of the population (gender, age, history, etc.). It also overlooks the fact that socio-economic differentiation is present in all groups where commodity relationships succeed (Cook and Binford, 1990). In order to understand the socio-economic context of San Juan and *Proyecto Tipica*, I needed to go further than simply labelling the members as "poor". The adoption of an ethnographic approach was appropriate for generating in-depth information about the context studied, and allowed me to immerse myself in the San Juan environment. Ethnographic fieldwork allowed me to experience, and thus better understand, the context studied (Ellen, 1984).

Due to the holistic nature of my investigation, and the broad range of information involved, I opted to use a combination of research tools. In sharing the natural and cultural setting with the participants of the research, I had the opportunity to experience the context studied (Marshall & Rossman, 1995). At the same time, I wanted to capture the participants' ideas and understand their activities and life realities. I did so by using informal and semi-structured interviews (Berg, 1995), as will be discussed below. Through participant observation I was able to formulate sensitive questions for interviews and use language appropriate for the participants (Ellen, 1984; Marshall & Rossman, 1995).

Participant observation was used during the entire period of my fieldwork in order to understand the reality investigated while minimising interference (Ellen, 1984; Marshall & Rossman, 1995). During the five months in which I lived in San Juan La Laguna, I shared housing, food, and transportation with the people who participated in this investigation. I joined them during harvesting, weaving, cooking, walking, religious ceremonies, celebrations and shopping, among other daily activities. I learned to live within their temporal framework, discovered the importance placed by them on social activities, and grew to understand the efficient local use of "chatting"⁶ as one of the main components of the local communication system. I travelled around the town and the country "chatting", sharing moments with Guatemalans and tourists alike, learning about their specific realities and ideas. I discovered the value of their money (Quetzal⁷) in the local context, and the efforts one would need to expend to earn food for a day. These activities made me aware of the local rationale that existed behind people's lives and acts, which I do not believe I would have been able to access otherwise.

Through engaging in a routine in San Juan La Laguna, I could sense the cultural and social aspects of the context investigated. The unpretentious act of socializing among the local people, and especially among the women, was an invaluable tool for understanding the reality behind the words and data collected through interviews. Most of the people interviewed, particularly the women, were not used to talking about themselves and expressing their ideas, especially with strangers. However, after occasionally meeting the women from *Proyecto Tipica* in such places as the market, the backs of trucks and church, we would engage in informal talks and feel progressively more comfortable with one another. As a consequence, the women were increasingly comfortable to share their lives with me and ask me questions to satisfy their curiosity.

It is important to note that I was not the only one with an agenda while engaging in conversations with the participants. Most of the time, we chose our words based on our individual current agendas. Each time I would talk with one of the women, her agenda would be reflected by the particular stories I would get from her that day. In each of these stories, some details would be omitted while others would be newly revealed. In relaxed social moments, and through silently watching each other's actions, the distinction between my agenda and the other participants' agendas was less evident, facilitating our understanding of each other.

⁶ Here, "chatting" refers to informal discussions, where gossip is often exchanged.

⁷ One Quetzal is approximately equivalent to 20 cents Canadian.

My findings were not collected merely through observing unexpected actions. Although I attempted to share several lifestyle characteristics with the locals, I always had a notebook and a pen in my pocket, and endless relevant questions in my mind. Back in my lodging, I had a desk on which books and my proposal sat, constantly reminding me of my research objectives. At this desk – each night – I transcribed the interviews recorded during the day, analyzed the information collected, and organized them by categories. Based on the constant analysis of this data, I planned my subsequent investigations.

Fieldwork Entrance

The fact that a fellow researcher was still in San Juan La Laguna at the time of my arrival facilitated my first field meetings with the leader of *Proyecto Tipica*, the main gatekeeper for this artisan group. During my first week in San Juan La Laguna, I explained my research objectives to *Proyecto Tipica*'s president and other executive board (*directiva*) members. At this time, they expressed willingness to support my work, a fact that greatly facilitated my access to the other women working in *Proyecto Tipica*.

During the five months I spent in San Juan La Laguna, I lived with the daughter-in-law (whom for present purposes I call Helena) of *Proyecto Tipica*'s president, a fact that allowed me to closely follow all of *Proyecto Tipica*'s activities during my stay. Because Helena always helped with the dyeing, warping and sewing that took place in *Proyecto Tipica*, I was able to learn about the tasks and politics behind *Proyecto Tipica*'s textile production. Helena was fluent in Spanish and Tzutujil, and knew all of the women working in *Proyecto Tipica*. She worked as my interpreter and research assistant, facilitating my first contacts with the other artisans in the group. The opportunity to live with a local family enriched my understanding of the daily chores of the local women, and gave me a first-hand view of local family dynamics, something I otherwise would not have been able to understand as well. With Helena, I was able to learn the warping and weaving techniques, and many other relevant social, economic, cultural and technical details about the artisans' work.

Understanding Proyecto Tipica's Organization, Dynamics and Context

During the first month in San Juan La Laguna, I endeavoured to get an overall understanding of *Proyecto Tipica*'s dynamics. I accompanied Carmen (the president) during several trips in an attempt to understand *Proyecto Tipica*'s shopping and sales activities – since she was the only one in charge of both. Through participant observation, I developed a list of subjects to

be covered in semi-structured interviews, which I carried out among women working in *Proyecto Tipica*. These semi-structured interviews were designed to yield information about the weavers' household socio-economic status, the role of the weavers' income in their household, and the division of labour in *Proyecto Tipica*. These interviews also aimed to collect information about the participation of other household members in *Proyecto Tipica*'s activities, the weavers' past and present income activities, and whether the weaver had participated in migratory work. Inquiries were also made about the artisans' textile activity prior their engagement with *Proyecto Tipica*. Information was also gathered on the weavers' motivations to use naturally dyed yarns and work within *Proyecto Tipica*, their returns and the time these artisans would take to finish each task. In this first phase, I also investigated the reasons why *Proyecto Tipica* had opted to use natural dyes.

The semi-structured interviews helped me identify the socio-economic realities of, and discrepancies among, the women, and gave me an opportunity to meet 26 members of Proyecto Tipica, in addition to Carmen and Helena. Helena facilitated my initial contact with the 26 members, and acted as my interpreter in cases where the women did not feel comfortable communicating in Spanish. The use of semi-structured interviews allowed me to develop a rapport with Proyecto Tipica members in a relatively short period of time, cover a broad range of subjects during the interviews, and capture their individual perspectives about their lives and work (Bernard, 1995). After I evaluated the information gathered from these first interviews, I returned for at least a second time to the houses of 20 weavers to observe their work, verify the validity of the first interviews, and follow up by conducting informal interviews. Only four weavers out of the 26 were not able to conduct basic conversations in Spanish, and so they had other household members help to translate their ideas from Tzutujil. Participant observation was useful to capture information that I could not collect through the semi-structured interviews conducted with Helena's help. For example, one weaver reported through Helena that weaving was her only income activity - before I ran into her at the weekly market selling chickens. In another case, one woman initially told me that she was the only member of the household involved in the weaving activity, but during my second visit to her house I noticed her teenaged daughter helping with weaving. Finally, in the absence of Helena, weavers were more comfortable to express their dissatisfaction with their returns, their lack of knowledge about where and for how much the president was selling the textiles, and their ignorance about financial aid the president may have accessed from development organizations for Proyecto Tipica. These interviews also taught me that the artisans considered themselves to be working for Carmen as *mozos* (local denomination for wage workers), and would never refer to themselves as "members" of *Proyecto Típica*, a detail that would have been lost had I relied solely on an interpreter or groups discussions where the president was present.

During my five months in San Juan La Laguna, the women working for *Proyecto Tipica* met on three different occasions. During these gatherings, I had the opportunity to observe the nature of the women's meetings, the interaction among the women and the political aspects of *Proyecto Tipica*'s organization. I also visited the house of *Proyecto Tipica*'s president on a daily basis – to learn about her daily and planned future activities and to watch her interaction with the artisans who would come to her house to return completed textiles, get paid and receive more work.

Before my immersion in the field, I was led to believe that Proyecto Tipica was a cooperative in the ideal, formal sense of a democratic organization. It did not take long for me to realize that Proyecto Tipica had a well-defined vertical structure, as will be discussed below. Based on this, I began to re-adjust my planned research approach and strategy. After pursuing my initial research goal of understanding the organizational dynamics of Proyecto Tipica, I realized that the participatory research approach I planned to use would not suit the study of the group dynamics. The initial interviews and a meeting with Proyecto Tipica's women, confirmed this suspicion. The group discussions would always reflect the hierarchical structure found among the women working in Proyecto Tipica. The president of the project would present her view of reality, and this view would not be publicly contested - even though I heard different opinions from the individual women members expressed in private. I learned of the high level of secrecy exercised by Proyecto Tipica's president about much of the operational knowledge of the group, making clear to me the hierarchical relationship within the organization. As a result, it was more appropriate for me to discuss information related to the use of natural dye techniques, the textile market and textile production on an individual basis, acknowledging division of labour among the women and the secrecy that was prevalent. Through this process I was also able to identify the specific socio-economic and political contexts in which naturally dyed textiles were being produced and marketed by Proyecto Típica.

Investigating the Labour and Time Commitment Involved in the Production of Naturally Dyed Textiles

I was interested in investigating the time commitments of the dyeing, weaving and related market activities to meet the goals stated at the outset of understanding the economics of weaving and dyeing. In order to understand these specific activities in their natural environments, I chose to use continuous observation and informal interviews, as discussed by Gross (1984). The natural dyeing activity in *Proyecto Tipica* was limited to women, except for dye-plant gathering. To determine the efforts and time spent on the dyeing process, I used continuous observation of the dyeing process. The dyeing activities depended on the availability of the natural dye matter and occurred on an irregular basis. Only two kinds of dyes were produced during my fieldwork. Complementary data were generated through several interviews conducted with the two dyers of this group. These interviews yielded information about the time spent on the activity, and revealed the seasonal fluctuation of the dyeing activity. In addition, I contrasted the information collected during these interviews with the information collected by C. Davis – the researcher who had observed the dyeing activities of *Proyecto Tipica* during the complementary season of the year (personal communication, September 04, 2000).

Accessing dye matter and yarns, delivering textiles to the stores, getting new textile orders and retrieving payments for the consigned textiles were activities that were often combined a number of times during single-day trips. Travelling with Carmen, I could observe first-hand the time, effort and expense involved in accessing raw material and selling the textiles.

Through continuous observation I learned about the time spent warping, starching yarn and setting up the loom. Weaving involves repetitive actions with fixed rhythms. By estimating the weaving output over a determined length of time for a specific weaver, I was able to extrapolate the weaving rate and the total amount of time spent by this weaver to finish a textile (Gross, 1984). A total of eight weavers and three warpers were observed, comprising a purposive sample that included women with distinct weaving experiences working on the different products made by *Proyecto Tipica*. I would go to the weaver's house, because the weaving is done in the individual's household, and write down the length woven during a 30-minute period, later estimating the time needed to weave a complete panel (Table 7.1). After the first day of using this technique, I decided to embroider while the women were working. Because embroidery was a common activity among the women, they were more comfortable

with my presence and consequently more relaxed while weaving. Embroidering, proved to be an effective technique for making the weavers comfortable, thus allowing them to weave at their normal pace while I observed their activity. Only after I began to embroider did the weavers understand that I was not interested in a "fastest weaver" contest. Moreover, many weavers were curious and would stop weaving to observe my work, just as I would do with them. As will be discussed in Chapter Seven (see Table 7.1), weavers estimate the time spent on each textile in periods of days as opposed to hours. I was able to use semi-structured interviews to determine the time weavers spent to accomplish each one of their tasks.

Investigating Costs, Routes and Political Aspects of Natural Dye Material Trade

To meet the goal of understanding the economics of naturally dyed textiles, I needed to learn about the costs and efforts expended to access the dye materials, the methods of marketing the naturally dyed textiles and the returns received by the artisans. To learn about the costs of the raw dye matter I interviewed *Proyecto Tipica* members responsible for the dye purchases and followed the trade route Proyecto *Tipica* members would use to access different dyes. I recorded the prices paid for the raw dye matter, observed dye-purchasing activities and interviewed the participants. Using these same strategies, I investigated the route the naturally dyed textiles take from the producers to the consumers, and the prices paid. I also interviewed buyers of the naturally dyed textiles to learn about their interests in naturally dyed goods. Because fieldwork time constraints kept me from observing textile marketing activities for an entire year, I used informal interviews with the artisans and other participants in the textile marketing activities to collect information on the yearly textile market fluctuations and subsequent effects on textile sales and prices.

To estimate the average cost of the naturally dyed yarn, preparation of the seven most-used dyes was investigated in detail through several group and individual interviews with the two women involved in dye preparation and the dye collector. The results from these interviews were compared for validation. When information collected from different interviews did not match, I interviewed the participants again to clarify the information collected. Through these interviews, I was able to determine the amount of dye material, mordant, and firewood regularly used in the preparation of the dye vat for specific amounts of yarns. Based on the costs of the dyes, mordant and yarn material involved in each dyeing activity, the transportation costs, and the wages paid to the collector, I could estimate how much the naturally dyed yarns cost for Carmen. By adding the cost of the naturally dyed yarn for each

of the main products made by *Proyecto Tipica* to the expenses related to artisan wage labour for the production of each of these products, the overall production costs could be estimated (Table 7.2).

The sale price of each product produced by *Proyecto Tipica* was learned through interviews with the sellers and compared with information collected through participant observation while the items were sold. During these trips, the retailers were interviewed about their insights into the use of natural dyes in *Proyecto Tipica*'s textiles, and their perception of the Guatemalan market for these textiles.

Investigating the Production Organization Units of the Textile Activity in San Juan and the Role of Textile Activity Income in the Local Economy

I wanted to understand the role of weaving in the local economy, and to do so needed to research other local income-raising activities and their relationships with weaving. I also wanted to learn about the different roles played by the artisans in the textile production and marketing, and the reasons that led them to assume these different roles. The initial information I collected during the semi-structured interviews with the artisans of Proyecto Tipica served to educate me about the role of textile income in the household. I also determined the relationship between the textile activity and the agricultural activity in their households. From the weavers' past or present experiences producing textiles as independents, for local intermediaries and for other local textile projects, I learned of the alternative textile production organization units that exist in San Juan. From the interviews, and through snowball sampling, I learned about the other alternative production organizations in San Juan and the rationale for why the artisans in Proyecto Tipica opted to work with this group. I also interviewed people involved in the alternative textile production units in San Juan. The individuals interviewed here were chosen in a purposive way. In addition to the artisans of Proyecto Tipica, I conducted informal interviews with five local textile entrepreneurs, five independent weavers, and three weavers who were working as pieceworkers for local entrepreneurs. I endeavoured to learn about their socio-economic status and the rationale behind their choices for the respective alternatives. Finally, I used participant observation and conducted semi-structured interviews with members of each of the two other textiles groups in San Juan.

Investigating the Production of Naturally Dyed Textiles in Guatemala

To further understand the economics of the naturally dyed textiles, I needed to learn about the current status of natural dye use in Guatemala and the environment in which *Proyecto Tipica* produces naturally dyed textiles. In addition, I wanted to determine whether NGOs were promoting the use of natural dyes in Guatemala, their motivations for doing so, their work procedures, and their experiences promoting natural dye use. In order to collect such information I first investigated the literature available in Guatemalan institutions, looking for recent materials on natural dye use, and searched textile markets throughout Guatemala for naturally dyed textiles. At the same time, I searched for Guatemalan artisan organizations in order to interview their members about the use of natural dyes.

I searched for information on the use of natural dyes in Guatemala at the local library in San Juan La Laguna, at Subcentro Regional de Artesania and the Ixchel Museum in Guatemala City, and at CIRMA (Centro de Investigaciones Regionales de Mesoamérica) in Antigua. Little material was found on the subject. Fortunately, while visiting a textile market in Guatemala City, I came across naturally dyed textiles that were produced by a second group in San Juan La Laguna. I took the opportunity to interview the seller, who provided valuable information and also sold me a booklet recently produced by CEDART, a Guatemalan NGO that promotes natural dyeing workshops for artisans. I then contacted CEDART, to learn about their experience promoting natural dye use among Guatemalan artisans. I also conducted a semi-structured interview with CEDART's natural dye instructor, who promoted skills-building workshops among local artisans. This instructor is recognized in Guatemala as an expert on the use of natural dyes, and wrote the natural-dye booklet that initially led me to CEDART. To further investigate the use of natural dyes in Guatemala I spoke with storeowners about their knowledge of the production of naturally dyed textiles, and with numerous people working with artisan organizations.

In order to understand the motivations of artisans who use natural dyes, it was important to learn about the efforts and costs involved in the use of synthetic dyes – a contrast that would allow me to better understand the constraints involved in the adoption of natural dyes by artisans. Learning about the practices involved in using synthetic dyes would also allow me to learn more about the additional efforts involved when artisans use natural dyes. Finally, I wanted to learn the reasons why artisans were still dyeing the yarns rather than using industrially dyed ones. For comparative purposes I interviewed one individual and one artisan

organization, both of whom were using synthetic dyes rather than industrially dyed yarns. Through these conversations I could estimate the efforts and costs involved in dyeing with synthetic dyes, and the different dyes that were more frequently used by dyers. The prices of the main synthetic dyes were determined in the stores of Salcajá, the main suppliers of textile materials in the Western Guatemalan Highlands, where the dyes were bought. In these same stores, speaking with the sales persons gave me a better understanding of the dye options and the quality of the dyes being used in Guatemala. Through interviews with these sales persons, I also learned that the dyeing activity by artisans in Guatemala was largely limited to artisans producing *jaspé*⁸, and that the dye quality used for domestic textiles was superior to that used for textiles destined for the tourists.

Reflection on Fieldwork Strategies

Proyecto Tipica, in the past, had been involved in two investigations conducted by Canadian women researchers, a fact that made this group of women more familiar with my practices as a researcher and as a woman from a different cultural background. Moreover, the people of San Juan were used to the continuous presence of foreign women volunteers from international organizations, and a few other researchers who had spent time in the community and who would visit families with questionnaires. Still, based on local criteria, my research activities were more associated with social activity than work or with the activities of male professionals. The people with whom I spoke were interested to know about activities associated with the female sphere in their culture, an interest that I shared. A number of people in the community saw that I looked after my own food, went to the market daily, cleaned and washed clothes, embroidered a shirt, learned to weave and baked cakes on top of a wood stove during my fieldwork – resulting in the popular opinion that I was someone who worked. Another factor that helped me to ask relevant questions about the agricultural activity, and to gain the respect of the participants, was my agricultural experience in a similar climate and consequent familiarity with local plants and crops. I found that this

⁸ Jaspé is the Guatemalan term for *ikat* or tie-dyed designs. To produce *jaspé*, warped yarns are tied with a string that has been dipped in cow lard before the yarns are dyed. After the warped yarns are tied, they are dipped in dye baths and the tied areas are protected from the dye. The areas that resist the dye form figures such as dolls, corn and trees, and are often found in Guatemalan textiles (Schevill, 1993).

facilitated my ability to formulate relevant questions to put to the artisans, and in particular their partners, about their activities. Marriage was clearly the most important passage in a local woman's life. The fact that I was married allowed me to bond easily with the artisans I interviewed, as the majority of them were married as well. At the same time, the fact that I was married and living on my own in the community resulted in a great deal of curiosity, which was expressed in the many questions I would receive when I visited the artisans. During the two weeks my husband spent with me in Guatemala, I made sure that I took him with me to visit all of the artisans I had interviewed. After this, I realized the artisans had a better understanding of my life. The only peculiarity that remained, in their eyes, was the fact that I did not have children – children are expected of the women in San Juan during the first year of marriage. However, this did not seem to affect my relationships with the artisans nor did it limit the information I was able to collect, since the artisans simply believed that I was not able to have children – a familiar problem for a few couples in San Juan, they explained.

Another concern was that I felt I needed to differentiate myself from the stereotypical young foreign tourists, who local people associated with drugs and alcohol. I knew that if I were not able to do so, I would risk my trust among the research participants. I decided not to go to the bars and restaurants in the region that were believed to cater drugs to tourists. I was also careful to dress as cleanly and conservatively as possible, which proved to be important as many research participants commented that I – in contrast to most "gringo" tourists my age – wore nice, clean clothes. I was asked a number of times whether I drank alcohol, and I decided to say that I did not. Although drinking is a tradition during some Mayan celebrations, the people of San Juan were not used to social drinking, and women were certainly not expected to do so. Moreover, a good part of the population had recently joined religions in which drinking was forbidden.

I agree with Hammersley and Atkinson (1995, p. 123) who wrote "there is a variety of roles the ethnographer may adopt in the field, carrying with them a range of advantages and disadvantages, opportunities and danger". The data I collected during my fieldwork were a direct product of the roles I adopted during the research. Some literature argues that a researcher has to be concerned not to feel too "at home" in the research setting, and must maintain a certain distance from the setting studied (Hammersley and Atkinson, 1995) – a suggestion that initially proved to be a personal dilemma for me. What would be the effect of limiting the relationships I was building with the participants? I came to the conclusion that I could endeavour to be as close as possible to the context studied, because five months of fieldwork would not be enough to make me so comfortable in San Juan that I would mix in, or lose my analytical skills. While I never felt completely at home in San Juan, and although people – despite being more comfortable with my presence – still saw me as an outsider, I opted to spend very little time isolated in my bedroom. I found socialising to be an important step in building trust with the research participants because, in the local culture, work and social life are blended and a boundary is not strictly drawn between them. During social time people relax, get to know each other and develop trust – which is the basis of relationships and of informal economic activities.

While the weavers who participated in the research were from various socio-economic groups, and provided me with important information, most of these weavers were part of Proyecto Tipica and do not form a representative sample of San Juan's weavers, nor of weavers from other groups producing naturally dyed textiles in Guatemala. While time limitations kept me from further using quantitative methods and producing complementary data, this fact does not decrease the relevance of the findings in this research. In the middle of my fieldwork, I identified another group using natural dyes in San Juan - which might have proved to be a practical way for me to expand my investigation on the use of natural dyes. However, this group and Proyecto Tipica had a strict competitive relationship, which involved issues of secrecy, and my involvement with both could have endangered the trust I had developed with the executive of Proyecto Tipica. While I believe that I would have been able to effectively research both groups had I not been associated with Proyecto Tipica prior to my arrival in San Juan, I suspect that researching the two groups could have limited my access to certain information. Considering the sensitivity of trade, dye recipe and dye source information, I am convinced that I made the right choice by concentrating my investigation on Proyecto Típica.

In all my activities in San Juan I tried to be careful to avoid political issues that might have affected the trust I had developed with *Proyecto Tipica* members and, in particular, the president. I had to be careful while approaching other artisan groups in town, because the groups were very competitive amongst themselves. Although I visited all of the weavers' groups in San Juan, I limited my visits to one per group and first explained to *Proyecto Tipica's* president that I simply needed to learn about the different kinds of textiles that were being produced by the other groups and about these groups' practices. I also decided to have Helena with me during all of the visits to the other groups, since Helena had worked with one of them before and her sisters worked with another. While I believe that the information collected may have been somewhat different if I had been on my own, the presence of Helena facilitated my access to these two groups and ensured that I did not jeopardise the trust I had built with the *Proyecto Tipica* executive.

My strategy was to combine semi-structured interviews, participant observation, informal interviews and group discussions, a fact that I believe allowed me to develop a strong understanding of the group's dynamics and the context in which they operate in San Juan. The use of informal and semi-structured interviews allowed me to learn about the participants' perspectives and their understanding of facts, processes, and activities as noted above. It minimised the influence of any personal bias I might have had. Visiting Proyecto Tipica's members multiple times allowed the weavers to become more comfortable with my presence and thus more willing to talk openly. By spending time in their households I had the chance to talk with the weavers' partners and children. Since I was living in one of the wealthier households in San Juan, spending time with the weavers of Proyecto Tipica opened my mind to the different socio-economic realities found in this group and in San Juan. Here, it was important to visit the artisans without the presence of the interpreter because she was associated with Proyecto Tipica's president and because I wanted to establish direct interaction with the artisans. I was able to observe the role of weaving during the coffee harvest and when agricultural wages were difficult to come by, which was crucial for my understanding of the economic role of weaving. The down side to the use of participant observation and open interviews was that these methods demanded time, limiting the sample of participants in my research. As a result, I could not use similar methods to research other weaving groups in San Juan, nor to research individuals and groups outside San Juan - with whom I opted to use semi-structured interviews. The use of group discussions and interviews with the artisans of Proyecto Tipica – although not very useful for collecting information about group activities and perspectives - was useful for determining the hierarchic character of the group, as discussed above in this chapter.

As noted by Harris (1993), trade matters are usually sensitive issues and more often than not participants are reluctant to report information such as prices and wages. Trust and good relationships with the participants proved to be of utmost importance in gaining access to this kind of data. From the beginning of my fieldwork I was aware of these factors. My decision to combine interviews with participant observation in investigating naturally dyed textiles costs proved to be a good strategy for validating the trade data collected. It also allowed me
to develop an understanding of the efforts required to market the textiles and to access the materials required for production.

Information Recording and Validation

The data collected through observation were recorded in logs, diaries and journals. The semistructured interviews were recorded with a tape-recorder and/or written notes. Complementary investigation methods were used to investigate the same phenomena for purposes of comparison (Jick, 1983). Also, as suggested by Hammersley and Atkinson (1993, p.227), "respondent validation" was used for the verification of the information collected. In addition, feedback was sought from other ethnographers who have studied the area (Creswell, 1998).

The use of interviews and observation increases the researcher's understanding of peoples' realities (Marshall & Rossman, 1995). Through interviews, the participant's view about a particular phenomenon was recorded, and more objective information was achieved through observation to increase the reliability of the data. Participant observation was used as a means to verify data collected during interviews, and information from interviews helped to determine at least part of the participant observation focus.

Data Analysis

During the research, as suggested by Marshall and Rossman (1995), the information being collected was analyzed, annotated and organized frequently. By constantly evaluating the data, I could critique the information I had collected and redesign parts of the research as necessary (Creswell, 1998). From this constant data analysis I was able to detect gaps in my information and plan my further investigations. Moreover, I could check the validity of the information while I was still in the field. After the fieldwork was completed, the information collected was re-read numerous times in order to identify patterns and themes. Following this, charts, tables and diagrams were created representing the diverse groups involved, and the data were compared and contrasted also against a framework based on a literature review (Creswell, 1998).

Research Limitations

Considering the fact that natural dye use in Guatemala is not limited to *Proyecto Tipica*, the use of an ethnographic approach in the present investigation may have limited the degree to

which the findings of the research can be generalized and applied to others involved in the production of naturally dyed textiles. This is because a relatively small group participated in the research process (Bernard, 1995). For this reason, my findings are limited to the expression of qualitative indicators of the weaving role in the household economy, and the extent to which San Juan artisans are involved in each of the textile production units I found to exist in San Juan. On the other hand, the ethnographic approach allowed this investigation to yield data with high internal validation (Ellen, 1984). Also, a relatively short time period (such as the five months I spent in Guatemala) may limit the depth to which a topic can be studied, due in part to the existence of seasonal variation. However, through interviews, I attempted to cover the maximum amount of information about any relevant seasonal variation.

While my understanding and communication levels in Spanish were more than adequate, the fact that I do not speak Tzutujil forced me to rely on an interpreter while interviewing some of the women working in *Proyecto Tipica*. This fact made efficient data collection more difficult, since interpretation is never as complete as direct communication. Had I spoken Tzutujil, I would not have had to ask as many questions, since I could likely have learned a great deal by listening to people chatting during social periods. Finally, my different cultural background might have been a restriction in the research process, although all efforts were made to reduce the impact of this on the research process. Of great advantage here was my deep familiarity with Spanish, the fact that I was raised in Latin America, and have had several previous cross-cultural research and development experiences.

Being an outsider was positive in some regards since, as discussed by Annis (1988), I was seen to hold a more neutral position. I was aware of the fact that, had I lived with the *Proyecto Tipica* president, people would have associated me with the group patron and tailored their responses to my interviews. However, living with Carmen's daughter-in-law was valuable since it created a tie between myself and Carmen. During my fieldwork I visited the other textile projects in town at various times, and developed friendships with other families not involved with Carmen. Moreover, I visited all of the artisans of *Proyecto Tipica* on my own, and was told by the artisans that they enjoyed talking with me in the absence of members of Carmen's household. At the end of my fieldwork I invited all of the artisans I interviewed for a goodbye gathering. I revealed to all of them the relevant findings, and thanked them for their contributions.

Summary

The holistic research approach adopted allowed me to focus the investigation on the socioeconomic environment while still considering the influences of the physical and cultural environments. While the present research did not cover all aspects involving the use of natural dyes in San Juan La Laguna, the approach adopted will facilitate the integration of this investigation with further investigations on the subject. The use of the human ecology approach calls attention to the pitfalls of using gender as a homogeneous group of analysis. Finally, undertaking ethnographic fieldwork allowed me to experience the context of my study, and to re-delineate my investigation according to my increased understanding of the environment.

The initial phase of the fieldwork was designed to develop trust among the research participants, a major step towards facilitating access to information during the fieldwork. At the same time, I made efforts to understand local taboos and beliefs and to be sensitive to such when presenting myself to others in San Juan – an important part of developing trust. It was equally crucial to be aware of the political context in which the weavers and weavers' groups in San Juan exist, and to respect them so as not to jeopardise the trust of the research participants. While being a married woman facilitated my access to the artisans and to pertinent information, it was equally important that I undertook activities that are expected of local women – such as cooking, doing laundry, cleaning and embroidering. Embroidering, as mentioned above, also helped to improve the data I collected while investigating the weaving time frame.

Flexibility and strategic planning were necessary to keep my research with the group from being dominated by *Proyecto Tipica*'s leader. I learned that, in groups where hierarchical systems predominate, participatory research approaches and group interviews are not appropriate as tools for collecting information other than concerning the nature of group dynamics. The use of a participatory approach or group interviews in the context of *Proyecto Tipica* would have yielded the ideas of the dominant members. My research was redesigned during the fieldwork to take into account *Proyecto Tipica*'s power structure in a way that would allow the voices of all artisans involved in this group to be heard.

With the use of semi-structured interviews, informal interviews, and participant observation I collected and validated information and designed additional research investigations during my fieldwork. Observing people on the streets, in the markets, and during celebrations in San

Juan La Laguna, and by conducting informal interviews, I could better understand the context in which *Proyecto Tipica* operates. Interviewing the local artisans, particularly those working in *Proyecto Tipica*, I came to understand the role that weaving activity plays in the local economy and the alternative textile production units that exist in San Juan. While it is clear that the use of qualitative methods to investigate the economics of weaving in San Juan produced important information on this subject, additional quantitative methods could yield further information on the extent to which the findings of this research apply to a larger sample of weavers in the community studied.

This chapter described the approach and research tools used in collecting the information to be discussed in the next chapters. During the five-month ethnographic fieldwork I conducted in Guatemala, and more specifically in San Juan La Laguna, I was able to experience the context I was studying. With the use of interviews and observations, I was able to constantly redesign my research and select the most appropriate research tools for the situation.

Chapter Three: Textile Production in the National Context

Introduction

In Guatemala, the majority of the Maya, although facing numerous threats to their cultural identity, continue to live by their own life system. Since the 1970s, tourism and commercial textile activity have expanded in Guatemala. Tourism has developed due to the country's cultural, ethnic, and ecological diversity. The Mayan textiles produced in Guatemala have played an important role in attracting the tourists. The indigenous population which produces the Mayan textiles, receives a small but important profit as a result of the presence of foreigners. While tourism has inspired new forms of income generating activity, Mayan dependence on the cash economy and on the world market has increased. The production of Mayan textiles, due to the low technological and capital input needed for their production and the impressive skills of the indigenous artisans, has played an important role as an incomeraising activity.

From community gifts to goods for the international market, textiles have always occupied a significant place in Mayan exchange activities (Orellana, 1984). The commercial production of textiles destined for foreign consumption has led to adjustments in textile quality and in the organization of textile production. Foreigners do not appreciate the colours chosen by the artisans when they produce their own clothes and household articles. Intermediaries pass on the consumers' desires to the artisans. Artisans have begun to produce textiles such as table runners, dog leashes, and other products that are not used in their domestic world. Textile production and marketing had to be adapted to the export and internal tourist markets. The forces affecting Mayan textile market conditions became more removed from artisan control, and the role of the intermediaries became more vital in linking consumers to producers. This chapter discusses the expansion of commercial textile production in Guatemala in the last 20 years, and briefly outlines the national context in which the textiles are being produced. Background information about textile production in San Juan La Laguna, and naturally dyed textile production by *Proyecto Tipica* is provided.

National Context

Guatemala, the largest and wealthiest country in Central America with a total population of 10.8 million (World Bank Country Review, 2000), is today a nation of social contrasts (Ruthrauff, 1998). Disparities are found in Guatemala's culture, class, gender and race (Vilas,

1997). Although Guatemala has many different ethnic groups, *Ladinos* and indigenous people are the two main ethnic categories into which the Guatemalan population is roughly divided (Hendrickson, 1995). The clothes worn, the language spoken and the *costumbre* (Mayan customs) clearly distinguish these two groups. In addition, as discussed by Hendrickson (1995), ethnicity also implies a specific way of thinking and of understanding the world.

While the majority of the population are Mayan, *Ladinos* control the nation's political and economic systems. Rural Mayan peasants make up more than half of the entire population (Gispert, 1999). The indigenous population is largely concentrated in the Western highlands and is largely dedicated to activities of subsistence, complemented by wage labour and cottage industry. Illiteracy among members of the rural population (largely indigenous) is an extremely high 70 per cent, and nearly 40 per cent have no access to health care (Ruthrauff, 1998).

The expansion of commercial agriculture, to the detriment of subsistence agriculture, caused the Mayan population to lose their means of independence. The agricultural land is concentrated in the hands of few, and most of the agricultural work is carried out by wagelabour. The unequal distribution of land is the main cause of poverty in Guatemala (Wearne, 1994). An average of 75 per cent of the Guatemalan population lives in poverty, with 55 per cent in extreme poverty (Enciclopedia de Guatemala, 1999).

Municipalities⁹ are still the main means by which the Maya identify themselves (Hendrickson, 1995), and the basic unit delimiting the indigenous communities (Sol Tax, 1936). Ecological diversity, combined with specific historical backgrounds, influences each municipality's specialized textile techniques and products (Goldin, 1987). This diversity among municipalities – and among the different units within each municipality – is displayed through their specific $traje^{10}$, visual expressions of technical specialization, natural environment and ethnic unity of each community (Hendrickson, 1995; Pancake, 1993). From the end of the 1970s until the end of the 1980s, a civil war devastated Guatemala (Warren, 1997). The military violence was mainly aimed at indigenous people occupying leadership positions and indigenous organizations, especially cooperatives (Adams, 1988). As a result of

⁹ Each municipality consists of a *cabecera* (town centre) and several *aldeas* (rural villages) located in the municipality's countryside.

¹⁰ Mayan traditional dress.

the war, the indigenous population became even more dependent on the cash economy. In 1996 the government, military and guerrillas signed the "Accord for a Firm and Lasting Peace", an important step in Guatemala's reconstruction process (Warren, 1997).

Development of Tourism

During the late 1960s, tourism began to develop in Guatemala (Moreno, 1995). Guatemala City, Antigua, Chichicastenango, Quetzaltenango, Panajachel and Tikal have since become the main tourist destinations in the country (Moreno, 1995). Panajachel was the first town on Lake Atitlán to be reached by paved road, and this facilitated the arrival of tourists. By the 1970s, Panajachel was receiving 85,000 foreign tourists per year, and tourists spent five million American dollars in Panajachel in 1978 (Hinshaw, 1992). By the end of the 1970s, more than 80 per cent of the population of Panajachel was dedicated to tourism (Petrich, 1998a). Tourist development and associated economic activities, such as the textile market, had repercussions for all of the other towns on Lake Atitlán – including San Juan La Laguna. Given the tourists' interests in Mayan textiles, women from the diverse communities around the lake began to sell their woven goods in Panajachel. At first, Mayan traders were selling used Mayan clothes bought from indigenous people in difficult economic situations in their communities (Hinshaw, 1992). Women from all the *pueblos*¹¹ on the shores of the Lake Atitlán began to travel to Panajachel to sell textiles made in their community.

Tourism in Guatemala was drastically reduced during the civil war. People working in activities related to tourism – such as hotels, restaurants and textile production – faced a drastic decrease in their returns (1992). After the peace accord, tourism began to grow again in Guatemala (Moreno, 1995). According to the Guatemalan Tourism Institute (INGUAT), in 1998 tourism was the second largest industry in Guatemala after coffee production, bringing in 325.2 million American dollars. In 1997, tourist expenditure on textiles was estimated at three million American dollars (Moreno & Littrell, 1998). The same Mayan ethnic diversity threatened by the national army during the war began to be used by INGUAT to promote tourism in the country (Hendrickson, 1997). In the marketing brochures, "the Indians join with images of volcanoes, mountain lakes, ancient ruins, colonial architecture, and weavings; and all these symbols of national identity are shown as exhibiting a passive beauty that the

¹¹ Villages.

beholder may contemplate much like an object of art" (Hendrickson, 1995, p. 83). In response to government and private-business appropriation of the indigenous identity, a group of indigenous activists wrote the "Declaration of Iximcheⁿ¹². As Hendrickson (1995, p.90) quotes from the Declaration: "...The Indian becomes an object of Tourism, a commercial object. All the benefits in this business are for the hotel chains, transportation business, the middle men for Indian crafts, and the government itself. But we, the Indians, are those who gain the least benefits from tourism, which in the last few years has been in second place [in terms of producing foreign currency]". Mayan textiles have always played an important role as promotional tools for attracting tourists to Guatemala (Hendrickson, 1997; Rouanet, 1989). Textiles can be easily packed and allow tourists to transport their experiences in Guatemala back to their home countries (Hendrickson, 1995; Littrell, 1998).

Textile Activity

Today, textile activity represents 90 per cent of artisan activity among the Mayan people in Guatemala (Rosenbaum & Goldin, 1997, p.73). Government, national and international nonprofit organizations and cooperatives have promoted textile production in Guatemala (Moreno & Littrell, 1998). Often supported by development agencies in Latin America as an activity that improves indigenous financial situations, craft production - as an income-raising activity - limits the artisans to roles whereby they are sources of cheap labour in the informal economy (Morris, 1996). According to Morris, while cash income is the bottom line in the craft activity, other objectives such as ethnic identity, indigenous autonomy, and the empowerment of women are also involved. Otherwise sweatshops, which provide higher incomes than craft activities, would be preferable. Textile handicraft appeals to the indigenous population as a form of income due to the low capital required, the possibility of flexible working schedules and the involvement of skills mastered by indigenous artisans (Pye, 1988; Littrell & Dickson, 1999; Morris, 1996). Moreover, textile income complements agricultural income, eliminates or reduces the need for peasant migration and generates an exportable commodity (Nash, 1993; Pye, 1988). Several scholars investigating the effects of the global market on Latin American indigenous textile production discovered that the quality, technology, social and production organizations, and marketing processes have been altered (Ehlers, 1993; Jopling, 1975; Morris, 1991; Nash, 1993; Schevill, 1993; Stephen,

¹² The indigenous meet at the "Iximche" ruins in Tecpán, Guatemala.

1991). All of the changes discussed by the scholars directly affected the Mayan households, and thus the Mayan women. According to Pye (1988), the export market provides artisans with better returns than does the tourist market. However, both markets only improved the financial situation of a minority of artisans (Nash, 1993). Textile production – once an activity with social, political and religious meaning – became "fragmented, exploitative, and alienating" in the capitalist context. Rosenbaum and Goldin (1997) stated that, through weaving, the Mayan women could earn some cash while resisting total assimilation into the economic system. The weavers have preferred to adapt their textile production in order to avoid migratory work. They wish to remain in their communities and to reproduce to the extent possible, their world views (Carlsen, 1993). In traditional production systems, backstrap weavers were independent, controlling their schedules, looms, yarns, designs and the final textile (Rosenbaum and Goldin, 1997, p. 72). The entrance of the Mayan textile into the global economy caused the artisans to lose their independence but, contradictorily, offered them an alternative for subsistence.

While Guatemalan textiles are currently being exported, the textiles woven in San Juan La Laguna using the backstrap loom are largely sold to retail stores and to tourists in Guatemala. As a result, the present discussion about the textile market is limited to Guatemala. However, this textile market is also directed towards foreign consumers, and so is affected by the international economy. If economic conditions in the tourists' home countries deteriorate, tourism – and subsequently the sale of textiles – is reduced. Oscillations in the value of the Quetzal, the Guatemalan currency, affect the price of yarn and dyes, transportation and other basic materials needed in textile production. Guatemalan natural disasters, such as earthquakes and hurricanes, and political instability have also affected local tourism in the past. The indigenous artisans often are without an understanding of the dynamics of the global market, and thus become susceptible to its fluctuations (Nash, 1993).

Guatemala City, Antigua, Panajachel, and Chichicastenango are the main destinations for tourists in Guatemala, and consequently are where tourists make their textile purchases (Hendrickson, 1995; Moreno, 1995). While the textiles produced in each municipality of Guatemala are still being differentiated through the style, colour, design and techniques used (Pancake, 1991; Schevill, 1993; Moreno & Littrell, 1998), artisans and merchants supply Antigua and Panajachel – the two main Guatemalan tourist destinations – with all kinds of textiles produced in the country. Antigua is an elegant Spanish colonial tourist town, usually a destination for tourists coming directly from the airport so as to avoid the chaotic capital, Guatemala City. From Antigua, tourists can easily take day trips around the country. Textiles are sold on the streets of Antigua, in market shacks, and at retail stores. Several elegant stores in Antigua offer tourists differentiated high-quality textiles, while in Panajachel few stores target the same high-end clientele.

Panajachel is identified in recent international travel guides as the location where travelers can get the best deals on textiles. It has a considerable number of stores, street vendor shacks and roving sellers marketing textiles and competing with each other. Among the weavers, Panajachel is well known as a place where the returns barely cover the material costs. Several women in San Juan La Laguna, who used to sell their textiles in Panajachel in the past, no longer attempt sales there due to the competition and the modest returns.

Textile Quality

According to Jopling's study of weavers in Oaxaca, Mexico (1975), the quality of a textile is the product of aesthetic, economic and technological factors affecting the weavers. A weaver's aesthetic ability is an important factor affecting textile quality, and weavers with high aesthetic ability gain prestige in their community. Jopling (1975) argues that most of the weavers producing textiles for distant markets do not concern themselves with textile quality, since dedication to achieving a high-quality textile will not give them prestige. However, the weavers with high aesthetic skills who do concern themselves with the textile quality have the potential to produce for a higher-end market, thus achieving better returns (Jopling, 1975). On the other hand, Jopling (1975) argued that high-quality textiles result in increased labour before the economic return can be realized, and only a few weavers - in more secure economic positions - can afford this option. Weavers producing high-quality textiles have to invest additional labour hours and more resources for high-quality materials. Technological factors also directly affect the quality of textiles, such as loom, yarn, dyes, and weaving patterns (Schevill, 1993). However, according to Pancake (1997), the women weavers decide their textile production techniques, materials and designs based on their understanding of consumer preferences.

"The pressures exerted by highly competitive international markets can destroy the [textile] qualities that attracted the customers initially" (Nash, 1993, p. 10), a fact that influences the demand for Guatemalan textiles. However, artisans adapt some of their product characteristics while retaining others (Berlo, 1991; Niessen; 1990). Moreno and Littrell

(1998) concluded that, although Guatemalan textiles are directed to foreign consumers, they continue to be characteristically Guatemalan. Cotton yarns and synthetic dyes represent the bulk of textile costs. Both products are commodities, with similar prices throughout the world. The bulk material costs of weaving textiles in Guatemala are similar to the costs in other countries, such as in North America (Moreno, 1995). The competitive prices of the woven Guatemalan textiles are at least partially reflective of the small wage Mayan women receive for their work. Retailers, as well, have to sell textiles for minimum profit due to competition, and intermediaries who have weavers working for them earn their profits by decreasing textile quality (Moreno & Littrell, 1998). Often, lower-quality materials are used and design simplification is employed as a strategy to lower costs and make the textiles more competitive in the market (Nash, 1993; Moreno, 1995; Schevill, 1993). Quality control exerted by culturally sensitive intermediaries and consumers helps to support artisans who are dedicated to the production of high-quality textiles, and facilitates the revival of techniques such as the use of natural dyes and the backstrap loom.

Price competition and lack of tourist awareness of what constitutes quality textiles are incentives for the weavers to continue to produce low-quality textiles for this specific market. However, according to Moreno (1995), tourists have recently increased their desire for better-quality textiles. In addition, in order to sell or consign textiles to higher-end stores – which pay better prices for the textiles than do vendors – the quality has to be such that it will meet the storeowners' requirements. As discussed by Stromberg-Pellizzi (1993), artisans depend on intermediaries to sell their crafts and thus intermediaries have control over exactly what is produced. In the high-end stores, textiles are more likely to be of a higher quality – and for sale at a higher price – than are similar textiles found in the markets and at the street shacks. The retail storeowners also have specific requirements, based on their understanding of high-quality and traditional textile characteristics (Moreno, 1995). Retailers concerned with exclusiveness develop new textile products, which later are reproduced with the use of lower-quality materials and sold at cheaper prices elsewhere (Moreno, 1995).

As discussed by Hendrickson (1995), the yarn chosen is the first indicator of the final quality of the textiles to be produced. The yarn-buyers' economic situation determines the quality and amount of yarn they can afford. Artisans rely largely on commercial yarn to produce textiles (Hendrickson, 1995). Cotton, wool and acrylic yarns are the main types of fibres used. Most yarn is bought industrially and does not exhibit good homogeneity nor ideal colourfast qualities (Moreno, 1995). The low quality of the commercial yarns found in Guatemala is of local concern to some. Some retailers, in order to guarantee textile quality, dye the yarns and supply it to the artisans (Moreno & Littrell, 1998). Retail storeowners will often wash the textiles to determine their quality, refusing any low-quality goods (Moreno & Littrell, 1998). In addition, some retailers verify the textile structure and homogeneity. Any failure to meet the storeowners' requirements causes the textile to be rejected. According to Moreno (1995), the artisans who have their textiles refused by higher-quality stores will sell these textiles to a less strict store, in the market shacks, or directly to the tourists on the streets. Textile sellers always try to show the quality of the textiles, saying that "el color no distingue" (the colour does not bleed). ARTEXCO, an NGO functioning as the umbrella of Guatemalan weavers' cooperatives, opted to standardize the quality of its textiles by dyeing all of the yarns that they sell to the cooperative members. In doing so, ARTEXCO reportedly was able to guarantee the high quality of their textiles and ensure that alternative industrial dyes were used rather than those banned in Germany. The use of natural dyes has been reported as a means of increasing colour qualities (Anderson, 1998; Morris, 1991) and provides artisans with an alternative to the azo dyes banned in Germany (Anderson, 1998; Hill, 1996).

Looms are a technological factor that influences the textile quality, the production rate, which gender controls the production, and the work environment in which the textile is produced. The backstrap loom and the foot loom are the two types used in Guatemala today (Ehlers, 1993; Schevill, 1993). Mayan women have been weaving with the backstrap loom (also known as the *palito*) for more than 2000 years (Schevill, 1993). Mayan women learn to work with the backstrap loom, starting as early as 10-years old, by watching their mothers weave in the households. The backstrap weavers work in their household where they still carry out other household tasks, a fact which gives continuity to the Mayan social and cultural world (Rosenbaum & Goldin, 1997). Weaving with the backstrap loom is at the same time an income generating activity and a cultural activity (Hendrickson, 1995). The construction of the backstrap loom does not require special skills and is built by the weaver at low cost. Backstrap loom weavers tend to work independently – under contract or on commission – in their household environments and often are organized into cooperatives (Stephen, 1991). Cook (1993) characterized backstrap weaving in Oaxaca as household-based, with individuals owning the means of production and with intermediaries playing an important role in linking artisans to the outside market. The backstrap loom is considered to respond more easily to the weaver's artistic impulse than does the treadle loom, although it limits the width and length of the textile produced. The Mayan people consider textiles produced using the backstrap loom to be of higher quality.

The foot-loom was introduced by Spanish colonizers who first transferred this technology to the Mayan men (Schevill, 1993). The foot loom allows for a production cycle four times faster than the back-strap (Schevill, 1993), and allows for the production of yardage because of its dimension flexibility. Consequently, it permits the production of material to be transformed into Western style clothes, at competitive prices (Rosenbaum & Goldin, 1997). The backstrap loom results in a much slower production cycle, a fact that limits the weavers' output (Ehlers, 1990). While women had long used this loom to provide family clothing, gifts and trade goods, the incorporation of Mayan textiles into the world market meant that the use of the backstrap loom decreased because textiles produced with the foot loom could be sold for less money and allowed the artisan to be more competitive (Ehlers, 1991). However, according to Pancake (1997), the women who remained using the backstrap loom intensified their textile production. The treadle loom is usually imported, and requires special skills for its construction (Schevill, 1993) - limiting the access of many weavers to this device (Ehlers, 1991). Moreover, many of those few who can afford to buy the treadle loom invest in several looms, and hire others to do the work for them (Ehlers, 1990). Since the treadle loom is usually located far from the household, it results in numerous difficulties for the women to access it because of the their family obligations (Ehlers, 1991). As a result, the majority of the weavers using the treadle loom are males (Ehlers, 1991). Ehlers (1991 & 1993) studied a group of female back-strap loom weavers who, with help from the Peace Corps, founded a cooperative to produce textiles with foot-looms. As soon as the enterprise was successful, their husbands took control over the activity while the women became the secondary weavers in the village. Ehlers attributed this change mainly to the women's household responsibilities, which kept the women away from the looms for part of the day. Today the production of textiles with the use of the foot loom usually takes place in workshop environments and is still largely controlled by men (Ehlers, 1993).

Trade and the Role of Intermediaries

Trade has always been a strong activity among the Mayan people, linking different Mayan groups from diverse geographic areas (Goldin, 1987; Orellana, 1984). *Comerciantes* (traders), as discussed by Goldin (1987), have always served as a link between the domestic and foreign worlds, and between geographic and culture regions within Guatemala.

Comerciantes would constantly leave their communities or municipalities and travel to different Guatemalan areas, thus gaining a better understanding of national diversity. The specific products of each municipality are used by *comerciantes* as opportunities to undertake their trade activities. Cook (1993) and Moreno (1995) used the term *comerciantes* to indicate people who link producers to those in the next stage of the commercialization chain. Others have designated such persons as entrepreneurs (Annis, 1987; Hermitte, 1972), contractors (Jopling, 1975), coyotes (Stromberg-Pellizzi, 1993) or merchants (Stephen, 1991). In the present study, I will use the term "entrepreneur" when referring to individuals involved in textile trade activities who are also involved to some degree in textile production.

As already discussed, the production of textiles for international consumers results in radical adaptations for the textile producer - adhering to new daily schedules, designs, sizes, materials and products (Nash, 1993; Litrell & Dickson, 1998; Rosenbaum & Goldin, 1997; Stephen, 1991; Verrillo & Earle, 1993). In the international market, foreign taste is not always compatible with the artisan's taste. Artisans can produce the perfect textiles to meet their household needs, and yet these textiles might not meet tourists' tastes. The disparities between the worldview and the realities of the artisan and the local consumer make it difficult for the artisan to understand foreigners' tastes and needs. Fashion dynamics continually change market demand in the Northern hemisphere. As discussed by Littrell and Dickson (1999), Guatemalan textiles similar to those worn by the Guatemalan indigenous - with bright colours and jaspé designs - were hot sales items in North America in the mid-1990s, but are no longer viable. Today, anything that looks Guatemalan is not desired in the U.S. ethnic market, and soft hues and natural tones are more saleable than bright ones (Littrell and Dickson, 1999). The rapid changes in Northern fads are slow to be represented in Guatemalan textile production. Artisans cannot follow the dynamics of the northern fads with respect to their textiles. Even if they are aware of changes in the quality of the textiles demanded, artisans in Guatemala have difficulties changing their production techniques and the styles of the textiles they learned to produce with their mothers (Littrell and Dickson, 1999). Moreover, changes in textile fads can cause artisans or groups of weavers who have invested resources in yarns to lose their investments.

Some weavers develop a better understanding of foreign preferences than others (Annis, 1987; Hendrickson, 1995), and those who do have a better chance of surviving in the international textile market. Usually, weavers with high aesthetic skills, a better understanding of the market demands, and the requisite financial circumstances will take

advantage of their special skills – hiring wage-labour weavers to produce for them (Annis, 1987; Hermitte, 1972; Moreno, 1995; Stephen, 1991). Entrepreneurs often receive orders from retailers in the tourist centres, and provide the relevant material and specifications to pieceworkers in their municipalities (Hermitte, 1972; Moreno, 1995).

Intermediaries can be entrepreneurs, artisan cooperatives, *comerciantes*, retail outlets, import companies, or alternative trade organizations (Litrell & Dickson, 1999). Most of the profit from international trade is retained in the hands of the intermediaries, and several layers of intermediaries are often involved (Rosenbaum and Goldin, 1997). It is a rare occurrence when a consumer buys the textile directly from an artisan without the influence of at least one intermediary. Rosenbaum and Goldin (1997) suggested that intermediaries play an important role in linking the producer and the consumer, enabling trade among them. The intermediaries generally have a unique knowledge of both the consumer's and the producer's world, and use this knowledge as a means of gaining profit from textile trade.

Consumers dictate their preferences and intermediaries engage the producers to adapt to these preferences (Nash, 1993, Rosenbaum & Goldin, 1997). The international market removes artistic control from the weaver (Rosenbaum & Goldin, 1997; Schneider, 1987) and thus the weaver cannot fully express herself through her work. Her efforts are representative of only the mechanical work involved in textile activity. Prestige, once a valued return from weaving activity, is sacrificed in this process – often resulting in a reduction in textile quality (Jopling, 1975). Intermediaries specify virtually all textile characteristics, in addition to inspecting the structural quality of the textile, thus transferring the prestige to themselves.

The presence of intermediaries alters trade relations as well. "In peasant markets, bargaining interactions serve as means of establishing relations and trading partners" (Rosenbaum and Goldin, 1997, p. 77). Trading partners are generally aware of their interdependence and the reciprocity of their relationship, thus creating a momentarily peaceful condition that goes beyond financial goals. The international market removes the relationship between the producer and the consumer, one so important for the Mayan people (Rosenbaum and Goldin, 1997). Textiles do continue to bond those involved in their transactions, however. Morris (1991) discussed the benefits to artisans of having direct contact with consumers, since artisans can learn about market demands and the results of their work. As discussed by Moreno (1995), retailers still develop strong trust relationships with the intermediaries who supply them with textiles from artisans. At a municipality level, weavers prefer to work for

intermediaries with whom they have some strong social relationship, such as kinship (Mier, 1984; Stephen, 1991a).

Summary

The Guatemalan indigenous population has been hard hit by national policies over the course of the past century. The expansion of commodity production in Guatemala increased the use of national resources for products destined for foreign markets. Commercial agriculture, the products of which are the main commodity in Guatemala, expanded at the expense of subsistence agriculture – which was the basis of the indigenous subsistence economy. With the diminution of subsistence agriculture, the indigenous population became more dependent on the cash economy and on wage-labour. With few income-raising alternatives, the indigenous people became dependent on seasonal migration to the coastal cotton and coffee plantations. However, according to Smith (1984), the indigenous would discontinue their migratory work as soon as they had saved enough cash to begin some income-raising activities in their own communities. A combination of diverse income-raising activities in the indigenous communities was potentially more profitable than the wages offered in the coastal plantations (Swetnan, 1989).

The development of commercial textile production for the tourist market in Guatemala offered an income alternative for the indigenous that would supplement their income and secure their families' subsistence (Nash, 1993; Swetnan, 1989). With the intensification of commercial textile production, competition increased. The prices of the Guatemalan textiles were continually lowered to appeal to tourists, a fact that was reflected in the low wages received by the artisans. In order to make the textile prices even more competitive, the quality was often reduced.

The use of the foot loom increased due to the fact that this technology can provide faster textile productivity, more flexible dimensions and lower labour costs. The increased production of textiles saturated the markets, and has had a negative impact on textile prices. Foot loom use also favours wealthier artisans who can afford the cost of this loom, and male wage labourers who are able to work away from the household. The Mayan backstrap loom is low in cost, and can be manufactured in the household. Even the most destitute artisans can afford the loom, although these weavers may not be able to afford to purchase yarn. However, backstrap weaving allows the women to generate income while remaining in the

household, even if the weaving is carried out as wage labour. The status of textile production with the use of the backstrap loom, and its role in the local economy, will be discussed in Chapters Three and Five.

Increased textile production required artisans to rely on industrial yarns, which in Guatemala are generally of low quality. In turn, the use of cheaper, low-quality yarn reduced the material costs involved in textile production. As a result, the general textile quality was degraded. Few producers specialized in the production of higher-quality textiles intended to meet the demand of a special clientele – a clientele that is willing to pay more for higher quality textiles. The use of natural dyes has been reported as an alternative that would ensure increased textile quality (Moreno, 1998; Morris, 1991). The use of natural dyes as a strategy for increasing textile quality is further explored in Chapter Seven.

Tourism and the consequent development of the textile market in Guatemala over the past 20 years have resulted in adaptations in the modes of textile production and commercialization in Guatemala. Artisans are now producing textiles primarily for a foreign clientele with different aesthetic tastes and needs. Intermediaries functioning as cultural brokers, allow artisans, who are generally not aware of foreign market demands, to produce the products desired by these consumers. Intermediaries also allow the products of artisans living in remote areas to reach distant markets. Finally, intermediaries can supply destitute artisans with the materials needed for the textile production. However, the need for intermediaries reduces the artisans' independence, economic returns, transaction satisfaction (Rosenbaum & Goldin, 1997) and prestige gained from the textile activity (Jopling, 1975).

Chapter Four: Local Economic Setting

Introduction

This chapter describes the relevant socio-economic context of San Juan, and recent changes in the local economy. It also describes the seasonal aspects of the local economy, and the indigenous dependence on wage labour. The information presented below establishes the socio-economic environment for subsequent discussions about the role of weaving in complementing agricultural income and on the production of naturally dyed textiles by *Proyecto Tipica* in Chapters Six and Seven, respectively.

Local General Context

Ninety-four per cent of the population of the *departamento* (state) of Solalá, where San Juan is located, are indigenous people – 64 per cent of whom are living in rural areas (Lopez, 1997, p. 2). The city of Solalá is the official administrative and commercial centre. Every Tuesday and Friday the Quiches, Cakchiquels and Tzutujil Mayans who populate the *departamento* converge in Solalá for the largest regional market. Fast boats cross Lake Atitlán almost every hour, linking San Juan with Panajachel, the largest town and main tourist centre on the lake, via a 20-minute boat ride. From Panajachel, Solalá can be accessed by a 20-minute bus trip.

San Juan's *cabecera¹³* is located on the shores of Lake Atitlán, and its population consists of half the 6380 people in the municipality. The municipality of San Juan is made up of fertile land located on Lake Atitlán's shores, and hillside land – which is covered with shaded coffee fields and a few remaining onion, corn and tomato fields. The municipality also includes some land on top of the hills where the air is cooler and corn is still the main crop.

In 1994, 35 per cent of the San Juan population above 15-years old were illiterate, a rate higher among the women (Lopez, 1997, p. 4). Tzutujil is the language spoken in San Juan and while almost every adult man has a basic working knowledge of Spanish in San Juan, the same is not true for women. Although today most of the women in San Juan have some basic knowledge of Spanish, they rarely practice it and their speaking confidence is low. Few

¹³ Town centre.

women are able to travel, and their husbands usually accompany those who do. The language barrier stops many women from developing direct contacts with outsiders who arrive in the village, such as doctors, social agents, and NGO representatives. Two decades ago education was only accessible to a few and the students were forced to speak Spanish. Today, students are first taught to write in Tzutujil – their mother tongue – and only later in Spanish. A number of youths from the few relatively wealthy families migrate temporarily to study at technical high schools in Quetzaltenango, Chichicastenango, Solalá and Guatemala City, usually returning to their communities afterwards. Several regional religious radio stations are transmitted in Tzutujil, while the main radio stations, newspapers and TV are restricted to Spanish.

In the past almost all housing was constructed with adobe, but after the earthquake in the late 1970s, houses built with concrete blocks and covered with corrugated sheets of zinc have become more popular. Seventy per cent of the households of San Juan have electricity, 86 per cent have latrines (Lopez, 1997, p. 8), and a few houses have flushing toilets. Running water is available to virtually all houses in the *pueblo*. Two community telephones are available, although during my fieldwork some of the wealthier families in the community purchased cellular phones. The economy is based largely on agricultural, textile and trade activities. Coffee, corn, beans, tomatoes and onions are the most important products. Corn tortilla is the basic food item, and it is usually eaten during all three daily meals, accompanied by very sweet and weak coffee. Fish and crabs from the lake, eggs and herbs are the main fare eaten with tortilla.

In San Juan, the civil war did not have the same direct violent impact as it had in San Pedro or Santiago Atitlán, the neighbouring Tzutujil communities (Hamerschlag, 1985). Nevertheless, wealthy families from San Juan were the victims of corrupt money extortion by the army. By falsely accusing wealthier families of involvement with guerrilla groups, they were able to extort large amounts of money to remove their names from the "black list" (Paul & Demarest, 1992). In addition, during the civil war and immediately after the peace accord, trade activities were reduced in San Juan due to the widespread violence still prevalent in the rest of the country.

After the peace accord, the roads in Guatemala were much improved as part of a post-war reconstruction plan supported by international funding agencies. Several roads were opened while others were paved, linking the communities surrounding Lake Atitlán. Since 1998 there has been road construction connecting San Juan to one of the country's main roads. This has expanded the traffic between San Juan and other regions in Guatemala that were previously accessible only on foot. Five buses pass through San Juan daily headed for Guatemala City, while two other buses go to Quetzaltenango. This improved transportation system has facilitated and increased communication and trade between San Juan and other Guatemalan regions. On the other hand, it has also meant an increase in the number of industrial goods consumed in San Juan, and in the amount of resources leaving this indigenous community. Transportation and communication are only a few of the many transformations that have occurred in San Juan over the past few decades.

Wage Labour and Seasonal Oscillations

The availability of wage labour in San Juan fluctuates throughout the year. During the dry season, from December to March, the coffee harvest is the principal activity and the demand for wage labour is very high. Towards the end of the dry season, men and boys are responsible for collecting firewood in the mountains to last for the duration of the rainy season when such collection is not possible. During the rainy season, the demand for wage labour is lessened due to the reduction in the amount of land planted in corn. In this same season, in households with small plots of land planted in corn, the male members will dedicate themselves to subsistence agriculture.

Weaving activities are also seasonally affected. During the dry season, the busy tourist period, the sales are high and there is a higher demand for weavers' work. However, at this time there is also demand for wage-labour in the coffee plantations and the wages are higher than textile earnings. During the rainy season, women cannot weave as much because they depend on the sun to dry the starched warp yarns. In addition, textile sales are lower in the rainy season because travelling becomes more difficult. In other words, during the dry season wageworkers enjoy the highest demand both for their agricultural labour and their weaving. During the rainy season, both weavers and agricultural wageworkers face reduced wage alternatives. Moreover, food becomes more expensive during the rainy season. While weaving wage rates are constant throughout the year, these wages are based on productivity and this is reduced during the rainy season. The daily agricultural wage falls from 25 Quetzales to 10 Quetzales (from \$5 to \$2 Canadian) in the rainy season due to the increased availability of labour. Nevertheless, during the rainy season the reduced weaving activity becomes even more important as a complement to agricultural wages. It is often the only source of cash income while the male household members are dedicating themselves to household subsistence activities.

From Subsistence to Migratory Seasonal Labour

At the beginning of the 20th century, San Juan's economy was based on subsistence agriculture and trade in agricultural and handcrafted products. The trade extended to the main communities of the Western highlands and the Pacific coast (COPMAGUA, 1999). The loss of a large part of the land by *Juaneros* to *Pedranos* (people from the neighbouring town of San Pedro) was a consequence of the mandamientos ¹⁴ and debt servitude (Seminario de Integracion Social Guatemalteca, 1968). The *Pedrano* neighbours attributed this fact to the high value given by the *Juaneros* to their traditional rituals and ceremonies, which involve great expense (Seminario de Integracion Social Guatemateca, 1968). The *Pedranos* have benefited from their political influence with the government. Only *Juaneros* were forced to migrate to the coastal plantations during the *mandamientos*, and subsequently became absent from their lands – resulting in their initial debt to the *Pedranos*. This debt later caused the transfer of most of the land titles from the *Juaneros* to the *Pedranos*. The *Juaneros* became landless and dependent on wage labour. At that time, wages were only available from coastal plantations.

Poor living conditions in the coffee and cotton plantations, as well as migration encouraged the Juaneros to leave behind their subsistence activities. Although subsistence activity is never accounted for in the national economic indices, it is this activity that most affects the population's living conditions (Swetnam, 1989). Women and children would usually migrate with their husbands to the coastal plantations. According to Annis (1987), the Mayan economy aims to optimize the input rather than maximize the output. Optimizing the input allows the integration of abundant labour that otherwise would be marginalized, as in the capitalist economy. Smith (1984) has concluded that the Mayan people prefer to start their own small family activities and absorb family labour rather than work as relatively more profitable wage labourers. The initial capital needed to start an independent economic activity is what perpetuates the peasants' reliance on wage labour.

¹⁴ Labour drafts.

The indigenous population worked on the coastal plantations as a last resort, and as soon as they had the minimum means needed to return to their community life, they did so. With the abolition of forced labour in the 1940s, Juaneros continued to work on the coastal plantations until the beginning of the 1980s. As noted by Smith (1984), the little money earned from seasonal work at the coastal plantations was sufficient to make a large difference to the economic situation of some Juaneros. Migrants were able to gather enough earnings from seasonal paid labour and trade activity to allow them to return to their communities with their savings, where they were able to start income generating activities (Smith, 1984). These allowed many indigenous people to stop migrating to the coast. All of the people in their 40s and 50s with whom I spoke about their migrations complained about the working conditions, but also stressed that their earnings guaranteed their families a start. According to them, at that time the earnings were small but the money was worth a great deal and they did not have much to spend it on. With the migratory wages many Juaneros were able to purchase agricultural land and build homes, which in turn allowed many to leave the traditional extended family household. Others invested the savings from the plantation work in their trade activity. The majority of Juaneros, however, could not save the money earned from the coastal plantations and continued to be dependent on wage labour. These poorer indigenous people began to work as wage labourers for the wealthier ones, reproducing within their communities the relationship of production that existed between ladinos and indigenous people on the coastal plantations.

San Juan and the Coffee Boom

In the late 1970s coffee plantations were first introduced to San Juan. Since then, the coffee plantations have replaced the cornfields, covering all of the volcanic hillsides that surround the *pueblo*. Coffee production in San Juan is largely based on small holdings, and most of the owners are from the neighbouring town of San Pedro. The coffee plantations created a large local demand for wage labour during the same period when work was available on the coast. The coffee paid better wages. *Juaneros* were able to stop migrating to the coastal plantations and instead remain in their communities. To take advantage of the high prices earned by San Juan coffee, the majority of the local landowners switched to coffee from corn. The demand for wage-labour workers in San Juan rose and the number of local economic alternatives increased.

Indigenous families largely control the coffee plantations in San Juan, although most of the owners are from the neighbouring town. Few San Juan coffee owners have large enough plantations to hire wage labourers. A family that owns small plots of land will usually use all of the available labour in the household to harvest its own coffee, and still sell their labour to larger coffee owners. One *cuerda*¹⁵ of land in San Juan today costs 7500 Quetzals. If coffee is grown, a *cuerda* can yield 4375 Quetzals, while corn would bring in an average of 570 Quetzales (\$114 Canadian) per year¹⁶. The respective returns from coffee and corn justify the choice of most landowners to cultivate coffee. A wage labourer usually needs a full day to harvest one *quintal*¹⁷ of coffee and is paid 25 Quetzals. The coffee plantation owner was getting 125 Quetzales (\$25 Canadian) when selling the same amount of coffee during the time when

I carried out my fieldwork. Outside of the coffee plantation season, the labour supply is greater than the demand and it is very hard for a wage labourer to find work. During this period, a labourer would earn only 10 or 15 Quetzales (\$2 or \$3 Canadian) for a full day's work in the corn plantations, or for weeding or fertilizing the coffee fields. Considering that there are only four months of coffee harvesting, and eight months where the average day's wage is 15 Quetzals, an individual can earn a maximum of 4400 Quetzals¹⁸ (\$880 Canadian) a year through agricultural wage labour. A landless household of five would need 7 pounds of corn a day, at a cost of 7 Quetzales (\$1.40 Canadian)– totalling 2555 Quetzales (\$511 Canadian) a year.

Combining Incomes to Guarantee Subsistence

Craft, marketing activities and intensified agriculture were all community alternatives to migration work for the inhabitants of San Juan. Swetnam (1989) argued that the proceeds achieved by the Maya by combining activities were better than the results of any single activity. Since coffee has become the most profitable economic activity in San Juan, it has

¹⁵ Approximately 2.4 acres.

¹⁶ These data were based on the production estimate found in Lopez (1997, p. 8) and on a price of 125 and 95 Quetzales for 100 lbs of coffee and corn, respectively – information that I collected during my fieldwork.

¹⁷ 100 lbs.

¹⁸ This assumes a person labours five days a week, year-round.

absorbed virtually all of the locally available wage labour from December to March, when the demand for labour in the coffee plantation is very high. As discussed by Pye (1988), and as noted above, agriculture competes with handicraft productivity for labour. During the coffee season San Juan experiences an income surplus, while there is an income deficit during the remainder of the year. Outside of the coffee season, *Juaneros* have to struggle to find agricultural wage labour. The returns from agricultural wage labour during these periods are insufficient in themselves to support the basic needs of a household. In addition, a good portion of *Juanero* large coffee plantation owners are in debt today due to the high initial costs of the activity and oscillations in the price of coffee. As noted by Annis (1987) for San Antonio de Aguas Calientes, land continues to be the basis of local wealth in San Juan. With land one can grow coffee – the most profitable activity available in the area. Trade and weaving are also important complementary activities. However, as concluded by Ehlers (1993) in another of the Lake Atitlán villages, land remains the most attractive investment when one has saved enough money.

In addition to weaving, trade is also an important activity for women (Ehlers, 1990), and almost all of the households in San Juan are involved in some kind of trade. Women and children can be found in front of their houses, in the market, or at the schools sitting beside simple baskets with a few oranges, tomatoes or mangoes. Although statistical validation was not sought, at the time this study was conducted, the combination of agriculture, trade and textile activity appeared to be the most common form of household income found in San Juan. With a diversity of activities, the local population is more likely to overcome the seasonality of, and oscillations within, agricultural production. The coffee and textile activities, both of which cause *Juaneros* to be dependent on the international economy, also enable them to subsist and give continuity to their community life (COPMAGUA, 1999; Rosenbaum & Goldin, 1997).

Summary

All San Juan households depend today on the cash economy and on the production of commodities, and are directly affected by changes in the global economy. The introduction of coffee plantations, the construction of new roads, the appearance of new modes of transport, the introduction of industrialized products, the expansion of, and changes to, the educational system, the rise in regional tourism, and the increased production of textiles for foreign consumers are just some examples of recent changes affecting *Juaneros*. All of these changes

have had repercussions for the San Juan weavers, who are the focus of the discussions in the next chapters.

The intensification of commodity production in Guatemala reduced the amount of land available to the indigenous people, thus increasing their dependence on the cash economy and on wage labour. In addition, the increased production of exportable commodities has increased the indigenous population's exposure to the oscillations of the international market. However, in San Juan coffee and textile production created local alternatives to the seasonal migration to the coast. Indigenous Juaneros can now remain in their communities with consequent continuity in their community life, avoid the bad living conditions of the coast, and make a better wage.

Coffee production is based on relatively small landholders' properties. During harvest season many coffee plantation owners, mostly from San Pedro, have to rely on *Juanero* wage labourers. This fact has created a division within the indigenous community between the few who hire workers to meet the labour needs in their plantations and those who rely on wage labour to survive because they are landless or do not own enough land to ensure subsistence. Land ownership, controlled by indigenous males, continues to be the local means of wealth and, consequently, of economic differentiation. Chapter Six analyses the relationship between land ownership and the importance of weaving in the household.

Chapter Five: Textile Production and Sale in San Juan La Laguna

Introduction

The emergence of Guatemalan textiles onto the world market changed the kind of textiles produced, how and where the textiles are produced, and control over the textile production system. Individual household textile production, which was highly efficient for household consumption, began to adapt to different production strategies in order to be able to compete in the commercial textile market (Littrell & Dickson, 1999). In addition to weaving skills, knowledge of market demand, trade skills, capital and time investments all became necessary for commercial textile production, in addition to weaving skills.

This chapter discusses the quality of the textiles produced in San Juan, and the role of intermediaries in the sale of locally produced textiles. Stephen (1991) describes the textile production units among the Zapotec weavers, where foot looms are used. Hermitte (1972) describes the weavers' "typology" in an Argentinean village, where foot looms were also used. In this chapter, I describe the different textile production organization units found in San Juan La Laguna, where women continue to control the activity based on the use of the backstrap loom. This chapter also discusses the "proyectos de artesania" (handicraft projects) that have developed in San Juan La Laguna in the last 15 years, in comparison to older production organizations already present in the community.

Weaving Activity in San Juan

Commercial backstrap weaving in San Juan today is largely dedicated to the production of tourist items. Few women still wear woven *huipiles*¹⁹, and most of the women have adopted fabric blouses worn with the *cortes*²⁰ produced with foot-looms in the Totonicapan area (Hendrickson, 1995). Only elderly men can still be seen in San Juan wearing the traditional woven *trajes*, but most of them have adopted Western style clothes. The majority of the men buy clothes from street vendors who sell *ropa americana*²¹. Good-quality used shirts, pants and sweaters can be bought for as little as three Quetzales (\$0.6 Canadian) each, while woven

¹⁹ Mayan traditional blouse, made of two rectangular textile panels.

²⁰ Mayan traditional skirt.

²¹ Used American clothing.

male *trajes* would cost no less than 300 Quetzals. For the most part, boys wear *ropa* americana while girls wear cortes and blouses. Traditional *trajes* for children to wear during special celebrations, textile panels to be sewn into backpacks and jackets, *servilletas*²², and occasionally aprons are still woven for domestic use. *Servilletas* are also commercially woven before *fiestas* such as Easter and Christmas, when food is exchanged and traditionally wrapped in new *servilletas*. In addition, aprons are often commercially woven for indigenous women consumers.

Textile Production and Quality of the Textiles Produced

Backstrap weaving technology involves instruments, materials and knowledge (Jopling, 1971 and Merril, 1968). The instruments are the loom, the reel and the warping board. The materials needed are yarn and corn to starch the yarns. Warping requires a reel and a warping board. In San Juan both are simple, locally built wooden devices, priced at 150 and 175 Quetzals, respectively. Artisans own the tools used in their work, but not always the materials. The warper winds yarn skeins onto the reel, and from the reel the yarns are wound onto the warping board. Warping is the step during the textile production when patterns and colour combinations are determined. It requires good counting skills and the focused attention of the warper. Any mistakes in counting the yarns wound on the warping board result in irregularities in the final textiles. Warping determines the final quality of the textile. Individuals who warp without following samples consider themselves to be the creator of the final textiles. Warping is a more prestigious task than weaving because it is more creative and more difficult than the plain weaving practiced in San Juan.

The weaver first strengthens the warped yarns with cornstarch $(atol^{23})$. Once the yarns are starched, the weaver has to set up the loom while the yarns are still wet. The sticks that comprise the loom are crude and are often made by household members. The set of sticks can also be bought in San Juan for 20 to 50 Quetzals. Setting up the loom is a complex process that involves organizing the warped yarns on the loom sticks and adding the heddle stick. Once the yarns are set with the loom sticks, the weaver attaches the loom to a pole or tree and leaves the starched yarns to dry in the sun. During the rainy season, sunny periods are

²² A multipurpose cloth mainly used to wrap tortillas and other foods.

²³ Atol is corn gruel used to starch the warped yarns. One textile panel requires about half a pound of corn, which costs an average of 0.50 Quetzal.

infrequent and the yarns take longer to dry. During long absences of the sun, weavers hang the loom close to a fire so the yarns will dry faster. Once the yarns are dried, the artisan starts to weave the textile panel. The weaver adds the weft yarns, but since the textiles woven in San Juan are warp faced the weft is not visible. The woven panels are stitched or sewn into *huipiles*, table runners, shawls, hammocks, tablecloths, bedspreads, handbags and vests, among other items.

The textiles produced for the tourist market in San Juan are predominantly made out of nonmercerized cotton yarns of varying quality and tie-dyed warp yarns (*jaspé*). While the colours of these textiles vary, soft hues and muted colours predominate over the bright colours found in textiles woven for domestic use. A local entrepreneurial couple also recycled yarns from the cheap *ropa americana* and supplied them to pieceworkers who produced textile panels that were later transformed into harmocks. Weavers do not wear or use similar textiles to the ones they produce for tourists. For household items, more expensive higher-quality yarns – often *sedalina*²⁴, *mish*²⁵ and *sedalana*²⁶ – are preferred. For their own households, weavers make textiles with a varied mixture of bright, strong colours that, as discussed by Morris (1991), do not suit North American tastes. The weavers today are aware of the differentiated tastes of tourists and the price competition that exists. Local weavers usually express their knowledge of tourist tastes by producing a range of textiles that match tourist preferences. In addition, weavers comment on the tourists' tastes and knowledge about the textiles. "Tourists don't know about the yarn quality. They buy cheaper textiles that bleed when washed... Tourists don't buy expensive textiles".

The textiles produced in San Juan have a standardized appearance and display designs and styles that are similar to only some of the other textiles produced for the same market in Santiago Atitlán, another Tzutujil community on the lake. The quality of the textile structure and the quality of the yarn used vary even among textiles of similar appearance, with the textiles of better quality having higher prices – a distinct competitive disadvantage in the marketplace. Only buyers with a better understanding of textile quality can distinguish the higher-quality textiles. On the other hand, higher-quality textiles can reach the standards of

²⁴ Pearl cotton.

²⁵ Two-plied mercerized cotton.

²⁶ Acrylic yarns.

the high-end stores, where textiles can be consigned or sold for better prices. As will be discussed below in this chapter and the Chapter Six, two artisan groups in San Juan today are differentiating their textiles by using naturally dyed yarns, while a third group uses more expensive high-quality industrial yarn in their textile production. These differentiated, higherpriced textiles enter into market competition with cheaper low-quality textiles of similar appearance.

Textile designs, styles and colour combinations are copied and reproduced at all levels of textile production in Guatemala (Moreno, 1995). Shortly after a new textile is developed and accepted in the market, it becomes impossible to avoid - copies tend to be made using lowerquality, cheaper materials and this increases market competition. Few textile producers in San Juan can afford the time and resources needed to develop new textile innovations. In addition, only weavers with a highly developed aesthetic sense (Jopling, 1975) and knowledge of tourist preferences will have the confidence needed to create textiles which will be marketable (Littrell & Dickson, 1999). As discussed by Jopling (1975), the weavers who can differentiate their textiles get better returns. These weavers, if they possess a natural entrepreneurial spirit (Annis, 1987), may have other weavers working under their coordination. Outsiders working with local artisans have also introduced some innovations to textile designs and colours. Since replication is likely to occur, constant innovation is required in order to maintain design novelty. In San Juan, I realized that independent weavers, entrepreneurs and weavers' groups are secretive with their *amuestras*²⁷, fearful that others in the village will see them and copy their otherwise unique designs. However, the uniqueness of each amuestra was limited mostly to colour combination, material and structural quality.

Textile Marketing in San Juan and the Role of Intermediaries

San Juan does not have a store for tourist textile sales. During the tourists' short hikes through San Juan, local artisans sometimes get lucky and sell some of their textiles. In San Pedro, San Juan's neighbouring town where accommodations are available for tourists, the backstrap weaving activity has declined due to better income opportunities. Two markets exist in San Pedro for San Juan weavers. The first targets indigenous women from San Pedro

²⁷ Textile samples.

who still wear woven goods, but who no longer weave because they carry out more lucrative activities. The second market is made up of the tourists who frequent San Pedro and who are attracted to the weaving activity in San Juan. Many women in San Juan weave daily in front of their houses, in places that can be seen from the main roads, and attract the tourists' attention. Several weavers showed me their strategy of hanging textiles to dry in places that can be seen from the streets. While the majority of textiles being produced in San Juan are not directly exported, the three textile projects in the village sell their textiles (in varying proportions) through international development agencies, individual foreign patrons and fair trade organizations (FTOs). FTOs act as intermediaries and differ from mainstream business in that their objective is to pay the artisan the greatest amount of money possible (Littrell & Dickson, 1999).

The large majority of textiles produced in San Juan are marketed in Antigua and Panajachel, the main tourist cities of Guatemala. More distant travel to sell textiles is restrictive due to the costs involved, the necessity of knowledge about the outer world and trade, and cultural gender barriers. Travel costs limit independent weavers whose returns on textile sales are low, especially given the small volume they can produce on their own. Travel costs could consume the little profit gained in the textile transaction²⁸, or worse if sales are not realized. In addition, women in San Juan have little exposure to the outer world, often do not feel comfortable being alone outside their community, and rarely speak Spanish. Women travel very little, and when they do they are accompanied by their husbands or by older women from their families who have previous experience outside the community. Men traditionally do not allow their daughters or wives to travel on their own. Lack of knowledge of the textile trade and lack of access to retailers who purchase only specific kinds of textiles equally restrict those wishing to engage in textile sales. "This is the work I know (referring to the textile she was weaving)... I can not sell textiles". These were the words used by a weaver to explain her specific knowledge of textile production. Finally, retailers often prefer to buy their textiles from producers / merchants who have access to various weavers, can guarantee a continuous supply of textiles, and can meet production deadlines (Moreno, 1995).

²⁸ The cheapest trip, which would be to Panajachel, would cost at least 20 Quetzales just for boat transportation – an amount that most weavers take one week to earn.

Organization of Textile Production in San Juan La Laguna

Several studies have been conducted by anthropologists in Latin America on the changes in work organization among artisans (Chibnik, 1996; Cook and Binford, 1990; Cook, 1993 and Stephen, 1993). The authors, whose conclusions are grounded in different theoretical schools (Chibnik, 1996), have generally not agreed on whether or not artisan activity generates social stratification. The weavers in San Juan occupy different socio-economic positions amongst themselves, and take on different roles in the textile production organization (see Chapter Six below). Weavers and textile entrepreneurs occupy different positions, play different roles, and receive different returns from the textile activity in San Juan.However, the socio-economic distinctions cannot be attributed exclusively to the textile activity, but also to other household economic issues such as land ownership and individual entrepreneurial skills (Annis, 1987). Weavers' profits are so low that it is difficult to believe that the weaving activity itself could be the cause of the social differentiation in San Juan.

Textile production organization units that have been discussed in the relevant literature (Eber & Rosenbaum, 1993, Ehlers, 1993; Jopling, 1975 and Stephen, 1991) include independent weavers, entrepreneurs and pieceworkers, workshop weavers and cooperative weavers. Workshops are often associated with men and the use of the foot-loom (Ehlers, 1993; Stephen, 1991). The production of textiles in San Juan is still predominantly undertaken in the surroundings of the weavers' households, with the use of the ancestral Mayan backstrap loom. In San Juan, independent producers, entrepreneurs and pieceworkers generally produce commercial textiles. These three basic categories differ essentially by the way the women access the resources needed for the textile activity and by the marketing of their textiles, as shown in Table 5.1. In the last 15 years a number of weaving projects have been funded in San Juan, and these projects are discussed below. There is a local weavers' association, which represents the only local workshop setting, but membership is limited to a few women who are able to work away from their households. The role of these three categories of weaver, and the weavers' groups funded in San Juan, are discussed below.

Independent Weavers

In San Juan, independent weaving households own the means of production and utilize nonpaid household labour. Children, teenagers and husbands contribute in different ways to the weavers' production. Independent weavers in San Juan need to take risks and invest in material and labour without the certainty of a market for the textiles produced. Initial capital

Table 5.1Different Roles Filled by the Women Involved in Textile Production and
Their Access to Resources²⁹

F	Pieceworkers	Independent Weavers	Entrepreneurs
Labour	Use own labour and household members' labour. Sell labour to intermediary-producers.	Use only household members' (non-wage) labour.	Use household (non- wage) labour and hired labour of pieceworkers.
	Obtain yarns from intermediary-producers.	Buy most yarns in local stores, for higher prices than those paid by the intermediary-producers in commercial centres.	Purchase input materials in bulk in main commercial centres, for lower prices than those found locally.
Market	Do not own the final textile.	Sell textiles to intermediaries in San Juan and occasionally to tourists.	Sell or consign textiles to specific retail stores and in tourist markets. Travel regularly to market the textiles.
Credit and a second	From wages or advanced payments from intermediary- producers.	From intermediaries and local creditors.	From credit cooperatives, banks and retailers.

²⁹ The categories analysed in this table are the same as those in the table developed by Hermitte (1972, p. 169), and are of great relevance to the present study.

and uncertainty in the textile sales are some of the factors that prevent many weavers from working independently in San Juan. In addition, independent weavers buy yarn from local stores in small amounts and for higher prices, and rely on intermediaries to sell their textiles outside San Juan. As a result, independent weavers have higher material costs and fewer returns than do larger producers who buy yarn in bulk and travel to sell their textiles.

To avoid reliance on intermediaries and the insecure tourist market, a great number of the independent weavers with whom I spoke were producing only for the domestic market, or for both the domestic and tourist markets. In the domestic market, weavers take textile orders from the few indigenous women who dedicate themselves to activities offering higher remuneration. Independent weavers produce local textile types for consumers in their own community or for *Pedranos*. In these cases, weavers control all aspects of the textile production, and they have knowledge of the market for which they produce. These weavers' domestic needs and aesthetic preferences are more similar to those of the final textile consumers. As discussed by Rosenbaum and Goldin (1997), these independent weavers use their community as the frame of reference for their textile production. The weavers market their textiles in San Juan or San Pedro, and do not have to rely on intermediaries.

The price of even the cheapest yarn, at 12 Quetzales (\$2.40 Canadian) per pound in San Juan, is a limiting factor for weavers who struggle to guarantee the basic needs of their families. Because there is limited tourist traffic in San Juan, independent weavers have to rely on intermediaries to sell their tourist textiles outside the *pueblo*. Intermediaries will travel to sell the textiles and keep a great portion of the cash return. Ana is an example of this. She is a 34-year old pieceworker, who used to produce textiles on her own for the tourist market. Although able to purchase yarn, she was not happy with her returns and decided to weave as a pieceworker. As an independent weaver, Ana used to buy yarn at 12 Quetzales a pound, weave the textile panels herself, and wait indeterminate lengths of time to receive only 16 Quetzales (\$3.20 Canadian) from local intermediaries for each panel after it sold. She could not travel to sell the textiles because she had four small children and lacked experience in trade. Moreover, according to Ana, travel would just add to her costs since the stores did not pay much more than the intermediaries. As she explained, "the intermediaries sell in Panajachel where the prices paid for the textiles are very low".

Pieceworkers

Like independent producers, pieceworkers weave in their household environment using the backstrap loom. When available they rely on non-paid help from other household members. Pieceworkers receive yarn and specifications about all characteristics of the textiles to be produced (Jopling, 1975; Stephen, 1991), and follow the "putting-out" system (Cohen, 1998). Pieceworkers, as noted by Rosenbaum and Goldin (1997), may have flexible schedules but have neither aesthetic control over the textiles they produce, nor knowledge of the final use of the textiles they produce. However, the structural quality of the textiles is dependent on the weaving skills of the weaver, and the more skilled weavers are able to work for intermediaries dealing with high-quality textiles. One pieceworker is not necessarily assigned to carry out all of the production phases needed to finish one piece. Yarns warped by one artisan may be woven by a second, and the finished textile panels may be stitched by a third artisan, all working as pieceworkers under a specific intermediary-producer. Although pieceworkers earn only a small wage, they are not subject to risk as are independent and entrepreneurial weaving less possible among weavers with few resources.

As discussed by Cohen (1998, p. 76), piecework "is a way to make a living, not to increase one's economic power". Pieceworkers work for a specific local entrepreneur or a combination of entrepreneurs as a means of guaranteeing a steady income. For their *mano de* $abra^{30}$, as they call it in San Juan, the pieceworkers might earn as little profit as seven Quetzals. This is for a piece that could take a weaver an average of three days to finish (2.3 Quetzales per day), due to the fact that weaving is carried out between many other household obligations. According to Cohen (1998), access to the means of production in the textile activity limits weavers from working on their own as independent producers. Knowledge of a market channel and a strong sense of aesthetics (Jopling, 1975) are also required for an artisan to work independently. As a result, material resources are not the only limitations that exist. In San Juan, as noted by Stephen (1991) and Cohen (1998) for Mexico, weaving returns are so low that only by combining various other income activities can weavers access the means to work independently.

³⁰ Handiwork.

Entrepreneurs

Entrepreneurs are traders who are also involved in the production of textiles, with weavers working under their coordination (Annis, 1987; Hermitte 1972; Moreno, 1995). The entrepreneur supplies the yarn and all of the design specifications, paying the weavers for their mano-de-obra. The majority of such entrepreneurs in San Juan are women. They are likely to have started as independent weavers but, as discussed by Annis (1987), moved on to the more profitable roles in textile production thanks to their entrepreneurial skills and financial circumstances. As concluded by Meier (1984, p. 442), "merchants' capital can subordinate independent producers only if it is able to monopolize access to raw material, tools, credit, expertise or the product market". Entrepreneurs, as mentioned by Hermitte (1972) and Meier (1984), assume the risks of investing their capital in yarn and getting loans to invest in textile production. They have expertise in market demands and determine all of the specifications about the textiles to be produced. They also coordinate the work of the weavers working for them, and are in charge of selling the textiles produced. Entrepreneurs travel regularly to sell textiles, and have specific retailers who buy from them in Panajachel, Antigua, Guatemala City and Chichicastenango. Because they deal with larger quantities of varns and textiles, entrepreneurs are able to reduce material and travel costs (Meier, 1984). To remain in the market, entrepreneurs have to keep up with new market demands and textile qualities, and provide technical assistance to weavers so they can produce the required products. As documented by Meier (1984) for Ecuador, San Juan entrepreneurs give credit to piecework weavers in order to secure their loyalty, invest capital in raw materials to be supplied to the weavers, pay pieceworkers their wages, and wait indeterminate periods before regaining the capital invested in the textiles.

Entrepreneurs may also take part in the production process, by dyeing, warping and weaving textiles (see Carmen's story, Chapter Six). Entrepreneurs use non-wage and wage labour from their household in textile production, when these resources are available. "Small-scale" entrepreneurs will warp the yarns themselves, and have pieceworkers involved only in the weaving process. On the other hand, merchants who coordinate textile production on a greater scale cannot manage all of the warping, and so will have pieceworkers do this task as well.

Projects: Alternative Textile Production Organizations

According to Littrell and Dickson (1999), the production of textiles for the world market requires new forms of organization. Independent, individual-household textile production – which efficiently supplied textiles for local markets – is not efficient for textiles destined for foreign consumers. Groups of weavers, if structured democratically, can provide artisans with an opportunity to reduce costs and share benefits. In addition, weavers' groups can better meet textile orders from retail stores or other intermediaries. While entrepreneurs currently earn relatively high profits from the fruits of weavers' common efforts, more democratic organizations involve cooperation amongst the weavers and sharing of the benefits from their common work (Cohen, 1998; Dhamija, 1989; Hamerschlag, 1985; Morris, 1991; Morris 1996). Through a more democratic structure, weavers would be able to increase their bargaining power, avoid intermediaries, reduce material and travel costs, and qualify for assistance from development agencies.

Although not part of the initial research objectives of the present study, the ubiquity of outside development agencies - mostly NGOs - working with weavers' groups in Guatemala, and the repercussions of their involvement with the weavers' production organizations, make some discussion on this subject necessary. The "development market" does not go unnoticed by anyone working in Mayan communities in highland Guatemala, especially with regard to textile activity. In the "development market" artisan organizations compete for support from agencies and individual agents. The agencies and individual agents, on the other hand, are searching for grassroots organizations with agendas that match their expectations (Morris, 1996). Often, small artisans' organizations - lacking the knowledge and skills needed to enter in development market competition - receive the backing of individuals or clients who help search for support sources for the artisan group (Morris, 1996). Development agencies and NGOs are more likely to support cooperatives and artisan associations due to their formal democratic characteristics (Cohen, 1998). Development programs usually offer artisans credit, market connections and skills-building programs (Cohen, 1998; Morris, 1996; Littrell & Dickson, 1999). Artisans frequently organize themselves, or are organized, to qualify for funds and loans from development organizations (Cohen, 1998).

Although development organizations often claim to promote participatory projects, the formation of a cooperative is often not an initiative borne of the community (Cohen. 1998). The large majority of community and artisan group members do not understand newly
introduced structures such as cooperatives, nor the dimensions of their individual roles in it (Craig, 1993; Dhamija, 1987; Hamerschlag, 1985). Artisan organizations, as discussed by Craig (1993), have great potential for promoting sustainable development and empowering women and communities, but this potential depends on the democratic operation of the cooperative. Democracy is only possible through members' equal participation. Long-term support from development agencies would be necessary in the artisan organizations just to raise the critical awareness of artisans about the newly introduced organizational structure, and to empower individual artisans such that hierarchical structures might be broken and participants might take part in a more democratic organization (Hamerschlag, 1985). In contrast to cooperatives, organizational structures based on the local culture are more likely to work because artisans would have a better understanding of their roles and rights (Dickson & Littrell, 1998; Dhamija, 1987). The introduction of new artisan group structures, though, is more likely to reflect the local hierarchical social structure (Cohen, 1998; Craig, 1993; Dhamija, 1987; Hamerschlag, 1985). Funding organizations often idealize homogeneous and equitable indigenous artisan groups, ignoring the local hierarchical context within which artisan groups exist (Cohen, 1998; Craig, 1993). According to Miraftab (1997), development organizations currently face the prospect in Latin America of reproducing patron-client relationships within the groups they fund. The intervention of these development organizations is likely to favour wealthy individuals/groups in a community, because they are the ones more used to dealing with outside individuals or institutions. The destitute tend to enter artisan groups in a position of dependence on the wealthy. Moreover, when the artisans are women - as is the case in San Juan - only individuals with better socio-economic situations have time to dedicate themselves to activities other than providing for the basic needs of their families. Development programs support artisan groups as a means of enacting social and economic change, although social change cannot be achieved until artisans attain greater economic security (Morris, 1996).

In 1997, San Juan issued a report (Lopez, 1997) stating that the municipality had two "proyectos de artesania" (handicraft projects) – the Associacion del Lago³¹ and the Proyecto Tipica. Proyecto is used in the community to designate groups of people organised to produce or work on something together, such as producing textiles, raising pigs, and building houses or schools. The Associacion del Lago was the first weavers' group and was organized in the

³¹ Associacion del Lago is a pseudonym adopted to preserve the group's anonymity.

beginning of the 1980s with support from outside agencies. It has been discussed by Schevill (1993), described in detail by Hamerschlag (1985), and used as a case study by Littrell & Dickson (1999). The association's initial objectives were to improve their textile quality, avoid the need for intermediaries, and increase the weavers' returns (Hamerschlag, 1985; Schevill, 1993). It is the largest weavers' group in San Juan, with some 150 official members. It is also the group that has received the most aid from development agencies. It has a large headquarters with foot loom and sewing machine workshops, a store, and an elementary school. Only a few women work in the headquarters, weaving on the foot loom and sewing the textiles into tailored goods. The majority of weavers continue to work using the backstrap loom in their households. Due to the difficult process involved in getting "cooperative" recognition by the Guatemalan government, only the Associacion del Lago managed to reach this status – becoming a branch of an already existing local coffee cooperative. At the present time, this group is not doing well marketing their textiles and is not able to supply its members with steady work.

The municipality recognized a second group, *Proyecto Tipica*, in 1989. It was formed by a group of weavers, headed by an entrepreneur. The entrepreneur, Carmen, has been the president since the group's foundation. While this group was not organized with the assistance of any development organization, there are many indicatives that it was organized in part to attract support from such organizations. Among the goals of the group were to avoid intermediaries and to become a recognized collective so it could negotiate with government and non-government organizations for access to credit, assistance, new markets and skills training. *Proyecto Tipica*, although not originally funded by development organizations, did eventually receive funds from such organizations for technical skills training workshops and the purchase of input materials (Olson, 1994). *Proyecto Tipica* has also been the focus of academic studies (Davis, 2000; Olson, 1994). *Proyecto Tipica* has some 30 backstrap weavers working in San Juan, owns no central space, and meets at the president's house.

During my investigations in San Juan, I came across a third weavers' group. This was a credit group, with some 70 weavers, formed in 1996. Development agencies had facilitated the formation of this third group, in which weavers receive credit, technical assistance in the production of a variety of textiles, management skills training, and market assistance. These agencies also rented a house in San Juan to serve as the headquarters for this group, where they prepare dyes, hold meetings and teach foreigners to weave.

All three artisan groups have been, and still are, a part of the "development market" to different degrees and for different periods of time. All have received credit, skills training and connections to markets as a result of their relationships with development agencies and individual patrons. These three artisan groups, as discussed by Stephen (1991), compete with local textile entrepreneurs for labour. During my fieldwork some individuals were participating in more than one of these groups, and also working as independents, pieceworkers and entrepreneurs at the same time. Combining membership in artisan groups, and occasionally being involved in independent production, allows weavers to achieve steady work and maximize the use of non-wage labour in their household. In addition, weavers were motivated to become members of two particular projects because they were receiving financial assistance for their children's education.

Contrary to their specific designations - association, cooperative, project or credit group and the different contexts in which they were founded, the three projects share several similarities with small textile businesses (Dickson & Littrell, 1998) in terms of their production organization and role. As with the artisan groups studied throughout Guatemala by Dickson and Litrell (1998), the three projects in San Juan initially endeavoured to produce high-quality textiles for the foreign market, and tried to avoid intermediary layers between themselves and retailers or consumers. The three groups had been involved with development agencies to varying degrees and with different relationships. All three groups present a formal democratic structure in which an executive- made up of a president, vice-president, treasurer, secretary – is periodically elected, and the general members attend meetings. While formally these weavers' groups have a democratic organizational structure, their practices continue to reflect traditional hierarchy (Craig, 1993; Cohen, 1998; Dhamija, 1987). According to my observations, and to the study developed by Hamerschlag (1985), the executive tends to have a higher scholarly and/or socio-economic level than does the general membership, due to the benefits of fluency in Spanish, literacy, confidence in speaking with outsiders, and ability to travel. All three groups produce textiles within a production organization, with a strict division of labour where specific members warp, weave, dye, sew, stitch or shop for raw materials.

The three groups all have decision making centred in the hands of the executive, and more specifically in the hands of the president. Members of the executive are responsible for accessing the materials needed, controlling the textiles to be produced, coordinating production, commercializing the textiles and networking with outsiders. The women in these executives are able to improve their levels of confidence and expand their networks. Executive members have often received technical training and experienced network relationships with outsiders – which in turn has often improved their self-esteem, increased their knowledge about the markets, given them accounting skills, and familiarized them with the outside world. The benefits realized by the women in control of these artisan groups further increase the disparities between them and the rest of the artisans. The members of these executives reveal many similarities with people who play the role of entrepreneur.

In San Juan I found that general members, mainly weavers and warpers, were responsible for the *mano-de-obra*, as is the case with the pieceworkers discussed earlier in this chapter. The majority of members, as discussed by Hamerschlag (1985), are destitute and – again like the pieceworkers – cannot afford to buy their own yarn, nor do they have the knowledge required to produce textiles for foreign consumers. The wages offered within the three projects are similar and vary depending on the task for which the member is responsible. The wages paid by these projects were superior to the wages paid by intermediaries – an average weaver would receive 7 Quetzales (\$1.4 Canadian) from an intermediary, while projects were offering 12.5 Quetzales (\$2.5 Canadian) for an equivalent piece.

Summary

This chapter reviews the different textile production organization units I encountered in San Juan La Laguna. It provides a context in which *Proyecto Tipica* operates. The backstrap weaving activity in San Juan La Laguna continues to be controlled by women. The textiles being produced in San Juan are not sold locally, but on the Guatemalan tourist market. The textiles being produced are largely dedicated to foreign consumers, have similar styles and appearances, and compete in the market against each other. Mayan municipalities traditionally specialize in specific textile techniques and patterns (Goldin, 1987; Pancake, 1991), and the style of tourist textiles being produced in San Juan is specific to this community. However, these textiles are often of differentiated structural and material quality. The textiles produced for foreign consumers are of different materials, designs and end-uses than are the textiles used in the weavers' households.

Three basic production organization units were found in San Juan La Laguna, among them independent weavers, pieceworkers, and entrepreneurs. Independent weavers and entrepreneurs have decision-making power and control of production resources, and so merit

the prestige earned from their products. However, independent weavers rely on intermediaries to buy the textiles from them in San Juan, while entrepreneurs travel to sell their textiles. Pieceworkers face less risk in carrying out their activities than do independent weavers and entrepreneurs, but do not have any control over the textiles they produce (Dickson & Littrell, 1998). Independent producers and pieceworkers rely only on non-wage labour from within their own households, while entrepreneurs hire labour. Independent weavers rely on intermediaries for the sale of their textiles, while pieceworkers rely on entrepreneurs for wage-labour. Entrepreneurs generally control large production units and thus reduce their material and travel costs, improving their returns. Entrepreneurs are in more direct contact with consumers and retail markets and can learn about foreign preferences and market changes. Although financial resources are the main limiting factors impeding the progression of individuals from pieceworkers to independent weavers to entrepreneurs, experience with the outer world and knowledge about market channels and demand are other issues. As discussed by Annis (1988), entrepreneurship is not only dependent on an individual's original competitive socio-economic position. Successful textile entrepreneurs are individuals "whose minds, values and activities are geared toward entrepreneurship" (Annis, 1987, p. 132), as is the case with Carmen (see case studies, Chapter Six).

Textile projects, as an alternative for weavers producing for foreign consumers, were first introduced 15 years ago in San Juan. Three weaving projects existed in San Juan during the period of my fieldwork, and all of them share similar production organization and a formal democratic structure. The three were created with the common goals of eliminating intermediary layers and improving the situations of the artisans. The three represent a great step forward in the organization and institutional participation of women in San Juan La Laguna. However, as discussed by Young (1997) and Feldstein & Jiggins (1994), women are divided into socio-economic groups. The Tzutujil women members of the San Juan artisan projects share a highly stratified division of labour. Most of them get paid for their labour while a few members form the executive, which exercises control over the textiles they produce. The indigenous artisans in San Juan, according to the findings discussed in Chapter Six, belong to distinct social strata. As discussed by Hamerschlag (1985), executive members tend to be individuals who already enjoy high status in the community and who will feel more comfortable raising their voices and coordinating the projects. General members, on the other hand, are often not comfortable expressing their opinions in meetings nor do they easily disagree with those of higher educational and social status in the executive. To facilitate the participation of the general members, long-term commitment and support would be required to work towards goals other than those with business aspects (Hamerschlag, 1985; Morris, 1996). Participation on the part of the general membership would involve questioning the hierarchical systems on which the San Juan weaving projects are currently based, and would, by necessity, work towards general membership empowerment³².

The three artisan groups have received varying degrees of credit and marketing and skills building training from development organizations and foreign individuals. My findings in San Juan show that while the local artisan groups were formed to avoid intermediaries, their executives act as intermediaries and culture brokers between the outside agencies and the general artisan members, and hold all of the control over the general members' production. The roles of the weaving project general members are very similar to the roles played by pieceworkers. Littrell and Dickson (1998) discussed the role of international NGOs as intermediaries in the marketing of textiles. The executive, controlling the decision-making process and all operations within a weaving project, plays the role of an intermediary layer, but their intermediary role is not limited to textile sales. The executives link weavers to the outside market, and to outside individuals, development institutions and foundations that provide aid to the weaving projects. The executives work as yet another intermediary layer in the textile production and in efforts to gain access to aid from NGOs.

The emergence of Guatemalan textiles onto the world market changed the kind of textiles produced, how and where the textiles are produced, and controls over the textile production – as discussed in Chapter Three. As discussed in Chapter Four, the many economic changes that occurred in San Juan La Laguna increased the dependence of the local Tzutujil on the cash economy. In this process, the income-generating aspect of textile activity increased in importance.

³² Empowerment arrives through increased self-confidence and self-determination (Nozick, 1992).

Chapter Six: Roles of Weavers and the Household Economy

Introduction

The weavers of San Juan La Laguna share many similar life experiences. They are Mayan Tzutujil women, members of the same municipality, the main community unit among the Maya (Goldin, 1987). As women, San Juan weavers have similar *trajes*, and household responsibilities- which demand their presence in the household surroundings – and thus limiting their experiences in the outside world. Together these weavers have learned the consequences of the many transformations that have taken place in Guatemala over the course of the past century, as discussed in Chapter Three.

On the other hand, many distinctions may be observed among San Juan's weavers. Throughout my study I found these distinctions to be mainly associated with age and economic status, similar to the findings of Stephen (1991) among the Zapotec women. The wealth status of each weaver's household is related to its agricultural activity and the role played by each weaver in the textile activity. The wealth of each household is also a consequence of historical factors, individual members' natural skills and life experiences, as discussed throughout this chapter.

Age differences are also important. Older weavers are more likely to have experienced migration to the coastal plantations, and are generally illiterate. They also have less knowledge of Spanish. They experienced the transition from a subsistence economy to the cash economy, and believe that today cash is more easily available than before. Older weavers have seen rapid transformations in local textile production. They once wove exclusively for household purposes, but today weave almost exclusively for commercial reasons. Older weavers, of course, have more extensive experience in textile production. They enjoy more freedom from household activities and can dedicate more time to textile activity, as was noted by Tice (1995) among the Kuna women. Older weavers – with more experience, knowledge and wisdom – are more likely to assume positions of authority and control in the textile activity. Younger weavers with small children lack the time and the experience of the older weavers.

Textile production, although generating relatively little profit, plays an important role in complementing agricultural income as noted in Chapter Four. In the current chapter, the role of weaving is discussed relative to three different socio-economic groups, differentiated by

land ownership status. Conclusions drawn about the relationship between textiles and household land ownership are based on data acquired from *Proyecto Tipica*'s members as well as other weavers, entrepreneurs and members of textile projects in San Juan. Four San Juan weaver case studies are then presented. These four weavers were selected to represent the most common variations among age, household economic status, and personal life experiences among the *Proyecto Tipica* members. The case studies are based on the information collected during in-depth and informal interviews among the weavers of *Proyecto Tipica*. These studies serve to illustrate the personal context for the analysis of the weaving activity in this chapter.

Textile Activity and Women's Role in the Household Economy

Stephen (1991), of Oaxaca, Mexico and Ehlers (1991; 1993), of a community across from San Juan on Lake Atitlán, reported that textiles produced on foot-looms were the main commodities produced, and that production was under male control. When textile trade increases, technological changes may take place, weaving activity tends to become more profitable, and gender shifts are more likely to occur (Minturn, 1996; O'Brian, 1999). In the communities studied by Ehlers (1991) and Stephen (1991), textile production was the most profitable local activity. The local men would prefer to spend their time working on foot looms, and hire wage labour to work their land. In contrast to the reality discussed by Ehlers and Stephen, the textile activity in San Juan, based on the use of the backstrap loom, is less profitable than the agricultural activity, and continues to be controlled by women. Men dominate the land use in San Juan, control the coffee production, and represent the majority of the labour force for this activity. The role of weaving as an income generator in each household is relative to the household's socio-economic position and to the other economic activities developed in the household, as will be discussed below. The income from textile production, as discussed by Pye (1988) and Nash (1993), generates income complementary to agricultural wage labour - or to subsistence agriculture - and is of greater importance in families where the agricultural income is low.

"A man without a wife may have corn without tortillas, cotton without clothing, a house without hearth" (Bossen, 1984, p. 305). Through these words, Bossen defined men's dependence on their partners in Mayan communities that are based on the economy of subsistence – in which the household is the main production unit. On the other hand, men guarantee that the women will be supplied with raw materials, such as corn and wood.

Children also play an important role by contributing labour. As discussed by Bossen (1984) and Ehlers (1990), women are always involved in some kind of income activity and regularly make cash contributions to the household. In San Juan, the male income is dedicated to the supply of corn and firewood while the female income is used for the purchase of other food items and needed goods (Bossen, 1984; Ehlers, 1990). Women's income has always played an important role in helping determine family living conditions. In households where agriculture - which is associated with men - is no longer able to supply all of the family's needs, the economic activity of the women becomes even more important. Because women bear the burden of the household, however, they have had to dedicate themselves to activities that allow them to remain close to the household (Ehlers, 1991). The weaving activity in the household gives the women a measure of freedom, enabling them to walk away from unhappy relationships even when they do not have their kin to rely on (Bossen, 1984), or to support their families on their own should they have to (as illustrated in Inés's story below). According to Ehlers (1990), women usually learn income activities from their mothers or grandmothers. In these activities the women rely on a minimum capital base and achieve small, but valued, incomes (Dhamija, 1989; Nash, 1993). The availability of daughters and daughters-in-law increases the amount of time women can dedicate to an income-raising activity (Katz, 1995), as will be illustrated below by the stories of Carmen, Maria and Inés.

In peasant economies, in which the family is the production unit, husband and wife are interdependent and their roles are equally valued. Under these conditions, the women feel confident about the important role they play. However, the equal interdependence experienced by married couples is broken when they are integrated in the cash economy, and the men – but not the women – gain advantages in accessing income outside of the household. Men are able to have incomes independent of the household environment, and the wages are higher than the women's income. As a consequence, the women's economic status decreases (Ehlers, 1991). According to Bossen, the introduction of the cash economy results in these resources and products that are controlled by men (such as land and corn) reaching higher values than those controlled by women. As a result, there is an imbalance in the partnership, and a tendency for the women to depend more on the men. In San Juan, as demonstrated below, the role played by the women's textile activity in the household economy depends on the household's general economic status, and on the land ownership.

In San Juan most families do not own enough land to guarantee their subsistence and are dependent on cash earnings such as from weaving. In landless households, women's earnings

from weaving activity are lower than men's income from agricultural wage labour, and both partners experience economic insecurity (Bossen, 1984; Young, 1978a) as exemplified by the story of Luzia below. In some periods of the year, weaving provides the only income available for the household. As discussed by Bossen, both partners' cash contributions play an important role in determining family living conditions, especially during the rainy season when the coffee harvest is finished and sources of cash in the community are scarce. This insecurity makes a couple more interdependent in the struggle for family survival, and the role of the woman more fundamental to the family economy. According to Petrich (1998b), household survival is the main struggle of most women in the *pueblos* on Lake Atitlán.

Gender intersects with class, ethnicity, and generation (Young, 1997). Gender and socioeconomic status have been found to influence women's participation in income activities and in the role women play in the household economy (Stephen, 1991; 1993; Young, 1978a;). Similar to the situation noted by Young (1978a) in a Mexican coffee-producing village, diet, clothing and housing are quite differentiated among Juaneros as evident from the case studies presented below. Among the artisans studied in San Juan, I found there to be three prevalent socio-economic groups. For her work in Mexico, Young chose to adopt the local classifications of pobres (poor), medios (middle) and ricos (rich) to identify the socioeconomic status groups. I found this classification to be appropriate for the present study. *Ricos* are a rich minority, who hire wageworkers for agricultural work and occasionally for household activities. The medios often have small plots of land, on which only family members or close kin members work - without a wage. Members of this middle group, usually with too little land to provide steady work even during the harvest season, often sell their labour to the rich landowners. The pobres, who make up the majority of the Juaneros, are the members of the landless households, who provide labour to the rich landowners. As discussed by Young (1978a, 1978b), the women's activities in San Juan depend on their household's wealth. Also, the interdependence among men and women varies depending on socio-economic status. The kind of textile activity engaged in by the women of San Juan also depends on the wealth of the household, and thus on the land ownership status of the household.

Rich households in San Juan own larger plots of land and hire wage labour for the agricultural work. Some of the rich households have also invested in coffee pre-processing plants – which dry, wash and de-pulp coffee – thus allowing these households to buy coffee berries from the median households. After pre-processing, the coffee is sold in Guatemala

City, putting members of such households in constant contact with the ladino, capitalist world outside San Juan. In the small number of rich households, refrigerators, TVs, flushing toilets and propane stoves can be found. The diet includes industrialized items such as corn flakes, daily bread, and oriental noodles. Women's clothing continues to be used as a means of identifying the wealthy, and rich women are more likely to wear woven or embroidered fabric huipiles rather than simple blouses. Although the difference may not be clear to an outsider, rich women – who do occasionally wear blouses – will have a large collection of expensive cortes and fajas³³ that are easily recognized by the locals as a representation of wealth³⁴. These households will have diversified agricultural activity and grow coffee for cash income, and corn for subsistence. Women ricos do not participate in agricultural labour, although in these households women still contribute to the household income (Young, 1978a), and if a woman dedicates herself to business independent from her husband she will maintain control over her activity. Women generally earn their income from trade or textile activity. However, women ricos in the commercial textile activity are more likely to warp the yarns, and then pass the warped yarns to wage-labour weavers. Women ricos in the textile activity usually have enough capital to invest in raw materials and to hire others in the community to work to their specifications. Women *ricos* also have more flexibility to take high risks, and use their profits to expand their business. Moreover, women ricos have the minimum capital required to access credit from financial agencies. These women use weaving income for secondary needs such as buying clothes, paying for school expenses, and bringing industrialized food goods into their house. In addition, when women ricos join the local weavers' groups, they are likely to be part of the executive, as stated by Hamerschlag (1985), since they can dedicate more time to meetings and travel, and usually have higher literacy levels. As noted by Young (1978), in San Juan's rich households women can enjoy more freedom from the household responsibilities, hiring women from poor households to carry out the household tasks. As a consequence, these women have more time to dedicate to their income activity. The children in rich households are more likely to continue their studies in one of the larger Guatemala cities up to graduation. During my fieldwork, teaching, accounting and secretarial

³³ Belts.

³⁴ The price of an adult *corte* and a belt from Totonicapan, usually worn in San Juan, varies from 150 to 750 and 20 to 200 Quetzals, respectively. Agricultural wage labour varies from 10 to 25 Quetzales per day.

positions were popularly aspired. Carmen, artisan whose story is discussed below, is representative of the *ricos* group.

Median households will own a small plot of land on which coffee is likely to be cultivated, and household members or close kin will provide all the agricultural labour needed. In most of these households coffee plantations are small, requiring that household members also sell their labour to the rich, large coffee plantation owners. In addition, when producing coffee, the median coffee growers will sell their coffee berries after harvest to the rich households that own processing plants. Women in the medio households will work on their household's coffee plantations, but not as wage labourers for other coffee producers. Median women will do all of the household tasks and will generate income mostly through trade and textile activities, or a combination of the two. In the textile activity, median women are likely to work as independent producers, with the help of other household non-wage labour. Median women will also work as pieceworker weavers for rich women, join one of the weavers' groups found in San Juan, or combine these activities. In the median households, women's income is important because it is usually the only cash that enters the house while the men work their own land, or collect wood. The couple in median households struggle together so that they might afford to keep their children in school for the longest period possible, and some of the children are likely to attain a technical degree. Maria, one of the weavers whose story is discussed below, represents this group.

Pobre households are landless. Landless households are totally dependent on income from wage labour and the entire household income is used for the purchase of basic needs, with no extras invested in life-condition improvements or higher education for the children. Men will sell their labour to landowners year-round. The women in these households will likely work as agricultural wage labourers during the coffee harvest, and weaving pieceworkers for the rest of the year. Poor women and their daughters might also work for rich women as maids or launderers. The children in poor households are likely to leave school earlier than the children from the two other groups discussed above, because they have to help their parents generate income or free their mothers from household obligations. In some cases, women with small babies and without someone to take care of them, will not labourer for the coffee harvest for a few years. When women cannot leave the household, they will labour as pieceworkers year-round. The coffee season in San Juan is considered the only time of year when these families can make some extra money, besides that spent on basic food, to purchase clothes or to go to the regional market. Poor couples struggle together to complement each other's income in

order to afford the basic needs for their families. Houses for the poor families are not built with the same materials as the houses of the richer groups and they also have fewer rooms. In these households, women usually cook in an outside shack, and electricity – even if available – is avoided because of the monthly bills. Women will wear the simplest *cortes* – usually bought second-hand – and simple blouses, and own few changes of clothing. Luzia, another of the weavers whose story is presented below, illustrates this group.

A variation of the poor household is the extremely poor household, where women are often singularly responsible for the household income. Usually the husband is irresponsible or often intoxicated, the woman is a widow, or the male partner no longer lives in the household, and the woman has not returned to her parents' household. Although it is usual for women involved in unhappy relationships to return to their parents' household, some parents do not have the ability to help their daughters and their children. When women have to generate income and support their children on their own, they will labour in agriculture and textile production. They will also wash clothes for the wealthier families. The children in these households will, from early ages, become responsible for the collection of firewood and edible herbs. Eight-year old daughters will assume almost all of the household responsibilities, and some will begin to work from that age helping to make tortillas, shopping, cleaning and babysitting in the rich households for small wages. In these households, the mother relies more on her children's labour than in any other household, so the family can purchase its basic needs. Children are likely to leave school in the first few years. Inés's story is representative of this group.

Case studies: Carmen, Maria, Luzia and Inés

<u>Carmen</u>

Carmen is a 50-year old, well-respected Mayan woman. She has five children – three female and two male, four of whom are married. Two of the daughters and their families live in the same compound³⁵ as Carmen. Four of Carmen's children attended high-school to become teachers in larger Guatemalan cities. Her oldest daughter is a teacher at a local school, while

³⁵ A group of houses side by side, sharing the same courtyard, occupied by members of the same family.

her son, who works at the departmental law courts as a trilingual interpreter, is currently attending law school.

A TV, VCR, refrigerator, propane stove, and flushing toilet are found in Carmen's house but in very few others throughout the community. The *trajes* worn by Carmen and her daughters, important symbols of prestige within Mayan communities, reveal their cultural and financial status. They own a varied collection of typical *huipiles* from many different areas of Guatemala, which reflects Carmen's travelling experiences. International food items such as corn flakes, oriental noodles and pancakes are regularly eaten. Carmen and her husband gave each of their daughters a house and at present are building a large hotel in the town.

Carmen married when she was 15, and migrated to the coastal cotton plantations with her husband to work until they had their first children. Carmen's husband came from a landowner family, which organized community *fiestas* and religious ceremonies. He has been known to go on drinking binges for as long as a month at a time, and has had numerous extra-marital relationships with other women in the community. For much of her marriage, Carmen has not been able to rely on her husband to help raise their children. She has worked hard, coordinating textile production and trading textiles, to guarantee a household income. The fact that her husband was often absent while he binged on alcohol, and openly had extramarital affairs, gave Carmen an independence not common among the women in her community. While this relative independence from her husband was one of the reasons Carmen was able to travel on her own to sell textiles, this capacity was also due to the fact that three of her children were daughters and able to take on Carmen's household duties such as cooking and washing clothes. Today one of Carmen's daughters helps with the household responsibilities while her mother is away, and a maid and a laundry lady are also employed.

Carmen's husband inherited a reasonable amount of land from his family and bought additional plots with money from wage-labour on the cotton plantations. He was one of the first landowners to implement coffee plantations in San Juan. Ten years ago, he built a coffee pre-processing plant – which allows him to buy coffee from the numerous local small producers and sell the dried, de-pulped coffee beans in the capital. He has enough land to harvest at least 700 bags of coffee³⁶ a year, and enough corn to provide for his and his

³⁶ A bag of coffee weighs about 100 lbs.

daughters' families year round. He employs a considerable number of wage labourers in San Juan. Today, Carmen's family enjoys the status that comes with being one of the few relatively affluent families in San Juan. Carmen's husband provides the household with corn, wood and other basic food items. Carmen's income is re-invested in her textile business, spent on the purchase of clothes for her and her daughters, and expended on luxury items.

Since she was 10-years old, Carmen – who never attended school – has been involved in textile trade activities. She would travel with her grandfather to the lowland coastal areas, taking belts, *servilletas*, aprons and blouses to sell. They would sell these products to the migrant workers in the tropical agricultural farms – workers who no longer had time to produce their own clothes. They would bring back with them tropical fruits, chillies and *pacaya*³⁷ – all products that are only found in the coastal region – to sell upon their return to San Juan. The trip to the coast would take two days by foot, and so Carmen would often spend five days away at a time with her grandfather. Carmen used the opportunity to develop her trade skills, and she and became exposed to the world outside her village and to regional differences found throughout Guatemala.

Carmen's mother had always been landless, and raised a total of 11 children, nine of them daughters. For several years, Carmen migrated to work on the coastal cotton plantations with her parents. Carmen's mother used to work with her daughters to produce traditional *huipiles* to be sold to the women from a neighbouring town who could not weave due to their responsibilities in agricultural work. Carmen and her sisters helped with weaving and sewing, but also accompanied their mother during the trade activities in the neighbouring village. During this time, Carmen developed her technical weaving skills and became aware of the market opportunities around her. In the late 1960s, Carmen's mother was one of the first women to take advantage of textile-sales opportunities among the tourists in Panajachel. By this time, Carmen was already married and would bring her small child along with her while selling textiles in Panajachel with her mother. In those days, the trip across the lake was made by canoe, and would take some three hours. In Panajachel, they would sell textiles they had bought from several women of their village. They would also sell blouses made with industrialized fabric to the Mayan people from the region. Carmen had the chance to meet tourists and expatriates, practice her Spanish, and begin to learn about foreigners' tastes with

³⁷ Bamboo shoot found in the lowland region of Guatemala and part of the traditional diet.

respect to textile products. Through the people Carmen met in Panajachel, she also began to learn about tourist activity in other areas of Guatemala, and marketing opportunities. Some of the expatriate Americans Carmen met during this period helped her later to contact high-end textile store owners in Antigua.

In 1980, Carmen invited two weavers from San Juan to join her to form a group in order to qualify for Caritas³⁸ assistance. They were granted the equivalent of 200 Quetzales (\$40 Canadian) per member. Carmen, who had more knowledge of the tourist market, invested the entire amount in yarn and the production of textile samples - to be reproduced by the other women in the group. The other women participated as pieceworkers. In late 1989, Carmen was working with 45 women and was able to get the group recognised as a proyecto de artesania (handicraft project) by the municipality of San Juan. Officially, she was then no longer a contractor in the textile business with a group working under her leadership, but rather the president of Proyecto Tipica with the mission of "producing textiles for the national and international market, while helping San Juan's people and the community" (extracted from Proyecto Tipica's meeting minutes). While the initial patron / pieceworker relationship has nevertheless been maintained, Carmen was able - having the proper municipal documentation and the signatures of the pieceworkers - to meet the administrative requirements of certain aid organizations and retailers who refused to work with individual contractors. Proyecto Tipica joined Trama, an alternative umbrella trade organization based in Quetzaltenango, which represents weavers' groups from different areas of Guatemala. Carmen also joined a credit cooperative in Panajachel as an independent entrepreneur, which gave her the credit she needed to be able to invest in yarns and dyes. For the past ten years, Carmen has also come to rely a great deal on her daughter-in-law, who has strong Spanish skills and who can communicate with outsiders. Carmen's daughter-in-law also helps her with local textile sales and representation in meetings with external agencies.

In 1993, a Canadian researcher investigating Mayan women's cooperatives used *Proyecto Tipica* as one of the case studies. Carmen developed a friendship with the researcher, who helped her to visit Canada in 1998 with a second weaver from *Proyecto Tipica*. This trip, which was sponsored by a Canadian development organization, allowed Carmen and the weavers to sell their textiles, exhibit their weaving techniques, and make further contact with

³⁸ An international development agency.

Canadian individuals and organizations. It also exposed Carmen to the North American lifestyle, adding to Carmen's knowledge of the tastes and needs of tourists. The trip conferred a great amount of prestige on Carmen from the community and resulted in two graduate students deciding to conduct their fieldwork with *Proyecto Tipica*³⁹.

Carmen's story traces many transformations that have taken place in Guatemala. Carmen came from a generation that did not have access to schooling, and had to migrate to the fincas⁴⁰ for work. Carmen's story shows the beginning of the tourist market for textiles, and the increased commercial importance of textiles. Carmen has participated in different ways in the textile activity. Starting as a non-wage household worker for her mother, becoming an entrepreneur, and finally becoming the president of a textile project, Carmen has updated her role according to the changes that have taken place in the textile production organization. Carmen's marriage to a more wealthy man, the household income from agriculture, and her personal entrepreneurial skills have allowed her to expand her role in the textile activity. Carmen's husband is one of the largest local coffee producers in San Juan, and employs wage labourers in his business. Today, Carmen's household is among the wealthiest in San Juan, a member of the rico category discussed above.

Carmen also illustrates the story of a weaver with adult children. The availability of daughters, a daughter-in-law and maids has freed Carmen from her household responsibilities, allowing her to dedicate more time to her income activity. Carmen has had numerous unique opportunities throughout her life to develop her Spanish skills, trade knowledge, technical skills and experience with respect to the world outside San Juan La Laguna. Her life story also shows Carmen's natural aptitude for entrepreneurship, and talent for taking advantage of opportunities around her, and of individuals she meets. Carmen's desire to offer her children technical training illustrates her desire to have her children

³⁹ I was the second graduate student to spend five months with *Proyecto Tipica* during the fieldwork period on which the present study is based.

⁴⁰ Large coastal plantations.

take on different careers than hers and that of her husband – based on textile entrepreneurship and agriculture, respectively.

<u>Maria</u>

Maria is a 49-year-old woman who has nine children – six of whom are married, and three of whom are teenaged boys who still live with her and her husband. Maria and her husband did not go to school, and she – unlike her husband – cannot understand or speak Spanish. All of her children speak Spanish, and all of the married ones have finished elementary school. Two of the boys are in the equivalent of junior high, and a third one is studying to be a teacher in a neighbouring town.

Maria learned to weave when she was 12-years old, and wove for several years to meet her household needs. Her family was very poor because her father died when she was only threeyears old, leaving her mother to raise the many children alone. After getting married, Maria migrated seasonally to the coastal plantations for several years with her husband. According to her, the work was hard but it represented the first and only opportunity for them to make some cash. "Before this opportunity, women's work was only in the house and we would not get money for anything... Although the payment was little, the money was worth more at that time, and there were not as many things we needed to buy." After several years of work on the coast the couple was able to buy a small piece of land, and build the house where they live today. Their house is part of a compound where one of their married daughters also lives. No TVs or other electronic items are found in the home, and there is no outhouse on the property.

The couple has a small plot of land where Maria's husband is a modest coffee grower relying exclusively on household labour. Due to the small size of his property, he dedicates most of his time working as a *jornalero*⁴¹ on the larger coffee and corn plantations. He also collects firewood for his family. According to Maria, if they don't work, they don't eat. As with many other women interviewed, Maria's income complements her husband's for most of the year, and is the only income while her husband is working on his land or collecting firewood. On top of the weaving activity, Maria buys live chickens on the weekends and kills and cleans

⁴¹ Day-wage labourer.

them to sell on the weekly Sunday market. Most of her income is spent on her sons' school expenses, particularly for the one studying to be a teacher.

Maria has worked with Carmen for the past 12 years. Before this, she worked for several years for a local woman contractor. She explained that this contractor would only pay her after she had sold the textiles, and that the woman did not have continuous work to give her as Carmen does. The warped yarns that Carmen provides her for textile production allow Maria to keep her three married daughters occupied, and provides them with an income. Maria weaves the larger textile pieces because she has more experience, while her daughters are left to work on the smaller pieces that require less skill. Maria does not know the locations where Carmen sells the textiles, nor the prices for which the textiles are sold.

Maria also joined the Associacion del Lago for a couple of years, when she temporarily stopped working for Carmen. She mentioned that the textiles made by that cooperative were not selling well, and the women were being left without work for long periods of time. Moreover, in the cooperative the members would have to wait until the textiles sold to receive payment, and the benefits sent from the gringos⁴² were kept in the hands of the executive.

Maria says she does not produce textiles independent of a group. To do so would require her to invest money in yarn and time in the labour, and then wait for long periods until the textile sold to get the returns. She would not be able to count on an income for daily expenses. In addition, Maria believes that it would not be worthwhile to travel to Panajachel to sell the textiles due to the high competition and low textile prices in that city. Maria believes that it is only viable to travel to sell textiles, if one also has textiles from others to sell.

Maria's story shows a weaver without small children who can dedicate most of her time to textile production. However, because she does not have single daughters, nor the resources to hire a maid, she is still responsible for the household work. Maria migrated, as did most of her generation, to the fincas with her husband and never had the opportunity to go to school. The fincas were the first source of wages for the couple, and allowed them to improve their

⁴² In this case, international development organizations.

financial situation. These wages also provided them with the ability to purchase a piece of land from which the household could earn cash by growing coffee.

Maria has never produced textiles on her own, but has always worked for local entrepreneurs and projects that supplied her with yarn and specifications for production. Maria is a skilled weaver who can get a large supply of yarn at a time, and provides her daughters with work and income. Maria has her own independent complementary activity in addition to her textile work. She explains that her craftwork gives her the additional income needed to send her teenagers to a technical school, thus helping them to avoid the hard life she and her husband have.

<u>Luzia</u>

Luzia is 22-years old and lives with her common-law partner and their two- and three-yearold children. Luzia and her partner went to school for three years, and have a good understanding of Spanish. The couple is landless, and makes monthly payments towards the loan they received to build their house. Their house was made with adobe roofing, a dirt floor, and no outhouse. It consists of two rooms, and Luzia cooks outside on an open fire since she does not have a wood stove.

Unlike her parents, Luzia and her partner never migrated to the coastal plantations to work. Luzia was the second-oldest child among her parents' seven children. Her parents never went to school, and her mother never learned Spanish. Luzia remembers her father telling her that, in his generation, more than half of San Juan's population would migrate to work. She is glad that she and her husband can find work in San Juan and do not need to migrate. Luzia's mother had only woven *servilletas*, *huipiles* and aprons for household use.

Luzia's partner, like most husbands of the other women her age, is a *jornalero* in the coffee or corn plantations. He leaves the house in the morning and returns in the late afternoon. While cutting coffee from December to March, Luzia's partner can make 25 Quetzales (\$5 Canadian) a day. Afterwards, he makes 10 or 15 Quetzales (\$2 or \$3 Canadian) daily working on the corn plantations. Luzia stopped cutting coffee once she started having children because she needed to spend her time taking care of them. Luzia's weaving income complements her husband's income in an effort to meet the family's needs. Also, when Luzia's husband has to perform household tasks for his family – such as collecting firewood – her income is the only source of cash for the family. Luzia usually uses the money she gets from weaving to buy corn, sugar, soap and clothes for her children.

Luzia learned to weave with her mother when she was 15-years old, because she wanted to start to weave for local entrepreneurs. Her mother had never woven textiles for sale before that time. One of Luzia's teenaged sisters often helps Luzia with her weaving activity as well.

Luzia complains about the rainy season, when her husband's income is reduced and when she cannot weave as much. She explained that, as part of her weaving task, she has to set up the loom with wet, starched yarns that have to dry well before she can start to weave. During the rainy season, since her house does not have a sheltered area, yarn-drying and weaving activities are limited to the short sunny periods, reducing Luzia's production and income. Luzia also notes: "I prefer to work with others rather than on my own because I cannot invest in yarn. Also, I would have to sell it to people who take it to Panajachel, and wait long periods before they could sell them."

Luzia illustrates the new weaver generation, members of which can speak Spanish, frequently have been schooled for several years and are literate. Luzia, a mother of two small children, cannot dedicate herself to work outside of her household and uses weaving as her income contribution. She cannot dedicate many continuous hours to weaving because of her children's interruptions. However, Luzia can often get help from her teenaged sister to weave while she goes about the various tasks of raising and looking after her children. Luzia's household is landless but she can count on the support of her husband who sells his labour to landowners. His income is not sufficient to cover all of the household needs, especially during the rainy season. Luzia's weaving activity plays an important role in complementing her husband's income, helping them to meet the basic household needs. However, because she has her husband's support, Luzia does not have to sell her labour to coffee owners, as Inés (see below) must do. Luzia, since she learned to weave, has produced specifically for income-raising purposes. Luzia has always woven for local entrepreneurs or handicraft projects, and has never had control over the resources needed nor the aesthetic of the textiles she produces.

Inés is a 35-year-old widow whose husband passed away a year ago due to problems arising from heavy drinking, leaving her with seven children including the one she was pregnant with at the time. She lives with all seven of her children (aged 12, 11, 10, 8, 7, 2, and 1) in a one-room house built by World Vision⁴³, to which she still owes 500 Quetzals. Her household does not include an outhouse, so the family members make use of the relative secrecy of the nearby coffee plots. Inés' home includes a place to cook that is outside the main house. It is very challenging to prepare family meals during the long rainy season. Although her husband was a carpenter, he sold all of the furniture they had to buy alcohol. Today, the eight members of the household share only three beds, and Inés has sold almost all of her *cortes* to pay for food.

Through the adversity, Inés has managed to keep all of her school-aged children in school for at least a short period of time. Finally, however, two of her daughters had to leave school to help their mother. The 12-year-old daughter goes back to school for one period of the day, and for the other she stays home to look after the one- and two-year olds. She cooks and does laundry while the eight- and seven-year-old boys are helping to collect firewood. The 11-year old girl worked as a maid at Carmen's house, where she would clean, make tortillas, wash clothes and do the household shopping. She worked every day from 6am to 8pm, receiving 100 Quetzales (\$20 Canadian) a month. Inés saw this as a good opportunity for her daughter to learn to work in a better house, and get fed while making some money. The 10-year-old daughter baby-sits for a local family.

Inés is Carmen's youngest sister, but her life experience was very different from Carmen's. Inés went to school for a year and a half, where she learned to read, but not to write much more than her name. When she was 12-years old, Inés started to weave the traditional *huipiles* of the neighbouring *pueblo*, which her mother would sell with Carmen's help. Later, she began to weave textiles for her mother to sell to tourists in Panajachel. Inés accompanied her mother on her textile-sales trips to Panajachel only twice before she got married. Soon after, Inés started to have children and had to help at her in-laws' house – which is where she lived until after her husband died. Inés was never able to produce textiles on her own, nor could she

⁴³ An international NGO that sponsors children and gives aid to families in San Juan La Laguna.

sell textiles because she never had the resources necessary to invest in yarn. "I would like to weave my own textiles to sell, but if I invest my little money in yarn my children don't eat."

Inés has woven for some of the many local women who used to sell textiles in Panajachel. She complained that they did not sell well because of the low quality of the textiles being produced. As a result, she sometimes had to wait two months to get paid, since they would only pay her after they had sold the textiles. "I am on my own to buy corn, soap and, when I can, sugar to make coffee". She says: "I have worked in Carmen's project for seven years now so I can buy some little things... This project is better than others because we have work year-round, we do not have to wait to get paid, and Carmen advances me money when I have a real need." During the coffee harvest, between December and the end of March, Inés cuts coffee because it pays better. "It is the only time of the year when we have the chance to make a little bit more money... I have to sacrifice myself because I do not have anyone who supports me." For the rest of the year, she relies on her textile work to provide her with an income, although her weaving time is limited during the rainy season.

"If I can not weave during the day because of my small children, I do it at night. I only weave after my daughter arrives from school, when she takes care of the small children. She can already help me with my textiles, as well. When I have to stop weaving, my oldest daughter weaves for me... I don't have any idea about the prices the textiles are sold for."

Inés, although growing up in the same household as Carmen and with a mother who was a pioneer textile entrepreneur, had a life that followed a completely different track than her sister. Inés never migrated to the fincas and attended school for only a few years. Inés has never produced textiles on her own, but rather for entrepreneurs and projects that could pay her a wage. Inés's story illustrates the struggles a woman faces in supporting her family on her own in San Juan. Inés, due to a bad marriage, was left as a landless widow with several small children. As a consequence of her tight economic situation, Inés depends on selling the family members' labour for the coffee harvest, and on the textile activity. Moreover, Inés depends on the help of her children to free her from household work and on their ability to earn an income from an early age. Inés's children sell their labour to wealthier families, such as Carmen's, who can afford to pay a small wage.

Summary

Textile activity returns are inferior to the returns brought in by the male-controlled agricultural activity in San Juan La Laguna. Still, textile activity allows women who are restricted to the household to earn an income, which, although small, plays a meaningful role in their family's life. With the textile activity, the women in San Juan can complement the agricultural income to meet the family's basic needs, or offer their children more years of schooling.

As discussed by Bossen (1984), women have always participated in the household income, independent of their socio-economic status. The findings from the present study suggest an association between the role textile production plays as an income-raising activity in the household, and the household's socio-economic status. In landless households where both men and women depend on each other to complement each other's income and provide basic needs for the family, the role of the women is relatively more important (Ehlers, 1991; Bossen, 1984). In such households, as illustrated by the stories of Luzia and Maria, the proceeds from weaving are essential to access basic food needs. Women in these households cannot save the basic capital needed to invest in yarns for textile production, nor can they face the financial risks that are inherent in the textile activity. In better-off households as Carmen's, weaving income is used for children's schooling, clothing and products. In these households, a more secure financial situation also allows the women to continue to wear fine woven huipiles. Moreover, women in households of higher socio-economic status can afford to take more risks in the textile activity, by investing resources in materials, producing as independents or becoming entrepreneurs who hire other artisans. Women in the wealthiest families, which rely on wageworkers for agriculture, do not participate in the agricultural activity.

The case studies discussed in this chapter showed some of the similarities and differences among the four weavers. These four weavers illustrate the main variations and statuses I found among the members of *Proyecto Tipica*. Age, household wealth, personal life experiences and specific skills have been shown in the four cases to differentiate the status of each weaver. The older weavers' stories illustrate some of the changes that have occurred in San Juan's textile production over the past few years, due to the intensification of commercial production and the expansion of the tourist market. The case studies illustrate the motivation of artisans who have a more secure subsistence, such as Carmen and Maria, to sacrifice themselves by working as hard as they can in order to offer their children a different life than their own experiences. On the other hand, Inés's story illustrates the life of a woman who is the head of her household and thus has to work as an agricultural wage labourer, in addition to her textile labour, to be able to afford food for her children. Finally, Luzia represents the artisans whose textile wages complement their husbands' agricultural income, while remaining in the household to care for small children.

The weavers' case studies described and discussed above reveal in a more immediate way, the complementary relationship between weaving and the agricultural activity, and the different roles weaving plays in the distinct households. The four weavers, with their weaving income, play different but important roles in their households. In Chapter Five, the logistics faced by the artisans who choose to work in each type of textile production organization unit encountered in San Juan La Laguna was shown to reflect the different socio-economic groups discussed in this chapter. The socio-economic discrepancies among the indigenous population that were discussed in this chapter, and illustrated in the case studies, reveal the context in which *Proyecto Tipica* functions, the political aspects of which are discussed in Chapter Seven.

Chapter Seven: Production of Naturally Dyed Textiles: Benefits to Whom?

Introduction

The present chapter explores the production of naturally dyed textiles in the Guatemalan context, using *Proyecto Tipica* as a case study, with the goal of supplementing the information available about the impact this type of production has on the artisans. In evaluating this impact, I will describe: (a) the group's political organization⁴⁴, decision making and knowledge control; (b) the production organization and the artisans' efforts in the textile production; and (c) the sales of *Proyecto Tipica*'s textiles, the group's returns and their motivations to continue to produce such labour-demanding textiles.

Natural dyeing techniques were abandoned in the beginning of this century in Guatemala (Carlsen & Wenger, 1991). In the last two decades, increased consumer interest in naturally dyed textiles in North America (Buchanan, 1990) and the German banning of azo dyes (Hill, 1996) have expanded the market demand for naturally dyed textiles. According to Hill (1996), natural dyes attract consumers due to their unique shades, their natural sources, and the assumption that they are environmentally friendly. With the potential market for natural dyes, and since the knowledge of natural dyeing techniques was often partially or entirely forgotten, individual professionals, NGOs and government agencies have facilitated the weavers' return to use of natural dyes in Southern countries (Anderson, 1998; Morris, 1991; UNDP, 1996; WDP/WAYANG, 1995). In Guatemala CEDART (Handicraft Design Development and Capacitating Centre) is an NGO that has used international funds to promote the training of 40 artisans in natural dyeing techniques. The findings discussed in this chapter are important because relevant information is provided about the impacts on artisans and their environments brought about by the use of natural dyes – impacts that should be considered by NGOs before they promote natural dyeing techniques.

The benefits of naturally dyed textile production have been discussed with respect to environmental impacts (Davis, 2000; Hill, 1996; WDP/WAYANG, 1995), market returns (Anderson, 1998; Morris, 1991), labour demand (Popelka, 1991) and ethnic traditional revival (Morris, 1991). However, more thorough and systematic research on the socio-

⁴⁴ Mechanisms that facilitate continuity within *Proyecto Típica* and maintain its hierarchical structure (Hamilton, 1984).

economic impacts on artisans who use naturally dyed materials is needed before natural dyes can be recommended as an appropriate alternative for artisans. The production of naturally dyed textiles in Guatemala is completely oriented to international consumers. In Guatemala, Davis' (2000) was the only study found on the current use of natural dyes. This chapter adds to the knowledge about natural dye use in Guatemala by exploring the artisans' efforts in preparing and using natural dyes, and the returns they receive. The use of natural dyes is a technique that can illustrate a technological production adaptation "to the combined constraints of the indigenous lifestyle and the external market" (Niessen, 1996, p.1). As noted by Morris (1991), Mayan women do not appreciate earth colours in their clothes, but prefer bright colours. This chapter explores the perceptions of the *Proyecto Tipica* artisans about the use of natural dyes, a technique that is often associated with the revival of ethnic traditions (Morris, 1991; Anderson, 1998).

The efficient use of a technological input such as the natural dyes depends on the production organization and on the knowledge of the producer (Gregory & Altman, 1989), which will be discussed in this chapter. According to Racanog (1997), this knowledge has always been a closely guarded secret among the Mayan people. The reintroduction of technologies such as natural dyes, especially as a response to foreign consumers' demands, is likely to yield important information about dominant and subordinate groups in society (Gregory & Altman, 1989). This important political aspect of natural dye knowledge among the members of *Proyecto Tipica* will be evaluated below.

The production of naturally dyed textiles increases the labour required (Popelka, 1991) and the capital investment required until economic returns can be realized. Thus only a few weavers – in secure economic positions – can afford to choose this option (Jopling, 1971). When produced for commercial reasons – such as to differentiate the textiles produced, avoid competition and reach a higher market – naturally dyed textiles need to be sold for a higher price to compensate for the additional efforts involved in their production. The economic returns from naturally dyed textiles encouraged weavers in Mexico (Morris, 1991) and Turkey (Anderson, 1998) to use natural dyes. The success of cooperatives that return to the use of natural dyes is dependent upon the elimination of middlemen, and on good marketing strategies for the sale of their products (Anderson, 1998, Morris, 1991; Popelka, 1991; WDP/WAYANG, 1995). Artisan groups in Turkey (Anderson, 1995) and Mexico (Morris, 1991) received heavy financial and technical support from foreign individuals and development agencies, and were reported to be successful in achieving a return that covered the extra efforts required to produce naturally dyed textiles. However, the above authors did not mention that artisans risk becoming dependent on their supporters to successfully market their products. *Proyecto Tipica* did not receive as much support as did the artisan groups that were reported to have been successful in marketing natural dyed textiles. In exploring *Proyecto Tipica's* marketing strategies, and the returns achieved by the artisans, this chapter reveals important information complementary to the other case studies reported in the literature.

4

Proyecto Típica's Organization

Proyecto Tipica was the initiative of Carmen, a textile entrepreneur and the group of artisans who worked for her as pieceworkers (see chapters above). Proyecto Tipica has received assistance from development agencies and foreign patrons, in the forms of credit, skills training and access to markets, although this assistance has never been on a continuous basis. Proyecto Tipica has never relied heavily on the support or initiatives of outside individuals or agencies and has never become dependent on their support for survival, in contrast to many artisan case studies discussed in the literature (Morris, 1996; Anderson, 1998). However, even with a formal democratic structure as documented in its minutes, Proyecto Tipica in practice displays a highly vertical hierarchical structure, which concentrates all of the decision-making and production control in the hands of Carmen, the project founder. As a result, the other artisans in this group are totally dependent on Carmen for the continuation of their work and wages. Carmen decides who does what, and when, while the rest of the women artisans in the group attend to Carmen's specifications and receive wages as pieceworkers.

Meetings among members of *Proyecto Tipica* do not happen on a regular basis. There is not even a comprehensive list of all of the women members of *Proyecto Tipica*. Carmen is the common link among the group's members. Some members of the group meet at Carmen's house should the need arise – such as when signatures are required on a document, or during visits from people representing NGOs or the government. The minutes of *Proyecto Tipica* document Carmen's re-election as president, and a rotation among Carmen's daughter-in-law, her daughters, and a close friend of the other executive positions. The minutes are always written by Carmen's daughter, who is the permanent project Secretary, and are signed afterwards by any weaver attending the meeting. On other occasions, minutes are written and weavers visiting Carmen's house to deliver textiles are asked to sign them after having had the contents explained.

Olson (1994) defined *Proyecto Tipica* as a weavers' cooperative. As was concluded in the last chapter, regardless of their designation, artisan groups tend to exhibit a hierarchical structure in San Juan. *Proyecto Tipica's* designation as a cooperative is a formal designation that does not account for local context variations (Cohen, 1998), nor the actual internal dynamics that characterize *Proyecto Tipica*. Rather than trying to fit the organizational structure found in *Proyecto Tipica* into one concept, I will explore the relationships among the project's members, relationships that give the project continuity. Davis (2000) stated that the group's president had a patron-client relationship with the other members. Knowledge control in the hands of few is one of the main aspects of patron-client relationships (Wolf, 1956). The patron-client relationship affects the organization of naturally dyed textile production, and the benefits received by the weavers from this activity. Due to the relevance of this topic, and the lack of information on patron-client relationships among women and on textile production based on the use of the backstrap loom, I further explore this relationship by describing the patron-client relationship between Carmen and the weavers of *Proyecto Tipica*.

Reproducing the Patron-Client Relationship

Although entrepreneurs' relationships with weavers are said to be capitalist in nature (Rosenbaum & Goldin, 1997), the use of kin ties and patron-client relationships by merchants and entrepreneurs has been discussed in the literature. Stephen (1991, 1993) described a different situation in her study in Oaxaca, Mexico, where the textile activity is based on workshop production and the use of the foot-loom. According to Stephen (1991, 1993), the contractors – the majority of whom are men – in Oaxaca use their godparenthood ties to contract weavers, and they dictate the colour, design, size and any other characteristic of the textile to be produced, similar to the way Carmen does in *Proyecto Tipica*. In Ecuador, Mier (1984) noted the use of kin ties by merchants to access raw materials, credit, markets for products and control over labour. In one Argentinean village, Hermitte (1972) concluded that weavers and entrepreneurs (both of whom were mostly women) worked in a patron-client relationship. In the case she described, the patron provided yarns, market and credit to piecework weavers (the clients). Cohen (1998) briefly discussed the use of kin ties and traditional political relationships in associations, cooperatives and other forms of textile

organizations in Mexico. No information was found in the literature on patron-client relationships in textile production based on the use of the backstrap loom in Latin America.

In patronage, the patron protects the destitute, while the destitute support the patron (Shirley, 1972). According to Wolf (1956), patron-client relationships are more likely to occur when inhabitants of communities depend on the world market and outside agencies. Few community members are aware of, or can understand, the connection between the community and the outside institutions. San Juan La Laguna, as detailed in Chapters Four and Six, fully matches Wolf's description of a typical context for the reproduction of patron-client relationships. Patronage, while it is the result of asymmetrical status in a community, also reproduces such asymmetry (Stuart, 1972). In the textile production environment in San Juan, one designed for foreign consumers, patron-client relationships are likely to occur. In San Juan, few individuals have knowledge about market channels and market demands, can gain access to the required capital, and possess aesthetic skills – all required factors for success in international market textile activity (as discussed in Chapter Five). Moreover, in a textile project few members understand how, or have enough confidence, to network with foreign individuals and organizations, to link general members to development agencies, for example. A small minority is knowledgeable of financial institutions where they can request credit, for which they have the required minimum capital. Many local women do not have the minimum capital nor the knowledge and skills possessed by the entrepreneurs, and in weaving find the only means they have to earn an income to ensure their families' survival. The majority of the women are not qualified for bank credit, nor for the credit cooperatives in Solalá⁴⁵. In addition, indigenous – especially those who have not been exposed to the outside world - are usually hesitant to deal with outside institutions, preferring instead to rely on community creditors (Hermitte, 1972).

Considering the context of textile production in San Juan (see Chapter Five above), it can be noted that Carmen has all of the characteristics required to be a patron. Carmen controls knowledge about textile techniques, credit access, market demands and channels, and does all networking with outsiders on behalf of *Proyecto Típica*. *Proyecto Típica*'s weavers – despite their modest wages – declared their preference to work for a patron such as Carmen, rather

⁴⁵ The credit cooperatives in Solalá are non-profit organizations that give their members accessible credit at lower interest rates than do the local banks.

than for outside intermediaries where it would be a purely capitalist relationship based exclusively on the piece-wages. In San Juan, a weaver's alliance with a specific local patron such as Carmen can offer her returns other than wages. Offering loyalty to a better-off individual such as a patron can give the weaver some additional security in adverse life situations such as periods of scarce wage work during the rainy season. Weavers have expressed loyalty to Carmen because she provides them with work year-round, gives them interest-free loans during emergency periods, and pays them right away.

The high percentage of women in San Juan interested in working as pieceworkers, rather than entrepreneurs, limits the bargaining power of Proyecto Tipica's artisans. This relationship between patron and pieceworker reproduces a local form of underdevelopment wherein the weavers depend on the patron, who controls the resources (Cardoso & Faletto, 1979; Cohen, 1998). However, power relationships do not depend exclusively on the actions of the dominant group, but on the subjugated group(s) as well (Foucault, 1980)⁴⁶. Entrepreneurs depend to a certain extent on the loyalty and reliability of the pieceworkers who work for them, to cover orders during the coffee harvest when many weavers have optional wage activities, for example. Carmen is able to offer her relatives, kin and other community members an income activity. She prefers to develop strong relationships with the specific women who work exclusively for her, providing them with steady work. Carmen fears that if weavers work for different patrons she could lose her exclusive ownership of textile designs. Strong relationships between Carmen and the weavers can enforce the recognition of Proyecto Típica as a weaving project, rather than a business enterprise. As Morris (1996) pointed out, artisan groups that can show commitment to artisan social issues can qualify for more aid, gain opportunities to market textiles through fair trade organizations, and receive support from development agencies and individuals. Carmen's patronage over the pieceworkers secures the weavers' presence in meetings, as required, for individuals and development agency representatives interested in Proyecto Tipica's work.

⁴⁶ "What makes power hold good, what makes it accepted, is simply the fact that it doesn't only weigh on us as a force that says no, but that it transverses and produces things, it induces pleasure, forms knowledge, produces discourse" (p. 18).

Revival of Natural Dyes and Power Structure

Artisan Motivations in Reviving the Natural Dye Use in Proyecto Tipica

While industrially dyed cotton yarns are easily accessible in local stores to anyone with capital, the production of naturally dyed yarns requires knowledge of the dye sources and techniques, specific market demands and channels, and the ability to travel to access the dye materials. It also requires that the dyer have enough capital to invest in bulk amounts of yarn to be dyed. Knowledge of special outlets specializing in the sale of high-quality textiles is also important, where sales would potentially mean a higher return to compensate for the additional work involved in the production of naturally dyed textiles. Carmen, who has initiated the use of natural dyes in *Proyecto Tipica*'s textile production, has the knowledge and capital needed to produce naturally dyed textiles.

Carmen gave several reasons for her motivation to produce natural dyes. First, the industrially dyed yarn available in the market was of low quality and retailers refused to buy textiles produced with them. Second, "people from far away were getting skin disease due to the use of chemical dyes" – a reference to the German ban on the importation of textiles produced with azo dyes (Hill, 1996). Third, Carmen learned that artisans in Salcajá and Santiago Atitlán were "dyeing with plants", and believed that this technique could differentiate her textiles, helping her access high-end retailers. From interviews with key people, I also learned that Trama⁴⁷ had in the past employed someone to produce naturally dyed yarns, which were then sold to member artisan groups. Carmen, who had learned a few basic dyeing techniques from her grandmother, started experimenting with plants to dye yarns, until such time as she had mastered the natural dyeing techniques. Carmen explained: "It was God who taught me to dye with plants, because my husband is mean to me and also because I help the people from my *pueblo* with this project".

The artisans of this group, working on a piece-wage basis, do not accrue any prestige from the use of natural dyes and expressed different motivations for using natural dyes. The large majority of these artisans were indifferent to the use of natural dyes; several of the artisans had only recently learned that the yarns provided to them by Carmen were in fact naturally dyed. When asked for their insights about the benefits of using natural dyes, 19 out of 27

⁴⁷ A fair trade umbrella association of which *Proyecto Tipica* is a member.

weavers simply commented on the fact that the colour of the yarns does not wash away (i.e., better quality). Only eight weavers expressed the belief that the natural dyes differentiated the textiles being produced, and that this was the reason why Carmen sold more than other local entrepreneurs and projects. These artisans also commented that the use of natural dyes provided Carmen and themselves with more steady work and better returns than artisans producing lower-quality textiles, but no better than those producing high-quality textiles.

In Guatemala, while several people I met during my fieldwork were aware of some of the plants that were used by their ancestors as dyes, most people did not have any knowledge about the preparation methods of the dyes. In order for someone to learn to dye, they have to learn by experimenting on their own, or by benefiting from someone else's experience. CEDART has published a manual which briefly describes some of the procedures of natural dyeing (Reiche & Mardoqueo, 1999). However, artisans generally have little education and are more likely to learn by experimenting than by reading a manual. The manual, which was based on workshops promoted by the Guatemala NGO, notes this organisation's awareness of, and concern for, the potential environmental hazard of uncontrolled dye preparation and use.

Natural Dye Knowledge and Power

Technological knowledge, when concentrated in the hands of dominant groups, can reinforce hierarchical structures. The introduction of new technologies is likely to yield important information about social groups in the contexts in which they are introduced (Gregory and Altman, 1989). Hosler (1996) concluded that the introduction of new pottery making technology, associated with the production of pottery crafts for higher-end craft markets, reinforced social categories in an Andean village. The use of natural dyes, considered ancestral knowledge among the Mayan people, has been revived due to a new international demand for natural products – which are often mistakenly equated with being ecologically sound products by consumers and development agencies. The revival of the production of naturally dyed textiles by *Proyecto Tipica* is an initiative of Carmen, who became aware of international consumers' demands for natural dye use. Moreover, the use of natural dyes is associated with traditional textiles by retailers and consumers (Moreno, 1995). The revival of natural dyes in this context is another example of how artisans adapt textile production in response to consumer preferences to better market their products (Littrell & Dickson, 1999),

and how the qualities associated with traditional goods are dictated by consumers (Moreno, 1995; Price, 1986).

In *Proyecto Tipica*, Carmen is the only one in the group who has knowledge of the vegetable dye sources, technical know-how, and market channels for naturally dyed textiles. Due to her knowledge of natural dyes, Carmen receives prestige from consumers, retail stores, and development agencies interested in learning from her experiences. She also draws the attention of academics – such as Davis (2000) and myself – interested in the revival of natural dye use. The use of natural dyes differentiates the textiles produced under Carmen's coordination from the majority of similar textiles produced in San Juan. This fact enables Carmen to sell textiles to high-end retail stores, which offer higher returns for the textiles than other retail stores. The use of natural dyes in the hierarchical context of *Proyecto Tipica* adds one other domain to be dominated by Carmen. Besides Carmen and her daughter-in-law, the artisans working in *Proyecto Tipica* are not affected by the fact that this group uses natural dyes. The additional knowledge required for the production of naturally dyed textiles concentrates power in the hands of the *Proyecto Tipica* patron.

Carmen is aware of the benefits she and her group can realize given that other artisans have not learned natural dyeing techniques. She has refused an offer of 8000 Quetzales (\$1600 Canadian) to give natural dye workshops to other indigenous groups. In addition, a store in Antigua asked Carmen to teach a workshop on natural dyeing techniques to tourists, at a rate of 700 Quetzales (\$140 Canadian) per student. This same store is interested in publishing a booklet about Carmen's natural dyeing techniques, of which Carmen would receive a percentage of the profits. Carmen turned down these opportunities as well. She explained that sharing the knowledge of natural dyes with others would promote competition with *Proyecto Tipica.* "If I teach others, the *Proyecto* will go backwards, and all the women will lose their work." She adds: "This is the reason I do not want others in the *Proyecto* to learn the dyeing techniques, only the people I really trust will not betray me, such as my daughter-in-law."

Despite Carmen's efforts to keep her knowledge of natural dye preparation from others, a second group of weavers in San Juan has begun to produce naturally dyed textiles with similar patterns to those produced by *Proyecto Típica*. Three women members of this group received natural dye training from a consultant working with CEDART. This group, despite the fact that it has received more support from development agencies, was having difficulties selling their textiles during my fieldwork due to the saturation of the high-end market with

textiles of similar appearance and quality. The fact that this second group learned of, and began to use, natural dyes caused increased market competition for *Proyecto Tipica*, and today the two groups compete for the chance to consign their textiles to high-end retail stores and fair trade organizations. The emergence of the second group also increased the competition for local wild natural dye sources that are already scarce in the San Juan region, as discussed below and as noted by Davis (2000).

Division of Labour, Skills Involved and Returns in the Production of Naturally Dyed Textiles

As already discussed, the president of *Proyecto Tipica* controls all production and sales of the textiles in this group. She buys all of the yarn, accesses the dye materials, controls the preparation of the natural dyes and the dyeing of the yarns, decides on the styles of the textiles to be produced, receives orders, and creates samples. She gives the warper dyed yarn in skeins of different colours, and a textile sample. "I am the one with the experience. These are all my samples I produced with my experience. Only I can match up the colours that go together in a textile sample. They are all from my ideas." Carmen's words further emphasize her confidence and the pride in her aesthetic knowledge and skills, which give her prestige (Jopling, 1975). The women involved in weaving, warping and stitching are not involved in any activities related to the natural dyes, and thus their efforts are not affected by the use of natural dyes. The pieceworkers' efforts and their wage returns from the textiles being produced by *Proyecto Tipica* are discussed below. Carmen and her daughter-in-law's efforts and cash returns are discussed separately, due to their unique positions in *Proyecto Tipica*. While pieceworkers get a secure wage for their work, the returns of Carmen and her daughter-in-law are uncertain and depend on the textile sales.

Wage-worker Efforts and Returns

In *Proyecto Tipica* the textile designs are determined during the warping phase, based on the textile sample and weaving procedure⁴⁸ supplied by Carmen. Carmen distributes the available work fairly to all of the pieceworkers. While some women are exclusively assigned to warp or weave, others are assigned to do both. Weavers are also assigned to the production of specific textile patterns. Less-skilled weavers cannot weave textiles that include *jaspé*. Only

older weavers with more experience are assigned to the production of shawls - the widest textiles produced using the backstrap loom. Weavers, warpers and stitchers all reported having no knowledge of the sale prices of the textiles produced by them. The women doing the warping and weaving have no knowledge of the final products made from the textile panels they produce. The weavers simply return the textile panels to Carmen, who passes them on to one of the two women responsible for stitching the panels together, thus transforming them into tablecloths, bedspreads and huipiles. The person who does the stitching is also responsible for finishing the textile fringes. Every woman returns her products to Carmen once she is finished her tasks and gets paid. All of the women artisans reported that they preferred to get enough material from Carmen to provide them with enough work for three or four weeks. They say that the returns from each single textile are too little, and do not allow them to buy anything. They often described their weaving activity as a "savings account", in that they would invest their labour daily, receiving a return from the accumulated "investments" every two to four weeks. However, if they required cash during this waiting period, they would return whatever pieces they had completed to get payment. Carmen also appreciates this procedure because it saves her some time in her busy schedule from attending to the artisans at her house. The textile production in this group is very fragmented, and the pieceworker artisans are alienated from the end product and from the consumers of their work (Rosenbaum and Goldin, 1998).

Warping

The warping of each textile panel takes from 0.75 to 1.75 hours (see Table 7.1), depending on the dimensions of the textile and the pace of each weaver. However, all women involved in warping reported that they would warp one textile panel in half a day. Women who only warped reported that they could warp one textile panel in the morning, a second in the afternoon, and an additional at night when they needed the money and Carmen had enough work for them⁴⁹. The women earn wages of 2.5 to 5 Quetzales (\$0.5 to \$1 Canadian) for each piece they warp, depending on the textile's dimensions. As a consequence, warpers in

⁴⁸ The procedure of weaving with a backstrap loom has been detailed in the available literature (Spelich and Spelich, 1980). Due to the technical characteristic of the procedure, and given the core objectives of this study, it is not described here.

⁴⁹ Some artisans stated they would not work at night because they do not have the money to cover the electricity bills.
Proyecto Tipica are able to make more money than weavers in San Juan (see Figure 7.1). The women who only warp said that warping is less hard on their bodies than is weaving, while the ones who both warp and weave said they prefer to do both because they can switch activities and it is less repetitive for them.

Weaving

To prepare the cornstarch mixture (*atol*) and to starch the warped yarns, a weaver takes an average of 20 minutes. Setting up the loom takes a master weaver, working without interruption, from 50 minutes (for the smaller textiles) to an hour and 45 minutes (for the larger textiles), depending also on the artisan's experience and personal working pace. Setting up the loom is the most difficult step to be learned by an apprentice weaver. Several weavers in *Proyecto Tipica*, whose teenage daughters were available to help in the textile production, would set up the loom so that their daughters could help with the weaving. These teenage daughters, although already expert weavers, had not mastered the set-up of the loom. Usually, weavers starch and set the yarns on the loom in the morning and let the warp dry in the sun until mid-afternoon when they will begin to weave.

Once the yarns are dry, a weaver starts to add the weft to the warped yarns. The weft yarn is not visible in the textiles and so, as discussed by Stephen (1991) in Mexico, lower-quality black dyed yarn⁵⁰ is commonly provided by Carmen to be used as the weft. The weavers I interviewed reported that they worked for one- to two-hour periods in the morning and again in the afternoon. They worked additional hours in the evening when the need for cash was urgent. Weavers with small children and no one to help care for them would take longer to finish a piece, since they were not able to work for long without interruption. Older weavers without small children took less time to finish each panel since they could work longer hours without interruption. The weavers wove at an average rate that varied from 10 to 14 inches per half-hour of continuous work. The estimated time required for the textile pieces to be woven, after the loom had been set, varied on average from four hours and eight minutes to seven hours and fifty three minutes, depending on the size of the piece. However, this time estimate did not include the time required for drying the starched yarns nor for interruptions. Breaks are a part of backstrap weaving because the work is hard on the women's backs and

⁵⁰ Locally known as *sope*.

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		Trans Internet				
-				·		
Small				11	10.6	50 - 75
Shawl				11	10.0	50-75
Warping	0.5	0.75	2.5			
Weaving	2	4.13	8.5			
Wide				31	64	150 - 200
Shawl						
Warping	0.5	1.66	5			
Weaving	4	6.33	25			
Fringes		0.1	1			
<u>Table</u>				9.5	24.6	50 - 60
Runner	0.5	0.00	2.5			
Warping	0.5	0.83 4.64	2.5			
Weaving	2	0.16	6			
Fringes Tablecloth	-	0.10	1	31.5	75	150
Warping	1.5	2.49	7.5	51.5	15	150
Weaving	6	13.92	18			
Stitching	0.5 to 1	2	6			
Fringe	-	0.5	(including			
			fringes)			
Bedspread			<u>_</u>	92.5	181	350 - 400
Warping	2.5	8.75	15			
Weaving	20	38	62.5			
Stitching	1 to 3	4.32	15			
Fringe	-	0.83	(including fringes)			

Table 7.1	Table of Work Time	e, Wages, Labour Costs, Material Costs and Sale P	rices ⁵¹ .
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⁵¹ Wages, costs and prices are presented in Quetzales.

⁵² The artisans observed knew in terms of "days" how much time would be required to finish each task. The numbers of days listed here were reported by the large majority of the weavers assigned to each particular textile. The time estimated in hours, based on the weaving rate, did not account for the "breaks" a woman would normally take to work on other household tasks. When a weaving rate is used to estimate the amount of time required to finish a piece, the flexibility that allows the women to carry out multiple tasks and not abandon household responsibilities – one of the main reasons why women use backstrap weaving as an incomegenerating activity (Ehlers, 1991) – is not accounted for.

legs, and they cannot weave continuously for very long. The weavers are aware of, and can precisely estimate, the number of days they need to finish each textile panel (from the time they start to starch the yarns). The weavers reported an average of one day to finish the small textiles, and four days to finish the wide textiles that are used as shawls. Weaving wages vary depending on the length of the textile panel and on its width. A weaver receives six Quetzales (\$1.20 Canadian) for a textile that takes an average of two days to finish, while the more skilled weavers – assigned to weave shawls – reported that they could weave one shawl in four days, getting a piece wage of 25 Quetzals. While less-experienced weavers can earn three Quetzales (\$0.6 Canadian) a day weaving, the more experienced artisans can make five Quetzales (\$1 Canadian) a day weaving wider textiles. Still, weavers make potentially less cash in one day than do the warpers who can earn up to 10 Quetzales (\$2 Canadian) a day.

Stitching and Doing the Fringes

The long, woven textile panels are stitched lengthwise at the seams. Two of the women in *Proyecto Tipica* are responsible for this task, which does not require weaving skills. They transform the textile panels into bedspreads, tablecloths and *huipiles*. Both women were taught by Carmen to do their work, which also includes twisting the textile fringes. The women get a piece wage of 15 Quetzals, and usually spend two or three days to stitch five panels of approximately 300 centimetres in length and to finish their fringes. They earn six Quetzales (\$1.20 Canadian) when working with smaller textile panels, which can often be finished in one day. These two women reported that they would sometimes finish the stitches and fringes of five panels in one day, working from 7am to 10pm, so that Carmen could meet orders or so that they could get paid. Both have teenage daughters, and reported that on such days their daughters would be in charge of all of the domestic work.

Efforts Accessing Natural Dyes

Only members of Carmen's close family participate in accessing and processing dyes (Davis, 2000). Carmen said that she cannot share her secrets with people she does not trust. For the dyeing activities, Carmen counts on the help of her daughter-in-law. Neither Carmen nor her daughter-in-law get paid on a wage basis. Carmen said that she gives her daughter-in-law an occasional cash contribution when textile sales are good, so that her daughter-in-law will not be tempted to work with other groups and teach others the dyeing techniques. The returns Carmen receives from the work involved in collecting and preparing dyes are paid from the

net profit from the textile sales, or from the sales of naturally dyed yarns. The only ones to receive wages for accessing natural dyes are the male collectors – usually Carmen's son-inlaw, who has a knowledge of dye plants. Carmen's son-in-law brings another male wage labourer to help when collecting dye plants in sites very far from San Juan, to help him carry back the large bags of dye materials collected.

Carmen accesses natural dyes in different ways depending on where the dye material is found. Carmen pays her son-in-law a wage of 30 Quetzales (\$6 Canadian) a day to collect wild tree bark in the mountains, due to the difficult nature of accessing these distant sites. She also counts on the help of her daughter-in-law for the collection of dyes in the San Juan vicinity. During her trips to Solalá, Quetzaltenango and Antigua, Carmen shops and searches for dye materials in the vicinity of the city surrounds and on the roadsides. Seasons affect the access to dye materials because at times, during the rainy season, it is difficult to collect plants, and at other times, during the dry season, many of the trees are too dry and not appropriate for collection. The majority of dye materials are purchased, and consist of wild (when they are found on privately owned land) and cultivated plants. Moreover, dyes can still be collected from wild areas for free, but these areas are difficult to access, involving at least a 30-kilometre walk from San Juan La Laguna.

Davis (2000) discussed the collection of natural dyes by Proyecto Tipica, and their collection methods. She draws attention to the line between sustainable harvesting and over-harvesting of dye plants in cases where natural dye use is increased. During my fieldwork, I spoke with two people in the San Juan area who owned plots where wild dye plants were found. They noted that the demand for the tree bark had increased in the last few years. One owner said that, initially, a lone collector from *Proyecto Tipica* would collect tree bark on his plot every year, but now there are at least seven collectors. This could be a consequence of the new textile group which also started to produce naturally dyed textiles in San Juan, and maybe individuals who want to experiment with the dyes. Davis (2000, p. 122) concluded that Proyecto Tipica could not grow natural dye plants because the group's artisans were landless. However, based on the information I collected about Proyecto Tipica household land ownership, more than half of Proyecto Tipica members do own some land, where they grow mostly coffee and/or corn. Moreover, Proyecto Tipica's president - the only member of Proyecto Tipica who would directly benefit from growing dye plants - is one of the largest landowners in San Juan, and still is not interested in growing dye trees or plants. I attribute this lack of interest to the fact that the land is being used for coffee production, which is a commodity that gives higher returns than dye plants. In addition, although coffee trees in San Juan are grown in shaded areas, the trees used as dye sources (with the exception of avocado) are not suited for cultivation in association with coffee. Furthermore, it could be that Carmen – although interested in growing dye plants – does not have decision-making control over her household land. Land is usually controlled by the male household members in the local context.

Efforts Preparing Natural Dyes

Once all of the materials needed for the dye preparation are gathered, the preparation of natural dyes still involves physically demanding tasks such as seed and leaf grinding with the Mayan stone mortar and pestel⁵³, the opening of seedpods, and the cutting of tree bark and stems into small pieces. To illustrate the hard work involved in dye preparation, I describe the preparation of a blue dye prepared with sacatinta quilete (Jacobinia spicigera), an indigo dye plant. This blue dye continues to be used in Guatemala to fix and improve the colours of synthetic dark blues. To access this dye, Carmen has to travel five hours each way by bus. The preparation of this dye involves two days of leaf grinding, and five additional days of fermentation during which Carmen and her daughter-in-law frequently stir the vat vigorously for half an hour. Washed yarn skeins of half a pound are dipped into the green vat and then hung on a wire. The dye turns blue when it is oxidized from contact with the air, adhering to yarns. These yarn skeins are transferred to a mordant vat prepared with water, pomegranate and cooking salt. In preparing the mordant, both dyers had to work over the open fire for more than one hour. Afterwards, the yarn skeins are removed from the hot mordant solution and vigorously washed in cold water by Carmen's daughter-in-law, who reported the temperature shock to be very hard on her hands. While preparing the mordant, the intense smoke hurt the women's eyes. When some of the sacatinta splashed into the face of Carmen's daughter-in-law her eyes were sore for several days. Moreover, Carmen and her daughter-in-law worked without gloves, dipping their hands into the sacatinta vat to remove the skeins of yarn and squeeze the skeins. In the days after dyeing, both women had several sore, dark burn spots on their hands.

⁵³ The stone mortar and pestel were once used to grind corn before the proliferation of the diesel-run corn mills.

In the week working with the *sacatinta*, 20 pounds of yarn were dyed – an amount sufficient to produce six single-colour wide shawls. The work occupied three women for one week. This was the maximum amount of yarn dyed in a ten-day period observed during the nine months – from September of 1999 to May of 2000 - C. Davis and I conducted our fieldwork (C. Davis, personal communication). While I have no doubt that natural dyes are used by *Proyecto Tipica*, due to the infrequency of the dye preparation during my field work, it is doubtful that all of the textiles produced by *Proyecto Tipica* are in fact only naturally dyed. Carmen reported using some 2500 pounds of yarn a year for the textile production, a reasonable amount considering the number of artisans working for her. The dyeing of 2500 pounds of yarn, at a maximum productivity of 20 pounds per week would involve a minimum of 125 weeks of intensive dye preparation activity (i.e. over two years). Moreover, as discussed below, textile marketing takes up a large amount of Carmen's time and efforts.

Marketing the Naturally Dyed Textiles

Carmen is the only one who travels to sell Proyecto Tipica's textiles. She is the only person in Provecto Tipica who knows where the textiles are sold or consigned, and their respective prices – which vary greatly from place to place. Carmen regularly consigns the textiles in two high-end Antigua stores, with whose owners she has a close relationship. In one of these stores, Carmen also consigns naturally dyed yarn, which is a hot item according to the retailer. These stores, as noted by Moreno (1995), receive textiles on consignment to help artisan groups and individuals. Both stores prefer to work with women's groups since this is thought to result in greater benefits for the producers, while offering the stores relatively steady textile products. One of the stores gives Carmen design and colour specifications, while the other prefers not to interfere in the design process. Retailers also call Carmen in San Juan when they have an order to fill. Carmen is always concerned with meeting textile orders on time and in offering retailers high-quality textiles. Both Antigua stores stipulated that Carmen not offer identical textiles to the street markets in Antigua and Panajachel, a condition that Carmen respects. In Panajachel, Carmen offers only textiles of inferior quality - which would not meet the requirements of the Antigua stores - or less elaborate textiles. Proyecto Tipica also consigns textiles at Trama, an umbrella organization of artisan groups dedicated to the fair sales of high-quality Guatemalan textiles (Schevill & Foxx, 1997). To date, this organization has not booked much success in selling the textiles. In addition, in 1998 Carmen and a second Proyecto Tipica representative were sponsored to travel throughout Canada on a sales/education mission sponsored by the Canadian International Development Agency (CIDA) and a small Edmonton NGO. During the tour, \$30,000 (Canadian) worth of textiles were sold.

Carmen alone determines the textile sale price: "I have to price the textile at a reasonable amount that will bring me a fair return, and will still enable the store to sell". Carmen always has in mind the material and wage costs she has invested in each piece, and will not agree to sell textiles for less than cost. Carmen is somewhat aware of the price the stores charge the buyer for her products, and uses these prices as the basis for selling textiles directly to tourists. Carmen will sell textiles to stores in Panajachel when she needs money, for prices that, according to her, "only pay for the yarn and the labour without profit because I needed the money to buy more yarn and to pay the women." Carmen also pays a small amount of rent for a street tent where she and her mother sell textiles on an unscheduled, irregular basis. In Panajachel, although it is the closest busy tourist centre to San Juan, Carmen complains that few tourists value the textile work and are willing to pay a fair price. In San Juan, tourists or intermediaries infrequently stop by Carmen's house to buy textiles. Since Carmen travels almost every weekday, she shares with her daughter-in-law the prices at which the textiles should be sold during her absence. Still, her daughter-in-law does not know the other places where the textiles are sold, nor their prices.

Carmen rarely spends her days in San Juan, due to the time consumed in selling textiles and accessing the materials needed for further textile production. Carmen travels twice a week to Panajachel and at least every second week to Quetzaltenango and Antigua. Carmen explains that: "The other women can't sell. They can't explain the meaning of our textiles' figures and the colours we prepare. They also think it is such hard work and don't want to suffer like I do. They are afraid to travel. Some have children and husbands who don't allow them to travel. And if I get others to sell textiles, I would have to pay for their trip, their food." Further: "People admire my patience to travel, spend money, get tired and sometimes not sell one piece. I do it for the women of my *pueblo*." Today, *Proyecto Tipica*, thanks to Carmen's hard work, networking and personal interest in the textile sales, has a privileged position with the high-end stores that ensure the sales of the textiles being produced. As a consequence, weavers in this group are offered more steady work than weavers working with other entrepreneurs and projects.

Each sales trip involves exhaustion, expense and risk. The risks include the financial costs invested in each trip with no certainty that sales will take place, and the frequent

confrontations with robbers who target textile traders in the school buses used for public transportation. Carmen's sales trips to Antigua illustrate her hard work and dedication. Once a week, she leaves San Juan on a school bus at 4am to go to Antigua, a bumpy five hour ride. The return trip costs 30 Quetzals. During the entire trip she has to carefully watch that her textile package, which is strapped on top of the bus, is not stolen. Around 9am, she arrives in Antigua with a textile bundle that she balances on her head. Carmen checks the two stores where she consigns textiles, gets paid for any that have sold the week before, and invites the store owners to select other textiles from her bundle. Afterwards, Carmen walks back to the bus terminal to shop in the market, starting her return trip to San Juan around 2pm, and arriving home around 7pm after a crowded, bumpy and noisy bus ride.

The textiles produced by *Proyecto Típica* are, due to their high quality, differentiated from the many other textiles of similar appearance being sold in Guatemalan markets for inferior prices. In the streets of Panajachel, Santiago Atitlán and Antigua, I found textiles of similar colour tones and designs for the same price at which Carmen was consigning them to retailers in Antigua. Moreover, street vendors claimed several times that their low-quality textiles were naturally dyed. One of the retailers said that she had to drastically reduce the price of *Proyecto Típica*'s textiles after their designs and colours were copied in lower-quality versions. She explained that several tourists would report that similar textiles could be found in the street markets for half the price, without realizing that the quality offered in the streets was poor.

Costs and Returns in the Production of Naturally Dyed Textiles

In the production of naturally dyed yarns, the unbleached white, cotton *Cantel*³⁴ yarn represents the bulk of material costs, and Carmen buys it in 10-pound packages for 100 Quetzals. In order to buy yarn, Carmen has to travel to Salcajá, the textile supplies centre in the Western highlands – two and a half hours away from San Juan by bus. The return trip, which always involves multiple errands, costs 25 Quetzales (\$5 Canadian) and so Carmen waits until she has enough resources to buy at least five packages of cotton.

⁵⁴ Cantel is the only Guatemalan yarn manufacturer that still uses Guatemalan cotton as raw material.

Popelka (1991) concluded in a Mexican community that the use of indigenous dyes was costly when the time required to prepare the dyes and dye the yarns was taken into consideration. As a result, artisans only use this technique for higher-priced items. Even excluding all of the efforts and time needed to access materials and prepare the natural dyes, I found that natural dyes and naturally dyed yarns were more expensive than the industrial alternatives easily accessible in the market. The material and wage costs for the naturally dyed yarns were estimated at an average of 17 Quetzales (\$3.4 Canadian) per pound⁵⁵, a price higher than that of available industrially dyed yarn and synthetic dyes found in the market. However, as discovered by Popelka (1991) in Mexico, the naturally dyed yarn produced by Proyecto Tipica used only local materials and labour rather than imported materials. In Guatemala only jaspé yarns are still dyed by the artisans, who otherwise prefer to use industrially dyed yarns (V. S. Soc, personal communication). Direct dye and procion - the most popular dyes used for tourist textiles - cost 0.9 and 1.25 Quetzales (\$0.18 and \$0.25 Canadian) respectively, for enough to dye one pound of cotton. These dyes, in contrast to the natural dye materials, can be easily purchased and only take a maximum of two hours to prepare. Industrially dyed cotton yarn, with colours similar to those found in the yarn used by Proyecto Tipica, are found everywhere in Guatemala at 13 Quetzales (\$2.6 Canadian) per pound, or 12 Quetzales (\$2.4 Canadian) when bought in ten-pound packages. This likely is reason enough for most artisans to use industrially dyed yarn rather than dedicating any efforts towards dyeing yarn themselves – particularly when the market prices do not offer artisans the higher earnings needed to justify their efforts in using natural dyes. There is a problem, however, with the low colourfastness of the industrially dyed yarns available in the Guatemalan market (Moreno, 1995).

Strong marketing efforts were used by development agencies to advertise naturally dyed textiles made by artisan groups in Mexico (Morris, 1991) and Turkey (Anderson, 1998). In contrast, *Proyecto Tipica*'s textiles are not well marketed as naturally dyed in the retail stores where they are being sold in Antigua and Panajachel. "Focus on product, without first pinpointing a market, is a particular problem for businesses in developing countries where producers are unlikely to have the ability and contacts necessary to create demand for a product overseas" (Dickson & Littrell, 1998, p. 70). Although much literature has noted that

⁵⁵ This includes the yarn costs, dye material costs, travel to access dyes, firewood and collector wages.

the use of natural dyes gives textiles an edge in market competition and helps textiles find a high-end niche (Morris 1991; Anderson, 1998), to fully justify the production and the promotion of natural dyes, sales prices should cover the additional efforts involved in the preparation. CEDART, after it promoted workshops to build artisans' skills in the use of natural dyes, concluded that the available market did not offer returns that would motivate artisans to take on the extra work and costs (V. S. Soc, personal communication). As a result, CEDART temporarily decided to discontinue their efforts to promote natural dye use among Guatemalan artisans. The prices fetched by *Proyecto Típica*'s textiles – once material costs, wages and travel costs are deducted – do not appear to justify the amount of labour involved in the production of naturally dyed textiles (see Figure 7.2 for sales prices and textiles costs), a fact that confirms the CEDART findings.

The prices paid for *Proyecto Tipica* textiles are similar to the prices paid for other nonnaturally dyed textiles in the high-end retail stores. The sale of *Proyecto Tipica* textiles, when material and wage expenses are considered, leaves Carmen with a return of 16 to 126 Quetzales (\$3.2 to \$25.2 Canadian) per piece. Her profit margins vary from 22 to 52 per cent of the sale price. From this profit margin, Carmen still has to cover travel expenses and pay her daughter-in-law for her efforts in preparing the natural dyes. What is left represents Carmen's compensation for her efforts in the dye production, gaining access to materials and making sales trips. Often, Carmen has to wait lengthy periods of time before she receives any return on her investments. I observed that Carmen often spends 30 Quetzales (\$6 Canadian) on bus trips trying to sell her textiles and returns home empty handed. At the retail stores where Carmen consigns the majority of the textiles, the retailers add from 70 to 80 per cent to the amount Carmen receives.

Oscillations in the prices paid for *Proyecto Tipica*'s textiles are not reflected in the wages paid to the artisans who make the textiles. Nevertheless, this wage – as modest as three Quetzales (\$ 0.60 Canadian) a day (see Figure 7.2)– represents an important resource for the women artisans of San Juan, as has been discussed in Chapters Five and Six. Piecework wages account for 15 to 26 per cent of the price received by Carmen for the textiles (see Figure 7.2). Yarn costs in the textile production, with the exception of one product, total more than twice the labour costs (see Figure 7.2). The use of naturally dyed yarn does not directly alter the work of the artisan pieceworkers in *Proyecto Tipica*.

Table 7.2Table of Costs and Returns (in Quetzales)

		atimentarie Tu	Diffatere"	STAT TE	Percentage	ाखरवाष्ट्रायः *शुःइतायः -
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		Consumer L	Fortgeim		Come :	WERG
Small Shawl	11.6	50 - 75	38.4 - 63.4	77 - 84 %	14 - 21 %	15 - 22 %
Shawl	95	150 - 200	55 - 105	36 - 52 %	32 - 43 %	15 - 20 %
Table Runner	34	50 - 60	16 - 26	32 - 43 %	41 - 49 %	16 - 19 %
Tablecloth	106.5	150 - 200	43.5 - 93.5	29 - 47 %	37 - 50 %	16 - 21 %
Bedcover (King-size)	273.5	350 - 400	76.5 - 126.5	22 - 31 %	45 - 52 %	23 - 26 %
Naturally Dyed Yarn	17	80 / pound	63/ pound	26 %	21%	-

⁵⁶ This gross profit margin was estimated measuring the sales price against the costs of wage labour and materials. The labour costs and travelling expenses involved in accessing yarn, sales activities and phone calls to retail stores were not deducted from this gross profit. These expenses do not occur on a regular basis, and the president of *Proyecto Tipica* does not keep records of them. However, travelling expenses and the time and labour spent by the President and her daughter-in law do represent significant costs to be deducted from this margin.

Considering the vast amount of labour involved in the production of naturally dyed yarn and textiles, the prices being paid for them in Guatemala do not justify the artisans' efforts, nor the direction of NGOs to motivate artisans to use natural dyes. The production of naturally dyed textiles for the market available in Guatemala today reinforces the exploitation of cheap artisan labour for the manufacture of affordable, labour-demanding products (Mies 1986; Nash 1993; Morris 1995). I believe that the income alternatives in San Juan are so few (as discussed in Chapter Five) that artisans use similar logic to the "*Milpa* logic"⁵⁷ noted by Annis (1987), in which the objective is to optimize the input rather than to maximize the output. Textiles, particularly naturally dyed textiles, increase the amount of labour demanded (input) and allow for the development of abundant household labour that otherwise would be marginalized (as in a capitalist economy). While the artisans' income from the textile activity allows them to survive, it does not allow them to improve their socio-economic situation (Cohen, 1998). By relying on textile activity for survival, artisans maintain a cheap labour force (Morris, 1995).

Summary

The use of natural dyes has been promoted among indigenous artisans by NGOs and outside individuals as a means of responding to consumer demands, differentiating their textiles, improving sales, increasing artisans' returns and reviving ethnic traditions (Anderson, 1998; WDP/WAYANG, 1995; Morris, 1991; UNDP, 1996). However, the available literature lacks systematic evaluations of the effect of the use of natural dyes on the indigenous communities who are using this technique. This chapter offers a case study of a Guatemalan women's artisan group that has responded to foreign-consumer demands for naturally dyed textiles. *Proyecto Tipica* was the first group to revive natural dye use in San Juan La Laguna. This chapter aimed to explore the impact the revival of natural dyeing techniques is having on the artisans involved in textile production. *Proyecto Tipica*'s production organization has been examined, with particular attention paid to decision-making, access to capital, knowledge control, division of labour and artisan efforts.

In *Proyecto Típica*, as in the other local artisan groups in San Juan, a strict division of labour among the artisans characterizes the production organization. The efforts of the warpers,

⁵⁷ Milpa agriculture is the combination of corn, beans, squash, chillies and other small

weavers, and stitchers in Proyecto Tipica illustrate the alienation of the weavers from the complete production process and the final use of the textiles produced, even though the traditional backstrap loom and the household settings still characterize the textile production. For their efforts in Proyecto Tipica these artisans receive a wage that is sometimes as low as 15 per cent of the textile's final price, and less than half of the material costs. This fact ensures the artisans' dependency on an entrepreneur or a textile project, which can provide them with raw materials and the security of a piece wage. The artisans in Proyecto Tipica maximize the returns from their activity by developing strong ties with their patron, so the patron can be relied upon to provide not only a wage, but also some security in the event of an emergency. The returns received by the artisans differ depending on the tasks to which they were assigned. Weavers assigned to the warping of yarns receive more prestige for their work, since this is associated with the determination of the final textile pattern. Warping, as discussed by Hamerschlag (1985), in San Juan offers artisans potentially higher returns than does the weaving activity. In contrast to Proyecto Tipica's president, the artisans producing the textiles do not have contact with those who value and buy the products of their efforts. Therefore, they do not receive prestige, build self-esteem, or learn about market demands and how to expand their networks with outsiders.

The adoption of natural dyeing techniques by *Proyecto Tipica* does not benefit all artisans in the group in similar ways. Due to the strict division of labour in *Proyecto Tipica*, pieceworkers are excluded from all activities related to the dyeing process. Variation in the sales price does not affect artisans' wages. Technological knowledge, when concentrated in the hands of dominant groups, can reinforce hierarchical structures (Gregory & Altman, 1989). The revival of the production of naturally dyed textiles by *Proyecto Tipica* is a response by its president to international consumer demands for natural dyes. While industrially dyed cotton yarns are easily accessible (to anyone with capital) in local stores, the production of naturally dyed yarns requires knowledge of the dye sources and techniques, and the ability to travel to access dye materials. Furthermore, in order to invest in the production of naturally dyed textiles, knowledge of specific market channels is required. These additional factors are likely to limit the revival of this technique to more wealthy artisans (Jopling, 1971). This chapter documents how, in *Proyecto Tipica*, it reinforces the concentration of power in the hands of the president.

vegetables that are companion planted.

The motivation for the president of *Proyecto Tipica* to use natural dyes was a desire to differentiate the group's textiles, increase the textile quality and improve earnings – as was the situation in case studies from Mexico (Morris, 1991) and Turkey (Anderson, 1998). Carmen, besides having the potential to earn higher cash returns than other artisans, enjoys a high level of prestige and recognition for her unique natural dyeing skills. Her natural dyeing skills have also facilitated networking with outside individuals and agencies. On the other hand, *Proyecto Tipica* pieceworkers were using naturally dyed yarns simply because this was the kind of yarn the president provided them with. All artisans from *Proyecto Tipica* considered naturally dyed yarns a high quality of yarn for tourist products, and some of them also associated the use of natural dyes with a better market and higher returns. The returns from their work in the production of naturally dyed textiles are restricted to their piece-wages, which were still low, but better than those for artisans producing lower-quality textiles in town.

The Mayan women of the group interviewed preferred bright colours over the earth tones produced with natural dyes, for their household use and clothing, as was also noted by Morris (1991) in Mexico. Although considered a good option for the production of tourist textiles, naturally dyed yarns were not believed to be suitable for household use. In this sense, the use of natural dyes illustrates the asymmetrical power between consumer and artisan (Moreno, 1995; Price, 1986). While the use of natural dyes has been promoted as a way to revive the indigenous ethnic tradition (Anderson, 1998; Morris, 1991), and adopted in an attempt to increase textile quality, the production of naturally dyed textiles does not reflect indigenous personal preferences. In promoting naturally dyed textiles as an expression of ethnic tradition, despite the fact that these textiles are not adopted by the indigenous artisans, the construction of a fictitious indigenous lifestyle (Rosenbaum & Goldin, 1997) is undertaken based on the past, rather than reflecting the dynamic context of modern indigenous life.

Proyecto Tipica's practices in accessing, preparing and using natural dyes proved to be precarious, and not consistent with the volume of textiles this group produces annually. Expanding on the cases studied herein, if one individual was to dye the yarns and produce the textiles, in a best-case scenario this artisan would need to dye yarns for one full week to produce enough material to weave single-colour textiles for the rest of the month. This is the case because a vast amount of additional labour is required to produce naturally dyed textiles, including accessing the dye materials, processing these materials and dyeing the yarns.

To financially justify the production and promotion of natural dye use, sale prices should be sufficient to cover the additional efforts involved in the preparation of natural dyes. The cost of naturally dyed yarn is higher than other market alternatives available, due largely to the additional labour required in the dye preparation. However, it is difficult to find alternative high-quality industrial yarn that will ensure that textiles may be sold in high-end stores. While *Proyecto Tipica*'s textiles are sold for higher prices through high-end textile stores, the consignment prices are not higher than the prices of other textiles not naturally dyed but considered of high quality.

The focus on the promotion of a technique such as natural dyeing, without identifying a specific market for the product, is a particular problem for indigenous artisans who are not likely to be able to create a specific market nor affect consumer demand on their own (Dickson & Littrell, 1998). Although a market for naturally dyed textiles is reported to exist by those promoting its use (Aageson, 1999; Hill, 1996), the current Guatemalan scenario suggests that tourists are not willing to pay the additional costs involved in the production of such textiles.

Chapter Eight: Conclusion

In the preceding chapters I have discussed the economic context of textile production in San Juan La Laguna. I have described the economic role of the weaving activity as complementary to the economic role of agriculture, and as found in the households of weavers of different economic status. I explored the impacts of Proyecto Tipica's naturally dyed textile production on the artisans relative to these different socio-economic environments. I described the artisans' efforts, their returns, and their motivations for participating in weaver groups and for using natural dyes. My findings are based on the data I collected during five months of ethnographic fieldwork. These have been developed within the theoretical framework discussed in Chapter Two. It was important to adopt a human ecological framework and, consequently, consider the different natural socio-economic and cultural aspects of the environment. This allowed me to undertake a broader perspective in the investigation than if the socio-economic aspects of the environment had been studied in isolation. The qualitative research approach used was helpful in gaining an understanding of the economics of weaving in San Juan. The research strategy and techniques adopted to meet the different goals of this study have proven to have both benefits and constraints, as was discussed in Chapter Two. In this chapter, I present conclusions from the study, and based on these conclusions make recommendations for further research and practical recommendations for organizations working with artisans.

With the decline of the economy of subsistence, the indigenous population of Guatemala has increased its dependency on the cash economy. The emergence of tourist and international markets for Guatemalan textiles presented an alternative form of cash income for the indigenous Maya. In San Juan La Laguna, coffee and textiles, both exportable goods, guarantee the Tzutujil Maya a cash income. This, in turn, guarantees them subsistence, allowing them to reproduce their community life. In San Juan, coffee represents the most profitable activity for plantation owners and also for wage workers. Land continues to be the primary means of wealth. Textile returns, although much lower than coffee income, play an important role since they represent the only form of income women have at their disposal in San Juan, while still remaining in their households. Textile wages complement agricultural wages, and the agriculture of subsistence. Textile production is one of the only means of income available during the coffee off-season.

Tzutjil Mayan textile activity continues to be based on the use of the backstrap loom and is controlled by the women. Women in San Juan play an important role in generating income for their households. On no account do the San Juan weavers form a homogeneous social category, although they share gender, ethnic and historical similarities. Age, personal factors, life experiences, and socio-economic status differentiate Tzutujil women's life experiences in San Juan, and consequently the roles these artisans play in textile production.

My findings on the economics of weaving were central to this thesis, and represent an important addition to the literature. The role of craft in complementing agricultural income was noted by Pye (1988) in Asia and by Nash (1993) in Latin America. Ehlers (1991, 1993) studied the role of textile production as a means of income raising in a Guatemalan village where foot-looms were adopted. This thesis reveals the vital economic role backstrap weaving continues to play for Guatemalan indigenous women as an income-raising activity to complement agricultural income. This thesis also suggests a correlation between the kind of textile activity performed in the different households and the socio-economic status of the households (based on land ownership), information which was not found in previous literature. Within Proyecto Tipica, the group studied, the income of weavers in landless households played the most important role since it was often the means of family survival. In households in which the weaving income was not dedicated to basic food needs, weaving income was still important in allowing parents to keep their children in school longer – an attempt to ensure them a better life. This demonstrates that weavers would prefer to see their children working in something other than backstrap textile production (see also Pye's [1988] findings in Asia). Further research on the economics of weaving in San Juan is suggested below in this chapter.

Hermitte (1972) and Stephen (1991) discussed foot-loom textile production organizations in Argentina and Mexico, respectively. This thesis is significant because it explores backstrap textile production organization in Guatemala. In San Juan, most of the textile production today is focused on the tourist market. This market presents many risks for those investing resources in textile production. Women in San Juan work as independent weavers, entrepreneurs, and pieceworkers. Moreover, in the last 20 years weavers have begun to organize artisan groups in San Juan. Development organizations have played a key role in prompting the formation of such artisan groups. Olson (1998) concluded that the Guatemalan artisan cooperative system was not allowing for equal resource sharing within artisan organizations, and was taking control over the textile activities away from the artisan groups. This thesis reveals that a similar situation to that examined by Olson in the context of the Guatemalan cooperative system is also reproduced inside artisan groups. The research findings in San Juan suggest that the local social hierarchy has been reproduced within the local artisan groups, and that the coordinators of these groups are likely to be from the more educated and wealthy households in the municipality. The role of the general membership in these San Juan artisan groups is likely that of pieceworkers. Pieceworkers receive a small wage for their labour, but do not assume any financial risks. Independent weavers and entrepreneurs take on the risk of investing resources in their enterprise without the security of guaranteed returns. Pieceworkers lack the capital, aesthetic skills, technical knowledge, language skills, and market knowledge that would allow them to enter the ranks of independent weavers and entrepreneurs. In addition, natural entrepreneurial skills were found to be essential.

Natural dyes are used in San Juan La Laguna to differentiate textile quality. This differentiated quality can help to increase the competitiveness of goods when the use of natural dyes is limited to a few artisans. The additional work required to produce naturally dyed textiles can also be a limiting factor because the additional labour receives relatively low remuneration. Furthermore, only a few artisans control the knowledge of natural dyeing techniques. Artisans need a fair market return for the extra effort required to make and use natural dyes, but such a market does not exist in Guatemala. As a result, not many artisans are motivated to produce naturally dyed textiles.

The use of natural dyes by *Proyecto Tipica* allows the group to sell their textiles through high-end retail stores that provide better returns than other retailers. However, naturally dyed textiles do not command prices higher than other textiles sold at the high-end stores. In order to be noticed and desired by tourists, naturally dyed textiles also require that extra efforts and resources be invested in marketing. Artisans, who already dedicate additional effort to the production of naturally dyed textiles, have neither the time nor the capital to create a special market for these products. Moreover, without some kind of certification, artisans who decide to dedicate extra effort to produce naturally dyed textiles face competition from the market of fakes posing as naturally dyed textiles. By making naturally dyed textiles to meet tourist tastes, rather than expressing their own preferences, artisans reinforce the principle of the market economy in which "the social good is the sum of individual wants" (Costanza *et al.*, 1997, p. 24).

The political context of the organization dedicated to the production of naturally dyed textiles is a key aspect in determining who benefits from the use of natural dyes in *Proyecto Tipica*. The adoption of natural dyeing techniques by *Proyecto Tipica* does not benefit all artisans in the group in similar ways. In addition, secrecy has been shown to be an important tool in maintaining the exclusiveness of natural dye use and in avoiding competition. The research data show that natural dye knowledge can be used as a power tool when it is kept secret; secrecy can limit the number of artisans who use such techniques; and this in turn reduces the use of dye-material and market competition. As well, the revival of natural dye use reinforces the control kept by dominant groups. Although the purpose of this study was not to focus on the impact caused by the use of natural dyes on the physical environment, it is clear that overexploitation of the natural dyestuff may compromise the survival of the wild plant species.

Davis (2000) noted the precarious production of natural dyes in San Juan, and determined that dye-plant extraction could add further pressure to the physical environment surrounding San Juan. This thesis reveals the fragility of the Guatemalan market concerning naturally dyed textiles. It is the unattractiveness of the naturally dyed textile market that has limited the number of artisans who adopt natural dyes, and has kept this specific market niche less competitive than the ordinary textile market. The fact that low remuneration and additional effort do not stop all artisans from using natural dyes reflects the economic insecurity faced by the Guatemalan artisans. Moreover, because only a few artisans have mastered natural dyeing techniques, prestige is an important incentive. Further research is suggested below on the impacts brought about by natural dye use in Guatemala.

Recommendations for Further Research

While this study has been undertaken from a holistic perspective, there are still many aspects to the revival of natural dyes and the social, economic, cultural and physical environments that invite further investigation. The following research topics are important to generate further knowledge about the viability of the revival of natural dye use:

 While the findings of the present study reveal a correlation between household land ownership in San Juan and the kind of textile activity performed by the household to generate income, quantitative research on this subject – such as a survey of a representative sample of the San Juan artisans – will reveal the extent of this correlation in that community (see Chapter Two).

- 2. Artisan groups in San Juan appear to be reproducing hierarchical structures and limiting the benefits that reach general members and the more destitute artisans. Further research on this subject is required for development organisations and fair trade organizations so that they are able to avoid supporting the reproduction of hierarchical structures among artisans.
- 3. The production of naturally dyed products by indigenous groups searching for incomeraising alternatives requires a fair market and a strategy to reach such a market. Market research evaluating the existence of a fair market for the naturally dyed products, and the development of participatory strategies through which the artisans could reach the market, would assist artisans and development organizations in promoting the revival of natural dyes.
- 4. The health impacts of natural dyes on artisans involved in the production of natural dyes are unknown. Further research is needed to determine these health consequences.
- 5. The present study was mostly limited to the investigation of one group (*Proyecto Tipica*) involved in the production of naturally dyed products. The political structure of the group was found to influence which member artisans were able to benefit from the use of natural dyes. By conducting research with other groups that use natural dyes, where the natural dye knowledge is shared amongst the group and where the members are not involved in such a hierarchical structure, important comparative information would be generated.
- 6. In order to evaluate future hazardous impacts on the physical environment by the use of natural dyes, further research is required to determine the proportion of dye plants used and environmental resilience relative to their use. It is of key importance to consider the political aspects of natural dye use when evaluating who benefits from the dye-plant extraction.
- 7. In order for artisans to use wild sources of dye plants without overly negative impact on the environment, further research to evaluate the potential of domestic dye-plant cultivation is required. Such research could also facilitate the task of accessing dye sources by the artisans using such materials.

Recommendations for Development Organizations, Individuals and Institutional Groups Working with Artisans

Any organization, institution or individual assisting artisan groups in hopes of promoting equal benefits for all artisans in a group should recognize the hierarchical differentiation that might exist in these groups. Despite their good intentions, anyone providing aid to artisan groups assuming that the member artisans are economically equal, and that the aid will be shared equally, could further increase differentiation among the membership.

I would argue that, before promoting the use of natural dyes, fair markets for naturally dyed products should be sought. Efforts to create certification for naturally dyed textiles may improve sales and inspire trust in the consumer. Whenever promoting natural-dyes skills training, if the aim is to benefit the entire artisan group, the training should not be provided exclusively to the group leaders – in order to avoid reinforcing the hierarchical system.

Special attention should be paid to access to local dye source materials, and consideration given to the impact that the use of wild dye plants can have on the environment. By cultivating wild dye plants, the effort expended in accessing these dye sources could be reduced, and the potential negative impacts on the physical environment could be minimised.

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