SMALL/MEDIUM SCALE CO-VENTURING:

An Alternative Approach to Technology Transfer

Specific Support Grant No. AID/DSAN-G-0064
Small Enterprise Technology Transfer Case Study

Submitted To:

Department of State
U.S. Agency for International Development
Office of Science and Technology

Submitted By:

The Entrepreneurship Institute

Principal Investigator: Marcia L. Grad

Consultants: Ann Becker
Alan Cook
Vicki Downing

June 1, 1979

This project has been sponsored by the United States Agency for International Development (U.S. Department of State). The views and opinions expressed in this report, however, are those of the author and do not necessarily reflect those of the sponsor.

ACKNOWLEDGEMENTS

This work has been made possible by a grant award received from the Department of State, Agency for International Development, Office of Science and Technology and by the cooperation of the interviewees. The author wishes to thank the contracting program officers, William Eilers and Susan Owens, and especially interviewees who contributed time from their busy schedules.

Also, the author wishes to acknowledge the consultants who performed the field work and wrote the case studies: Ann Becker, Alan Cook and Vicki Downing. Each of the consultants has his/her own business into which this study has been integrated during the contract period.

Finally, the support of The Entrepreneurship Institute, which administered the contract, is gratefully acknowledged. In particular, the efforts of William McCrea and Micheline Daubigny are noted.

PREFACE

The contents of this report are based on data gathered in the field, from businessmen by businesspersons, and the results are presented in Appendix B as case studies. All information presented in these case studies was obtained directly from the interviewees identified on the cover sheet of each case.

Occasionally, interview information was qualified as confidential. Such information has been treated as such and is not contained in the case studies. However, when appropriate, a general sense of such information has been included in the report's main text without attributing it to a particular source.

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INTRODUCTION

On October 1, 1978, The Entrepreneurship Institute received a grant in the amount of $48,650 to conduct a special project over a period of six months. The research was to focus on examining the potential of the small and medium scale co-venture process as a technique for transferring technology.

RATIONALE

The primary rationale for undertaking this research effort was to determine if small/medium scale co-venturing[1] is an effective technique for transferring technology[2] and, at the same time, generating jobs and revenues in developing countries.

Other reasons for undertaking this research include:

- The lack of information regarding small/medium scale co-ventures. Little research has been done in this field; what has been done is in the hands of private firms or individuals; little effort has been made to aggregate information which is available.[3]

- Lack of understanding of what a small/medium scale co-venture is and the co-venture process. It should be noted that this results in a lack of understanding of the types of small/medium scale co-venture partnership arrangements.

- Need to identify and implement a method for technology transfer acceptable to developing countries. There has been an increasing interest in developing small/medium scale co-ventures as an economic development and technology transfer technique on the part of developing countries as witnessed by the increased number of organizations (public and private) providing services to small/medium scale co-ventures. At the same time, there has been an increasing level of interest and activity on the part of

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[1] A small/medium scale co-venture was defined, at the beginning of this effort, as a cooperative effort between a developed country entrepreneur and a developing country entrepreneur to establish or expand a profitable new enterprise in a developing country.

[2] For the purpose of this study, technology transfer is defined in its broadest sense (i.e., the transfer of skills, knowledge, hardware from a developed to a developing country or between two developing countries).

[3] Although research has been done in the field of joint venturing, the results contribute little to our knowledge of small/medium scale co-venturing because of the differences between the kinds of firms participating in each process and their business philosophies.

European and Japanese public sector organizations[4] and private sector firms to promote small/medium scale co-ventures for the same reason as well as a technique for expanding the markets for their products. Clearly, there is a greater degree of small/medium scale co-venture expertise and experience resident in such countries than in the United States.[5]

PURPOSE AND OBJECTIVES

Purpose

The general purpose of this work has been to develop case studies of several small/medium scale co-ventures to determine their effectiveness in transferring technology to, and generating jobs and revenues in, developing countries. At the same time, an effort has been made to determine if the present understanding of small/medium scale co-venturing and co-ventures is accurate.

Objectives

More specifically, the objectives of this effort, as defined in the grant award, are:

- To determine the factors which led both sides to seek to establish a small/medium scale co-venture
- To determine the principal barriers to small/medium scale co-venture formation and the manner in which they may be overcome
- To identify facilitators involved in the cases and point out the manner in which the small/medium scale co-venture was affected by actions of facilitator[6] organizations and governments
- To determine how technology is transferred through small/medium scale co-ventures

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[4] See Case Studies of Selected Organizations Acting as Co-Venture Facilitators, The World Bank, 1979, by M. L. Grad for information on these organizations.

[5] It appears U.S. markets are sufficiently large so that U.S. firms do not readily perceive a need to explore overseas markets in order to maintain their profitability.

[6] A facilitator, for the purpose of this paper, is defined as a group or organization that brings the partners together and provides services (e.g., accounting, legal, information, negotiation) up to the time the co-venture is operational.

- To obtain best estimates of the types and values of technology transferred as a result of the small/medium scale co-venture
- To determine small/medium scale co-venture potential for employment generation and other economic benefits in the host country
- To estimate the economic effect of small/medium scale co-venture activity on the developed country partner's national economy

METHODOLOGY

In order to examine these issues, the case study method was selected. This approach was taken primarily because in-depth interviews typically yielded a great deal of information that cannot be obtained through mail surveys or telephone interviews (e.g., information related to the small/medium scale co-venture formation, characteristics of people participating in small/medium scale co-ventures). Other reasons for selecting this approach were that time and funding were both in short supply and that it was believed the distances between interviewees and researchers could be bridged most effectively by conducting personal interviews.

Case study selection criteria were discussed with the contracting officers and it was decided to select diverse cases in order to gain insight into the various types of small/medium scale co-ventures and to determine if the definitions of the term, the process and the characteristics are correct. Although the sample is small, it is believed the cases are sufficiently diverse to provide such insight. This diversity should also contribute to expanding the knowledge base in this field and to determining other research needs in the area.

Other criteria, in rank order, used in selecting cases were:

- Type of co-venture participants (i.e., entrepreneurs, facilitator organizations, governments) and their role(s) in the projects
- Geographic location (i.e., the Far East, Africa, Latin America)
- The market for the product/service (i.e., domestic, export, or a combination of these two)
- The extent of technology transfer and the type of technology involved
- The type of product/service involved

In addition, because of project time constraints, it was critical that the research team contact organizations and personnel able to respond quickly and favorably to the request to participate in this effort.

When these had been agreed upon, organizations involved in facilitating small/medium scale co-venturing and small/medium scale co-venturers were contacted to determine if they would cooperate with the research team. From the pool of potential cases identified in this manner, six were selected for study and agreement of co-venture principals was obtained.

While waiting for these agreements, an interview format was designed (see Appendix A) to probe the following issues:

- The general climate for small/medium scale co-venturing in the host country
- The history of the enterprise from the perspective of each partner
- Problems in small/medium scale co-venturing and their solutions
- Barriers as well as incentives to participating in small/medium scale co-ventures

Data gathered during the field work are presented in the case studies contained in Appendix B. It should be noted that this information was most often obtained from interviewees at the same time they were involved in normal work routines and often under difficult conditions. For example, one interview was conducted while the interviewee was on his way to a meeting in another city.

Finally, upon completion of the field work and case studies, a qualitative data analysis was performed with a heavy concentration on examining the small/medium scale co-venture process, characteristics of small/medium scale co-venturers and issues related to technology transfer (i.e., barriers and incentives to co-venture, methods and techniques to transfer technology, and outcomes/benefits of co-venturing).

CO-VENTURING

CO-VENTURE: A DEFINITION

At the inception of this effort, the following definition of a co-venture was proffered:

> A cooperative effort between a developed country entrepreneur and a developing country entrepreneur to establish or expand a profitable enterprise in a developing country.

The key points in this definition are:

1) It is a person-to-person activity

2) It is a private sector activity

3) The enterprise is located in a developing country

4) The enterprise is intended to be profitable--implicit in profitability are the concepts of job generation, revenue generation, and economic development

The term co-venture is used instead of joint venture to emphasize the ongoing commitment of the partners as well as their ongoing cooperation to ensure the viability of the enterprise. The term also implies that tangible assets are committed by each partner.

THE SMALL/MEDIUM SCALE CO-VENTURE PROCESS

Based on discussions with entrepreneurs and facilitator groups throughout the world, the following steps emerged as part of the small/medium scale co-venture process:

- Identification of a market opportunity in a developing country. This identification may be made by a local entrepreneur or facilitator or by someone from a developed country who wishes to do business in a developing country.

- Identification of a small/medium scale co-venture partner. It is believed that the president/chief executive officer is the best person to have involved at this point because he can quickly commit his firm and allocate initial resources. At the same time, this person can validate the existence of a viable market and ensure that it is sufficiently attractive to warrant participation of his firm.

. Definition of small/medium scale co-venture project. The two or more partners develop a plan where the developed country partner generally agrees to provide production technology, management and technical assistance, and some financial support. The developing country partner contributes his knowledge of the marketplace, the business climate/community, credibility within the community, manpower, marketing support and some financing as a co-owner. It is important to note that both partners commit tangible assets, thereby demonstrating their commitment to the enterprise. During this step feasibility and market studies will probably be conducted and a business plan developed. If both partners decide to proceed with the enterprise, an agreement is negotiated.

. Implementation of the project in the developing country with the developing country partner providing leadership and the developed country partner providing backup support. If there is a financing organization involved, there is probably some record-keeping control exercised by that organization. As the project is implemented, management and technical skills are transferred to all levels of personnel through training techniques as well as role modeling.

While it is true that the above steps do not appear substantially different than those of the new venture formation process, it must be remembered that a small/medium scale co-venture relationship is developed and reinforced with thousands of miles between the partners. These relationships are between persons living in very different cultural, business, and social environments, and the risks involved are substantially different. Thus, many factors must be considered in deciding to develop small/medium scale co-venture relationships and a great deal of time and effort must go into maintaining and reinforcing the relationships.

Small/medium scale co-ventures are neither simple to develop nor to implement. Not only do they have all of the problems of new venture formation, but they also have additional risks associated with business partnerships involving individuals from two different cultures.

As previously mentioned, one focus of this research has been to determine if this description of the small/medium scale co-venture process.

SMALL/MEDIUM SCALE CO-VENTURE CHARACTERISTICS

Just as the steps in the small/medium scale co-venture process were defined over time with frequent inputs from participants from around the world, so too were the general characteristics of co-ventures defined. These include:

. Transfer of technologies appropriate to the environment in which the venture is established.

- Some equity ownership by each partner with the small/medium scale co-venture located in the developing country and majority ownership frequently by the developing country partner. Therefore decision-making is often primarily in the hands of the developing country partner, with the developed country partner providing some guidance.

- The market for the product/service is often local/regional at the inception of the project.

- Small/medium scale co-ventures make maximum use of local raw materials and labor resources.

- Financing for good projects is not problematical and generally can be found in the developing country if the project definition and development is well done.

- Management and technical expertise is contributed by the developed country partner and knowledge of the local markets and business community is contributed by the developing country partner.

Most of the above characteristics are self-explanatory. However, the first characteristic merits further discussion because it is the crux of this study. Because small/medium scale co-venturing is essentially a private sector activity involving profit-oriented businessmen, it is believed that the technology employed to produce the product/service will be determined by economic criteria in order to keep fixed costs at a minimum. Further, if the product is saleable in a developing country marketplace, it is most likely to be appropriate to the developing country (i.e., "appropriate" technology is employed in production and/or is produced).

Moreover, it appears that small and medium scale industry projects tend to select simpler, more labor intensive technologies than large scale operations. This may be because small and medium scale ventures are often constrained by the availability of capital, a lack of highly skilled labor and a marketplace where the demand is for products produced by "low" technology.

CASE STUDY SUMMARIES

QUIMICAS DE CENTRO AMERICA, S.A.

This is a small/medium scale co-venture between a U.S. entrepreneur and a Guatemalan entrepreneur that is located in Guatemala City and was established in 1973 to produce chemicals used in textile manufacturing for the Central American market.

The Small/Medium Scale Co-Venture Process

The Concept

Source: The idea for the co-venture originated with customers for the product who wanted to have a better quality product available in greater quantity.

Market: The market for this product is Central America.

Small/Medium Scale Co-Venture Agreement

The terms of the co-venture agreement specified the U.S. partner would receive 40% of Quimicas' capital stock and two seats on the Board of Directors. In addition, he receives 5% of net sales annually. The Guatemalan partner received technical assistance (including on-site engineering assistance, training for employees and consultancy) and collective purchasing rights intended to reduce the cost of raw materials.

Facilitator Organization

There was no facilitator organization involved in this small/medium scale co-venture. However, a lawyer and Certified Public Accountant acted to facilitate co-venture decision-making on behalf of the Guatemalan partner.

Financing

Financing for this small/medium scale co-venture was obtained from the retained earnings of the existing firm.

Small/Medium Scale Co-Venture Problems

The major problems existing throughout the development of this co-venture have resulted from differing expectations by each partner. Essentially, the U.S. partner believes the Guatemalan partner does not apply himself sufficiently while the Guatemalan partner feels overwhelmed. At the same time, the Guatemalan partner is especially concerned with improving the quality of his products rather than just the quantity. Further, he indicated that the U.S. partner did not provide assistance in obtaining the capital he expected during the start-up phase.

Outcomes

Both partners agree the co-venture has been and is a success. Together, they have achieved growth in sales and employment and have resolved most of their personal differences.

More specific outcomes are:

- Increase in number of employees from 10 in 1969 to 50 at the present time.
- Increase in gross revenues from US $250,000 (combined in 1969) to nearly US $1 million in 1977-78.
- Salaries have increased concomitantly.
- About US $1 million in import substitution.
- The Guatemalan partner is able to purchase raw materials at reduced prices through a collective purchasing arrangement with the U.S. partner, thereby making his product more competitive in the Central American marketplace.

Characteristics of Small/Medium Scale Co-Venturers

The co-venture partners in Quimicas are two entrepreneurs each of whom had his own business at the time the co-venture was established. Both men have engineering degrees and the U.S. partner has additional education in business administration, as well as substantial experience in small/medium scale co-venturing.

Technology

The technology involved in this co-venture is the manufacture of chemicals used in processing textiles. Quimicas was manufacturing some textile chemicals prior to the co-venture establishment. The involvement of the U.S. partner resulted in an improved product and an increase in the quantity of available product. The Guatemalan partner's management skills have improved markedly since the inception of the co-venture agreement even though the amount of time he devotes to managing the co-venture has decreased over time. The availability of this technology within Central America has resulted in the ability to decrease imports and has utilized indigenous raw materials.

Methods for Technology Transfer

Methods used to achieve technology transfer include:

1) Annual international seminars dealing with problems in the industry conducted by the developed country partner for all of his small/medium scale co-venture partners

2) On-site consulting in the area of product sales and production engineering

3) Training programs conducted at least twice a year in the developed country partner's offices; these deal with recent technical developments in the industry and with market opportunities

Barriers to Small/Medium Scale Co-Venturing

Barriers to small/medium scale co-venturing identified by the partners are:

1) Differing expectations of co-venture partner's responsibilities and of the relationship that should exist between the partners

2) Differing business practices (e.g., using friends/colleagues to fill key slots, establishing mutually acceptable business objectives)

3) Language differences

Incentives for Small/Medium Scale Co-Venturing

1) Technical and marketing assistance from developed country partner; ability to purchase raw materials at reduced costs through a collective purchasing arrangement

2) Good reputation of each partner

3) Contacts of the developed country partner

4) Lack of government and legal barriers

5) The venture involved an expansion situation rather than a start-up formation

6) New emphasis on economic development through new enterprise development, by government

Benefits of Small/Medium Scale Co-Ventures

Benefits that have accrued from the formation of this enterprise are:

. Increased sales for the company which means increased sales for the U.S. partner as well, and increased sales tax revenues in Guatemala

. Increased employment in Guatemala which means increase in the amount of salaries paid and personal tax revenues resulting therefrom

- Increased use of indigenous raw materials and human resources
- Improved skills of Quimicas personnel
- Import substitution
- Increased availability of quality textile chemicals at reasonable prices in Central America

HOLE MASTER COMPANY, LTD.

This is a small/medium scale co-venture between a U.S. entrepreneur and a Korean businessman located in Seoul, Korea to manufacture twist drills for the Korean market. The co-venture was initiated in 1976 and production began in late 1977.

The Small/Medium Scale Co-Venture Process

The Concept

Source: The U.S. entrepreneur who came from Korea 25 years ago wished to make a contribution to the economic development of that country. Although he had traveled to Korea several times and had a sufficient knowledge of its economic and business climate, he did not have enough contacts to identify a wide range of potential partners. For this reason and several others, he contacted a relative by marriage who agreed to establish a co-venture to manufacture twist drills.

Market: The product's market is primarily in Korea.

Small/Medium Scale Co-Venture Agreement

It appears there was only an informal agreement between the two partners. The U.S. partner was responsible for obtaining the technology, equipment and technical assistance as well as providing equity. The Korean partner contributed money for land and plant construction.

Facilitator Organization

No facilitator organization was involved in this small/medium scale co-venture. However, several organizations acted to facilitate formation of the enterprise. The Korean Institute of Science and Technology (KIST) provided advice regarding the viability of the co-venture. The Fellows Company (Vermont, U.S.A.) provided technical assistance during the start-up stage. The Industrial Advancement Administration, Ministry of Commerce and Industry provided technical assistance, including on-the-job training.

Financing

The U.S. partner put US $49,000 into the co-venture and the Korean partner put in US $51,000 for a total investment of US $100,000. An additional US $500,000 was obtained from the Commercial Bank of Korea.

Small/Medium Scale Co-Venture Problems

The major problem in this co-venture has been a growing distrust between the partners coupled with a breakdown in communications. The U.S. partner is virtually out of touch with what is happening to the business. There has also been difficulty in obtaining working capital, which is typical for small businesses in Korea. Even though a $700,000 loan has been approved which will allow the firm to diversify, the Korean partner is unwilling to expand without access to working capital.

Small/Medium Scale Co-Venture Partners

The two entrepreneurs are both well educated and experienced businessmen. The U.S. partner is an inventor-designer with an engineering degree and strong commitment to Korean economic development.

Technology

The U.S. entrepreneur acquired the twist drill manufacturing equipment from Germany and tried to negotiate a technical assistance contract with the company selling the equipment. However, that contract did not transpire and subsequently, the U.S. partner located a twist drill company in the U.S. willing to provide such assistance to the co-venture. The past president of that firm went to Korea to direct the start-up phase. Three technicians also helped.

Methods for Technology Transfer

The primary transfer method has been on-site training conducted by experts.

- The past president of a U.S. twist drill manufacturer first went to Korea for six months to direct the plant establishment, equipment assembly, training programs and to write operations manuals.

- Three U.S. technicians each spent three months, sequentially, in Korea to provide assistance in: 1) setting up and operating manufacturing equipment; 2) implementing heat treatments necessary to produce precision tools, and 3) management of mass production programs.

- The past president returned to Korea to teach additional skills to plant engineers.

- The U.S. partner sought out and purchased new equipment from U.S. sources and some experimental manufacturing equipment based on his philosophy of starting small and growing in planned fashion together with his understanding that transferring technology to a developing country is a lengthy and difficult process.

. Industrial Advancement Administration (IAA), Ministry of Commerce and Industry provided technical assistance including on-the-job training.

Barriers to Small/Medium Scale Co-Venturing

A key barrier identified in this co-venture has been the limited access to working capital for small businesses in Korea. In the start-up phase, the U.S. partner's lack of resources to identify and qualify potential financial partners was a barrier.

Incentives for Small/Medium Scale Co-Venturing

The following incentives to co-venturing were identified in this case:

. Three-year income tax holiday at 100% and 50% for the next five years; reduction and/or exemption of guaranteed remittance of dividends; guarantees of property and reinvestment

. Korean economic development goals emphasize the development of small businesses, encourage co-ventures through direct equity investment or provision of technical assistance and have targeted industrial areas for assistance. This co-venture was in line with economic development goals and was within an industrial group targeted for stimulation.

Benefits of Small/Medium Scale Co-Ventures

The following benefits have accrued from the establishment of this co-venture:

. The number of employees grew from the original 60 persons to 130 in early 1979.

. Additionally, there are 150 independent Korean distributors selling the product.

. There has been a steady increase in sales revenues (5% net profit from sales in 1978, 10% predicted for 1979 and 15% for 1980); the 1978 gross revenues were US $1,092,000 with a Value Added Tax of US $147,000.

. Product sales have generated local tax revenues.

. Increased export sales (currently 10% with an effort to increase) contributed to improved foreign exchange status for Korea and improving the country's position in the international marketplace.

. The technology involved was appropriate for production and use in Korea (90% is used within the country)

. Import substitution

. Contributed to diversification of the national economy.

ALBAY AGRO-INDUSTRIAL DEVELOPMENT CORPORATION
(ALINDECO)

This is a small/medium scale co-venture established in 1974 by a Japanese entrepreneur and a Filipino entrepreneur in the Albay province of the Philippines to produce unbleached abaca pulp sheets for export.

The Small/Medium Scale Co-Venture Process

The Concept

Source: The Japanese partner learned the Japanese Ministry of Finance Printing Bureau was going to stop purchasing raw abaca used in manufacturing yen and begin to purchase abaca pulp sheets. He had a business and personal relationship with the Filipino partner for 15 years and they had often discussed the possibility of forming a business together. Finally, in 1974 the time was ripe to do so.

Market: Because of the decision within the Japanese Ministry of Finance, there was a likely market for the product; the Japanese partner is sole distributor for this product outside the Philippines; 10% of the production may be sold in the Philippines by ALINDECO.

Small/Medium Scale Co-Venture Agreement

An Equipment Sale and Technical Assistance Contract was negotiated between the partners. The Filipino partner helped conduct the feasibility study (especially the portions related to conditions existent in the Philippines), supervise the plant construction, recruit employees with management capability and was responsible for daily operations of the enterprise. The Japanese partner provides on-going technical assistance, arranged for equipment procurement and attendant technical assistance from a Japanese firm and obtained the first long-term debt financing. It should be noted that no technical decisions are made without consulting the Japanese partner.

Facilitator Organization

There was no facilitator organization involved in this small/medium scale co-venture.

Financing

Financing was obtained from each of the partners and banks. The Filipinos made an equity investment of US $420,000 while the Japanese made an equity

investment of US $180,000. A long-term loan was obtained from the Japan Export-Import Bank in the amount of US $400,000 to finance the importation of equipment and miscellaneous start-up costs.

Between 1976 and 1978 another US $500,000 in debt capital was obtained from Philippine and Japanese banks. This money has been used to improve facilities, modernize equipment and optimize productivity.

Small/Medium Scale Co-Venture Problems

From the standpoint of the Japanese partner the time involved in obtaining the financial guarantees required by the Japan EXIM Bank from the Philippine Development Bank. Time was a problem because it was important for ALINDECO to become operational in order to take advantage of the market opportunity.

Small/Medium Scale Co-Venture Partners

Both partners are well educated. The Filipino partner has a college education in commerce and the Japanese partner is a lawyer. Both partners are also experienced businessmen. The Filipino partner had several years experience as Assistant General Manager in the production and trade of abaca and now owns his own business which is engaged in trade, the export of handicrafts, marketing and management consulting. The Japanese partner gained his business experience working for a company involved in trading fibers and then in his family's business which involves pulp trade as well as other products. It should be noted that the Japanese partner is sensitive to cultural differences as a result of his extensive international experience.

Technology

The technology involved in this co-venture is that related to the production of abaca pulp sheets. Hardware and skills were transferred from the developed country to the developing country. The equipment and abaca pulping machinery were purchased from a Japanese firm that participated in financing ALINDECO through the Japanese partner.

Methods for Technology Transfer

An Equipment Sale and Technical Assistance contract was negotiated between the Japanese partner and ALINDECO. The abaca pulping machinery and equipment were imported for the project from another company via the Japanese partner's company. Under the terms of this contract, the following services were to be provided:

- Instruction to assemble and install abaca pulping machinery and equipment

. Instruction on test runs and plant operations

. The machinery and equipment manufacturers' specification sheets, operations and maintenance standards and technical drawings.

Further, engineers were sent to supervise the installation and test runs of equipment. Personnel training and close supervision during the first several months of operation was conducted by the Japanese. At present, the Japanese partner makes 2-3 trips to ALINDECO per year and his Foreign Department Director makes several trips to the site per year.

Barriers to Small/Medium Scale Co-Venturing

A key barrier identified by the partners was the length of time necessary to arrange for the loan guarantee.

External factors identified as potential barriers to future growth include: increasing inflation, imbalance of international payments, unstable economy, tight money with high interest rates, and sudden possible changes in government policy.

Incentives for Small/Medium Scale Co-Venturing

Philippine law provides a variety of tax and financial incentives to pioneer industries and agricultural projects. These include tax deductions, depreciation allowances and guarantees needed by foreign partners.

Benefits of Small/Medium Scale Co-Ventures

Several benefits have accrued from the establishment of this co-venture. Those identified are:

. Increased employment (there are now 120 employees)

. Increase in gross revenues of the co-venture together with concomitant increases in tax revenues (gross revenues tripled between 1976 and 1978)

. Technology appropriate to the co-venture environment was transferred

. Non-farm employment opportunities were generated in a rural area

. Increase in income of abaca planters

. Spin-off of an affiliate venture which will raise abaca

. Increase in technical and managerial skills of employees

COUVOIRS DE NASSEN

This co-venture was established by a Tunisian entrepreneur and a Dutch entrepreneur in 1979 in Tunis.

The co-venture plan called for hatching chicken eggs for one-day broiler stock and for manufacturing poultry feed.

The Small/Medium Scale Co-Venture Process

The Concept

Source: The project was conceived by the developing country entrepreneur, M. Chatti, who had experience in the poultry industry through participation in his family business.

Market: The market for one-day chicks was local Tunisian buyers who raise broiler meat fryers; the poultry feed market was the Chatti family business; thus, the project has a domestic market.

Small/Medium Scale Co-Venture Agreement

The co-venture agreement stipulates technical assistance would be provided by Euribrid-Hendrix, management would be provided by Chatti and financing would be provided by the Netherlands Finance Company for Developing Countries (FMO). The FMO required a formal management agreement between Chatti and Euribrid-Hendrix be arranged before agreeing to participate in the co-venture.

Facilitator Organizations

No facilitator organization has been involved in this case. It should be noted that all development projects in Tunisia are subject to approval by the Agency for Promotion Investment (API). All requests for currency exchange and transactions resulting in an outflow of Tunisian currency are examined by the Central Bank for effect on the balance of payments.

Financing

There are four equity participants in this project:

1. Societe Civile d' Exploitation Agricole (SECA) owned by the Chatti family (31%)
2. Mustapha Chatti (20%)
3. Euribrid-Hendrix (34%)
4. The Netherlands Finance Company for Developing Countries (15%)

Long-term debt financing was obtained from the FMO with a 10-year payback period beginning in 1979. An infrastructure grant was received from the Agency for Promotion Investment. Finally, a local bank provided a line of credit to the co-venture to facilitate purchases from Holland.

Small/Medium Scale Co-Venture Problems

The major problems encountered during the establishment of this co-venture were:

- Delays in constructing the required facilities
- Delays in receiving equipment ordered from Belgium
- The problems involved in adapting the sophisticated Dutch system to a developing country environment
- Developing and training a work force to produce a product requiring a great deal of quality control and high hygienic standards.

Outcomes

Outcomes of this project which have been identified by the partners are:

- Expansion of both chick and poultry feed production in Tunisia resulting in a decreased dependence on imports
- Generation of 80 jobs
- Implementation of social programs for employees
- Partial achievement of national economic development plan

Small/Medium Scale Co-Venture Partners

There are three partners in this co-venture: two entrepreneurs (one Dutch and one Tunisian) and a major financing organization located in Holland. Mustapha Chatti, the Tunisian entrepreneur, is well educated (PhD in law and PhD in economics) and has extensive business as well as political experience within the Tunisian government. The Dutch partner, Mr. Hendrix of Euribrid-Hendrix, is also well educated and has established a company respected throughout the world for its high quality poultry products. The FMO was established by the government to support Dutch foreign policy in developing countries by providing financial assistance directly to projects and indirectly through development banks. FMO personnel are experienced in defining, developing and implementing projects in developing countries.

The developed country partners provided financing, technical know-how and assisted with equipment purchases. The developing country partners provided equity financing, the idea, land, management and logistical support.

Technology

In this case, the technology transferred is that necessary to hatch chicks and produce poultry feed. Hardware, skills and knowledge were transferred. It is important to note that the strict hygiene standards and high level of quality control required to have a successful business in this field require a skilled labor force. Because Euribrid-Hendrix wishes to maintain its reputation as a leader in this field, the company is committed to ensuring a complete transfer of skills/knowledge.

Methods for Technology Transfer

The methods employed to transfer technology in this case are:

- Frequent visits to the developed country manufacturer for training at the technical training center
- Euribrid technical expert on-site for two years
- Frequent visits by food technology specialist (every two weeks) to check production methods, management methods, productivity.

Barriers to Small/Medium Scale Co-Venturing

Barriers to co-venturing identified in this case are:

- Cultural (e.g., the appropriateness of men and women working together)
- Need for project approval by the Central Bank and API prior to implementation
- Availability of technical expertise and equipment
- Lack of skilled work force
- Time and human resources costs of building a factory

Incentives for Small/Medium Scale Co-Venturing

There were several incentives to co-venture in this case:

- Chatti's ability to work with the Tunisian government because of his in-depth political experience to gain support for this project as part of the five-year development plan

- The government recently began supporting efforts to develop the Tunisian private sector
- Tax incentives
- The positive relationship between each partner and his government
- Markets for the product were assured
- Language problems were minimized by providing training in French when needed

Benefits of Small/Medium Scale Co-Ventures

The benefits which derived from this co-venture were identified as:

- Import substitution
- Increased utilization of indigenous labor
- Increased employment/salaries/tax revenues
- Euribrid-Hendrix expanded their market and is likely to engage in other co-ventures
- Training programs and social programs have been implemented for employees (e.g., on-site housing constructed, land for employees to garden and raise goats, encouragement to educate children)
- A spin-off company has been established; Avidev will keep laying chickens and sell eggs to the commercial food market

ROYAL LESOTHO TAPESTRY WEAVERS
(RLTW)

This is a co-venture formed by an entrepreneurial administrator of a Lesotho development organization and British partner; it is located in Lesotho. The co-venture products are indigenous handicrafts which are exported.

The purpose of this venture is to substantially raise extant skills of the indigenous population in native industry (i.e., weaving tapestries) which would also serve to preserve a national craft and improve the economy of Lesotho; another purpose is to provide employment to the female labor force.

The Small/Medium Scale Co-Venture Process

The Concept

Source: The source of the RLTW concept was Wynand van Graan, the Managing Director of the Lesotho National Development Corporation (LNDC).

Market: The originally targeted market for the high quality product was the United Kingdom, Europe and South Africa. Later, a factory showroom was established to serve the South African tourist trade.

Small/Medium Scale Co-Venture Agreement

The agreement involved in this co-venture was a financial one. The original British investor agreed to purchase 50% of the shares in RLTW. Later the shares were sold to EDESA, an international finance organization.

Facilitator Organizations

There was no facilitator organization involved in this small/medium scale co-venture. Original co-venture formation was facilitated by the LNDC via the championship of van Graan. Recently, the Kingdom of Lesotho Handicrafts, Pty, Ltd. (KLH) has become a marketing representative for RLTW. Because FRIDA, an international economic development organization, is a partner in the KLH venture RLTW also has access to its marketing capability.

Financing

Originally, a British company purchased 50% of the RLTW shares thereby becoming an equal financial partner with the LNDC. In 1976 the British partner's shares were purchased by EDESA.

Small/Medium Scale Co-Venture Problems

The major problem encountered during the development of this co-venture was management. The lack of indigenous management skills when the co-venture was formed resulted in foreign management -- a common situation in Lesotho at that time. When government and industrial leaders pressed for national management of firms, the original RLTW management left, including van Graan. At the same time, much of the entrepreneurial spirit he brought to the firm was lost. A series of managers subsequently brought the co-venture into a state of financial and management disarray.

Outcomes

The following outcomes have been identified:

- RLTW tapestries won the gold medal at the International Exhibition of Arts and Crafts in Florence, Italy in 1970
- New markets for the weavings have been identified and reached
- Transfer of knowledge and skills has resulted in production of a high quality art work which is competitive in world markets
- A model for similar projects was established
- The turn-around efforts appear to be successful at this time
- A factory was built for the workers; a showroom was added
- Women have received management and weaving skills training
- Employment has been provided for 80 women
- One female past manager has begun her own business

Small/Medium Scale Co-Venture Partners

The original partners in the co-venture were the LNDC under the management of W. van Graan and a British company with many years of experience in the mohair industry. Van Graan was previously a marketing executive with a major South African firm. No information is available regarding the education, business experience or political experience of the original partners. In 1976, EDESA, an organization that invests in African enterprises, purchased the British partner's shares. EDESA is headed by an entrepreneurial manager with extensive banking experience and co-venture experience in Africa.

Technology

The technology transferred was skills and knowledge of the weaving process (i.e., spinning, yarn dyeing, mohair processing), of tapestry designs and design transfer. Management skills were also transferred at the secondary management level.

Methods for Technology Transfer

The technology transferred did not come from the developed country partner. Rather, the Managing Director of LNDC brought an expert from Switzerland to train the workers in all areas of weaving tapestries. This was a long-term training effort.

In addition, several well recognized artists were persuaded to contribute original designs to the RLTW. Finally, RLTW has contracted with the original consultant to return to Lesotho in order to reinforce the skills she taught and has contracted with a local weaving entrepreneur to provide design assistance. These efforts have been short-term in nature.

Barriers to Small/Medium Scale Co-Venturing

The barriers identified in this co-venture were:

- Lack of well developed indigenous management skills
- Lack of design skills
- Lack of advanced weaving techniques

In summary, there was a lack of a trained work force to implement the co-venture concept.

Incentives for Small/Medium Scale Co-Venturing

Several incentives exist to co-venture in Lesotho. Those pertinent to this case are:

- The government strongly encourages the development of co-ventures because of the lack of indigenous management and planning skills; it also encourages overseas marketing with production of goods shared between foreign and domestic firms. It is believed this is a result of the low level of skills/training/experience within the country which only became independent in 1966 and has one of the lowest GNP's in the world
- The government encourages foreign investment in labor-intensive, manufacturing industries

- There are unlimited foreign exchange provisions for co-ventures
- Co-venture products have duty-free entry into South Africa; many products enter other African markets, the EEC and the USA duty-free
- Pioneer industries receive preferred treatment (e.g., tax holiday, generous depreciation allowance)

It is clear that the government support of co-venturing in order to achieve economic development creates a favorable climate for co-venturing.

Benefits of Small/Medium Scale Co-Ventures

Several benefits have accrued as a result of RLTW's success:

- Employment has increased to 80 jobs with a very low cost to create the jobs
- Increased utilization of indigenous raw materials and labor
- Extant skills have been improved and, it was noted, weaving skills that might have been lost have been preserved as a result of this project
- Technology appropriate to the small/medium scale co-venture environment has been transferred
- Increased ability to export goods in a country where markets are highly limited
- A model for similar projects has been created and tested
- Partial achievement of the national economic development plan
- Markets for African products have been expanded

ZONA FRANCA INDUSTRIAL y COMMERCIAL

The government of Colombia has facilitated the establishment of at least six commercial and industrial free zones as part of its economic development plan. Of these, until recently, only one has attempted to develop the industrial free zone component and has been relatively unsuccessful in attracting foreign firms.

The Zona Franca was established by law in Cartagena to encourage industrial growth outside of the major centers of population. The Commercial Free Zone component was established within the city and has been successful from the outset. In addition, it has been estimated that 36 government and 260 private sector jobs have been generated.

The Small/Medium Scale Project Process

The Concept

In 1974, Hector Trujillo was appointed Manager General of the Zona Franca and became convinced that developing the Industrial Free Zone component would contribute substantially to the economic development of the country. Subsequently, he examined the concept as implemented in other countries and participated in Shannon Free Airport Development Company training programs. Then, sufficient money was obtained from the Commercial Free Zone revenues and local lending sources to initiate a planning phase for the Industrial Free Zone. The Zona Franca contracted with Shannon Development to provide technical assistance in planning. The planning phase is now complete and the Colombian government has applied for a long-term loan from the World Bank to implement the project; the loan has been recommended for approval; however, it has not been granted.

Facilitator Organizations

There was no facilitator organization involved in this project.

Financing

Financing for the concept development stage was obtained from revenues of the Commercial Free Zone and local lending sources. Financing for construction and promotion is expected to come from the World Bank and the Colombian government, internal cash flow, SENA, Municipal Public Utilities Company and domestic lending sources.

Problems

The major problem involved in this co-venture has been the delays resulting from the change in government in 1978. A major change in government is generally accompanied by uncertainties regarding future government policies.

Outcomes

The following activities have been completed during the planning phase:

1. Shannon Development trained staff in Industrial Free Zone operations and the development of promotional strategies.

2. Shannon Development conducted macro-economic and regional planning studies.

3. Shannon Development provided technical assistance to the Colombian consulting engineering firms regarding physical plan design and construction.

4. Shannon Development reviewed existing laws and regulations related to Export Free Processing Zones and has suggested revisions regarding the establishment of Industrial Free Zones, foreign investment, methods for financing construction.

5. The Gesellschaft fur Technische Zusammenarbeiten (GTZ) has agreed to send a two-man team to assist in implementing promotional activities for a period of two years; the Manager of the Industrial Free Zone will attend a special school at the GTZ for training.

6. The city of Cartagena has financed and partially built an access road from the city to the proposed Industrial Free Zone site.

Anticipated Outcomes

The following project outcomes are anticipated:

1. Full occupancy within 10 years and breakeven within 3 years which will have substantial economic development impact on the city.

2. Ultimately 5 islands will be created through land-fill. Each island will have 16 manufacturing buildings, a cafeteria and a general service area. Each building will have about 17,750 square feet and will house approximately 80 workers. The total potential employment will be 6,400 persons.

3. Establishment of a successful industrial zone will result in the establishment of support business outside of the zone. It is expected that these activities will result in the generation of a total of 13,000 to 18,000 jobs in the public and private sectors.

4. There will be an increased utilization of local raw materials and labor because this is a criterion for selection of firms that can locate in the zone.

5. Local workers will be employed and trained.

6. Social programs are being developed for anticipated employees. These include the establishment of nursery schools, providing basic education to women, providing health and nutrition services, providing housing, access to purchasing co-operatives, training in personal budgeting and education in family planning.

Project Participants

The participants in this venture are the Colombian government and the Shannon Free Airport Development Company, Ltd., an Irish government development agency. Both participants are primarily interested in Colombian economic development. In some ways the Colombian government is a silent partner. The project has been championed by a well educated and committed administrator-entrepreneur, Hector Trujillo. He was educated as an engineer and believes the industrial free zone concept will contribute substantially to the economic development of Colombia in general and Cartagena specifically by increasing the degree of industrialization and the amount of technology transfer. Further, he is committed to raising the level of productivity and standard of living for Colombian workers.

Technology

In this case the technology transferred is management and technical skills required to develop, implement and "grow" an industrial free zone; these were transferred from Shannon Development personnel to Zona Franca personnel. It is expected that the Gesellschaft fur Technische Zusammenarbeiten (GTZ) will provide assistance in implementing a project to promote the Zone.

Methods for Technology Transfer

The methods used to transfer skills and knowledge in this project are:

. On-site consultancy by Shannon Development

. Training programs conducted at Shannon Development

. Long-term technical assistance provided on-site by GTZ personnel

Barriers to Project

Barriers to developing an Industrial Free Zone in Colombia are the present Colombian laws related to Industrial Free Zones and the delays resulting from the last presidential election in 1978.

Incentives for Project

The major incentive in this project has been that it supported Colombia's economic development plans and the infrastructure development of one of the lesser industrialized areas of the country.

Benefits of the Project

Benefits that have accrued from this venture are:

- Provision of technical training programs for employees
- Increased employment of indigenous population
- Development of a model project for Latin American countries
- Land-fill project to create the islands on which the Industrial Free Zone will be constructed
- Partial construction of a 20-kilometer access road
- Progress toward achieving economic development goals

Anticipated benefits include:

- Implementation of social programs for employees
- Implementation of training programs for employees
- Increased employment through business located in the zone
- Increase in number of local/regional businesses to provide support services to business located in the zone
- Increased foreign investment

CONSIDERATIONS IN SMALL/MEDIUM SCALE CO-VENTURING

This section contains information regarding the variables believed important in the small/medium scale co-venture process as well as the important characteristics of small/medium scale co-ventures. Tables containing more detailed data on each variable are contained in Appendix C. Such information is essential if efforts to stimulate the quality and quantity of small/medium scale co-ventures is deemed desirable. It is also important information for persons deciding whether or not to engage in small/medium scale co-ventures.

The reader should remember that this information is based on interviews with a limited number of small/medium scale co-venture participants and that it reflects their perceptions. On occasion, the partners' perceptions conflicted and only in these cases was an effort made to determine which perception was real. When conducting future work in this field, it would be desirable to determine the real barriers to, incentives for and benefits of small/medium scale co-venturing based on the results obtained from a larger sample which should include policy makers.

The range of potential small/medium scale co-venture relationships is presented in Table 1. It was found that the more purely private sector a small/medium scale co-venture is, the more closely it fit the original definitions and characterizations developed by the research team.

Table 2 contains a list of variables examined as part of this research effort.

TABLE 1

RANGE OF POTENTIAL SMALL/MEDIUM SCALE CO-VENTURE RELATIONSHIPS

Entrepreneur/ Entrepreneur Partnership	Entrepreneur/ Entrepreneur/ Financier Partnership	Entrepreneur/ Government Partnership	Government/ Government Contractual Relationship
Quimicas de Centro America S.A. (Guatemala)	Couvoirs de Nassen, S.A. (Tunisia)	Royal Lesotho Tapestry Weavers/ RLTW (Lesotho)	Zona Franca Industrial y Commercial[7] (Colombia)
Hole Master Co. Ltd. (Korea)			
Albay Agro-Industrial Development Corporation/ ALINDECO (Philippines)			

[7]This case is not an example of a small/medium scale co-venture; rather it is an example of a project that is helping to improve the host country climate for such co-venturing and the infrastructure necessary to support small/medium scale co-ventures.

TABLE 2

CONSIDERATIONS IN SMALL/MEDIUM SCALE CO-VENTURE DECISION-MAKING

THE SMALL/MEDIUM SCALE CO-VENTURE PROCESS

- The Concept
  - Source
  - Market
  - Purpose
- Small/Medium Scale Co-Venture Arrangements
- Facilitator Organizations
- Financing
  - Source
  - Type
- Small/Medium Scale Co-Venture Problems

CHARACTERISTICS OF SMALL/MEDIUM SCALE CO-VENTURES

- Education
- Business Experience
- Political Experience

TECHNOLOGY

- Type of Technology
- Technology Transferred

METHODS FOR TECHNOLOGY TRANSFER

- Training - Long-Term and Short-Term
- Consultancy

BARRIERS TO SMALL/MEDIUM SCALE CO-VENTURING

- Political

TABLE 2 (continued)

Economic

Cultural/Social

Technical

INCENTIVES FOR SMALL/MEDIUM SCALE CO-VENTURING

Political

Economic

Cultural/Social

Technical

BENEFITS OF SMALL/MEDIUM SCALE CO-VENTURES

Political

Economic

Cultural/Social

Technology Transfer

THE SMALL/MEDIUM SCALE CO-VENTURE PROCESS

The Small/Medium Scale Co-Venture Concept

In two cases the idea for the co-venture came from the developed country partner (Hole Master, ALINDECO) and in four cases it came from the developing country partner (Quimicas, Couvoirs, RLTW, Zona Franca). Thus, most of the small/medium scale co-ventures examined originated with the developing country partner.

Two of the cases examined involve production for domestic markets (Hole Master, Couvoirs) while one involved production for regional consumption (Quimicas). Two of the small/medium scale co-ventures are intended to reach foreign markets (ALINDECO, RLTW) and one is designed to attract foreign investment to establish firms producing products for export (Zona Franca).

All of the cases involved ventures established for the purpose of profitability. However, it should be noted that four had substantive economic development goals (Hole Master, Couvoirs, RLTW, Zona Franca). It is interesting to note that interviewees recognize the potential contribution of small/medium scale co-ventures to economic development.

Small/Medium Scale Co-Venture Arrangements

In three of the cases there was a formal agreement specifying the responsibilities of each partner and specifying the types of assistance to be provided (Quimicas, ALINDECO, Couvoirs). The arrangement between Zona Franca and Shannon Development was contractual. In the Hole Master case there appears to be only an informal agreement between the two partners and in the RLTW case details of the arrangement are unknown.

The primary responsibility for operational decision-making is in the hands of the developing country partners, although an equity investment by the developed country partner allows him to participate in decision-making.

Facilitator Organizations

Using the definition of facilitator organization previously noted, there are no facilitators involved in the cases examined. However, it should be noted that in each case assistance was provided by organizations that facilitated the establishment of the enterprise.

Financing

In four of the six cases examined, the partners made an equity investment (Hole Master, ALINDECO, Couvoirs, RLTW); in three of these cases, long term debt financing was also secured (Hole Master, ALINDECO, Couvoirs). In the Quimicas small/medium scale co-venture, the needed financing was obtained from the retained

earnings of the existing firm. The Zona Franca project used funds generated by the Commercial Free Zone and a local bank.

It does not appear that securing financing for small/medium scale co-ventures presented a significant problem to co-venture participants.

CHARACTERISTICS OF SMALL/MEDIUM SCALE CO-VENTURERS

All of the small/medium scale co-venturers were well-educated and had a substantial amount of business experience prior to engaging in the co-venture. In four cases, at least one partner had established his own business prior to the co-venture (Quimicas, Hole Master, ALINDECO, Couvoirs). Only in one case did one of the partners have previous co-venture experience (Quimicas).

It is noteworthy that the direct government experience of one partner contributed to the successful establishment of the small/medium scale co-venture (Couvoirs).

TECHNOLOGY

Five of the co-ventures involve manufacturing/producing products suitable for local/regional consumption (Quimicas, Hole Master, ALINDECO, Couvoirs, RLTW), even though in two instances the product is exported (ALINDECO, RLTW). The production technologies are appropriate to the environment in which the enterprise is located and indigenous labor/raw materials are utilized; local personnel are trained to use the technologies. In the Zona Franca project the technology involves transferring the planning and management skills necessary to running an Industrial Free Zone.

In all cases, both knowledge and skills were transferred from a developed to a developing country. In three cases, hardware (i.e., equipment and/or machinery) was transferred from a developed to a developing country (Hole Master, ALINDECO, Couvoirs).

METHODS FOR TECHNOLOGY TRANSFER

Training

Short-term, on-site training was provided in three of the cases (Hole Master, ALINDECO, Couvoirs). Short-term training was provided at the developed country firm in three of the cases (Quimicas, Couvoirs, Zona Franca). In addition, one developed country firm provides training by conducting international training seminars for professionals in the field (Quimicas).

In two cases (Couvoirs and RLTW) long-term training was provided on-site. In each case, the training was intended to teach high level skills that would improve the probability of a successful co-venture.

In one case, long-term intermittant technical assistance is provided (ALINDECO).

Consultancy

In four cases consultancy was obtained from a developed country (Quimicas, Couvoirs, RLTW, Zona Franca). In the case of RLTW consultants have been employed to facilitate a turnaround situation well after the small/medium scale co-venture was established. In one case the services of two public agencies were utilized (Hole Master).

BARRIERS TO SMALL/MEDIUM SCALE CO-VENTURING

In two cases government-related barriers were identified. In the Couvoirs case, the developing country partner had to obtain approval of the investment and the existing Colombian laws related to Industrial Free Zones were identified as inhibiting implementation of the Zona Franca project.

Developing a mutual understanding of business practices and relationships was identified as a barrier in one case (Quimicas). Cultural barriers were identified in one case (Couvoirs). Specific finance-related barriers identified were:

- The risk of investing in a developing country (Couvoirs)
- Limited access to working capital in the developing country (Hole Master)
- The length of time required to obtain loan guaranteed from the appropriate developing country lending institution (ALINDECO)

Two important technical barriers were identified: lack of a trained/skilled labor force and the lack of advanced production equipment. The first technical barriers were identified in the ALINDECO, Couvoirs and RLTW cases; the second was identified in the Hole Master, ALINDECO and Couvoirs cases. The lack of veterinary testing facilities was identified in the Couvoirs case by interviewees.

Of the barriers perceived by the small/medium scale co-venturers interviewed, only the technical barriers appeared to be of significant concern. The lack of a trained labor force, especially managers, with sufficient skills/knowledge to participate in a small/medium scale co-venture is a barrier requiring substantial time and effort to overcome.

INCENTIVES FOR SMALL/MEDIUM SCALE CO-VENTURING

A major incentive to become involved in small/medium scale co-ventures is that the developing country government supports the establishment of small/medium scale enterprises, or more specifically, supports the establishment of small/medium scale co-ventures. Only in one of the cases examined did the government specifically support such ventures (Hole Master). In one case, the lack of government regulations was considered an incentive (Quimicas). In five of the

cases, it is believed that the fact the co-venture was supportive of the national economic development plan was an incentive to proceed (Hole Master, ALINDECO, Couvoirs, RLTW, Zona Franca).

In one case the good reputation of the partners and their standing in the business community was identified as an incentive to co-venture (Quimicas).

There were incentives identified which related to the economics of co-venturing in five of the six cases. In one case the developing country partner's knowledge of proven markets was considered an incentive (Quimicas). In the other four cases, tax and other financial incentives were deemed important incentives (Hole Master, ALINDECO, Couvoirs, RLTW). In three of these cases, the market for the product was virtually assured prior to establishing the enterprise (Quimicas, Couvoirs, ALINDECO).

Thus, the major incentive to small/medium scale co-venturing appears to be the support provided by the developing country government. In most of the cases studied, the government provided incentives to small/medium scale enterprises and did not place barriers in the way of co-venturing. Developing country incentives are generally financial in nature and often are provided to target industrial sectors in order to stimulate economic development.

BENEFITS OF SMALL/MEDIUM SCALE CO-VENTURES

Overall, the small/medium scale co-ventures examined as part of this study have contributed to fulfilling the economic development plans of the host country and technology has clearly been transferred. More specifically, the following benefits should be noted:

- Increased employment: Quimicas (40 employees), Hole Master (130 employees), ALINDECO (120 employees), Couvoirs (34 employees + 35 as part of the expansion), RLTW (80 employees), Zona Franca (24 employees)
- Import substitution: Quimicas, Hole Master, Couvoirs
- Increased utilization of indigenous raw materials: Quimicas, Hole Master, ALINDECO, RLTW
- Formation of a spin-off venture: Couvoirs/Avidev
- Opened new markets for the developing country: ALINDECO, Couvoirs, RLTW
- Increased skills and knowledge levels of native population; often resulted in production of improved produce extant in host country marketplace

SUMMARY

In summary, the data collected from this limited number of small/medium scale co-venture case studies indicate:

- With respect to the small/medium scale co-venture process: the concept for the co-venture originated in the developing country; the primary purpose of the co-venture was to generate profits but a concern for economic development often was an underlying purpose; most often a formal agreement was negotiated specifying the responsibilities of each partner; no facilitator organization was involved, but organizations did provide facilitating services; most often both partners participated on an equity basis and long-term debt financing was involved.

- The small/medium scale co-venture partners are well-educated, successful businessmen; most often this is their first co-venture experience

- The production technologies and products are appropriate for local/regional markets even if they are exported; both knowledge and skills are transferred from the developed to developing country

- Short-term training (both on-site and in the developed country) and consultancy are used as methods to transfer technology

- The most important barrier is technical in nature and involves the lack of a sufficiently well-trained labor force, especially in the area of management; a lack of advanced production technology was identified as a barrier, but did not substantially affect the establishment of the co-venture

- The major incentive to develop a small/medium scale co-venture wasthe support provided by the host country government (e.g., tax incentives, investment incentives)

- A wide variety of small/medium scale co-venture benefits were identified; interestingly there were not any detrimental effects identified

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The small/medium scale co-venture process, as originally defined, is accurate in content.

The steps involved in small/medium scale co-venturing were originally specified as:

- Identification of market opportunity
- Identification of partner(s)
- Definition of the project
- Implementation of the project

Data obtained from an examination of five small/medium scale co-ventures and one project indicate the above steps were accurate, but that they were not necessarily linear or sequential. In the case of the project (Zona Franca), the first step was project definition because it was believed the market could be developed and no partners were involved. The emphasis was on regional economic development. In the case of the Quimicas small/medium scale co-venture, the market had already been ascertained and the need as well as the partners were identified by the customers; thus the process began with the partners defining their co-venture relationship. In two of the remaining cases (Hole Master, Couvoirs) the process began with market identification, progressed to project definition, then to partner identification and, finally, to project implementation. In the RLTW case, the process began with project definition, progressed to market and partner identification and then the project was implemented. Only in the case of ALINDECO were the steps sequential as originally specified.

Thus, although all of the steps are included in the establishment of a small/medium scale co-venture, they need not occur in sequence in order to result in a viable enterprise.

CHARACTERISTICS OF SMALL/MEDIUM SCALE CO-VENTURES

The originally-specified characteristics are substantiated by the data with one exception; others have emerged as common to the cases examined.

Originally, the following characteristics were specified:

- Transfer of "appropriate technologies"
- Some equity ownership by each partner with the small/medium scale co-venture located in the developing country and majority ownership by the developing country partner
- Market for the product/service is most often local/regional to begin with

- Small/medium scale co-ventures make maximum use of local raw materials and labor resources

- Obtaining financing is not a major problem; the major problem is project definition

- Management and technical expertise is contributed by the developed country partner; knowledge of and access to the local marketplace as well as knowledge of the business community is contributed by the developing country partner

- Both partners contribute to decision-making in a small/medium scale co-venture

The exception to these characteristics, emerging from the data review, is that project definition does not appear to constitute a major problem in small/medium scale co-venturing. Rather, the specific task of developing mutually agreeable business objectives and a mutually satisfactory working relationship appears to constitute a problem (Quimicas, Hole Master). The second major problem is the lack of a sufficiently well-trained labor force to implement a small/medium scale co-venture. A lack of well-trained managers in developing countries has repeatedly been cited as a problem.

Other characteristics that emerged as common to the small/medium scale co-ventures examined are:

- The goals/objectives of the enterprise are consistent with national host country development plans

- The small/medium scale co-venture partners have experience as successful businessmen; most often this is their first co-venture experience

- Small/medium scale co-ventures generate employment and revenues which contribute to economic development

- Small/medium scale co-ventures result in the transfer of knowledge and skills, as well as hardware, appropriate to the host country environment; thus, they contribute to infrastructure development that further improves the climate for other small/medium scale co-ventures

On the basis of the cases examined, it appears that there are many benefits associated with small/medium scale co-venturing and that there are few detrimental effects.

Summary

An examination of these cases, even though limited in number, clearly indicates that technology appropriate to the host country environment is transferred

thereby contributing to the country's development. Further, it is accompanied by increased employment and revenues; frequently this increase occurs in both the developed and developing countries.

On the whole, it appears that these small/medium scale co-ventures result in sufficient development and technology transfer benefits to warrant efforts to stimulate the quantity and quality of such ventures.

RECOMMENDATIONS

As a result of this effort, three recommendations are proffered, based on the conclusion that small/medium scale co-venturing will contribute to achieving the development and technology transfer goals of the United States.

RECOMMENDATION 1: EXPAND THE EXISTING DATA BASE

Additional research should be conducted. This research should first focus on identifying and describing existing small/medium scale co-ventures involving U.S. businessmen. As part of such research, an effort should be made to include the perceptions of policy makers and to validate, modify and/or expand the current assumption. Also, an effort should be made to determine the real problems, barriers, incentives and benefits associated with small/medium scale co-venturing.

RECOMMENDATION 2: DEVELOP AND IMPLEMENT A PLAN TO STIMULATE SMALL/MEDIUM SCALE CO-VENTURES INVOLVING U.S. BUSINESSMEN

Such a plan could include identifying potential facilitator organizations, providing them with funding to develop their own plans for facilitating co-ventures and then providing funding for the best of those to implement their plans. An effort should be made to identify existing facilitator organizations and organizations providing services facilitating the establishment of small/medium scale co-ventures before any implementation funding is provided.

Should this recommendation be implemented, two considerations should receive a great deal of thought. First, it is likely that implementing a plan of this nature will have all of the problems associated with new venture creation. Therefore, the funding must be sufficiently high and of sufficient duration to encourage success. Unlike much government funding, it must carry with it the funding agency's commitment to weather start-up problems and actively contribute to success by being involved in planning, implementation and evaluation. In order to determine the progress and problems of such a project, a monitoring and evaluation system should be established at the same time the project is being planned. Second, it may be appropriate to fund organizations that will act as facilitator organizations to bring potential small/medium scale co-venture partners together and provide services up to the time the co-venture becomes operational and/or it may be appropriate to fund organizations that provide services that facilitate the establishment of small/medium scale co-ventures.

RECOMMENDATION 3: ESTABLISH A CLEARINGHOUSE FOR INFORMATION RELATED TO SMALL/MEDIUM SCALE CO-VENTURING

There is still a lack of publicly available information regarding small/medium scale co-venture experiences and resources available to provide assistance to small/medium scale co-ventures. As mentioned in the introduction to this document, there is information available on joint venturing and larger scale projects. The conduct of additional research in this specific area will contribute to establishing a data base, but a clearinghouse function providing practical information to persons currently engaged in or desiring to engage in small/medium scale co-venturing would be a service designed specifically to facilitate the quality and quantity of such ventures.

APPENDIX A: INTERVIEW FORMAT

CASE STUDY INTERVIEW FORMAT

for

USAID PROJECT

January 1979

Interviewee:_____ Date:_____

Position:_____ Location:_____

THE CO-VENTURE

I. Background

A. Please describe your educational background including any skills training you have received.

B. Please describe your previous business experience.

C. Please describe any previous attempts you have made to establish a co-venture and specify the dates of these attempts.

II. Please describe your firm (obtain basic information about the co-venture in the interviewee's own words).

III. Co-Venture Definition

A. Why did you start this firm?

B. Please describe how the concept for this co-venture developed (key decision points should be identified).

C. When did you first begin to think about becoming involved in this co-venture? When did you actually operationalize this co-venture?

D. Please describe how you became involved with your partner (e.g., how identified, how and why selected).

E. How and why did you select the product/service on which this firm is based?

F. How did you identify and test the market for your product/service? (Identify market entry point)

G. Did you utilize any facilitators while planning this co-venture? If so, specify which and the services utilized.

H. As you defined this co-venture, did you identify any

- barriers to co-venturing
- incentives to co-venturing
- risks

If so, what did you do to

- maximize the incentives
- overcome the barriers
- avoid the problems
- minimize or manage the risks

I. Did you consider locating this co-venture in any other country? If so, where and why? (identify barriers and incentives)

J. What key decisions were made during this phase? Did you seek advice when making those decisions? If so, from whom?

K. Did you develop a business plan? If so, for how long?

L. What costs did you expect to incur as part of starting this co-venture?

Financial

Management

Technical

Personal

M. What benefits did you expect to result from this project?

IV. Start-Up Phase

A. Please describe the start-up phase of this venture step by step.

B. Please describe, in as much detail as possible, the problems you encountered during the start-up phase (e.g., government-related, technical, marketing, production, personnel recruitment/training). At the same time please describe your solutions to each problem.

C. Please describe the structure and organization of the firm when it was first started.

D. Please identify the personnel involved in the co-venture when it became operational as well as the role or job he/she had in the operation of the firm.

E. Please describe how this co-venture is managed and specify how much of your time is spent managing. Is it more or less than you expected? If more, specifically how did you find the "extra" time?

F. Please describe the product/service delivered by the firm when first begun and the source of materials used in production.

G. Have you developed/used any special legal, technical or licensing agreements? Which provisions are especially important?

H. Please describe how you market your product/service. Does the co-venture compete in the developed country partner's market?

I. Please describe the function of any intermediary facilitator organization your firm works with (e.g., financial, management, technical, marketing, planning).

J. Please describe the firm's relationship with the government of the country in which it is located.

K. How much capital did it take to initiate this co-venture? What kind of capital?

L. What was the source of your capital? How did you identify the source? Did you have assistance in acquiring capital?

M. Were the risks you identified in the planning stages real?

N. Were the barriers you identified in the planning stages real?

O. Were the incentives you identified in the planning stages real?

P. Were the problems you identified in the planning stages real?

Q. Was your business plan accurate? For how long?

R. Do you feel you understood the need for planning when you began your co-venture?

V. Stabilization and Growth Phase

A. Please describe the growth of this co-venture.

B. Since you initiated this co-venture, please describe how the following have changed

- Management (diagram)

- Organization (diagram)

- Structure (legal)

- Marketing (diagram the marketing effort)

- Product/Service

- Investment capital

- The market

- The buyer of the product/service

- Source of materials

- Support services required

- Facilitator/Intermediary Organization affiliation

- Relationship with the government

- Relationship with your partner

- Personnel, and personnel policies

C. Please describe if/how you review the progress your firm is making.

D. Please describe how you manage the risks involved in this co-venture.

E. Please describe the strengths and weaknesses of your partner.

F. Please describe the 2 most important government barriers and incentives for co-venturing.

G. How long did it take for this co-venture to "break even" and achieve stable cash flow? Did it take more or less time than you anticipated?

VI. General

A. Is this a successful co-venture? If so, why? If not, why not?

B. How do you define successful?

C. Please describe the growth of this co-venture in terms of its financial, cash flow and capital requirements growth.

PROJECT OUTCOMES

VII. Outcomes related to the Firm

A. Please specify the following on an annual basis (i.e., overtime):

- Number of jobs created by type (e.g., skilled labor, unskilled labor, supervisory, middle management, technical)

- Amount of taxes paid

- Amount of salaries paid

- Number of products produced/services rendered

- Gross revenue

B. Please describe the growth of the company since its inception (include expansion of company and markets which have been achieved and which are planned)

C. Have you acquired additional capital beyond the initial funding? (specify source of capital, kind of capital and for what purpose it was obtained)

D. Describe any changes in social conditions which have resulted from the establishment of this firm.

E. Have any affiliated ventures been developed?

F. Have any supporting ventures been initiated?

G. Please describe any linkages established with other firms, support groups and/or individuals.

H. What should or could have been done differently?

I. Did the problems you anticipated in co-venturing turn out to be real problems?

VIII. Outcomes related to the Host Country

This information will be the perceptions of the interviewees with respect to the impact of the venture on the host country in general. An attempt should be made to obtain the following information.

A. Please describe any changes you feel have occurred in the following areas:

- The relationship between the host country and the country in which the partner is located

- Reliance on imports

- General social conditions of employees

- Government policies related to co-venturing (i.e., changes in barriers and incentives)

- Attitudes toward economic development

- Services available to co-venturers

APPENDIX B: CASE STUDIES

QUIMICAS DE CENTRO AMERICA S.A.

LOCATION: 5a Calle 10-53 Zona
Guatemala, C.A.

TELEPHONE: 80434

CABLE: Seydin

INTERVIEWEES: Ing. Juan Jose Font, President, Quimicas de Centro America, S.A.

Scott O. Seydel, President
The Seydel Companies, 80 Broad Street, Atlanta, GA, USA
Board member, Quimicas de Centro America, S.A.

SUBMITTED BY: Alan Cook, Associate Professor of Economics
Hankamer School of Business
Baylor University
Waco, Texas

PREFACE

The interviews for this project took place in the offices of Scott Seydel, President of the Seydel Companies of Atlanta, GA, USA, and Jose Font, President of Quimicas de Central America of Guatelmala City, Guatemala.

Scott Seydel was very open and candid during the interview portion but stated that the everyday decision making tasks are carried out by Font and he could not readily answer questions pertaining to the impact that the co-venture had on the local economy of Guatemala. Jose Font was very difficult to interview and it took 2½ days to partially complete the interview. Again, Font did not want to discuss the impacts of the venture on Guatemala, but I did draw enough information from him to estimate some of the economic impact on the country. Font agreed to send additional information on this company but did not. Therefore, I pieced together information from Font and Seydel in order to determine sales and employment growth.

INTRODUCTION

At the present time, Guatemala has very liberal regulations concerning direct foreign investment and co-ventures are not deemed necessary by most Americans wanting to invest there. There is no specific agency in the government that specifically deals with either small business or co-ventures between foreign and Guatemalan firms. However, small business ventures are encouraged by such incentives as tax holidays for new ventures and export promotion and development policies. There is a new bank that will make loans to small ventures, but it will not necessarily deal with co-venture projects. The government will also hel new small ventures develop marketing studies and business plans. There are no specific barriers which would hinder co-ventures. The Guatemalan economy has bee closely linked to the U.S. for years and their business infrastructure (banking, accounting services, distribution) is well developed, as are their transportation and communication networks.

Guatemalan political history has been relatively unstable. Political violenc has continued sporadically to the present and apparently will remain a source of some concern. Most violent changes in government have tended to be little more than changes in names with the military remaining in control. The recent democratic presidential election of Centrist candidate General Romeo Lucas Garcia is expected to produce little change in economic or political direction. Moreover, the country's well-organized labor groups are concentrating on increasing wages and price controls (with some success) rather than on political action. Local guerrilla activity appears under control, and the prospects of any external conflict, such as with Belize, are quite remote.

HISTORY AND DESCRIPTION OF THE VENTURE

The Co-Venture Partners

Quimicas de Centro America, S.A.

Jose "Pepe" Font, President of Quimicas de Centro America, is an enigma. His family controls an extensive amount of land in Guatemala and produces one of the largest cotton crops in Guatemala. Font, however, chose to study chemical engineering at the University of San Carlos in Guatemala. After graduation, Font worked as a sales representative for a major textile chemical firm before starting Quimicas. He started Quimicas de Centro America in 1969 in addition to his other business interests in Guatemala (e.g., thread for textile, the shoe industry, and steel or metal fabrication).

Font describes himself as a "typical Latin male" during his early post-graduate years and stated that he liked to party and have a good time. However, he is now a reborn Chirstian in a country which is 99 percent Catholic. Font is now substantially more tolerant in his approach to people and contributes generously to the church. When he became a reborn Christian, Font began to pay more attention to his family and to his business interests.

Font was encouraged to start a textile chemical plant because chemicals were often difficult to obtain and very expensive. He used family money to get started producing starches and later began producing chemical additives for textile sizing. Quimicas used as many indigenous raw materials as possible to produce resins, dyes, and chemicals for the textile industry. At this time, Font experienced his first disappointment with people offering help but not delivering. Font expected to receive technical and monetary assistance from some of the people who encouraged him to start Quimicas, however, he received no such aid.

By 1972, Quimicas had reached sales of $95,000 and had ten employees. However, the Company had not penetrated any market other than Guatemala in Central America. Also, Font had reached a point where he needed to expand to keep the business going but didn't have the expertise or the market. At this point, some of Font's local customers, who wanted to see Quimicas continue, introduced Font to Scott Seydel, President of The Seydel Companies, Atlanta, Georgia. At that time, Seydel was selling $150,000 of Textile Chemicals in Central America and was one of Font's main competitors.

The Seydel Companies

Scott Seydel was educated as a textile chemical engineer at Georgia Tech and in Business Administration at the University of Georgia. Throughout his school years, he worked in the textile chemical industry to gain experience

and was even "farmed out" to the Texas Textile Mills in Waco, Texas, to learn about textile sizing firsthand. After returning to Georgia, he joined the family business and went to work in the international division.

He became intrigued with international operations which were a very small part of the $30 million firm and, at that time, also very unprofitable. In addition, top management of the company was disenchanted with international operations--especially the ventures that the company had organized in Cuba, Chile, and Argentina. All of these operations lost money and the Company lost the entire Cuba and Chile operations as a result of nationalization. In 1969, there was some discussion of closing the international division, at which time Seydel decided to purchase that division and operate it as an independent company. He formed a domestic international sales corporation that represents 20 chemical companies and a few textile machinery companies. Seydel sells chemicals all over the world for his clients and has developed license operations in Brazil, Mexico, and Argentina. However, he soon discovered that license operations did not provide either optimal control or profit.

Seydel's approach to the co-venture process is unique. First, he and his staff learn as much as possible about the laws and business procedures of the country he wishes to operate in. Seydel believes this type of research and information gives him an advantage in negotiating co-venture contracts. Often, Seydel knows more about the national law and business procedures than the potential local partner. Second, Scott convinces the host government that his proposed co-venture will benefit the potential host country by providing new industry, jobs, and technology transfer. Third, Seydel takes a minority stockholder's position--usually 40%--which insures protection of and quasi-control over the co-venture. In the agreement that Seydel negotiates, 40% of the stock is sufficient to hold two of five seats on the board of directors and to control any increase in company indebtedness, sale of assets, or initiation of capital call.[1] In the co-venture agreement, Seydel also requires that an independent auditor provide a periodic audit of the venture's books and records.

An incentive for a Seydel partner is that he receives marketing and manufacturing assistance together with the Seydel Companies' textile engineering expertise as well as the benefit of collective purchasing of raw materials for textile chemical production. Collective purchasing of raw materials provides (1) continuous access to critical raw materials needed in textile chemical production; (2) cheaper prices for raw materials are usually available. However, Font took issue with the latter statement indicating some products Seydel sells him are more expensive than those of Seydel's competitors. Also, Seydel helps train developing country marketing and technical personnel both at his office in Atlanta and during special annual seminars held in one of the countries where he has a co-venture. For instance, Quimicas received research data, which cost $1,000,000 to develop, for a cost of $5,000.

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[1] A capital call is a procedure whereby stockholders are asked to put up additional capital equal to their current stockholdings.

Seydel now has over 14 co-venture partners and is developing another 20 prospects. Typically, Seydel derives his revenue from selling raw materials to his co-venture partners and from collecting 5% per year from co-venture net sales (net being sales after sales taxes are deducted). The 5% of net sales provision means that Seydel never has to depend on the co-venture making a profit. Rather, he gets his money "up front."

The Beginning of the Co-Venture

Seydel and Font, forced to meet by their mutual customers, did not take to each other at first, according to Font. When negotiations first started, Font's lawyer and accountant advised Font against the venture, but Font overruled them because he believed he needed Seydel's technology and access to Central American markets.

In November 1973, Seydel and Font entered into a co-venture relationship. Under the terms of the co-venture agreement, Scott received 40% of the capital stock of Quimicas or 40% of the $175,000 capital that Quimicas had at the time. In return, Scott told Font that he would guarantee commissions on sales that Seydel had developed in Central America. Eventually, Seydel paid $20,000 U.S. into Quimicas for commissions on sales that did not develop.[2] At the time of the co-venture agreement the total sales of both firms in Central America was approximately $245,000 ($95,000 Font; $150,000 Seydel). It should be noted that under the co-venture agreement, Quimicas sales territory is limited to Central America (not to include Panama).

When the co-venture began, Font made no long-range financial forecast but Seydel estimated that sales should reach $4 million U.S. by 1979; in 1978, sales were $1 million U.S. During the formative stages of the co-venture, no facilitators were utilized, however, Font sought the advice of a lawyer and certified public accountant. There was neither hindrance nor help from the government, as Guatemalan law does not restrict foreign investment or co-ventures.

According to Seydel's perception, Font's responsibility is to develop the local market, oversee the manufacturing operations, conduct the marketing program, and manage the day-to-day activities of the co-venture. Seydel's responsibilities are to provide:

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[2]Font took over Seydel's customers in Central America. If the Central American customers would not buy from Font, his sales volume would not increase and he would derive no profit. In order to offset this, Seydel agreed to pay Font, for a limited time, the commissions that Seydel would have made from selling to his old customers in Central America. This would give Font enough money to develop the confidence of those customers and eventually get their business.

- New technology and methods are made available to Quimicas on a continuing basis. Seydel conducts a lab/plant school each year to advise partners on both technical developments and opportunities in the marketplace. Engineers, administrators, chemists, and technicians from master licenser firms participate to teach new textile chemical technology for both manufacturing and for applications. (There is a charge for these conferences.)

- Collective purchasing services which have been described.

- Engineering assistance; it is provided on-site in the form of advice on production equipment flexibility, capacity predictions, labor/automation evaluations, and climate and terrain factors. Seydel also provides expert assistance in the design and construction of cooling systems, reactors, boilers, quality control laboratories, and other facilities.

Font indicated that when the co-venture was established, he was quite naive about the new co-venture formation taking place. He didn't understand the legal or technical aspects of the co-venture. In his view, it was absolutely necessary for his survival and, therefore, outweighed any risks. As a matter of fact, no risks or problems were perceived by Font at that time. He rejected Seydel's first offer but with Seydel's persistance, according to Font, a deal was made "to Seydel's satisfaction."

Seydel holds two of five directorships with four required to approve:

- Investment decisions;

- Sale of purchase of real estate;

- Authorization to mortgage property;

- Issue collateral;

- Long-term borrowing; and

- Sale of stock.

Thus, Seydel maintains a considerable degree of control. Font believed that the technical assistance and increased sales he was to receive from Seydel would offset the unfavorable financial terms of the co-venture agreement.

Co-Venture Problems

Upon reaching a co-venture agreement, Font immediately began to receive technical assistance from Seydel. However, he did not receive the financial

assistance he thought would be provided. For example, Font anticipated Seydel would co-sign notes needed to obtain working capital--however, no notes were signed which made it difficult for Font to secure money. Further, he discovered that a corporate relationship with a developed country partner was different than a similar relationship between Guatemalan partners.

He also indicated that he had a difficult time communicating with his partner because of their differing languages. This problem became acute when they tried to establish mutually acceptable business objectives. Seydel expected growth objectives to be reached regardless of problems (e.g., production capacity, product quality) then facing Quimicas. His primary objective was to increase sales as he added quality to his products.

For several years, according to Font, there was a lack of confidence between Font and Seydel because Font felt overpowered. For example, Font said he was forced to learn English in order to deal with his partner. It is noteworthy that Font almost withdrew from the co-venture several times between 1974 and 1978. During that same period, Seydel believed Font was spending too much time on other projects and not managing Quimicas properly. Font admitted that over time, he has reduced his management involvement in Quimicas from 100% in 1973 to 30% in 1978.

Organization and Management

An organization chart is presented in Table 1 on the following page.

The sales force operates out of two offices: one for Guatemala and El Salvador and one for Honduras and Nicaragua. Costa Rican sales activities are handled out of the main office in Guatemala City. It is noteworthy that political problems between the two countries have slowed sales in Costa Rica. (Guatemala accounts for 24% of total sales, while Nicaragua accounts for 32%, Honduras 12%, El Salvador 31%, and Costa Rica 1%). The current (May 1979) trouble in Nicaragua and El Salvador could have some effect on Quimicas sales but it is unknown to what extent.

At first Font appointed friends and fellow chemical engineers to key management jobs without regard to their management experience--he terms this a "time honored" mistake. Most of these people have left the company and Font has replaced them with people who are qualified whether or not they have been formally educated.

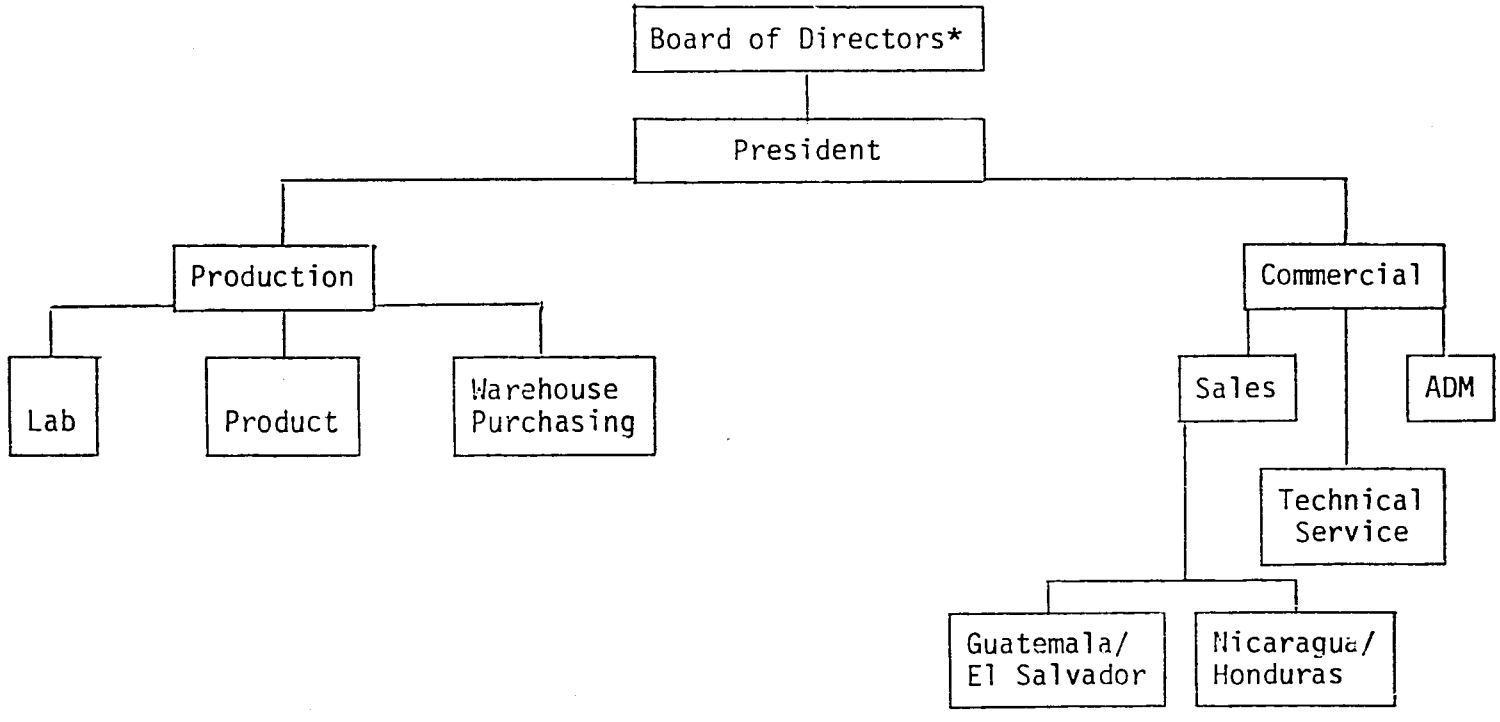
Font is the key decision maker in this firm and management is "top down." He has a close relationship with his employees.

Stabilization and Growth Stage

After the co-venture began, Font had to convert his privately held corporation to a public corporation in order to allow Seydel International to own stock. This did not disturb the capital structure of the company as all the

TABLE 1

ORGANIZATION CHART FOR QUIMICAS DE CENTRO AMERICA



*Seydel holds 2 of 5 seats on the board.

stock, $150-195,000 U.S., had been privately held by Font. All additional capital needs appear to have been met from retained earnings and, as of June 1977, retained earnings and surplus amounted to $368,000 U.S.

The sales of Quimicas increased dramatically after the establishment of the co-venture. In June 1974, the sales of the company were $310,000 U.S. and by June 1977, sales had increased to $963,000 U.S.; by June 1978, sales were a little over $1 million U.S. The most dramatic increase occurred between June 1975 and June 1976 when sales increased from $369,000 U.S. to $618,000 U.S.--a 40% increase in one year. The following year, a 35% increase in sales occurred, but growth faltered in 1978. Font believes sales did not increase substantially because the market had become saturated. On the other hand, Seydel indicates sales have slumped because Font is diverting his attention to his other ventures rather than concentrating on Quimicas. In terms of employment, the company has grown from a group of 10 workers in 1973 to 48 in 1979.

The Co-Venture Relationship

Font views the co-venture relationship differently now that he is a reborn Christian. He believes that he can accept Seydel--and others--as he/they are; he still perceives Seydel as both aggressive and overwhelming. However, Font believes that Seydel is working at tempering his aggressive attitude. This acceptance has helped to overcome the lack of confidence Font experienced earlier in the co-venture. The new relationship has benefited the co-venture.

Another interesting aspect of the co-venture relationship is the differing view of each partner regarding the personal relationship they should have. While Seydel believes partners should be close friends, Font believes that such a relationship would result in a high level of interdependence that would be detrimental. Font feels each partner should be strong and independent, and the relationship between them should be an "arms length" relationship.

Font believes the co-venture arrangement has helped Quimicas develop as a result of the marketing and technical assistance received from Seydel and that Seydel has contributed to the company by being affiliated with it. This latter because he is respected and well-known internationally and has a plethora of contacts. On the other side, Seydel is pleased to have Font as a partner because of both his personal reputation and that of his family in Guatemala and Central America.

PROJECT OUTCOMES

Employment has increased steadily from 10 before the co-venture to around 50 in 1979. There are 10 managerial and technical jobs and approximately 40 relatively unskilled jobs. Salaries have increased drmaatically from $35,000 U.S. in 1973-74 to $130,000 U.S. in 1976-77, or 271%. Gross revenues have increased from $250,000 U.S. (for both) just prior to the merger to $1 million U.S. in 1977-78. However, there is a difference of opinion at this point as to future growth. Seydel believes sales should be much higher, while Font believes that the present product lines have almost reached a saturation point.

The capital structure of Quimicas has grown from approximately $150,000 U.S. to $369,000 U.S., or a 163% increase.

Neither Font nor Seydel responded to the question regarding the impact of the co-venture on the country. However, it is known that 40 more people are working and that the Central American Textile Industry is less dependent on foreign supplies, textiles, chemicals, and related products.

In general, both partners agree that is has been a successful co-venture because of the growth in sales and employment and because they have been able to overcome the differences that developed between them in the early stages of the project.

HOLE MASTER COMPANY, LTD.

LOCATION: 130 3KA Cong-Ro, Chongro-Ku
Seoul, Korea

TELEPHONE: 261-7412-3
261-9313

INTERVIEWEES: Mr. Sung Oh Choo, President
Hole Master Company, Ltd.

Mr. Yun Hoon Chung, President
IAM Company

SUBMITTED BY: Ann L. Becker
1800 R Street, N.W.
Washington, D.C. 20009

PREFACE

The Hole Master Company, Ltd., is a small/medium co-venture which was incorporated in 1976 in Seoul, Korea. The product on which the company is based is the twist drill, a cutting tool used to bore holes to exact specifications. Production is completely automated. What follows is some general background information about the host country (Korea), a history and description of the co-venture, and a discussion of project outcomes.

The data for this case study were gathered from several different sources. Country background information (Section II) was drawn mainly from several books and pamphlets about Korea and its business climate. Section II was principally compiled by Nicholas Owens, an economist formerly with The World Bank and now affiliated with the New TransCentury Foundation.

Material about the venture itself was collected during an interview with Mr. Sung Oh Choo, President of The Hole Master Company, Ltd., in Seoul, Korea, March 30, 1979. Also participating in the discussion was Mr. Kyung-Suk Ko of the Banking Department, Small and Medium Industry Bank. Additional information was provided by telex after the author's return to the United States and from phone conversations with Mr. Yun Hoon Chung, President of the IAM Company, Perryburg, Ohio.

COUNTRY BACKGROUND INFORMATION

Government Organization

The government of Korea is organized in a similar fashion to that of the United States, with the three main branches of government being the executive, legislative, and judicial. Government work programs are implemented through a variety of ministries (agriculture, industry) and special councils, committees, and authorities which deal with specific issues. Economic priorities and Five-Year Development Plans are established by the Economic Planning Board, which oversees major government operations.

Those ministries most involved in small enterprise development include:

1. Small and Medium Industry Bank -- implements credit guarantee scheme for small industry, which makes loans, serves as a bank, and promotes domestic and foreign exchange business for small industry.

2. Committee on Financial Assistance to Small Industry -- promotes cooperations between banking institutions for small industry financing, and between the government and these institutions.

3. Council on Small Industry Policy -- recommends appropriate small industry policies, and serves as a data bank for information necessary to support these policies.

4. Korea Productivity Center -- provides technical assistance to small enterprises on a regional basis.

5. Korea Exchange Banks -- promotes international business and trade for Korean businesses.

Business Community Infrastructure

Korea's business community infrastructure is well developed. Communications and transport systems are well developed, and there are a number of foreign exchange banks and trade associations assisting with foreign investment and co-ventures.

Foreign investment coming into Korea is channelled through the Economic Planning Board, the government's central planning agency. Within the Board there are three bureaus that have been established to deal specifically with foreign investment and co-ventures:

1. Office of Investment Promotion -- processes investment applications,

and provides material on investment costs and procedures in Korea.

2. Bureau of Economic Cooperation -- assumes control over business related to public and private loans and recommends as needed changes in the Foreign Capital Investment Law.

3. Bureau of Economic Planning -- prepares feasibility studies on proposed investment projects as requested by the Bureau of Economic Planning.

The small business development infrastructure is well established. The Small and Medium Bank, established in 1961, provides a variety of credit and financing services to small businesses under the Credit Guarantee Scheme for Small Industry, implemented by the Small Industry Credit Guarantee Council of the Bank. In addition, the government has established a number of small enterprise organizations such as the Gurodong Export Industrial Estate Unit, various industrial cooperatives, and the Council on Small Industry Policy which formulate and implement a number of small enterprise investment incentive schemes.

Economic Structure

The Korean economy, during the ten-year period 1963-1972, made significant gains towards becoming an industrialized economy. Aggregate economic growth averaged about ten per cent, and the industrial contribution to Gross National Product increased from 13 per cent to 25 per cent. Overall growth in manufacturing averaged 18.4 per cent, and the GNP contribution of agriculture, forestry, and fishery declined from 40 per cent to 25 per cent.

The structural shift in the Korean economy occurred with a large emphasis on small industry. During this time, small industry accounted for over 96 per cent of total industry establishments. Although the relative position of small industry declined during the period (employment in small firms decreased from 66 per cent to 46 per cent of total industry and production from 59 per cent to 28 per cent of the same), in absolute terms employment increased 46.8 per cent and production increased at an annual rate of 14 per cent.

The Korean economy is highly export-oriented, particularly the export of manufactured commodities. Primary exports include textiles (cottons, wools, silks, and synthetic fibers); ships (primarily tuna vessels); pottery and porcelain; processed fisheries products (shrimp, tuna); and minerals (primarily tungsten).

Domestically, emphasis is on developing industrial capacity for primary production processing to replace goods previously imported. Main industries being developed include cement, fertilizer, and power (mainly electric) production; a pig iron and steel industry; and assembly and production of automobiles. Agriculture presently employs about 40 per cent of the labor force, primarily on small farms. There is limited land available for expansion of cropping area,

and the Korean government is expanding the industrialization process rapidly in order to maintain employment levels and create new jobs in non-agricultural sectors.

Business Climate

Business in Korea is based on the principle of free enterprise, but there is a heavy goverment influence on the private sector. Investment priorities are determined by the Economic Planning Board through Korea's Five-Year Development Plans and financial markets are regulated by the Ministry of Finance and various government banks (Bank of Korea, Foreign Exchange Bank). The government is actively promoting the development of primary product processing and manufacturing industries, particularly those that are export-oriented.

The business climate is strongly oriented towards small enterprises. The government has established a number of programs and institutions promoting small enterprise development, including such things as industrial export estates and credit guarantee schemes. Foreign investment is also encouraged, particularly foreign investment in social overhead capitol and manufacturing processes. The government has set an annual ceiling on the amount of foreign capital that can enter the country, and has established high priority investment fields to guide the inflow of foreign funds into the country. Preferred types of foreign investment and co-ventures include direct equity investment or through provision of technical assistance. The government also has established a number of policies promoting decentralized small business development.

Co-Venture Investment Incentives

Korea's basic policies concerning foreign investment are set forth in the Foreign Capital Inducement Law (Law #1802, promulgated August 3, 1966). Under this law, incentives which are provided to foreign investors relate to the reduction and exemption of taxes, guaranteed remittance of dividends, reinvestment of profits and property guarantees. Additional incentives are concerned with foreign investment in an export-oriented business and investment guarantees.

HISTORY AND DESCRIPTION OF THE VENTURE

General Background

Mr. Yun Hoon Chung came to the United States from Korea about 25 years ago (after having spent the first 17 years of his life in China) to study engineering at the University of Michigan. He received his mechanical engineering degree in 1958 and worked for a few small companies in Ann Arbor. During this time, Chung made a few small inventions and began to recognize that he had some talent as an inventor-designer.

Shortly after his graduation, Chung invented a machine which packages free flowing granules such as salt and sugar. This machine became the basis of the IAM Company, founded by Chung in Ann Arbor in 1962. When the company needed additional space, Chung decided to locate it closer to a distribution center. Because of Toledo, Ohio's proximity to Interstate-80, Chung bought a building which was available on a former military base and moved his company there in 1967. IAM is presently worth approximately $12 million.

Over the course of the past 20 years, Chung has done an extensive amount of pioneering work in packaging technologies and is presently working on the development of asceptic packaging techniques. Because of his ethnic background and close ties to Korea, Chung wanted a role for IAM and himself in Korea's economic development. From the outset, he said that he was more concerned about the future of Korea than he was about making money. After starting IAM, Chung became involved in import-export activities with some Korean businesses. However, he soon decided that his skills did not lie in the "cut-throat" trading business. Instead, he recognized that his own inventive capabilities and inclination towards "hands-on" work were his greatest strengths and the probable basis of any entrepreneurial endeavors he might have with Korea. Not only did Chung feel that those were his greatest personal strengths, but he also felt that those were compatible with what he perceived as the strengths of the Korean people. He felt strongly that Korea should pursue economic development activities which could best utilize the ingenuity and the dexterity of the Korean people. According to Chung, the Koreans are generally very hardworking, skilled with their hands, and easy to train. Because of these characteristics, Chung felt that the machinery industry was a field in which other developing countries could not compete with the Koreans. According to him, development of the machinery industry would contribute to the development of a decent economic base and standard of living for the country.

Originally, Chung's ideas about how he could contribute to Korea's economic development began with his desire to develop a business based in Korea. He saw that as only a first step, to be followed by the establishement of a technical training facility in Korea, initially funded by the profits from the Korean-based business. Finally, he felt the need for the establishment of an organized worldwide network of experts from the private sector specializing in business, engineering, economics, etc., whose talents and resources could be tapped to

assist business and economic development in the developing countries. Inherent in Chung's "dream" is the understanding that building up the national scientific and technological capacity of a developing country is a complex process demanding innovation and educational changes throughout many different levels of society.

Origins of the Firm and the Start-up Phase

Chung began to pursue his idea of starting a Korean-based business more actively in the early 1970's. At this time, he was chosen to be a member of the American Economic Mission to Korea. This was a group of representatives of some 20 to 30 companies such as Sears Roebuck and Bank America who were asked to visit Korea as guests of the Korean government. They toured many companies and talked to many governmental officials. For Chung and the others, this was an opportunity to gain an up-to-date understanding of Korea and its ambitions.

Shortly after his trip to Korea as a member of the American Economic Mission, Chung was asked by a senior advisor at Battelle Memorial Institute, an old college friend, to consult for Battelle on the contract which it had with the Korean government to assist in the development of the country's third five-year economic development plan. Chung felt that his friend had asked him to participate because of his respect for Chung's engineering ability and his philosophy on industrial growth. Chung assisted Battelle on the contract by touring Korean industries and talking with many people there to study the needs of the Korean economy. During his travels to Korea, he identified the need for good machine cutting tools. One tool in particular caught Chung's attention. This was the twist drill manufactured by only one local company with what he felt was "primitive" manufacturing equipment. In addition, in the early 1970's, approximately 80 per cent of the twist drills in Korea were being imported. The Korean government's third five-year economic plan also mentioned the development of the cutting tool manufacturing industry as one of its top priority areas to encourage because of its new business potential.

Chung's approach to determining what kind of business to pursue was significant. His decision was based on careful assessments of local needs and capabilities along with a general understanding of the government policy climate which would have an impact on the success or failure of any such venture. Chung's understanding of the Korean economic, social, political, and cultural environment undoubtedly enabled him to move his business idea into a reality.

By the mid-1970's, Chung had decided to try to establish a twist drill manufacturing plant in Korea and had learned that a West German company was trying to dispose of some twist drill equipment because it was obsolete by German standards. Chung travelled to Korea and consulted with the Korean Institute of Science and Technology (KIST) about the viability of his business idea. After receiving affirmative advice, Chung began to seek a financial partner for the venture.

In spite of his visits to Korea in the early 1970's, Chung felt that his business contacts in Korea were limited. He lacked the resources for identifying and screening possible financial partners. Therefore, he sought out a relative by marriage, Ja Hack Koo, to determine his potential interest in the venture. Chung felt that Koo would be an ideal financial partner because of the Koo family wealth and because of Koo family contacts throughout Korea. Koo agreed to the establishment of the venture with the understanding that Chung would invest in the machinery and that capital required for the land site and construction of the plant buildings would be invested by Koo. The company was incorporated as a joint venture under the name of Solingen Tool Korea Company, Ltd., on March 3, 1976 (its name was changed to Hole Master Company, Ltd. on December 30, 1977).

Initial start-up costs were approximately $600,000 U.S. with $100,000 U.S. coming from Chung and Koo (49 per cent U.S. and 51 per cent Korean). $500,000 U.S. was acquired from the Commercial Bank of Korea.

In June, 1976, Chung went to Germany to buy the plant and have it shipped to Korea. Two problems which he had during this time were the difficulties in negotiating with the German company because he did not speak German and the length of time it took to ship the plant from Germany to Korea.

Sixty people were hired to establish the plant facilities between June, 1976, and September, 1977. Originally, Chung had arranged with the German company to have its technicians sent to Korea to help train the Koreans to install and operate the machines. This never transpired for several reasons. First, one of the key technicians had heart trouble and could not travel. However, and perhaps more significantly, Chung suspects that several of the Germans were afraid to go to Korea because they perceived the development of the twist drill manufacturing industry as a potential export competitor with the German drill manufacturing industry.

Following his failure to negotiate a technical assistance agreement with the German company, Chung contacted the Department of State's Korean desk. The Korean desk assisted him in identifying a U.S. company which was in the twist drill manufacturing business. This was the Fellows Company, a subsidiary of Inhart Industries (P.O. Box 399, Springfield, Vermont 05156). Chung went to Vermont to visit the Fellows Company and made arrangements through the International Executive Service Corps (IESC) for its past president, Mr. Barbear, to go to Korea to direct the set-up of the plant, the equipment assembly, and the training of the Korean engineers and technicians. Initially, Barbear spent three months in Korea, where, according to Chung, he "took charge of the whole thing". In addition to the previously mentioned tasks, Barbear spent many evenings writing construction manuals which explained all the steps involved in assembling and operating a twist drill manufacturing plant. Assisting Barbear were three technicians from the Fellows Company who spent three months in sequence providing assistance to the company. The first advisor assisted in the set-up and operation of the equipment, while the second was hired to advise about heat treatment, specifically, advice about the heat temperature to be applied on different size drills in order to ensure the best possible cutting performance. The third person provided guidance about managing a mass production system.

Six months after Barbear's initial stay in Korea, he was invited back to teach the engineers, with whom he had previously worked, additional skills, so that eventually foreign expertise would no longer be necessary.

Chung felt very positive about the contribution which Barbear made to the company. He thought that he and Barbear shared a common understanding about the growth of a co-venture between a developed and a developing country partners, namely the importance of starting small and growing slowly. This philosophy also applied to the purchase of equipment. While Chung originally purchased the used equipment from the German company, he carefully sought out some additional new equipment from other sources. In addition to the technical assistance provided by the Fellows Company, he bought an experimental machine from them for more advanced drill making equipment. A machine for heat treatment was purchased from the C.I. Hayes Company of Rhode Island. In addition to the "start small and grow slowly" outlook on the business, Chung and Barbear shared the understanding that the receiving country partner must demonstrate a sincere desire to learn about the new technology and that both partners must have an understanding of how to transfer the technology so that it becomes indigenous. This must be accompanied by recognition that building indigenous technological capacity is a slow and arducus task.

Production began in late 1977.[1] Mr. Sung Oh Choo was hired by Koo to become the president of the company. Prior to joining Hole Master, Choo had majored in philosophy in college and then worked with a leading Korean newspaper company as part of the planning and sales promotion staff. According to Choo, Koo recognized Choo's managerial ability and persuaded him to join the company.

When Hole Master began operating, it produced only the standard type drill which made a simple hole.

The marketing and promotion was carried out principally in two ways. The first and foremost is through a network of distributors located throughout Korea who are wholesalers of tools and parts and who deal with products of companies other than those of Hole Master. The product is also advertised in Asian Sources Hardwares for World Markets (See Appendix A).

[1] While the history and details of how the co-venture became established was described to the author principally by Chung, information about what happened when production began up through the present was almost exclusively provided by the Koreans. This apparent shift in involvement is significant for it appears to have had an impact on what has transpired between the two partners since that time. This will be discussed in greater detail under the "Growth and Stabilization" part of this section.

Growth and Stabilization Phase

Between 1978 and 1979, Hole Master's markets have expanded. Currently, 90 per cent of the sales are domestic and 10 per cent are for export (to the U.S., Canada, Saudi Arabia). Domestic sales are more profitable than export sales because of the higher unit selling price due to the timely support of varied sizes of products even in very small quantity. However, the company is spending more and more time developing export markets. One reason, according to Chung, is that continued development of export markets is the means of enabling Hole Master to mass produce and sell large quantities of drills. In addition, the Korean government provides many incentives to small and medium-sized enterprises, including specialized machinery industries, to help them develop export markets. Some of these incentives include the simplification of export regulations and low interest rates for raw materials which are imported for eventual export products. The government's policy regarding the promotion of industries having export potential has been formulated within the framework of Korea's successive economic development plans.

According to Choo, 1978 also was the time when the employees working in production became skilled in their work. The company regularly received technical consultancy from the Industrial Advancement Administration (IAA), a government organization under control of the Ministry of Commerce and Industry. Some of the types of consultancy are quality control advice on technical improvement through on-the-job training given by IAA technical advisors, the introduction to recent technical developments in other countries by the use of films, etc.

The number of employees has grown from 60 in 1976 to 130 with the majority of new additions in management and sales. (See Table 1.) Presently, there are approximately 150 distributors, many of whom now hold some inventories of finished goods.

According to Choo, sales revenues are steadily increasing. The company broke even in 1978 with a five per cent (5%) net profit from sales. Ten per cent (10%) is predicted for this year and 15 per cent in 1980. Choo anticipated that 1979 sales would be an 100 per cent increase over last year's sales.

Although the Hole Master Company is growing, it has not been without some difficulties. In February, 1979, Hole Master received a loan worth approximately $700,000 from the Korean Small and Medium Industry Bank. The money was intended to be used for acquiring machinery to enable Hole Master to diversify its product line. Choo was interested in producing specialty drills which make longer and bigger holes, e.g., a gun drill. At the time of the interview, Choo was fearful of investing in the additional facilities because of the additional working capital which would also be required for purchasing bulk quantities of raw materials, helping finance the work in progress, etc. Choo views limited access to working capital as a real barrier to expansion. Both Choo and Kyung-Suk Ko of the Small and Medium Industry Bank acknowledged the difficulties which small businesses comparable to Hole Master have in acquiring such loans because many banks are not willing to provide sufficient working capital loans as are required by young enterprises whose credit worthiness is not yet well established. Choo has discussed this problem with Koo who indicated that he would rather the company make enough

money and then reinvest it as working capital rather than tie up his own.

In spite of this difficulty, Choo is proud of the development and growth of Hole Master and feels that the company is doing well. The total assets of Hole Master are presently $2,702,758.

However, if success of the co-venture is measured according to criteria other than dollars, back in the U.S. Chung has a different attitude about what has transpired with the Hole Master Company. Shortly over a year ago, Koo contacted Chung and wanted to buy his shares of the stock. Chung refused. Koo then told him that the company was going bankrupt and suggested that he sell out. Suspecting that he was not being given a valid picture of what was happening, Chung sent his wife to Korea to examine the situation. She reported back that from all appearances the business appeared to be doing well and in addition, the land on which the plant was built was presently worth about one million dollars.

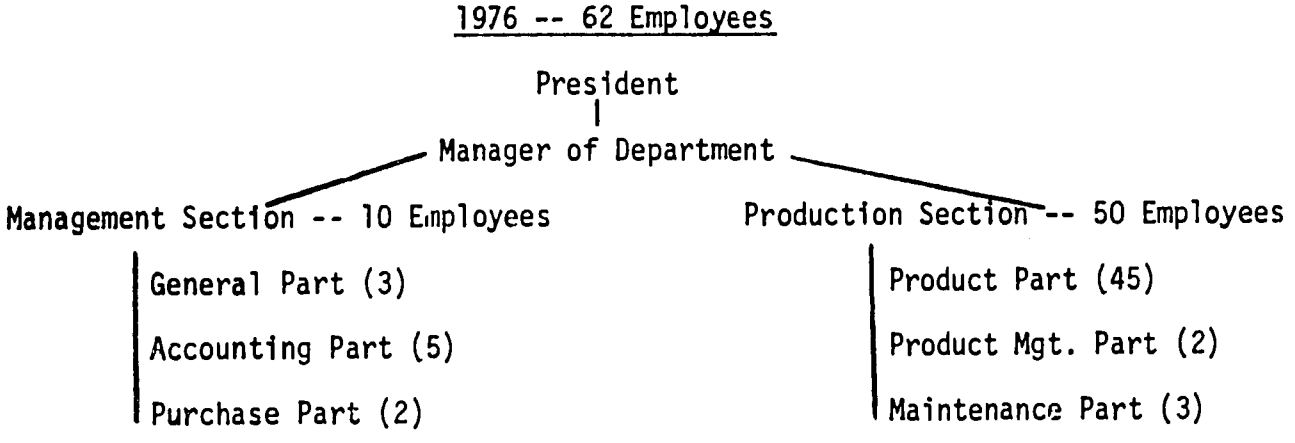
Since them Chung has virtually lost contact with Koo and what has been ahppening to Hole Master. Upon receipt of a mailgram sent from the author in early April, he contacted her by telephone and indicated that one of the reasons why he contacted her was to hear an up-to-date report from her on the company's progress. He is no longer being paid any dividends and is cintemplating withdrawing from the business.

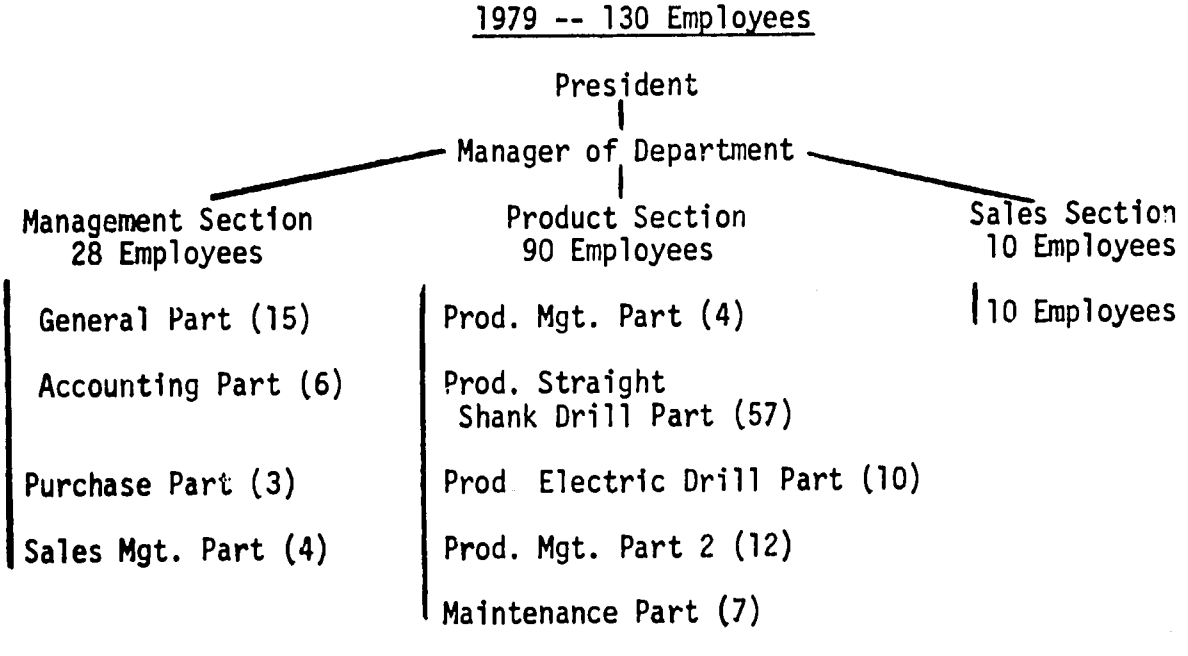
There appears to have been a breakdown in communications between the two partners. Chung feels that his partner's greediness and the fact that he lives so far away from the site of the business, making frequent communication extremely difficult, are two of the factors which have essentially destroyed the relationship between the two business partners. These two points indicate that a mutual trusting relationship between the two partners was never fully developed. What Chung had viewed as an "ideal" partnership evidently lacked the ingredient necessary for him to pursue business successfully without having an on-site presence to keep aware of what was happening on almost a daily basis. Koo apparently lacked any interest in Chung's desire to invest and develop a co-venture which would first contribute to Korean economic development and secondly be mutually beneficial to the partners.

In spite of this experience, Chung is anxious to pursue new co-ventures in Korea or other developing countries. He feels that he has learned from his mistake and that he can apply what he has learned by seeking future partners whose interests and goals are aligned closely with his own and with whom he can build a solid trust to ensure honest relationships. Chung's opportunity to do so may be provided by one of the new technologies which he is presently working to develop. That may also be the opportunity which will enable him to pursue his "dream".

TABLE A

Hole Master Company's Organization Chart and Number of Employees (1976 and 1979)





PROJECT OUTCOMES

According to Choo, in 1978, Hole Master produced 2,055,400 products, earned gross revenues of $1,092,000 and paid $147,000 in taxes. (This refers only to a value-added tax because co-ventures are exempt for paying income tax for the first three years according to Korean law; after that, the co-ventures are 50 per cent tax exempt for five years.) Another outcome which was mentioned previously was the steadily increasing number of people employed by Hole Master; the number of employees more than doubled between the time that plant construction began in the fall of 1976 and early 1979. These project outcomes already indicate several benefits which have been accrued from this co-venture. First, product sales have generated local tax revenues. Secondly, the export sales to date and steadily increasing export market potential is also significant; as stated previously, development of export markets will enable Hole Master to mass produce and sell larger quantities of twist drills. From a national perspective, the growth of industries having increasing export potential is significant in terms of foreign exchange for Korea and also in helping establish Korea in a more competitive and equitable position in the world market. Finally, the Hole Master Company has already provided jobs for over 130 people, making a small but significant contribution to the problems of domestic employment which face many of the developing and industrialized countries of the world today.

The project outcomes discussed above are those which can be mentioned in numbers and dollars. However, there are additional benefits derived from the Hole Master co-venture, which although they can not be measured in a similar fashion, are of no less importance. And, in spite of the fact that many people may discount one small co-venture's contribution to the economic development of a developing country as negligible, what is important to bear in mind is that the contribution of <u>many</u> similar small local co-ventures can make an impact on a nation's development.

The story of the evolution of the Hole Master Company co-venture is an example of the ability of a developing country to clearly define its national development goals (the promotion of small and medium-sized specializied machinery industries was within the framework of Korea's economic development plans) and then, through the co-venture process, have the technologies chosen to assist in achieving these development goals. The choice of the twist drill, so carefully researched by Chung, was responsive to national development policies and also indicative of the recognition that any imported or indigenous technology must be suited to local conditions if that technology is to be successfully transferred or adopted. Chung had assessed the Korean skill base before initiating the co-venture and had carefully arranged a technical assistance agreement with the people from the Fellows Company, especially Mr. Barbear, which could enhance the indigenous technological capability of the Koreans by upgrading local skills and building on already existing capabilities which Chung felt were inherent in the Korean people. This represents one small step towards increasing Korea's technological self-reliance. It can be seem in the fact that the original technical assistance was provided to Hole Master almost exclusively by people from developed countries; now, according to Choo, most technical consultancy is provided by the Industrial Advancement Administration, an organization of the Korean government.

The Hole Master co-venture is also significant in that it has also contributed to a greater diversification of the local Korean economy. Prior to Hole Master, Chung mentioned that there was one domestic company which produced the twist drill with what he termed "primitive" equipment and that the majority of the other drills were imported. Hence, Hole Master has broadened the range of technological options from which people can choose to meet certain needs.

Finally, the Hole Master Company co-venture is particularly significant in light of the upcoming U.N. Conference on Science, Technology and Development and a U.S. foreign policy that stresses scientific and technological cooperation as an important component of U.S. relations with developing countries. Chung's experiences in initiating and attempting to carry out a co-venture have indicated many possible areas where U.S. assistance would have been welcomed. Such assistance could contribute to the development and growth of an incrasing number of small and medium-sized co-ventures which would help strengthen developing countries' scientific and technological capabilities and assist in their efforts to achieve greater equity in the international arena.

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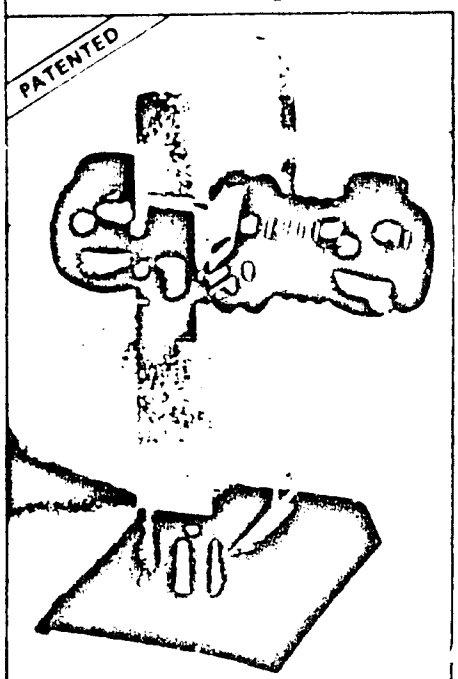

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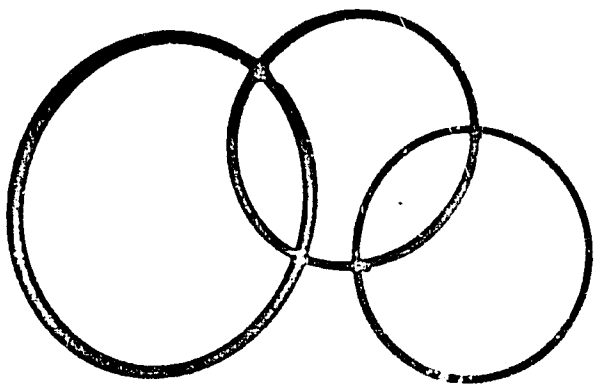

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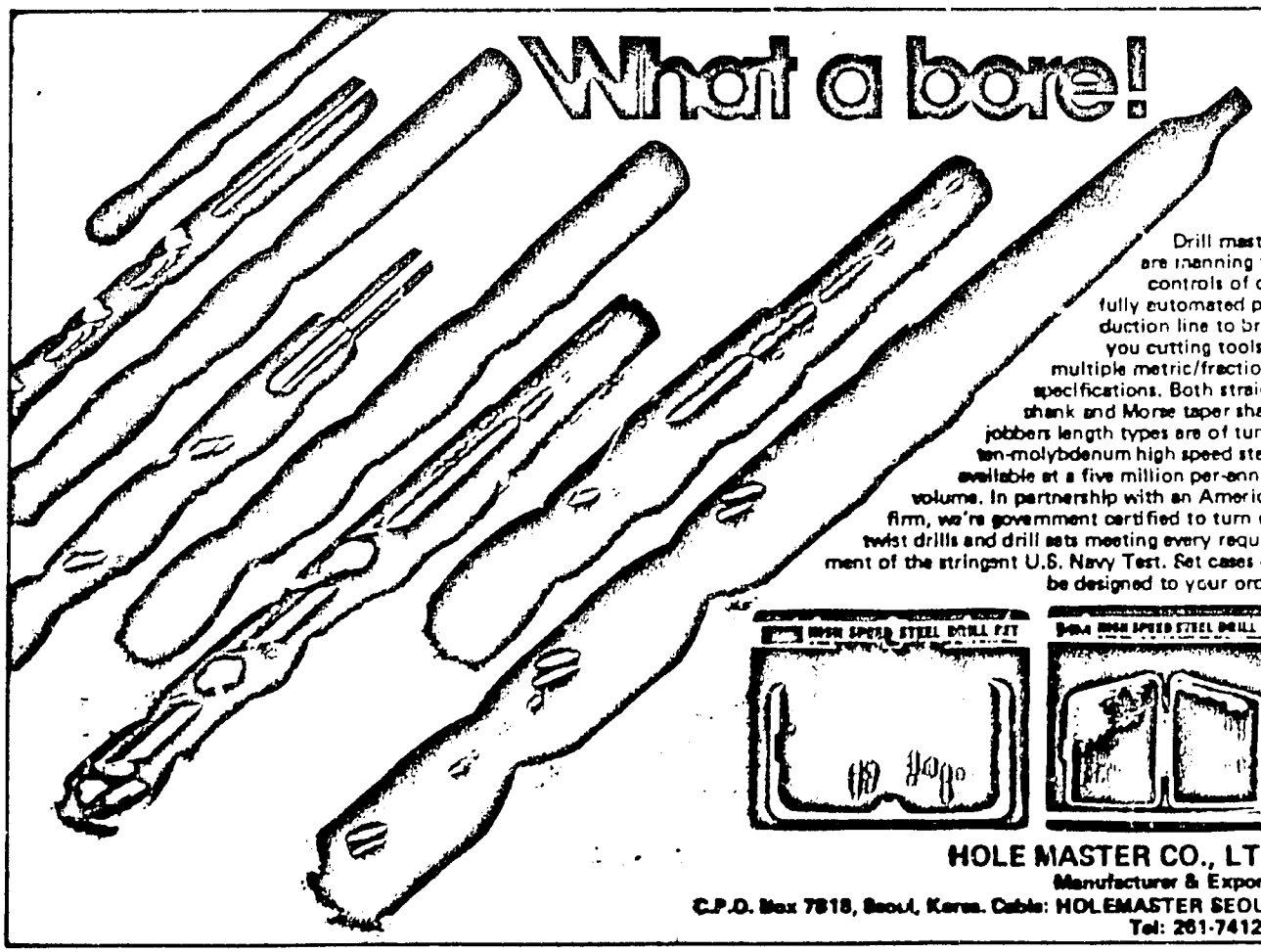

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Vicente Madrigal Building
Ayala Avenue, Makati
Metro Manila, Philippines

TELEPHONE: 85-42-13
85-41-48

TELEX: 3503 Alinde PN

INTERVIEWEES: Arsenio Uy, Executive Vice-President
Albay Agro-Industrial Development Corporation

Shoichiro Yamamoto, Managing Director
Yamamoto-Tomo Menko, Ltd.

Hiroshi Takusari, Manager, Foreign Department
Yamamoto-Tomo Menko, Ltd.

SUBMITTED BY: Ann L. Becker
1800 R Street, N.W.
Washington, D.C. 20009

PREFACE

The Albay Agro-Industrial Development Corporation (hereafter referred to as ALINDECO) is a small/medium scale co-venture which was incorporated in 1974 in Manila, Philippines. The company processes abaca fiber (abaca is a plant which is native to the Philippines) into abaca pulp sheets to be used as specialty paper for such items as Japanese yen notes, caligraphy arts, tea bags, stencil paper, and other. What follows is some general background information about the host country (Philippines), a history and description of the venture, and a discussion of project outcomes.

The data for this case study was gathered from several different sources. Country background information was drawn mainly from several books and pamphlets about the Philippines and its business climate. This material was principally compiled by Nicholas Owens, an economist formerly with the World Bank and now affiliated with the New TransCentury Foundation.

Assistance in identification of ALINDECO as a case study was provided by Mr. Faustino Agbada, Assistant Executive Officer, Industrial Projects Department, Development Bank of the Philippines (DBP).

Material about the venture itself was collected during an interview with Mr. Arsenio Uy, Executive Vice-President of ALINDECO on March 21, 1979. Additional information was provided from Uy by telex after the author's return to the U.S.

A second interview was conducted on March 22, 1979, with Mr. Shoichiro Yamamoto and Mr. Hiroshi Takusari, Managing Director and Manager of the Foreign Department, respectively, of Yamamoto-Tomo Menko, Ltd., Tokyo, Japan. Both interviews were conducted in the Manila office of ALINDECO, although the plant is located in the Albay provide of the Bicol region. Follow-up correspondence with Yamamoto provided additional material for the case.

Mr. Menardo Jimenez, President of ALINDECO, was not interviewed by the author. The information about Jimenez which is presented in the following pages was obtained during the interviews with Uy, Yamamoto and Takusari and through the additional background material provided by Agbada.

COUNTRY BACKGROUND INFORMATION

Government Organization

The government of the Philippines is similar to that of the U.S. in organization. The three main branches of government are the executive, the legislative, and the judicial. The country has one major political party, the government-supported New Society Party, which holds most elected positions.

Government work programs are implemented through a series of subject specific ministries (Agriculture, Education, Industry), and a number of special commissions and authorities. Those government agencies most active in development programs include:

- o Ministry of Industry -- in particular, the Bureau of Small and Medium Industry Coordination Action Program.
- o Commission on Small and Medium Industry -- an inter-governmental policy development and economic unit assisting small business development.
- o Trade Assistance Center -- provides marketing and technical assistance programs to small enterprises; also acts an linkage between different government agencies and private trade associations working in small business development.
- o National Cottage Industry Development Association -- provides technical and marketing assistance to cottage industries.
- o Development Academy of the Philippines research group, which engages in market research, information networking, policy analysis, and technical assistance programs for small enterprise development.

Economic Structure and Resource Base

Over 50 per cent of the country's labor force (estimated to be about 14 million people at present and expected to increase to about 30 million people by the year 2000) is currently employed in agriculture; industry and commerce are concentrated in the larger urban areas.

The country is well endowed with natural resources; the Philippines is the world's leading producer of coconuts, and has significant forest and mineral resources. The country's natural resource wealth is shown by the fact that the country's main exports are primary products (timber, coconuts, copra, sugar, copper concentrates, bananas, molasses, canned pineapple). The country has an abundant labor force which the government is actively seeking to develop.

Business Climate and Government Incentives for Co-Ventures

The government annually published an investment priorities plan which identifies primary economic areas open for investment. The following sectors are areas in which foreign investment is being encouraged:

- o Labor-intensive export-oriented manufacturing activities. These include such product groups as garments, electric components, and foundry products.

- o Processing of natural resources for export, including such things as tropical lumber and bi-products and processing of coconut oil into chemicals and industrial materials.

- o Domestic industries producing intermediate goods and components; for example, light agricultural, industrial, and transport equipment.

Foreign investment and co-ventures are actively encouraged by government through a series of special investment incentives acts. The two major investment acts which the government has passed to stimulate investment in preferred areas of activity are the Investment Incentives Act and the Export Incentives Act. These acts provide a number of incentives (primarily tax deductions and depreciation allowances) and guarantees (such as freedom from expropriation without due compensation except in times of national emergency), to foreign/Filipino co-venture firms. In addition to these two general acts, two more specific acts, the Tourism Industry Incentives Act and the Agricultural Investment Incentives Act have also been passed. The Agricultural Investment Incentives Act grants firms the same guarantees and incentives as the former two acts and is intended to ensure balanced growth between industry and agriculture by making the latter sector attractive for investment.

Areas of preferred economic activity for investment under these acts are set by the government through the following classification schemes:

- o Pioneer firms -- firms engaging in the manufacture or production of commodities not currently produced in the Philippines on a commercial scale. These firms are also identified as preferred or non-preferred, with the former receiving the maximum incentives under the incentives acts:

- o Non-pioneer firms -- existing or on-going commercial enterprises, also classified as preferred or non-preferred, whcih have opportunities for export or domestic market expansion.

One particularly important government criterion which applies to foreign firms interested in investing in the Philippines is that co-venture firms must have at least 60 per cent Filipino capital in the firm's equity at the time of commencement of activities. The exception to this are preferred pioneer industries open to 100 per cent foreign capital financing initially but which must achieve an equity capital balance of 60 per cent/40 per cent Filipino/foreign

within a prescribed number of years (generally 30 to 40). This criterion is designated to inhibit the dominance of Filipino business activity by foreign-owned companies.

HISTORY AND DESCRIPTION OF THE VENTURE

General Background

The Abaca Corporation of the Philippines was a government corporation organized in 1955 to accelerate the development of the abaca industry. It was given the power as a private corporation to but abaca fibers from producers and sell directly to world buyers to eliminate middlemen. It also established mechanized decorticating plants in major abaca producing provinces.

The Abaca Corporation of the Philippines was the "meeting ground" for Menardo Jimenez and Shoichiro Yamamoto, the two key people who helped make the Albay Agro-Indsutrial Development Corporation a reality. Jimenez, who had received a B.S. degree in Commerce from Far Eastern University, joined the Abaca Corporation in 1956 and eventually rose to the position of Assistant General Manager.

Shoichiro Yamamoto received a law degree from Kyoto University. After graduation, he went to work for the Marubeni Corporation for 12 years where he specialized in the trade of flax, abaca, sisal, and similar kinds of fibers and waste for spinning, cordage, and paper making as well as their related products.

During this time, Jimenez, Yamamoto and another man Hiroshi Takusari became acquainted because Marubeni was one of the Abaca Corporation's buyers. One of the topics which Jimenez frequently discussed with foreign corporations and businessmen, including Yamamoto, was his belief in the necessity for continuous production of abaca into cordage, pulp, and twine.

In 1963, Yamamoto left the Marubeni Corporation and became the Managing Director of his family's business, Yamamoto-Tomo Menko, Ltd., a company which specialized in the importation and exportation of various fibers, pulp, and pulping materials and machines, spinning machines, and the processing of cotton and thread waste. Takusari also joined the company as Manager of the Foreign Department. Six years later, Jimenez resigned from the Abaca Corporation (it was abolished in 1970) and became the President of M.A. Jimenez Enterprises, Inc., a company which handles trading, the exportation of handicrafts, and marketing and management consulting.

In spite of his departure from the Abaca Corporation, both Jimenez and Yamamoto remained in frequent communication with one another.

Origins of the Firm and the Start-Up Phase

In the late 1960's, there was a renewed interest in paper made out of abaca. The prices of high grade papers had increased, and abaca became more readily available since rope manufacturers, who had previously used most of this supply, had turned to using synthetic fiber.

At about the same time as the renewal of interest in paper made from abaca, Yamamoto had recognized while working for the family company that the spinning business in Japan was no longer able to compete with the developing countries. He was intrigued by the idea of converting abaca fiber into abaca pulp for the manufacture of such things as specialty papers which he knew could not be replaced by synthetic fibers. Yamamoto was also aware that the Philippines was the biggest producer of abaca fiber and that abaca fiber had been used to make Japanese yen notes since the 1940's. In fact, the Printing Bure-u of the Ministry of Finance of Japan purchased raw abaca fiber from Yamamoto's company. In addition, the Bureau had started buying abaca pulp from Kanlubang, a Philippines pulping mill, because pulping costs were steadily increasing and Japanese pollution controls on such manufacturing processes were extremely strict. The Bureau eventually found it too difficult to continue pulping, so it gave up buying raw abaca and switched exclusively to the purchase of abaca pulp. As a public agency, the Bureau had to have at least two supply sources to encourage healthy competition, so it encouraged Yamamoto to put up a pulping plant in the Philippines.

By the early 1970's, it was clear that the stage for a Filipino/Japanese co-venture had been set. Jimenez, Yamamoto, and Takusari had been professional acquaintenances for several years and had shared past business experiences and common business interests. The men had also been in almost constant communications with one another since Jimenez had left the Abaca Corporation. In addition to a close and trusting relationship between Jimenez and Yamamoto, the business climate was conducive to such a co-venture; there was a renewed interest in abaca because rope manufacturers had switched to synthetic fibers, and the Japanese government had made known its intentions to diversify its suppliers of abaca pulp which it needed for paper for currency. All of these factors were coupled with the fact that both Yamamoto and Jimenez were acquaintenances with Governor Felix Imperial, Governor of the Albay province in the Bicol region of the Philippines. According to Yamamoto, the Governor, who was formerly affiliated with the Abaca Corporation, had always had a dream to install an abaca pulp manufacturing plant in the Philippines.

Yamamoto also maintains that although the establishment of an abaca pulping mill in the Philippines had been an idea discussed among Yamamoto, Takusari, Jimenez and Governor Imperial some 15 years earlier, the timing for the co-venture was not ripe until the Japanese printing bureau announced that is was about to switch to importing abaca pulp in 1974. Consequently, in January, 1974, Yamamoto and Takusari went to the Philippines on several different occasions (each of two to four week duration) to conduct feasibility studies and work out a realistic business plan with Jimenez.

Yamamoto and Takusari did much of the initial feasibility studies themselves. the Japanese printing bureau was shifting rapidly from raw fiber to abaca pulp and unless they moved as quickly as possible, the business opportunity would have been lost. They researched almost all aspects of the co-venture themselves, especially the technical details. The one aspect of the potential business on which much research was not done was marketing, because they were almost assured that the printing bureau would be a major buyer.

Assistance on the feasibility was provided by Arsenio Uy, now Executive Vice President of ALINDECO, Governor Imperial and C. Duran, one of the present Filipino stockholders. They researched the feasibility of the proposed plant site, the economic situation and business climate of the Philippines, relevant legal details, especially those covered in the Investment Incentives Act of the Philippines, and contacted the various governmental officals and agencies with whom the Japanese needed to meet. According to Uy, a decision to build the abaca plant in Malinao, Albay, was based on several factors. First, the Bicol region had an adequate supply of raw materials and an adequate water supply; proximity to raw materials would keep transport costs to a minimum. Secondly, abaca fiber would be supplied by local abaca dealers and plantation owners. Other factors included the abundance of labor in the Albay area and proximity to the port of Tabaco.

ALINDECO was registered with the Philippines Securities and Exchange Commission in early 1974. ALINDECO was also registered under pioneer status with the Board of Investments for the manufacture of unbleached abaca pulp sheets at 3.3 metric tons per day conforming to BOI approval.

An Equipment Sale and Technical Assistance Contract was negotiated between Yamamoto-Tomo Ltd. and ALINDECO. The abaca pulping machinery and equipment were imported for the project from the Shinko Brains Corporation of Shizuoka through Yamamoto's company after the Board of Investments had approved ALINDECO's request to open letters of credit for importation of the machinery. Included with the contract was the following technical assistance:

-- Instructions on the assembly and installation of the abaca pulping machinery and equipment;

-- Instruction on the test run and actual operations of the plant;

-- Shinko Brains Corporation's specifications sheets, operation and maintenance standards and drawings.

Although the construction of the plant, begun in 1975, was locally contracted and three local engineers were hired to manage the construction and eventually take over operation of the plant, the Equipment Sale and Technical Assistance Contract also provided that engineers from both Shinko Brains Corporation and Yamamot-Tomo Menko Ltf. supervise the machinery installation and test runs, and supervise the first six months of activity.

In addition to the Equipment Sale and Technical Assistance Contract, ALINDECO negotiated a sole distributorship agreement with Yamamoto-Tomo Menko Ltd. for the sale of its production of unbleached abaca pulp sheets. The agreement applies only to markets outside the Philippines. ALINDECO may sell up to 10 per cent of its entire production within the Philippines.

Initial start-up costs were approximately one million dollars. This included a foreign cash loan of approximately $400,000 U.S. with the remainder being split between the Filipinos and the Japanese originally on a 70 per cent/30 per cent basis. (Following BOI registration, the rates of capital participation were revised to 60/40 respectively.)

The $400,000 foreign cash loan was secured on a 50/50 participation basis from Yamamoto-Tomo Menko, Ltd. and tanaka Heiji Shoten, Ltd., Part; the latter is a Japanese company which purchases and sells paper manufacturing materials and which provided 15 per cent of the initial Japanese investment in the venture. The loan, which was secured from the Japan Export-Import Bank (EXIM Bank), was used to finance the importation of equipment. Local construction work and initial operating costs came from the original paid-up capital of the corporation and short term loans from local commercial banks.

According to Yamamoto, arranging for the loan was an arduous task. First, the paper work submitted to the EXIM Bank was lengthy and complicated. Secondly, the EXIM Bank required that the Development Bank of the Philippines (DBP) guarantee the loan before it was granted. However, since the DBP was also a government entity, there was additional "red tape" including the fact that some of the Philippines regulations were inconsistent with Japanese laws. Two vital months passed before the EXIM Bank and the DBP could reach consensus on the loan guarantee. The loan was guaranteed at an interest rate of ten per cent (10%) per annum in 11 equal semi-annual installments including principal and interest commencing on the twelfth month from initial date of remittance.

In contrast to Yamamoto, Uy did not identify any specific problems related to financing. He attributed this to several factors, including the fact that ALINDECO was registered with the Board of Investments and that it was an export-oriented company. Uy also felt that the DBP was sincerely interested in ALINDECO and similar companies because he mentioned that the DBP gave loans to improve existing abaca plantations or establish new ones in order to strengthen the abaca industry in the Philippines. DBP assistance to the planters enabled them to produce more abaca fiber so that the manufacturers of abaca pulp would always be ensured of sufficient supply.

ALINDECO became operational in mid-1976. Jimenez, as its President, was responsible for budget matters and overall policy decisions. Uy was much more involved in day-to-day operations of the firm, including daily contact with the plant, and the technical and financial aspects of the company. Production was supervised by Victor Remon, a civil engineer and one of ALINDECO's stockholders. Antonio Claro was hired as a plant manager to oversee the firm's manufacturing operations. According to Yamamoto, although the official responsibility of the Japanese partners was solely within the scope of their investments, he and Takusari were actually consulted on all aspects of the business; everything related to the company's business except for minor or routine details had to be referred first to the Japanese in advance of any company management decision. The company management has adopted a policy of consultation with the Japanese investors in all aspects of operations and this consultation policy has become a two-way affair.

Stabilization and Growth Phase

Since operation of the plant began, ALINDECO has grown gradually, although not at the rate which was originally anticipated. For instance, both the Filipinos and the JApanese thought initially that it would take two years for the company to break even, but now it appears that 1979 will be the first breakeven

year. In addition, it was also anticipated that the company would employ over 200 Filipinos; in actuality, employment has risen from approximately 80 Filipinos when the plant became operational in lid-1976 to 120 in early 1979.

Both the partners are not bothered by the fact that ALINDECO is not in the exact position in which they had hoped it would be by now. They feel that it is more important that ALINDECO is ahead of schedule on its loan repayments, has no major cash flow problems, and has solid financial projections. The growth of the company can be measured in its gradual increase in the number of employees, the increased production of abaca pulp sheets (from 231.65 metric tons for six months in 1976 to a projected 1200 metric tons per annum this year), and total assets now worth almost 1.5 million dollars. Additional loans of approximately $250,000 U.S. from commercial banks in Manila and $250,000 U.S. from commercial Japanese banks have been acquired from commercial banks between 1976 and 1978 to improve facilities, optimize production, and modernize equipment.

Yamamoto and Takusari have also been spending more time travelling outside of Japan to develop new markets in the Far East, where, according to Yamamoto, the interest in specialty paper is rapidly growing. In June, 1978, a deal was negotiated with a Far Eastern company for abaca pulp sheets which will be used for the manufacture of caligraphy paper and cigarette paper.

When asked about any company management changes during the past three years, Uy mentioned that the same people who began in the management of the company still have the same roles and responsibilities; there have been no changes of any significance. On the other hand, based on the Technical Assistance Agreement, the Japanese investors have consistently advised ALINDECO on crucial matters relative to the transferred technology. Takusari visits the Philippines (both the Manila and plant offices) frequently, whereas Yamamoto visits approximately twice a year. Yamamoto and Takusari are consciously working to train the Filipinos who now run the plant in Albay on all technical matters, to eventually be able to carry out the manufacturing activities without continuous guidance from the Japanese. From the author's perspective, the roles and responsibilities of the Filipinos and Japanese are gradually shifting in a manner and pace which appears to be mutually satisfactory.

While Yamamoto and Takusari generally feel good about ALINDECO's progress, they are very conscious of the difficulties in doing business with a country where the way of life and thinking is very different from that of their own. Although Jimenez, Yamamoto, and Takusari have shared the same interests and known one another well for many years, Yamamoto and Takusari have felt a major difference between the general attitude and outlook of the Filipino plant worker and standard Japanese worker. Sensitivity to this and other differences has enabled the Japanese and the Filipinos to develop an on-going, productive working relationship.

There are also external factors of concern to Yamamoto which could potentially obstruct future growth of the business. These include an unstable economic situation with ever-worsening inflation, the constant imbalance of international

payments, tight money with extremely high interest rates, and sudden possible changes in government policies.

From the start of the venture, it has been Yamamoto's desire to bring ALINDECO to a stable position in the Philippines. He is hopeful that ALINDECO has given everyone involved not only experiences for further developments in abaca pulping, but in other agro-industrial fields of business as well. More generally, despite the previously mentioned difficulties, Yamamoto would like to encourage other people from developed countries to pursue business opportunities with developing country partners providing they have identified the appropriate people and location, have ample resources, and access to enough money.

PROJECT OUTCOMES

Several statistical figures indicate the rate and amount of growth of ALINDECO between mid-1976 and early 1979. As mentioned previously, the number of employees has approximately doubled, a small but positive contribution to the employment situation in the Philippines despite the fact that the number of jobs created did not meet the original projections.

Gross revenue has tripled between 1976 and 1978 when it was approximately $160,000. The taxes paid in 1978 were about $7,000 as compared with about $1,000 in 1976. These figures are significant in that product sales have generated local tax revenues and steadily increasing export sales are valuable not only for the growth of the company but also for Philippine foreign exchange.

While it is important to examine the growth of ALINDECO and its contribution to the Philippine economy within the context of the above statistics, there are several additional benefits derived from the ALINDECO co-venture which should be mentioned.

As mentioned on previous pages, Yamamoto and Takusari have spent a considerable amount of time in the Philippines working with the company management in Manila and also at the plant in Albay. The success of the Filipino/Japanese working relationship which has involved the local use of foreign expertise and technical assistance on a fairly regular basis is indicative of successful collaboration between two developed and developing country parties who are very different in terms of culture and experience. However, Yamamoto and Takusari have indicated their intent to move from a close collaborative relationship to one in which more and more of the technical responsibility is transferred to the Filipinos. This is another small example of an attempt to enhance the indigenous technological and organizational capabilities of a developing country. The ALINDECO co-venture has been an opportunity for Uy and some of the other young Filipinos to gain entrepreneurial experience and training and thereby contribute to strengthening and broadening the pool of your entrepreneurial talent which exists in the Philippines.

The ALINDECO co-venture is also significant because it provided employment opportunities in a village in Albay for many of the laborers who had already been living there. While the abaca pulp manufacturing plant undoubtedly made a contribution to the standard of living in this particular village, it is important that it provided employment opportunities in a rural area. It did not exacerbate the regional imbalances which exist in most developing countries where many of the rural areas are being depleted by the migration of people to already overcrowded urban areas which hold few new job opportunities. In addition, ALINDECO created important non-farm jobs appropriate to the infrastructure and labor skill requirements of the particular rural area of which the Albay province is a part.

The ALINDECO co-venture has provided two other benefits which should be mentioned. It has indirectly improved the income of some of the abaca planters for whom it has become a steady customer. It has also been the impetus for the establishment of an affiliate venture which, according to Uy, is planning to enter the abaca planting business.

All of the above benefits which relate to rural employment relevant to the needs and skill level of the local people, an increase in the number of non-farm jobs, and the growth of new rural enterprise contribute to the rural development of the Philippines.

COUVOIR DE NASSEN, S.A.

LOCATION: Nassen, Tunis

TELEPHONE: 207.214

TELEX: 13.784

INTERVIEWEES: Mustapha Chatti, President Director General
Les Couvoirs de Nassen, S.A.
Nassen (Tunisie)
Telephone: 207.214; 207.223
Telex: 13.784

Frank Smit
Netherlands Finance Company for Developing Countries
Nassaulaan 25
P.O. Box 85899
2508 CN, The Hague - Holland
Telephone: 070-61.42.01
Telex: 33042 Nefmo NL

Ing. H. Steenbeck
Euribrid
Euribrid B.V.
P.O. Box 30, 5830 AA Bo
Boxmeer - Holland
Telephone: 08855-2051
Telex: 48080

SUBMITTED BY: Vicki Smith Downing
2800 Routh, Suite 243
Dallas, Texas 75219

OVERVIEW OF HOST COUNTRY

Government Organization

Tunisia is governed by the Destourian Socialist Party (there are no opposition parties), which conducted the struggle for independence. The country is a constitutional republic and has three main branches of government: executive, legislative, and judicial. The executive is headed by the Office of the President, elected for five-year tenure. The President is assisted by a self-appointed cabinet headed by a Prime Minister. The legislative branch is comprised of the 112 member unicameral National Assembly elected concurrently with the president. The judiciary is headed by the independent Court of Cessation, whose judges are appointed by the president.

Government programs are carried out by subject specific ministries and banks, of which the following are most active in the development process:

- Tunisian Investment Promotion Agency
  Promotes and regulates investment, both foreign and domestic, in the country.

- Ministry of Planning
  Responsible for formulating the country's development plans and establishing development priorities.

- Ministry of National Economy
  Issues licenses to co-ventures on basis of API opinion. Responsible for Special Agreements granting extraordinary conditions favorable to the Investor.

- Capital Investment Commission
  Examines and judges projects for the API Board of Directors depending on size and sensitivity of project within thirty days of application.

Business Sector

Traditionally, the business sector in Tunisia has been organized on a collective basis. The sector was organized into collective unions, such as the Tunisian Union for Industry, Commerce, and Crafts, and the Tunisian General Union of Labor. These unions were given responsibility for developing industrial and training development programs and designing general worker condition policies. However, success with the collective system was mixed, due to a lack of production incentives. Since 1969, the government has implemented a number of tax incentives designed to encourage free enterprise in production, and the country has a favorable attitude towards private enterprise co-venture production oriented projects. The government is still very concerned about increasing the social distribution of development benefits and uses the tax system to balance free enterprise and social benefits.

Infrastracture, Resources, and Economic Structures

The Tunisian economy has been characterized by high growth rates during the 1970s (annual average 7.5% for 1973-76). The country has reasonable oil reserves, producing enough to satisfy domestic needs and to supply one-third of export earnings. Other main exports include olive oil, phosphorus, and a number of agricultureal commodities (grapes, fish). About one-half of the labor force is employed in agriculture, the industry employs another 20%.

However, the country has had problems with employment creating and balance of payments deficits. The country is reliant on imports as a source of semi-finished goods, machinery and equipment, and consumer goods. To offset these problems, the government is placing emphasis on expanding agricultural production and on creating food processing and textile industries. To a large degree, the government is encouraging foreign investment to help overcome these problems, in particular, labor-intensive export production oriented investment.

Investment Opportunities

Tunisia is actively encouraging foreign investments and co-ventures in manufacturing and has passed a comprehensive investment incentive law (law 74-74, August 3, 1974) covering the above. The law is implemented by the Tunisian Investment Promotion Agency (API) and includes the following incentives and convenants:

- Foreign investments of any type are required to be licensed by the API.
- Licensed, or unopposed (new manufacturing industry) investments are granted tax concessions such as: tax on only 50% of corporate profits and exemption from excise duties on imported capital goods necessary for production; and tax benefits for the number of jobs created (e.g., creating 150 permanent jobs lowers the taxable profit of a firm to 10% of the total profit).
- Licensed and unopposed investments have a transfer of foreign exchange capital and income guaranty.
- Additional concessions (e.g., Tunisian government financing of infrastructure projects) are granted to projects having a high proportion of Tunisian value added in the manufactured product.
- Territorial zones are created throughout the country to provide the above incentives to firms locating within these zones.

It is recommended that persons interested in establishing co-ventures in Tunis obtain the following publications for more explicit information:

- The Industrial Investor's Guide to Tunis
- Law 74-74 of 3 August 1974
  Relative to Investments in the Manufacturing Industries
  (Producing for the Domestic Market)
- Special System Applicable to Exporting Industries
  (Law 72-38 of 27 April 1972)
- Basic Collective Agreement
  (June 1, 1973)
- Social Legislation for Workers and Labor Costs in Tunisia

They may be obtained by writing:

The Investment Promotion Agency of Tunisia (Agence de Promotion des Investissments)
17, Rue Bel Hassen Ben Chaabane, Tunis

HISTORY AND DESCRIPTION OF THE VENTURE

Background

Couvoirs de Nassen, S.A. (CDN), a Tunisian-Dutch co-venture created in 1974, is comprised of two distinct divisions: A chicken hatchery and a poultry food mill. CDN is the second of three interrelated businesses, all concerned with agriculture and food production and all created by the Chatti family of Nassen, Tunisia. These businesses are housed in a compound located at Nassen, Tunisia, a small village near Tunis, Tunisia.

The mother company for these enterprises is the Societe Civile de Exploitation Agricole (SCEA), which was created to import one-day chicks for the local broiler market. Couvoirs de Nassen, the second company, was created to develop locally hatched one-day broiler chicks and also to produce poultry food. The third company, Avidev, was created recently to provide eggs for the commercial food market. Couvoirs de Nassen has from its beginning had two Dutch equity partners, one being the Netherlands Finance Company for Developing Nations (FMO), and the other, Euribrid-Hendrix. There are also two Tunisian equity investors: M. Chatti and SCEA.

Background of the Partners

The Tunisian Partners/M. Chatti and SCEA. Mustapha Chatti and his brothers, Hedi Chatti and Khelifa Chatti, form the core of owner/management for Couvoirs de Nassen. Mustapha Chatti, the entrepreneur who spearheaded the CDN co-venture, is a Paris-educated (Doctorates in both Public Law and Economics: University of Paris) Tunisian, who has had many years of experience in high level government

positions in Tunis. In recent years, he has acquired "hands on" business experience from his association with the original Chatti family business, Societe Civile de Exploitation Agricole. As the oldest of the three brothers, and in the traditional cultural pattern of Tunisia, he provides leadership in all of these ventures.

Both Hedi Chatti, an engineer, and Khelifa Chatti, an economist, are fully active in the management and development of each of these businesses. There is, according to one of the Dutch associates, obvious camaraderie among the three brothers and a strong common will to build a viable enterprise.

A Dutch Partner/Euribrid-Hendrix. Euribrid-Hendrix, Boxmeer, Holland, a privately owned company, is the second largest poultry company in the world. The Euribrid business concept is based on developing long-term client relationships through emphasis on excellent products sold in conjunction with extensive marketing and technological support services, including research, quality control, and distribution systems unparalleled in the industry. In effect, Euribrid becomes a partner with its clients in developing new business and in maintaining high quality products backed up by regular technical supervision. Euribrid products are among the most expensive on the market.

The company reflects very strongly the values and principles of the founder and entrepreneur, Mr. Hendrix, particularly his dedication to excellence. This is evident in Euribrid's commitment to customer service and marketing support designed to assist Euribrid clients in identifying, developing, and maintaining the client's market. Additionally, Euribrid's technical support in the area of quality control for animal and food products is of the highest quality available in the industry. Further, Euribrid clients benefit from their participation in domestic and international product competition. An international reputation for product excellence, based on continuous and sophisticated genetic research, strengthens the Euribrid client's own market position simply through association with an acknowledged, award-winning industry leader. This co-venture marks the first and, to date, the only instance of the company's participation as an equity partner in a developing country enterprise.

A Dutch Partner/FMO. The Netherlands Finance Company for Developing Countries (FMO) is a wholly Dutch government-funded institution whose primary objective is:

> to make a contribution to the advancement of productive enterprise in developing countries in order to stimulate their economic and social progress in accordance with the aims pursued by their governments and with the policy of the Netherlands government in regard to development cooperation. . .[1]

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[1] FMO: Act Relating to the Netherlands Finance Company

There are many ways in which this institution participates in development, including equity participation (share purchases), extensive lending programs offering both conventional and concessional rate structures, the subsidization of planning services, and some financial support for technical assistance programs for small enterprises. It should be noted that the FMO has been involved in about eleven projects in Tunisia.

The FMO participates in Couvoirs de Nassen as an equity partner and has provided both debt financing and support for extensive planning and feasibility studies. The FMO's participation in this co-venture represents a stable source of financial strength to meet equity and ordinary debt (e.g., working capital) demands, as well as seasoned development project management expertise.

Exploratory Period

Planning/Concept Development

Mustapha Chatti describes the concept of Couvoirs de Nassen as a Tunisian adaptation of the Euribrid concept. Using Euribrid parent-stock (breeder stock) and food products, Chatti has attempted to create very high quality products, both chickens and poultry food, that are marketed as part of a package (i.e., products and on-going services including technical, marketing, and managerial support).

The initial planning for the venture was performed by Mustapha Chatti, who was then involved in the management of the Societe Civile de Agricole. SCEA imported one-day chicks from Euribrid into Tunis to develop them to 7-8 weeks maturity, at which point they were sold as broilers for meat consumption. Chatti was quite satisfied with the service the company had received from Euribrid, and, in fact, began to consider that company as a model for his own new company.

The funadmental reason for creating Couvoirs de Nassen was to meet objectives of the Tunisian Five-year Development Plan which specifically called for public and private sector solutions to the extremely high rate of poultry importation.[2] As a result of his government experience, Mr. Chatti was aware of this need. Further, he believed early entry into the import substitution market would give his company a competitive edge in the future. Because of his admiration for the Euribrid concept and particularly for Mr. Hendrix, and because of the level of rapport between the two, Mr. Chatti decided to approach Euribrid management to join him in a co-venture.

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[2] In 1974, 80% of chickens consumed in Tunis were imported. The country's high chicken consumption rate is related to Islamic taboos on pork consumption, and to religious practices (e.g., Ramadan, a period of fasting in the daytime and high consumption of chicken at the breaking of fast in the evening). This creates a heavy seasonal market in addition to regular demand.

Although Euribrid had never been an executive partner in a developing country co-venture, management agreed to examine Mr. Chatti's idea. Initially, according to Euribrid's current commercial representative to Couvoirs de Nassen, there was little interest except on the part of Mr. Hendrix himself. Mr. Hendrix reminded his people that European markets for their products would eventually diminish, and he maintained that moving into Tunis at such an early stage (even though the risk was high) could lay the groundwork for future business. Additionally, Mr. Hendrix has tremendous pride in Euribrid's success throughout the developed world and wanted to test the viability of his concept, given the challenges imposed by developing country conditions. Another factor in the decision was his respect for Mr. Chatti. There is an entrepreneurial camaraderie throughout the development of Couvoirs de Nassen.

At this point, Euribrid assessed the feasibility of such a project in Tunisia. Experts were deployed to Tunis to study on-site conditions and to determine specific technological barriers resulting from the different climate and health and hygiene conditions (e.g., adapting architectural specifications for sanitary factories to the Tunisian site). Convinced of the viability and development value of the co-venture, Euribrid management agreed to take a minority interest and to approach a third equity participant on behalf of Mr. Chatti.

At this stage, Euribrid contacted the Netherlands Finance Company for Developing Countries and asked them to consider the project. The FMO, after a preliminary appraisal, agreed to participate in a thorough feasibility study. Extensive financial projections were calculated using the technical experience of Euribrid, Mr. Chatti's knowledge of local (Tunisian) conditions, markets, and costs, and the FMO's extensive experience in financing development projects. With the results of these studies, the FMO agreed to enter the venture as both an equity partner and a lending source.

The exploratory period culminated in the signing of an agreement between Mr. Chatti and the two Dutch partners on April 29, 1974. The agreement specified Chatti and SCEA would contribute 51% of the shares, Euribrid would purchase 34%, and the FMO 15%.

Product/Market Selection

There was never any real question in the exploratory stages of this project that Chatti would choose to use Euribrid's Hybro chicken. The initial marketing strategy focused on the buyers identifying Couvoir de Nassen with Euribrid products. He considered Euribrid's widespread reputation to be a very strong selling point.

Couvoirs de Nassen's market is centered in and around Tunis. However, the government has requested that 30% of production be distributed to Sousse which is approximately 2½ hours driving distance from the hatchery. Although the government is generally very supportive of private enterprise, and provides incentives for development, there is also an effort to provide some general social benefits through such means as government directives for distribution.

The production of food at Couvoirs de Nassen illustrates an integration of meeting in-house needs and developing revenue from outside customers (i.e., the three Chatti companies purchase 80% of the food). The food mill, which currently produces three tons of food per hour, is being expanded to a capacity of 20 tons per hour. Projections estimate Chatti Company purchases will require 50% of this expanded level of production, with local customers purchasing the balance.

Facilitator Identification

No development project can proceed in Tunis without Agency for the Promotion of Investment (API) approval. With approval, there are many benefits for the venture, including fiscal exemptions, long-term low interest rate loans, authority to import and, in some instances, outright grants for infrastructure construction. Also, with API concordance that the project is of value in the development of the country, it is likely that the Central Bank, which controls the economy and the flow of Tunisian dinars out of the country, will approve the co-venture financial requirements for repatriation of profits or repayment of loans made outside the country. Because of his long association with government, Mr. Chatti was acutely aware of the need to clear this kind of project through API.

Anticipated Benefits

The primary benefits anticipated during the exploratory stage were:

- Creation of poultry import substitution;
- Increased employment for Tunis (in accord with the 5-year Development Plan);
- Development of a base for future Euribrid markets; and
- Opportunity for the FMO to fulfill its mission (i.e., to support economic development in a developing country and to support and assist in the transfer of appropriate technological and managerial skills in the developing country).

These primary benefits, along with many secondary incentives, provided a relatively strong rationale for developing Couvoirs de Nassen. Incentives include:

- API approval of venture;
- Central Bank approval of venture enabling movement of funds;
- Dutch partners assured of repatriation of profits and repayment of loans in gilders;

- Availability of tax incentives favoring private enterprise;
- Tunisian government and citizenry supportive of private enterprise (from 1963-69, Tunisian business experienced negative results of collectivism);
- Tunisian government stable;
- Dutch (developed country) partners' presence assured financial and technical stability;
- Developing country (Tunisian) enterpreneur had "hands-on" business experience in poultry industry in Tunis;
- Markets for products guaranteed by high chicken consumption and lack of indigenous industry;
- Added bonus of margin available on chicken pricing due to quality of CDN locally produced chicken matching quality of import chicken on which high duty is charged; and
- Additional markets built in through existence of clientele of first Chatti company, Societe Civile de Exploitation Agricole, SCEA.

Identification of Risk

Although there were many strong incentives for creating Couvoirs de Nassen, there were also risks identified in the exploratory phase. General risks of creating a venture in a developing country include the lack of a stable, technically trained work force and the lack of laboratories in Tunis for veterinary tests related to poultry production. There was some risk inherent in attempting to transfer this technology into a developing country. On the financial side, there were risk factors for both the Dutch and the Tunisian partners in participating in transactions where the Tunisian dinar would be placed against the Dutch florin. For instance, if loans made by the Dutch in florin/gilders were to be repaid in dinars, there would be substantial loss for the Dutch over a period of time. On the other hand, the Tunisian borrowing gilders and forced to repay in an inflating money market would find himself repaying the loan at an excessive effective interest rate.

There were some risks apparent in attempting to plan the venture. Before production could begin, delays and escalating construction costs created a differential in capital requirements which forced an early increase in the original equity/debt structure. The poultry industry itself posed a very clear risk element. Producing one-day chicks is a very delicate task demanding the strictest hygienic standards. Because of the five-year plan and the emphasis on "lifting up the people" through employment creation, there was a temptation to develop the company in an excessively labor-intensive direction. However,

the technical advisors reminded the planners that one-day chicks are highly susceptible to human disease, and consequently should be exposed to humans as little as possible. Although this seemed to indicate more automation and mechanization, Mr. Chatti tempered this thrust by evaluating the costs of purchasing, maintaining, and repairing appropriate machinery. "For us," he said, "the middle way is best. It is inappropriate for us to over-mechanize at the expense of the workers, and it is just as inappropriate to jeopardize the safety of the stock by over-employment."

There were obvious, but very real, risks for each of the partners. For instance, for the two Dutch partners to invest in a project in which they would have only a minority voice posed potential risks. They entertained the risk of trusting Mr. Chatti to manage the venture on a day-to-day basis, in effect, at arms length from the partners, primarily due to distance. Moreover, Chatti was holding a demanding high-level government job full-time during the initial stages of this venture. Mr. Chatti, on the other hand, agreed to take the risk of bringing two strong equity partners into his company and, indeed, into the decision making process of that company's future. All three of these partners felt that not only did incentives far outnumber risks, but those risks which could be identified could be managed.

Start-Up Period

The start-up phase of Couvoirs de Nassen was unexpectedly delayed by problems in constructing facilities, which took much longer than originally estimated, and by delays in delivering the imported equipment. Further, during this period, Mr. Chatti decided it was important for the company to have a reliable source of food for the poultry, so he requested additional funds from the Dutch to build a food mill. This was an agreeable addition in the judgment of the partners, and Chatti was able to proceed with full support, even though it resulted in additional delay. The organization of the venture is presented in Table 1.

In the early stages, the food mill was planned merely to provide food for the Chatti companies. However, in 1978, expansion plans were approved and it is anticipated that 50% of the total production will be purchased by Chatti companies, with the balance available for commercial sale to Couvoirs de Nassen customers. Mr. Chatti's assessment of the start-up period is that it was necessary "to build a very solid underpinning to assure the stability of the company in the future."

The roles and responsibilities of partners are presented in Table 2.

Costs/Financing

At start-up, Couvoirs de Nassen was financed through share participation, concessional and conventional loans from the FMO, an infrastructure grant from API, and a line of credit from the local Tunisian bank. The share breakdown agreed to in the contract signed April 29, 1974, was:

TABLE 1

ORGANIZATION OF COUVOIR DE NASSEN, S.A.

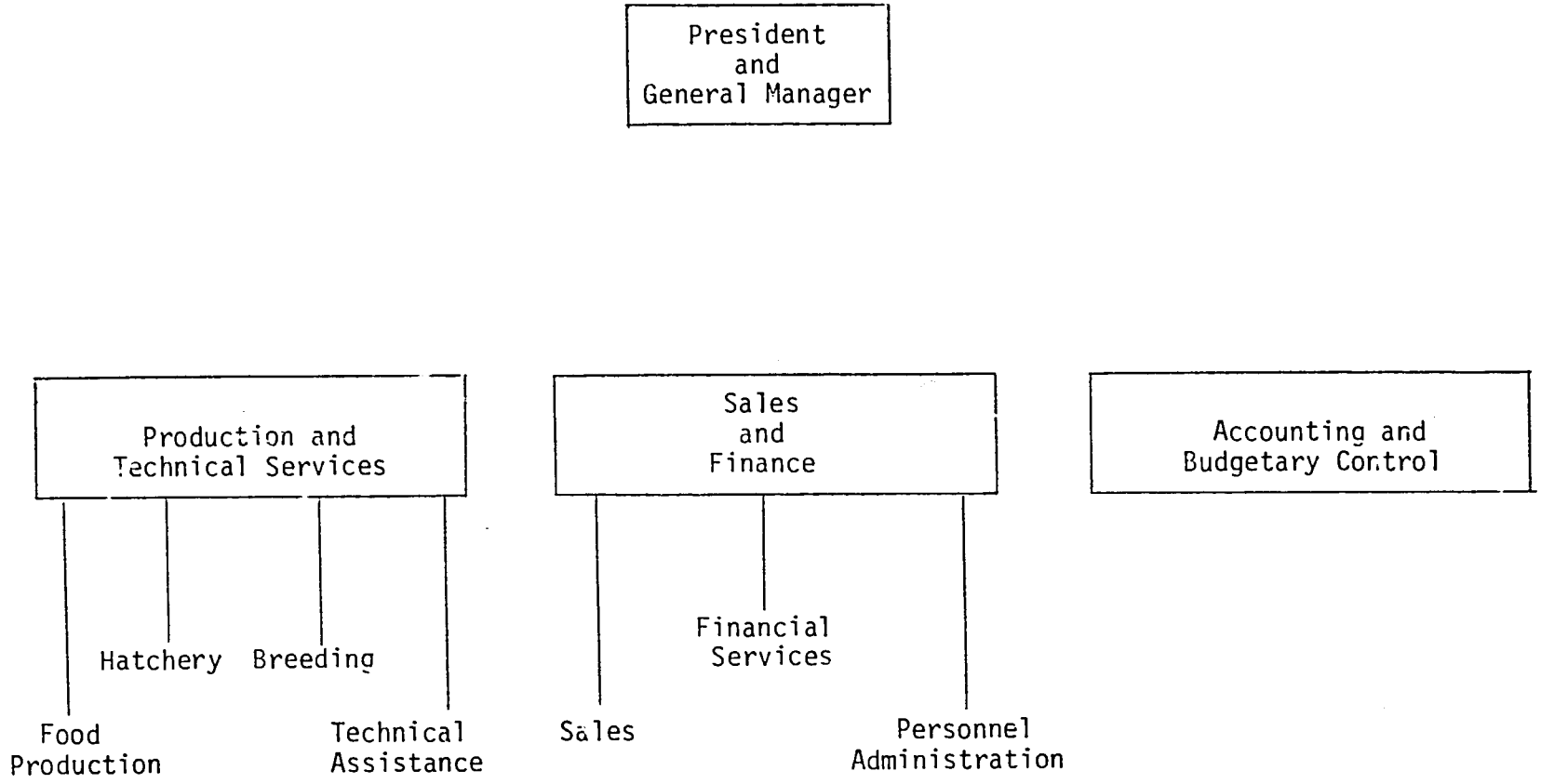

TABLE 2

PARTNER'S ROLES AND RESPONSIBILITIES

FMO Equity 15%	Euribrid Equity 34%	Chatti/SCEA Equity 51%
· Financial Partner	· Technical Partner	· Management Partner
· Provides other financing, i.e., -debt -concessional loans -conventional loans	· Responsible for transfer of technology	· Operations
	· Provides all-levels technical training	· Long-range planning
· Planning subsidies	· Provides ongoing technical oversight and quality control	· Knowledge of country
· Knowledge and experience of other co-ventures in developing countries	· Supplies product and support services	· Entrance to market
· Provides financial and planning management advice	· Provides general management advice	· Long-standing government relationships
	· Provides planning and feasibility services	· "Hands-on" business experience in Tunisian poultry industry

SCEA	31%
Chatti	20%
Euribrid	34%
FMO	15%

Of the first major loan agreements, one was structured at 3% (a concessional interest rate) and the other at 10% (a conventional rate). Terms for repayment of these loans were up to ten years with repayment scheduled to begin in 1979. The granting of concessional loans is a supportive effort on the part of the Dutch financier to absorb some of the currency-related costs incurred by the borrower.

Because the dinar is a soft currency, a Tunisian borrower operates at a disadvantage in transactions where the dinar interacts with hard currencies. The dinar is floated (not freely) with a group of currencies including the dollar, the French franc, the German Deutschmark, the Italian lire, and the Dutch gilder. The rate is managed by the Tunisian Central Bank, which has authority to grant permission for all transactions involving the flow of private and public funds (T. dinars) out of and into the country. Thus, a Tunisian borrowing from another country must obtain permission to borrow from the Central Bank in order to repay the debt.

As a result of escalating building costs and production delays incurred during the lengthy start-up period, additional financing was negotiated in 1976. With stabilization, the management decided that expansion of both chick and food production was appropriate; and they submitted a proposal to the FMO for a substantial financial commitment. This request was approved on June 14, 1978.

Relationship with Government and Facilitator

The Tunisian government, as stated previously, takes a positive view toward private co-ventures. Official government philosophy supports free production with some socialism in the distribution system (e.g., CDN has been asked to market up to 30% of its production in Sousse).

Although a representative of the government was appointed to sit on the Board of CDN, actual control is minimal. Of the few reporting requirements, most are merely data collection for statistical purposes. Examples of this type of report include API progress reports and Department of Agriculture reports on poultry products.

In this case, once approval of the appropriate government body (API) was assured, the co-venture could move forward with the knowledge that money could move freely between the Netherlands and Tunisia. Couvoirs de Nassen has had a clearcut advantage because Mr. Chatti was keenly aware of the Development Plan goals and of governmental processes. Further, the esteem in which he is held by the Tunisian government is a source of confidence within government and business sectors.

Products and Technologies Involved

Couvoirs de Nassen, S.A., produces and sells two products, poultry livestock and poultry food. The poultry livestock are one-day old chicks bred from Euribrid Hybro stock.

The process begins with the purchase of breeders or "parent" stock from Euribrid in Boxmeer, Holland. These chickens are placed in four large breeding houses where they produce eggs. The eggs are carefully delivered to an on-site hatchery, in which they are placed in trays and deposited in large temperature and humidity controlled incubators for approximately 20 days. This process is conducted under strictly controlled hygienic conditions and the hatchery is supervised 24 hours a day by technicians trained by Euribrid specialists. After hatching, the one-day chicks are delivered in hygienically prepared trucks to the purchaser.

The poultry food is actually a formula food composed of many elements and created by Euribrid specialists to provide Hybro birds with maximum nutrition.

Transfer of technology in both production systems has been accomplished by training at the Euribrid factory and on-site, one-to-one training/skill development provided by Euribrid personnel. A thorough and elaborate technical transfer program has been developed which includes:

- A Euribrid technical expert on-site for two years to provide both training and quality control services from the time the venture was initiated.

- A Euribrid specialist in veterinary technology presently visits Couvoirs de Nassen every four to six weeks to check poultry blood specimins to determine if disease is present and if immunization is effective; Chatti indicated if disease is discovered, everything would have to be burned.

- A Euribrid specialist visits every two months to check the method of food production, including the composition of the food; in addition, he checks Chatti's feed against the formula standard and, if necessary, he adapts and/or refines the formula based on the nutritional needs of the poultry.

- Euribrid's chief of food production has also visited the site to assist in developing management skills, training personnel, and developing productivity in the food production area.

- CDN employees have been sent regularly to Holland for intense training in the Euribrid concept. When there was language difficulty, or when there were not enough French-speaking instructors in Holland, employees were sent to the Euribrid plant in France.

- Supervisory employees have an annual refresher course in Holland.

Although a management contract exists and is paid for by Chatti, it is clear that Euribrid has gone far beyond what is required and has absorbed some costs of extending the additional assistance. Euribrid has been concerned particularly with effective technology transfer and that the technology transferred was appropriate to a developing country. At this stage in development, the base level of technology transfer has occurred and both partners constantly strive to upgrade and maintain extant technical levels.

Problems/Barriers

Government. One of the most significant barriers to co-venturing in Tunis is the necessity to obtain approval of the Central Bank for transfer of funds out of Tunis. This corresponds with the effort to affect the Tunisian balance of payments deficit by reducing the outflow of Tunisian funds unless proof exists that the outflow in reality results in increased revenues for Tunis and/or results in a positive effect on issues detailed or pinpointed in the five-year plan. In this case, 80% of the poultry for the country was imported and the creation of CDN positively impacts on that import situation. No outside bank can loan funds to a Tunisian venture without assurance that repayment is possible and guaranteed repatriation is available.

Technical. The poultry industry model in this co-venture, namely Euribrid, is one of the most sophisticated and highly controlled quality systems in the world. The Tunisian company is an adaptation of this model, taking into account the vast differences in culture, climate, health and hygiene conditions, as well as the educational and skill levels of employees. Couvoirs de Nassen presented an enormous but feasible technical managerial challenge. Examples of specific technical problems were:

- There are no labs in Tunis, therefore, most veterinary tests must be flown to Holland. A successful poultry venture is dependent on closely supervising the condition of chickens.
- Because there is no trained work force in Tunis, all employees receive technical training in Holland.
- Extensive technial supervision by Euribrid was necessary during the first two years. A Euribrid technician lived in Tunis during this period.

Marketing. The market for these prdoucts--both the chickens and the food-was outlined in the Tunisian five-year Development Plan, which called for the development of local poultry sources to achieve import substitution. Tunis was, in 1974, importing 80% of the chicken consumed. Because of the high demand for product, Couvoirs de Nassen was able to be selective in accepting customers.

Marketing the poultry food poses relatively few problms as existing companies (SCEA, CDN, and Avidev) presently purchase 80% of food produced.

Even with the expanded food production capacity (which is expected by summer 1979), the three family companies will continue to purchase 50% of production. Clients for the poultry products are, as in Euribrid, primary markets for the balance of the food produced. The Tunisian adaptation of the Euribrid concept means that customers purchase ongoing packages of goods and services from Couvoirs de Nassen, thus minimizing the need for developing an independent market for food products.

Production. One of the barriers to production in the start-up stage was the cost of building the factory (both time and money). There were some delays incurred at the inception of the project which prevented full production on the originally projected schedule. Some of these delays resulted from problems involving delivery of equipment, development of a technically skilled work force, construction of buildings (slower than expected), and development of parent-stock.

One problem in the food production area has been the lack of storage. Summer 1979 will see completion of the company's first silo and second food factory, which increases production capacity from 3 tons per hour to 20 tons per hour. Previously, food components were stored in small bags which had to be emptied one by one, by hand, a slow and inefficient process.

Labor Force. Culturally, the Dutch have a stable, educated work force while the Tunisian venture necessitated developing a work force in a traditionally nomadic culture--an ever-moving, nonrooted work force. In order to develop a stable work force, Chatti created housing for his employees. Further, he encouraged workers to cultivate gardens near their homes, thereby assuring food supply. Some families keep goats for milk for children. Additionally, he encouraged employees to enroll children in an area school.

One method of recruiting workers is through area trade high schools; young workers are brought into the company in apprentice-style patterns. Both male and female workers are recruited, although cultural traditions impose some barriers to employing young unmarried women. There is particular difficulty (as noted by Mr. Chatti) in preventing situations where one male and one female worker are found working without supervision; this is considered morally compromising to the young woman. However, Chatti continues to attempt to work around this barrier as he has found that young women exhibit "far better skills" (more delicate handling) in working with one-day chicks.

Risk Management

In order to minimize risks identified by the partners in the exploratory stage, several specific plans were enacted. One of the first was to develop thorough reporting systems for the management of CDN. These included managerial, technical, and accounting systems. Further, the FMO insisted on a covenant within their agreement, requiring Courvoirs de Nassen to enter into a management contract with Euribrid for extensive support services to maintain the product.

Under this plan, CDN's management and supervisory personnel received technical training in Holland (when language was a barrier, employees were sent to Euribrid's French plant for instruction). Euribrid kept a technical expert on-site at CDN for two years. Additionally, a food technology specialist visited regularly to check the quality of the food production.

Mr. Chatti addressed the problem of the instability of the work force (derived from old traditions of nomadic culture) by bringing families in from other areas and building housing for them on-site. In order to "give them a mentality of stability," he encouraged employees to cultivate gardens at their homesite and to keep goats for milk. Additionally, he encouraged families to enroll their children in a nearby school. He provided social benefits such as medical care and offered eggs and chicken to employees at reduced rates.

In response to the lack of labs in Tunis, all lab work is flown directly to Holland. Some on-site analysis is conducted by Euribrid specialists who visit every four to six weeks, and plans are now underway to hire a full-time specialist.

Insofar as the risk taken by Mr. Chatti in opening his company to share purchase by two Dutch partners, he structured his agreement with them to allow him to buy back these shares at a future date. In 1979, Mr. Chatti notified both partners that he was ready to begin purchasing their shares. This is compatible with the original purpose of the venture. The FMO's standard policy is to sell shares back to the host country owner as soon as possible.

As to the risk incurred by the two Dutch partners with Mr. Chatti, both Euribrid and the FMO have found Chatti to be an excellent manager. According to a Euribrid spokesman, "he plows every cent back into the business. He is extremely thrifty, intelligent, and industrious." In order to absorb some of the financial risk facing the Tunisian in the borrowing of gilders, the FMO has granted loans which have very low initial interest rates, for instance, where a normal rate might be as much as 10%, some concessional loans were made at 3%. All three partners declared this project to be one in which risks have been managed well.

Stabilization and Growth Period

Couvoirs de Nassen was legally established in 1974. After a somewhat lengthy start-up period, characterized by construction delays and additional capital requirements related to creation of a food mill, CDN reached a breakeven point in 1977, compensated 1976 losses, and ended the year with a small profit.

In 1978, with business stable and profitability measuring between 5 and 10%, the company announced plans for expansion of both chicken production and food production. This expansion will increase one-day chick production capacity from 1.3 million to 2.6 million. Actual production will be determined by market demand. Food production capacity, which was planned primarily to provide a reliable source of food for the three Chatti businesses, will increase from 3 tons to 20 tons.

The actual projected increase from 1978 to 1979 is:

Baby Chicks	1,250,000 to 2,000,000
Food	3,000 tons to 14,000 tons

Mustapha Chatti estimates that this increase in overall capacity will sustain the company's growth needs for the next five years. Personnel required to implement this expansion number approximates 46, which doubles the personnel level of the company. Of the new employees, 3 will be executives, 10 will be middle management, 23 skilled workers, and 10-14 unskilled workers.

Because CDN actually began full operation in 1976, after a delayed start-up period, it must be viewed as a very young company, still in the dynamics of stabilizing. It has shown a remarkable viability in its brief history and is once again involved in dynamic change through the planned expansion.

PROJECT OUTCOMES

Statistics

Production of Chickens in Tunisia	1976
Traditional (yard chicks) production	4.0 million
Industrial Production	13.0 million
Couvoirs de Nassen Production	1.3 million

This represents 8% of Tunisian production.

The Impact of this Co-Venture on Tunisia

- Import substitution
- Creation of approximately 34 jobs
- With expansion, will create 35 more permanent jobs, 10-14 seasonal jobs (requires 200 days per year)
- Expected currency savings for Tunis (related to export of dinars--for import of chickens) was estimated by Mr. Chatti at $350,000 U.S. in 1974 (prior to full operation). The actual savings in 1978 were $500,000 U.S.

ROYAL LESOTHO TAPESTRY WEAVERS (PTY) LTD.

LOCATION: P.O. Box MS 734
Maseru, Lesotho

TELEPHONE: 3011

TELEX: 341

INTERVIEWEES: Sam Mountsie
LNDC
P.O. Box MS 665
Maseru, Lesotho
Telephone: 2012
Telex: 341 BB

Wynand van Graan
EDESA (Swaziland) (Pty) Ltd.
P.B. Box 1144
Mbabane, Swaziland
Telephone: 2026
Telex: 2057

Rene Gerber
EDESA Finanz Ag
Limmatquai 2
8024 Zurich
Switzerland
Telephone: (01) 34 18 95
Telex: 52224

Diego Hidalgo
FRIDA Consultancy Ltd.
38 King Street
London WC2E 8JT
United Kingdom
Telephone: 02-836 6941
Telex: 27291

SUBMITTED BY: Vicki Smith Downing
2800 Routh, Suite 243
Dallas, Texas 75219

BACKGROUND

The story of the Royal Lesotho Tapestry Weavers' (RLTW) development is tied to the history of the Kingdom of Lesotho itself and to the entrepreneurial spirit of RLTW's founder, Wynand van Graan. In 1966, after 98 years of British rule, the Kingdom of Lesotho was declared an independent African country. Dr. Leabua Johathan became Prime Minister, and the tiny (11,000 square miles) kingdom began its long and arduous journey toward development.

One of the first actions of the new Prime Minister was to invite Mr. Anton Rupert, a successful South African businessman, to act as unpaid economic advisor to Lesotho. Rupert accepted the invitation and thoroughly reviewed Lesotho's economic situation. He recommended the creation of a national development corporation as a means to stimulate Lesotho's industrial development. The government accepted Rupert's recommendation and in 1967, with financial assistance from the British Commonwealth Development Corporation, established the Lesotho National Development Corporation (LNDC).

The purpose of LNDC was "to initiate, promote, and facilitate the development of manufacturing and processing industries, mining and commerce in a manner calculated to raise the level of income and employment in Lesotho." Realizing that leadership and management expertise for such an ambitious undertaking would be critical, Rupert recommended the appointment of Wynand van Graan as Managing Director of the LNDC. Van Graan was a highly skilled and broadly experienced former marketing management executive with the Rupert companies. For the next six years, van Graan dedicated himself to the task of pulling this fledgling nation forward by developing a variety of businesses under the aegis of the LNDC. One of the best examples of co-ventures developed by LNDC in that period is the Royal Lesotho Tapestry Weavers (RLTW) which provided an effective, early model for many later handcraft industries in Lesotho. A partial list of projects established by LNDC is presented in Table 1.

TABLE 1

PARTIAL LIST OF PROJECTS STARTED BY LNDC

Carpet Factories

Candle Factory

Jewelry Factory

Two Potteries

Building Industry Supplies

Tire Re-tread Plant

Diamond Cutting and Polishing Factory

Clothing Factory

Fertilizer Blending and Packing Plant

Furniture Factory

Electric Light Fittings Factory

Tractor Assembly Plant

Umbrella Factory

Rainwear Manufacturing Plant

Construction of Shopping Center

Two Retail Shops for LNDC

Establishment of Lesotho's National Airline

Establishment of Lesotho Electricity Corporation

Establishment of Lesotho Housing Corporation

Construction Venture with Taiwan

Holiday Inn Development

National Park (For Preservation of Plants and Animals)

OVERVIEW OF HOST COUNTRY

Government Organization

The Kingdom of Lesotho was a British Colony until 1965, thus, the present government organization is a mix of the British parliamentary system and the traditional Basutho chieftainships. The country is a constitutional monarchy, with the 1965 independence constitution creating a two-house system of central government: a National Assembly of 60 elected persons and an Upper House comprised of 22 Basutho Principal or Ward Chiefs and 11 persons nominated by the Paramount Chief (leader of the Principal or Ward Chiefs), now known as the King.

The 22 Principal and Ward Chiefs are the leaders of each of the country's traditional administrative districts, with chieftainships normally inherited. Together they comprise the College of Chiefs, which is responsible for designating a successor to the Paramount Chief (King).

A political crisis in 1970 led to suspension of the Independence Constitution and establishment of a Council of Ministers to govern the country. A 93 member Interim National Assembly was established and has been guiding the country back to the systems designated by the Constitution.

Government work plans are implemented through subject-specific ministries and national development banks and corporations, with development priorities established in five-year development plans. The government agencies most actively involved in development include:

- Ministry of Finance. In particular, the Central Planning and Development Office, which is responsible for formulating the five-year development plans.
- Lesotho National Development Corporation (LNDC). This organization channels government capital into manufacturing and industry through equity participation, joint-venture loan guarantees, and financing of construction at serviced industrial sites.
- Basutho Enterprise Development Corporation (BEDCO). Programs are designed to develop local business and entrepreneurial skills, in particular business management.
- Pioneer Industries Board. This Board establishes incentives for creating new industries within Lesotho.
- Ministry of Agriculture, Co-operatives and Marketing.
- National Manpower Development Secretariat.

Infrastructure, Resources, and Economic Structure

With a per capita gross national product of $180 U.S. in 1975, Lesotho is listed by the United Nations as one of the 29 least developed countries. Lesotho has few natural resources and only about 15% of its land is suitable for crop cultivation. The economic structure of the country is characterized by subsistence agriculture, which employs 85% of the population on at least a part-time basis, and migration for employment in the mines of South Africa, which employs about 29% of the work force. The industrial sector contributes only about 6% of total product to the country's Gross Domestic Product (GDP) and is composed primarily of small enterprises.

Lesotho's main exports at present are wool and mohair. The country is a net importer of food, but does have large quantities of sandstone, clay, dolomite, and diamonds which have not yet been fully exploited. The labor force is largely unskilled, and the government is placing great emphasis on both providing training programs and creating employment opportunities to bring the migrant labor force back to the country.

Infrastructure development has improved over recent years. Major towns are linked to the capital of Maseru by all-weather roads and both government as well as privately owned transport companies have been created. The country is still largely dependent on imports for acquiring modern equipment and also must ship grain to South Africa for milling.

Business Infrastructure and Climate

Business development in Lesotho has been hampered due to the proximity of South Africa, which has attracted much of the available business investment in the region. Lesotho has no central bank, and there are only three major commercial banks in the country: Barclays Bank International, Ltd., The Lesotho Bank (a government-owned commercial bank), and the Standard Bank, Ltd. There are several other financial institutions such as the newly formed Agricultural Development Bank and the Lesotho Credit Union Scheme for Agriculture; there are also branches of several South African building societies. Services, such as insurance, are largely provided by South African firms. Lesotho is a member of the Southern African Customs Union along with South Africa, Botswana, and Swaziland, and uses the South African Rand as its main currency. Much of the indigenous industry in Lesotho is composed of small enterprises producing such things as handicrafts.

The business climate in Lesotho encourages investment. The government activity focuses on developing manufacturing industries (using foreign capital to accomplish this goal) and has a number of specific investment incentives designed to achieve this end.

Investment Incentives

The government of Lesotho is actively encouraging foreign investment, particularly in labor-intensive manufacturing industries, in order to reduce economic dependence on South Africa. To this end, the following manufacturing co-venture operations are being most actively encouraged:

- Equipment plus services industries;
- Assembly work;
- Component manufacturing;
- Overseas distribution of final product;
- Agro industry;
- Commercial ventures--in particular, buying expertise; and
- Production of Brand Name consumables, such as beer.

The government prefers co-ventures involving expatriate project design and management, overseas marketing, and production of goods shared between foreign firms and Lesotho firms.

To encourage foreign investment and co-ventures, the government has developed a number of business incentives, including:

- Unlimited foreign exchange provisions through the South African Reserve Bank;
- Duty-free entry of all products into South Africa and of many products into other African markets, the EEC, and the USA;
- Unrestricted imports of raw materials for production of exportable goods; and
- Preferred treatment for the establishment of Pioneer Industries (e.g., a six-year tax holiday, generous depreciation allowances).

HISTORY AND DESCRIPTION OF THE VENTURE

Exploratory Period

Planning/Concept Development

In 1968, Wynand van Graan, having examined the state of the economy in Lesotho through his position as first Managing Director of the LNDC, developed a detailed plan for creating a carpet and rug weaving project at Maseru, Lesotho. He specifically planned to use Basutho craftswomen as the artisan work force, bearing in mind that these women already had a tradition of weaving and desperately needed stable employment.

Although he was acutely aware of the limited natural resources in Lesotho, he knew that Lesotho produced some of the world's finest mohair, albeit sometimes inaccessible on a regular basis because linkages between producers, processors, and final markets were not well established. He also knew that well-made mohair products would have good export potential. Further, the original concept was based on van Graan's belief that handicrafts provided a logical and viable means to create employment at the lowest possible cost per job in developing countries.

Whereas competitiveness in the marketplace forces most industries to automate and to reduce the labor force in order to cut costs, the fact that an article is handcrafted drives the ultimate consumer price up on a value-added principle. Van Graan recognized the development value inherent in teaching, upgrading, expanding, and transferring skills as well as technologies. He was especially interested in those which could be transferred readily from one environment to another and which could be practiced individually (e.g., in distant villages where women might spin finished pieces, or in workshops/industrial settings where artisans are an integral part of the production community).

Product/Market Selection

Van Graan specifically planned to develop and market tapestries which have been traditional handcraft items for the Basutho. However, rather than simply marketing existing products, he decided to develop new products and to build a complete factory. He began by bargaining with an insurance company to build a small but adequate brick structure which RLTW would lease on a long-term basis.

The main thrust of his planning was to develop existing weaving skills by transferring the most advanced weaving techniques in the world, to the point where artisans could product works of art. To achieve such high quality, both in technology and in design integrity, he made two significant decisions. The first was to hire a Swiss weaving expert, Vreni Schmidli; he pursuaded her to become the first Manager of RLTW. The second decision was to seek designs from the world's top artists, including Picasso, Calder, and Vassarely, and then to product a limited edition of a "Famous Artist Series."

Ms. Schmidli was to be totally responsible for training the women who would eventually produce tapestries for RLTW. This included processing mohair, dyeing and spinning yarn, designing and transferring designs, and weaving tapestries. An apprentice-style system was implemented with each step in the process becoming a move upward for the workers. Meanwhile, Ms. Schmidli individually taught workers the skills necessary to begin RLTW's operation. A tiered management system was developed wherein women were trained as supervisors in each area, thus developing some simple, but useful and appropriate, managerial skills. Workers' councils were formed to insure feedback and communications flow, as well as to serve the needs of the workers.

In the beginning, van Graan perceived the target market segment to be consumers of the highest quality handcrafted goods. Initial marketing efforts focused on South Africa, the United Kingdom, and Europe. He contacted potential outlets during the planning stages to confirm these market assumptions. Van Graan's extensive domestic and international marketing experience with the Rupert companies proved to be a remarkable asset for the young African company in its efforts to plan a marketing strategy.

Partner Identification and Selection

Although van Graan intended LNDC to act as a 50% equity partner from the beginning, he knew it would be necessary to get an outside equity partner to provide the balance of capital needed to get the project off the ground. To this end, he sought out a British partner, Harold Laycock, Ltd. (West End House, Legrams Mills, 39 Legrams Lane, Bradford 7, England) which agreed to participate as 50% equity partner in the co-venture. The choice of partners, in retrospect, seems particularly appropriate as the British had been heavily involved with Lesotho; further, the Laycock company had been dealing in mohair for more than a century, enhancing their understanding of the potential inherent in developing mohair supply and products.

Anticipated Costs/Benefits

Van Graan prepared a detailed plan for the start-up phase in which he estimated total costs for start-up, purchase of all equipment, and working capital for six months to be 29,000 rand ($34,220 U.S.). The British investor provided 50% of the initial capital through share purchase, and the balance was supplied by LNDC.

A breakdown of fixed and variable costs resulted in a projected cost of producing rugs at approximately R2.20 ($2.60 U.S.) per square foot, and a minimum price per rug of R2.65 ($3.31 U.S.) per square foot. This meant that a 4' by 6' rug would be expected to retail at about R63.00 ($72.34 U.S.). Pricing was based on a minimum production level of 90 rugs per month and allowed for a 10% minimum profit on sales as well as a sales commission of approximately 5%, with discounts allowed at 2½%.

As production increased, fixed costs decreased and, therefore, total production costs decreased. Consequently, it would become possible to sell the rugs at a somewhat reduced price from the above. For instance:

Monthly Rug Production	Reduction in Minimum Selling Price Per Square Foot	Approximate Revised Selling Price Per 4' x 6' Rug
90 Mean	R2-65 Mean	R63 Mean
100	R13 cents	R60
110	R23 cents	R57
120	R32 cents	R55
130	R40 cents	R53

Van Graan planned to purchase 13 looms which would give RLTW a start-up maximum potential monthly production of 115 rugs. The production estimate was based on 22 working days per month with each rug requiring 2½ days to produce. Thus, 22 divided by 2½ times 13 equals 115 rugs.

Estimates on the profitability of the company were as follows:

- 10% return available if 664 rugs at average size of 24 square feet sold yearly.
- 11.5% return available if minimum planned production goals of 90 rugs per month sold yearly.
- 15.5% return available at maximum capacity production of 115 rugs per month sold yearly.

All of these are after-tax figures, and in reality RLTW was expected to be (and indeed later became) exempt from tax for a five-year holiday, thus increasing net return figures.

Some benefits anticipated from the creation of RLTW were:

- To create employment through the development of a labor-intensive company;
- To create this company on minimum capital;
- To use local raw materials (i.e., mohair);
- To use existing skills (i.e., women weavers);

- To upgrade local skills and introduce appropriate and usable advanced weaving and design transfer technology;
- To create linkages in the mohair-related handcraft industry among producers, suppliers, and consumers;
- To teach simple managerial skills and systems;
- To develop local entrepreneurial spirit;
- To create fine quality products for export;
- To create a company which might serve as an example of a viable small-scale co-venture in a developing country;
- To preserve existing handcraft designs and skills;
- To create markets for African handcrafts; and
- To provide economic support to work-seeking women in a developing country, giving them opportunities for developing transferrable skills and managerial expertise.

During this stage, the LNDC was acting as a facilitator for the co-venture. It is interesting to note that there were at this time no other significant facilitators involved. In fact, van Graan received almost hostile treatment from a local branch bank of a major English banking group when he requested financing for working capital needs in the planning stages of the co-venture. To his credit, he returned, persisted, and later received the requested financing.

Start-up Period

Although every small business experiences a certain amount of chaos at start-up, RLTW seems to have gotten off to a remarkably smooth start.

Roles of Participants

After approval of LNDC and introduction of the British partner, Vreni Schmidli established a workshop to begin training weavers and spinners, the permanent building was built by the insurance company as agreed, and van Graan provided needed management and marketing skills from his vantage point at LNDC. In effect, Schmidli was managing the operation, training the workers, and directing purchases and installation of equipment.

Relationship with Government

The Lesotho government was very supportive at this time of industrial development in Lesotho. The prevailing attitude seems to have been one of real

camaraderie among van Graan, government officials, Schmidli, and the workers. Doubtless, the workers were glad to be employed, the government was glad to see the project showing real profitability--which it continued to do for many years--and Schmidli and van Graan began to enjoy the fruits of their mutual entrepreneurial endeavor.

One of the most significant events of the early period of RLTW was winning the Gold Medal at the International Exhibition of Arts and Crafts in Forence, Italy, in April of 1970. As a result of this award, RLTW received eight months of orders, thus effectively penetrating world markets as a source of fine quality tapestries. Although the planned marketing strategy was for export, a secondary market developed at Maseru as tourism from South Africa began to increase. In order to tap this market, RLTW opened a showroom at the factory. From 1968 to 1973, RLTW continued to produce fine tapestries and to refine its own operations--with increasing success and momentum. However, a series of changes ensued which had a serious effect on this company.

Interim (Problem) Stage

About 1973, attitudes began to surface within government and industry circles concerning the management of Basutho enterprises by expatriates and non-Basutho nationals. Because Lesotho only recently achieved independence and because there had been very little business development prior to independence, there is a distinct lack of Basutho nationals with managerial experience and/or training. Therefore, when development projects were begun, expatriate management became a common and, in fact, welcome phenomenon. With the rise of Basutho pride came a need to control their own future and to manage their own companies. These pressures explain the departure of van Graan from LNDC and of his influence from RLTW in 1973. It should be noted that the earlier departure of Vreni Schmidli had been tempered by van Graan's close scrutiny of design and weaving technology standards.

Although the company continued its momentum the first year or so after van Graan's departure, the entire operation then began to slide into disarray. In effect, the entrepreneurial spirit which had so dominated the enterprise all but disappeared. During this period, there is a parallel between the problems experienced by RLTW and its series of managers and the LNDC, which suffered a similar succession of managers who were not always competent.

By 1976 RLTW was showing a shocking loss and the British investor began to express a desire to sell his shares. By this time, there was a severe inventory build-up, record keeping had become lax and inaccurate, and the quality of the tapestries had deteriorated dramatically. Meanwhile, van Graan had moved to Swaziland to become Executive Vice-President of EDESA[1] and there he initiated another successful handcraft project using some of the concepts he had developed in Lesotho.

[1] EDESA is a private international investment company whose purpose is "to foster the economic development of the independent and developing countries of Equatorial and Southern Africa and adjacent islands by stimulating private enterprise through the provision of finance and know-how."

Simultaneously, Sam Mountsie, a young Basutho national with "keen" (according to van Graan) managerial ability, had been elevated to the position of Managing Director of LNDC, after serving as assistant for about a year. With this change in LNDC leadership, attention was once again focused on RLTW, which previously had been one of the most consistently profitable LNDC investments.

Mountsie, concerned about the deepening financial and artistic decline of RLTW, contacted van Graan whom he believed had a useful historic insight into LNDC's as well as RLTW's problems. Eventually, Mountsie suggested that van Graan review the situation based on the possibility the British investor would withdraw and consider EDESA's entrance as an equity partner. Mountsie and van Graan then established a regular, friendly dialogue, marking the first indication of a possible turn-around for RLTW

Turn-Around Stage

One of the first concrete steps in this stage was the decision of van Graan and his counterpart, Rene Gerber, also a vice-president of EDESA and widely recognized as an outstanding international (Swiss) financier, to bring EDESA into RLTW as a 50% equity partner (thus, in effect, returning the influence of van Graan to RLTW). After many months of negotiations, an agreement was structured, and van Graan and Gerber are now working with LNDC to initiate actions to restore RLTW.

Vreni Schmidli was brought again from Switzerland, under a special consulting arrangement, to upgrade technological skills and procedures and to start a program for restoring the general quality of the tapestries to desired levels. Jill Gague, a neighboring entrepreneur who has a successful weaving business and a financial relationship with EDESA, has recently agreed to consult with RLTW weavers on developing new designs.

But perhaps the most significant development of this period was the introduction, through the efforts of EDESA, of a new marketing facilitator, Kingdom of Lesotho Handcrafts, Pty, Ltd. (KLH). KLH was established in February 1978 as a joint effort of LNDC and the Fund for Research and Investment for the Development of Africa (FRIDA)[2] to assist in developing markets for Lesotho handicrafts in Europe, North America, and other parts of Africa. KLH assists producers with product development, feeding back information on design questions, packaging and other factors which affect product sales. RLTW is now using the

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[2]FRIDA is an independent, international development agency, registered as a charity in the U.K. Its chief concern is to assist the economic development of Third World countries through the promotion of labor-intensive industrial and handicraft projects and the development of export markets for their products.

services of KLH (and, in effect, FRIDA) to market approximately 30% of its product. Both van Graan and Gerber express belief that this assistance will make a difference in the ongoing stability of RLTW.

The justification for attempting to restore RLTW at this point seems to be the relative value inherent in a small-scale co-venture which creates and sustains 80 jobs in an economy of less than a million people, and the somewhat more difficult to measure benefit of an enterprise which has a tendency to spawn many well-trained individual entrepreneurs in a climate of high unemployment.

A critical factor in this company's development has been the presence or absence of an entrepreneurial spirit. Obviously, van Graan provided this spirit in the beginning. When he departed, the well-organized structure maintained the momentum of the company for a period of many months, but eventually the lack of leadership and management expertise began to take its toll in quality control, production scheduling, inventory control, and sales; the result was clearly destructive.

Although the turn-around stage has in fact just begun, it seems clear that RLTW, given proper management and access to desirable markets (through KLH), offers its owners (now LNDC and EDESA) a reasonably feasible venture. Simultaneously, it contributes significantly to the country's development plan objectives by creating employment at low capital expenditure, by upgrading existing skills and introducing the most advanced weaving technologies, by preserving an aspect of Basutho heritage, culture, and handicrafts industry, and by developing exports which will assure a flow of funds into Lesotho.

PROJECT OUTCOMES

RLTW, in its 11-year history as a small-scale handicrafts manufacturing co-venture, has provided:

- Creation of 80 jobs in a country of high unemployment, at low cost per job.
- An example (except during a brief period when management was lacking) of a viable, labor-intensive handcrafts project in a developing country.
- Utilization of local raw materials (i.e., mohair).
- Successful transfer of advanced skills and processing techniques in weaving-related technology.
- Successful transfer of basic managerial/supervisory skills to Basutho craftswomen.
- Support of traditional Basutho handicraft enterprise.
- An example for developing other handcraft enterprises in Lesotho.

Special Impact of RLTW: Women in Development

Lesotho and the Royal Lesotho Tapestry Weavers case study offers an excellent example of a co-venture which impacts women in development. Basutho women seem to be unusually independent and self-sufficient. They are outspoken and confident. Many can be viewed as small-scale entrepreneurs in the handicrafts area.

An examination of social and economic conditions in Lesotho quickly reveals that many of the males in this society are absent for long periods of time working in the mines of South Africa. Consequently, women have been forced by circumstances to strengthen their role in the culture. They have provided leadership within their families, and developed small craft enterprises to meet economic needs, thus moving outside the family circle and effectively into community economic development. It was to meet the needs of these craftswomen that the LNDC, under van Graan's direction, created RLTW.

The work force that developed through the years at RLTW has been 100% female from the raw mohair processors to spinners and weavers. There is a solid camaraderie among these women as they work together. According to van Graan, they accept training in very highly specialized weaving techniques readily and successfully implement these techniques in their work.

Not only do women comprise the basic work force, but all of the RLTW supervisors are female. Although the present manager is a male (in effect the only one on the premises), during one period a female was elevated to this post. Interestingly, she became so entrepreneurial that she created her own weaving business and eventually left the company.

Upon her departure, there were some communication problems with the new male manager. It seems he was unmarried which, in Basutho culture, is a very low status person. The women workers and supervisors were married and most had children, all of which gave them a higher status than the young manager whose leadership they were reluctant to follow. Some of this was alleviated by the manager's recent marriage, which raised his status enough to gain at least limited respect from the work force.

It is interesting to note that when these women negotiate with management, it is less for large wage increases than for human benefits (e.g., the right to leave work to attend the funerals of family and loved ones). The women show great pride in their work, and maintain the highest quality weaving techniques. Skills learned by the women of RLTW are transferable to other individuals and institutionalized weaving operations.

At its best, RLTW can be offered as an example of a co-venture which enables women to participate in economic development and in the development of viable enterprises.

ZONA FRANCA INDUSTRIAL Y COMMERCIAL

LOCATION: Manga: Calle 29 No. 27-05
Apartado Aereo 1158
Cartagena, Colombia

TELEPHONE: 41067 and 42065

INTERVIEWEES: Hector Trujillo Velez, General Manager
Ronald Covo Torres, Manager Industrial Operations
Zona Franca, Industrial y Commercial

Tom Callanan
Shannon Free Airport Development Company, Ltd.
Town Centre, Shannon Free Airport
Co. Clare, Ireland
Telephone: 061-61555
(interviewed by phone)

SUBMITTED BY: Alan Cook, Associate Professor of Economics
Hankamer School of Business
Baylor University
Waco, Texas

PREFACE

The interviews for the Zona Franca project took place in Cartagena at the offices of Hector Trujillo and Ronald Covo. Mr. Tom Callanan was interviewed by phone as it was impossible to meet with him in Ireland or correspond with him due to the Irish mail strike. However, useful information was obtained from Mr. Callanan about the Shannon Development Corporation's relationship with the Zona Franca.

Mr. Trujillo and Mr. Covo were extremely helpful and very open about the development of the industrial zone of the Zona Franca. I believe that the information provided is accurate and they went out of their way to clarify any questions that I had. Trujillo and Covo are working very hard to see that the industrial zone is properly designed, constructed, and managed. They did not appear to be typical government bureaucrats and their greatest frustration is the delays caused by mounds of government red tape and regulation.

INTRODUCTION

This case study reports on a project involving economic development efforts of the Colombian government designed to encourage foreign investment in Colombia. The venture, Zona Franca Industrial y Commercial, was developed by a Colombian entrepreneur after his exposure to the Shannon Free Airport Development Company's training programs as well as an examination of other free zones. The initial contact with Shannon Development grew into an ongoing relationship that focused on developing an industrial and commercial free zone in Colombia with participation by an entrepreneur, the Colombian government, and Shannon Development personnel. The agreement among the parties, described later in the report, is a contractual one and, therefore, this is not a co-venture. This case illustrates a contractual arrangement where the developed country provides legal, management, and technical assistance and the developing country provides funding, land, and logistical support. Thus, this case is viewed as a project that will improve the developing country infrastructure which should improve the environment for co-venturing.

The impact of this project, even though it is not fully implemented, is already affecting the local economy due to (1) the public works projects taking place to support the industrial zone and (2) the establishment of a staff to develop the industrial zone. The impact of the completed industrial zone will be enormous and will spread far beyond the legal limits of the zone. In addition to training workers, hundreds of small enterprises will develop to support activities within the zone and a substantial amount of managerial/vocational skills will be developed. The social infrastructure will be greatly improved as educational and health standards will be upgraded and extended to several thousand homes in the Cartagena area.

COLOMBIA'S ECONOMIC DEVELOPMENT STRATEGY

The government's development strategy is directed at creating conditions conducive to increasing employment opportunities. Incentives are provided for private sector investment in less developed regions of the country, especially in industries using labor-intensive techniques. Proexpo (the government export promotion fund) provides financing and technical assistance to export industries and promotes them in foreign markets. At the end of 1976, Proexpo had loaned $170 million U.S. to Colombian exporters; 70% of that amount went to manufacturers.

Public sector investments have concentrated on expanding and improving infrastructure, and on socially oriented projects designed to reduce poverty in the country. Included in this effort are health and nutrition programs, job training programs, and rural development projects. Since many exports are linked to the agricultural sector, a substantial effort has been made to provide farmers with credit and technical assistance. Agricultural production has not responded, however, as sugar, wheat, rice, and maize output fell in 1977.

The development plan also calls for curbing the concentration of manufacturing and population in the major cities of Bogota, Medillin, Cali, and Barranquilla. These efforts are complemented by plans to encourage the development of small- and medium-scale firms in the smaller cities and less developed regions of the country. Small-scale firms are assisted by the Corporation Financiera Popular (CFP) which specializes in providing financial and technical assistance. Approximately 300 firms have been assisted by CFP. A large number of loans have been made to companies whose assets are less than $100,000 U.S.

The decentralization of industry noted above is a key economic development strategy because approximately 70% of Colombian industrial production is concentrated in Bogota, Medellin, Cali, and Barranquilla. Increased industrialization in these areas currently only adds to overcrowding and pollution; therefore, the government is restricting foreign investment in the above-mentioned cities. The government is encouraging industrial development in less populated areas by: (1) providing increased credit and more favorable terms to firms locating outside major cities; (2) allocating an increasing proportion of infrastructure investment for smaller cities; and (3) increasing manpower training and technical assistance.

Another economic development strategy utilized in Colombia is to establish and promote industrial and commerical free zones (i.e., manufacturing and warehousing facilities where tariff laws are altered or suspended to provide incentives for investment). Since this strategy is the focus of this case study, these zones will be detailed in later sections of the report. Suffice it to say at this point that there are six industrial and commercial free zones authorized to operate in Colombia. Most of these are commercial zones located in the larger industrial centers, however, the case considered herein is located outside of these centers. It should be noted that Barranquilla has the only industrial zone that has not relied solely on commercial activities, including storage and transportation of goods. The Barranquilla zone has developed 26 industrial firms since 1972 but has not been successful in attracting foreign investment.

HISTORY AND DESCRIPTION OF THE PROJECT

Background Information

The Zona Franca Industrial y Commercial in Cartagena is currently trying to develop an industrial free zone to complement the existing commercial free zone.[1] Cartagena, population 350,000-400,000, is one of the cities targeted for industrial development by the central government as part of the decentralization strategy. It is located in the state of Bolivar--one of the poorest states in Colombia. The current estimated unemployment rate is 25% for the state and 20% in the city. In addition, the city suffers from a heavy migration of unskilled and uneducated people from the rural areas of Bolivar. Tourism is the main industry in Cartagena.

Manufacturing is developing slowly--only 4,500 jobs have been created in the manufacturing sector since 1969. However, there are several reasons why manufacturing could prosper in Cartagena. First, there is a good transportation net which includes an international airport, a well-developed seaport. and a river transportation system which gives Cartagena easy access to the raw materials produced in Bolivar. In addition, Cartagena is located on the Caribbean and is near the Panama Canal as well as the wealthy markets of Venezuela. Finally, Cartagena has a large pool of unemployed where productive potential could be unleashed through proper education and training.

Zona Franca Industrial y Commercial

In 1974, the Colombian Government started the Zona Franca with an investment of approximately $100,000 U.S. No further capital injections have been needed and the commercial zone made money from its very first year of operation. The Zona Franca currently consists of seven privately managed warehouses where goods are kept in duty free storage for up to five months. The advantage of leaving goods in bond are numerous. First, a manufacturer can bring in either machinery or raw materials and enhance their cash flow position by not having to pay the duties on the imported items until they need to be used. Second, a retailer may gain a greater advantage by not having to bring imported retail goods out of bond until he has an order for them. Finally, anyone who purchases expensive imports knows he will have five months after the goods have arrived to accumulate the duties.

The revenues of the Zona Franca Commercial Zone rose rapidly from a little over $100,000 U.S. in 1975 to $1,550,000 U.S. in 1978. These revenues are derived from rents and fees paid to the zone by the private warehouses that operate in the commercial zone. Commercial zone activities have resulted in the generation

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[1]The technical term used by Shannon Development for an industrial free zone is a "duty free export processing zone."

of 36 government jobs and approximately 260 private jobs. Approximately 26 of the private jobs are skilled supervisory while 52 are classified as semi-skilled and 182 unskilled jobs. The government jobs are classified as: 26 unskilled, 5 skilled, 2 supervisory, and 3 middle management positions. In addition, there is a special staff of 24 which have been hired to design and promote the industrial free zone. The total payroll for the Zona Franca amounts to $266,000 U.S. The commercial zone also paid $467,000 U.S. in 1978 to various government agencies to assist in the training and social development of the people of Cartagena. General administrative expenses amounted to $195,000 U.S. and there was a surplus of $1,022,000 U.S. which was applied to debt service realized in planning the industiral zone.

An organization chart for the Zona Franca is presented in Table 1 on the next page.

Hector Trujillo, a native Cartagenian, was appointed Zona Franca Manager General by the Board of Directors. Trujillo, 35, studied economics at the Catholic University in Chile before joining his family's business as sales director of a metal fabrication plant. Later he became the manager of a family-owned floor tile and floor products factory. Trujillo was then asked to manage the Cartagena office of the Colombian National Association of Manufacturers. After three years, he was appointed vice president of the National Association of Manufacturers and moved to Medellin. Trujillo accepted the position of manager of the Zona Franca because he felt that Cartagena needed leadership to develop its industrial potential.

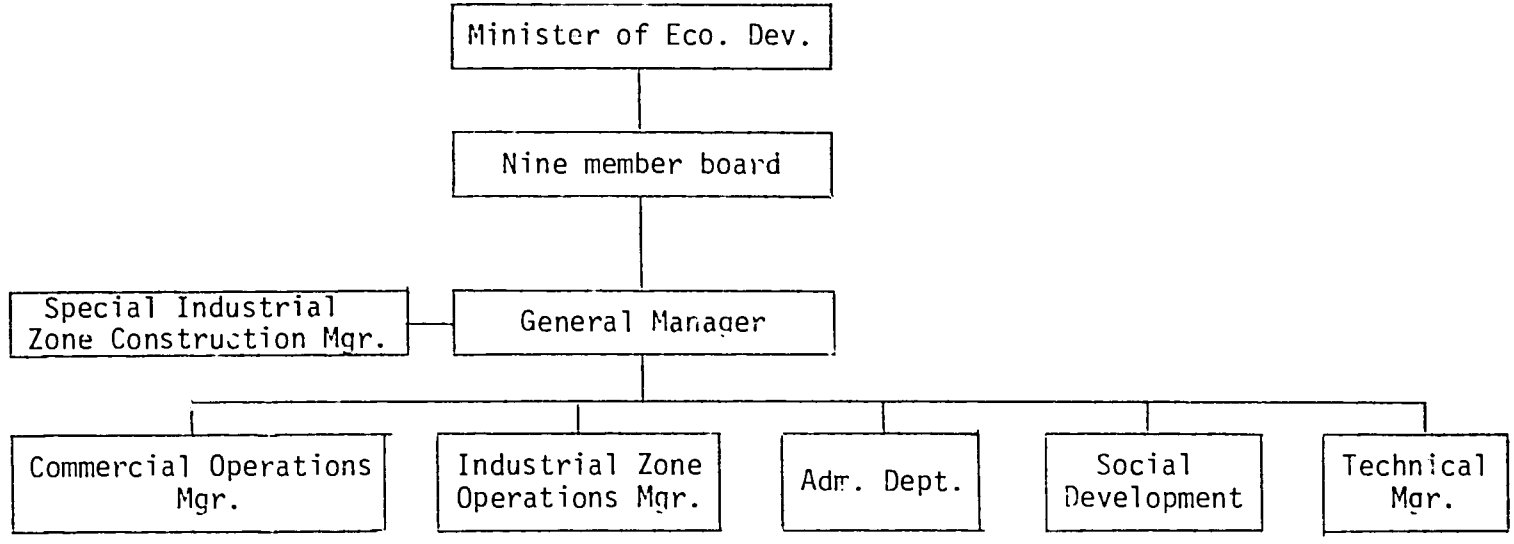
Shannon Free Airport Development Company, Ltd.

Shortly after his appointment as manager of the Zona Franca, Trujillo attended a UNIDO meeting in Barranquilla and met Brendon O'Regan, the founder of the Shannon Free Airport Development Company, Ltd. (SDC) of County Clare, Ireland. O'Regan originated the commercial and industrial free zone concept and implemented it in Ireland as a development tool.

O'Regan explained to Trujillo that Shannon Development was the result of sheer necessity. During the 40s and 50s, Shannon airport was a main trans-Atlantic airline refueling stop. However, as the jet age overtook air travel, Shannon was no longer a necessary stopover. Economic activity at the airport and in the immediate vicinity was rapidly declining when O'Regan developed the idea of the free commercial zone. Airline passengers would be allowed to buy duty free goods from all over the world. This concept worked quite well as the airlines continue to provide service through Shannon. The next phase of O'Regan's plan was to develop an industrial free zone where foreign exchange regulation, profit, and capital repatriation and duties on imported components used in the manufacturing process is waived to encourage firms to establish plants.

TABLE 1

ORGANIZATION CHART FOR ZONA FRANCA



The composition of the board is established by the enabling act that set up the Zona Franca. The board consists of the Colombian Minister of Economic Development or his appointed representative, the Governor of the state of Bolivar, the Mayor of Cartagena, the port manager, the director of the customer zone, and representatives from the Chamber of Commerce, the National Association of Manufacturers, the local industrial development district, the Cartagena branch of the Colombian Bank for Small Business, and one member at large.

As Shannon prospered, O'Regan realized that these concepts could be transferred to less developed countries in order to stimulate economic development. Thus, a Development Consultancy Program was established to assist developing country governments in implementing programs similar to those used by Shannon Development during Ireland's economic development phase.

This program is designed to provide training in the areas of:

- Increasing tourism;
- Implementing industrial and commercial free zone concepts; and
- Implementing the duty free shopping concept.

These services, for the most part, are provided at a training facility in Shannon, Ireland. However, in the course of implementing large projects, Shannon Development personnel will provide consulting services on-site for short periods of time at intermittant intervals.

After the Barranquilla meeting, Trujillo attended a seminar on Free Zone Management Techniques at Shannon (November 1974). The relationship between Shannon and the Zona Franca developed from that point and lasted until March 1979; there is a high probability that it will continue into the future.

The Industrial Free Zone Project

The Concept

An industrial free zone is an enclave (or splinter) within a country where certain laws are waived in order to promote economic development, essentially through the manufacturing process. In these zones, the primary focus is to create employment through an intensified manufacturing effort. Most of the manufacturing firms located within such a zone are foreign owned and financed. Usually, the foreign company is permitted to own 100% of the plant and operate it as a subsidiary of the parent company. The company also gains special privileges pertaining to foreign exchange restrictions, and capital and profit repratiation. The companies are allowed to convert money at any time and transmit it back to the foreign parent whether it be profits, normal trade credit payments, or capital repatriation. In return, the manufacturers agree to export a substantial portion of their product (usually over 90%) to use as many local or regional raw materials as possible in the production process, to employ and train as many people as possible, and to transfer some level of technology. Colombian owned firms could locate in the zone but usually won't becasue of lack of capital.

Operating costs are also very low in an Industrial Free Zone. For example, the Zona Franca will lease space for 14¢ U.S. a square foot building. If a company wants to build instead of lease the building, cost is $10.60 U.S. per square foot plus 6¢ U.S. per foot per month rental for use of the land. Labor

rates are also extremely reasonable. Unskilled workers receive $3.40 U.S. a day (including fringe benefits) while semi-skilled and skilled workers receive $4.48 U.S. and $8.66 U.S. respectively. A manufacturer employing 100 unskilled workers would incur a $340 U.S. per day wage bill in comparison to $2,320 U.S. per day for the same number of unskilled (not including fringe benefits) employed in the United States (calculations based on $2.90 per hour minimum wage).

In addition to inexpensive rentals and labor, Cartagena is strategically located close to the Panama Canal and, thus, there is easy access to markets on the West Coast of South America as well as access to the Pacific trade areas. As a Caribbean port, Cartagena also has easy access to the East coast of South America, especially the wealthy Venezuelan market. As a member of the Andean Pact, Colombia has easier market entry to fellow members than nonmembers.

Project Initiation

In 1975, a group of Colombian consultants was engaged by the Zona Franca to execute a physical plan for the Industrial Free Zone. Shannon Development was hired to "look over the shoulder" of the consultants to ensure the study was being done correctly. Shannon Development acted as technical advisor to the consultants in such matters as plant and office layouts. The Company had done some work earlier at the Barranquilla Industrial Free Zone but the results were less than anticipated due to "internal environmental" problems. Shannon Development described the Barranquilla project as successful in developing internal trade within and around Barranquilla, but the Industrial Free Zone was not able to develop much foreign investment because of the "hostile" environment.

Shannon Development found that the Cartagena staff has a much more positive attitude. They have been training the Cartagena staff on operational and promotional aspects of Industrial Free Zones. In addition, Shannon Development personnel carried out tedious macroeconomic and regional planning studies, aimed at totally integrating the Industrial Free Zones into the Cartagena area. The last project completed for the Zona Franca resulted in recommendations for revising Colombian laws regarding (1) establishing Industrial Free Zones, (2) regulating foreign investment, and (3) regulating methods used in financing the Industrial Free Zone construction.

Current Status

The contractual relationship between the two organizations has recently been concluded. Shannon Development personnel reported their working relationship with Zona Franca was very pleasant and they are considering continuing working relationship to help establish Industrial Free Zone procedures for potential manufacturers. However, they also stated they would never actually help identify or "knock on doors of" potential industrial customers as this would be cutting Shannon's own Industrial Free Zone out of potential customers. It is interesting to note that a German technical assistance group, the Gesellschaft

fur Technische Zusammenarbeiten (GTZ), has agreed to assist the Zona Franca in its promotional activity and economic development strategy. The GTZ has agreed to send a two-man team for a two-year period to assist Zona Franca personnel with promotional activities and has invited Ronald Covo, manager of the Industrial Free Zone, to attend a special GTZ school on industrial promotion.

It was further reported that planning and development was progressing very well until 1978, when the Colombian general elections slowed the project almost to a standstill. It is not clear if the election hindered the loan application for $15 million U.S. to The World Bank. The World Bank staff recommended the loan be approved in June 1978. However, at the present time, the loan has not been approved and Shannon Development reports that the project was no further along in March 1979 than in March 1978 when dirt fill work was being done at the Industrial Free Zone site. They believe the project will be completed; the only serious complaint they had in their working relationship with the Zone Franca concerned the delay during the 1978 hectic political campaign.

Future Plans

When the loan is approved by The World Bank, construction of the buildings and promotional activities will begin.

PROJECT OUTCOMES

Since the Industrial Free Zone has not been completed, its benefits are a matter of conjecture. The EPZ is located 12 miles from Cartagena and currently a new road to the site is being built resulting in job creation in the Cartagena area. Additional dirt work is being done at the site and as soon as The World Bank loan is approved, construction of the main part of the zone will begin. The site, consisting of 255 acres of land donated by the Exxon Corporation, is located in low lying marshlands that will have to be filled before any buildings can be built. All of these activities will create jobs.

Ronald Covo (34 years of age, a U.S. Trained Civil Engineer and Manager of the Zona Franca) describes current progress as slow but sure. The major problems lie in the city's completing the road and obtaining The World Bank loan. There will be five islands in the Zona Franca industrial area and each one has to be created through landfills. Each island will have approximately 16 industrial buildings, a cafeteria, and a general service area. Each building will have approximately 17,750 square feet and will house approximately 80 workers. At the present time, there is no rule prohibiting one firm from owning a whole island or at least several industrial/manufacturing buildings.

When all of the industrial buildings are occupied, it will be possible to accommodate approximately 6,400 workers in the Cartagena Industrial Free Zone. Even at the minimum wage of $3.40 U.S. per day (with benefits), 6,400 workers will generate approximately $21,760 U.S. per day in income and benefits to the people working in the industrial zone. Several hundred more administrative jobs will be created to serve the industrial zone. In addition, Trujillo and Covo estimate that approximately 13,000 to 18,000 jobs will be generated in the Cartagena area to service firms within the Industrial Free Zone. Further, they estimate that capital investment in each plant probably will range from $2 to $10 million U.S. Every attempt is being made to attract firms that will utilize local raw materials and labor. Target industries include metal working, textiles, leather, construction equipment, agricultural processing and canning, furniture, glasswear, plastics, ceramics, and small boats.

Criteria for selecting firms include: (1) the generation of employment, (2) the potential for export, (3) the amount of income generation and distribution, (4) the generation of spillover benefits, (5) the attraction of new technology, (6) the production of a quality product, and (7) the degree of pollution control exercised. Trujillo believes that if firms are properly selected, it will result in: (1) new markets for Cartagena, (2) structural diversification, and (3) efficient production. In addition, technology and skills transfer will be accomplished at the line worker level, the supervisory level, and the skilled and professional level. Part of this transfer will take place through a government-sponsored training center located in the Zona Franca. In addition, the University of Cartagena will offer training in engineering and professional services such as accounting, finance, and management.

Various social development programs are being implemented to help people adjust to the industrialization process. These programs include nursery schools for working mothers, basic education programs for women, health and nutrition services, housing (construction and improvements), buying co-operatives, education on how to budget personal income, and family planning. Many of the social programs and some of the basic vocational training programs are already being developed. These programs are currently being funded by (1) the Zona Franca, (2) the local government, (3) the central government, and (4) the university. Trujillo considers vocational training programs and social services as an essential element in the Industrial Free Zone overall development strategy. He refers to this as "developing the whole person."

The total cost of the Industrial Free Zone will be $31.3 million U.S. with $15 million U.S. anticipated from The World Bank. Table 2 shows the estimated cost for the program and the financing plan. The internal cash flow of the Zona Franca will provide $7.2 million U.S. of the financing while $4.7 U.S. million is derived from domestic borrowing and $4.2 U.S. million from the central government. There is a four-year grace period on The World Bank loan which will then be repaid over 17 years at 7.5 percent interest.

Covo estimates that full occupancy will be attained by the end of the tenth year of operation and that the break-even point will depend somewhat on how many single-story or two-story industrial buildings are constructed and whether they are leased or built by the occupant. However, he believes that the Zone will begin to break even in less than three years, one year ahead of the first scheduled debt service payment.

Currently, it appears that the only major setback in this project was the construction slowdown caused by the 1978 political upheavel. Potential future problems revolve around the Zona Franca's ability to promote the zone and obtain full occupancy in the industrial park.

The relationship between the Zona Franca and the SDC has been cordial and the SDC has provided them with invaluable guidance and assistance during the development stage. Further relationships between Shannon and the Zona Franca are currently being discussed.

The project appears to have excellent leadership under Trujillo's guidance and it is anticipated that he will be able to successfully develop the EPZ to its fullest potential. If successfully implemented, this project will be used as a standard for other Industrial Free Zones in Latin America.

TABLE 2

Estimated Cost:	Local --U.S.	Foreign $Million	Total Equivalent--
Export Processing Zone	9.5	7.2	16.7
Technical Assistance	0.1	0.2	0.3
Road and Water Supply	2.2	1.8	4.0
Vocational Training	0.1	0.2	0.3
Physical Contingencies	1.2	0.9	2.1
Price Contingencies	3.2	2.6	5.8
Total Project Cost	16.3	12.9	29.2
Interest during Construction	--	2.1	2.1
Total Financing Required	16.3	15.0	31.3
Financing Plan			
Government	4.2	--	4.2
Internal Cash Generation of the Free Zone Authority (ZFIC)	7.2	--	7.2
Contribution of the Vocational Training Service (SENA)	0.1	--	0.1
Contribution of the Municipal Public Utility Company (EPMC)	0.1	--	0.1
Bank	--	15.0	15.0
Domestic Borrowing	4.7	--	4.7
Total Project Cost	16.3	15.0	31.3

APPENDIX C: DATA TABLES

TABLE 3

THE SMALL/MEDIUM SCALE CO-VENTURE PROCESS

The Concept: Source

Quimicas:	Guatemalan customers
Hole Master:	U.S. partner
ALINDECO:	Japanese partner
Couvoirs:	Tunisian partner
RLTW:	LNDC Managing Director
Zona Franca:	Colombian government/Director of the Industrial and Commercial Free Zone

The Concept: Purpose of Co-Venture

Quimicas:	Viable co-venture
Hole Master:	Viable co-venture/economic development
ALINDECO:	Viable co-venture
Couvoirs:	Viable co-venture/economic development
RLTW:	Viable co-venture/economic development
Zona Franca:	Economic development/infrastructure development

The Concept: Market

Quimicas:	Regional (Central America)
Hole Master:	Domestic (Korea)
ALINDECO:	Export (Japan)
Couvoirs:	Domestic (Tunis)
RLTW:	Export (Europe); secondary market in Lesotho
Zona Franca:	Foreign manufacturing companies wishing to establish firms in a Latin American Industrial Free Zone

TABLE 3 (continued)

Small/Medium Scale Co-Venture Agreements

Quimicas:	U.S. partner provided technical assistance, received 40% of the stock, receives 5% of net sales annually; the Guatemalan partner provides management skills and knowledge of the marketplace
Hole Master:	The U.S. partner provided equipment and technical assistance; the Korean partner provided management, contacts and market knowledge; both partners contribute equity financing
ALINDECO:	The Japanese partner provides marketing capability, equipment, technical and management assistance; the Filipino partner provides management and knowledge of natural and human resources available on-site; both partners contributed to equity financing
Couvoirs:	Tunisian partner provides management of co-venture; Dutch partners provide technical assistance and long-term, debt financing; all partners contribute equity financing
RLTW:	The LNDC has provided entrepreneurial leadership and technical assistance; the KLH provides marketing assistance; both partners contributed to equity financing
Zona Franca:	The agreement is contractual. The Irish participant provides planning and strategy development assistance

Facilitator Organizations

Quimicas:	None. Services were obtained by the Guatemalan partner from a lawyer and Certified Public Accountant
Hole Master:	None. However, a U.S. firm was contracted to provide technical assistance
ALINDECO:	None
Couvoirs:	None. However, the Agency for Promotion Investment in Tunis must approve all developing projects in Tunis; Central Bank approves requests for repatriation of profits and repayment of loans outside Tunisia
RLTW:	None. However, the LNDC provided facilitator services during the start-up stage; Kingdom of Lesotho Handicrafts, Pty., Ltd. (KLH) is now acting as a marketing representative
Zona Franca:	None

TABLE 3 (continued)

Financing: Source	
Quimicas:	Developing country partner
Hole Master:	Each partner and Commercial Bank of Korea
ALINDECO:	Each partner, Japan Export-Import Bank and local commercial banks
Couvoirs:	All partners
RLTW:	Each partner
Zona Franca:	Developing country and local bank(s)
Financing: Type	
Quimicas:	Retained earnings from Guatemalan firm; amount unknown
Hole Master:	Equity from partners and loan from the Commercial Bank of Korea
ALINDECO:	Equity participation by each partner; long-term debt from the Japan Export-Import Bank; loans from local, commercial bank
Couvoirs:	Equity participation by each partner; long-term debt from the FMO
RLTW:	Equal equity participation by each partner
Zona Franca:	Funds generated by Commercial Free Zone and local bank

TABLE 4

CHARACTERISTICS OF SMALL/MEDIUM SCALE CO-VENTURERS

Education

Quimicas:	Both partners educated as engineers (U.S. and Guatemalan); U.S. partner also had formal education in business
Hole Master:	Two businessmen; the U.S. partner is an entrepreneur/ inventor/designer educated in engineering; education of Korean entrepreneur is unknown
ALINDECO:	Two educated businessmen. The Japanese partner has a law degree and the Philippine entrepreneur has a degree in commerce
Couvoirs:	Two well-educated entrepreneurs (Tunisian and Dutch) and experienced staff of the Netherlands Finance Company for Developing Countries
RLTW:	The project champion is an experienced businessman who acted as the Managing Director of the LNDC; the original British partner had an ongoing relationship with Lesotho and experience in the mohair industry. The developed country partner buying the British partner's shares, EDESA, is directed by a well-educated financier
Zona Franca:	The Colombian entrepreneurs directed by an administrator have an economics/engineering education

Experience

Quimicas:	Both partners have established businesses; the U.S. partner has extensive co-venture experience
Hole Master:	Both partners have business experience; the U.S. partner founded his own firm but had neither co-venture experience nor international experience; no information is available on the Korean partner
ALINDECO:	Both partners have substantial experience in the abaca industry - the Japanese partner in a trading firm and in his family's business; the Filipino entrepreneur in a major abaca production facility and as founder-owner of a trading/ consulting firm. Both had international experience, but not co-venture experience
Couvoirs:	The Dutch and Tunisian entrepreneurs have well-established, successful businesses; neither had co-venture experience; the FMO staff has extensive experience in financing joint ventures and small/medium scale enterprises in developing countries

TABLE 4 (continued)

RLTW:	The project champion was a marketing executive with a major South African company; the original British partner was an established businessman. The second developed country partner, EDESA, is directed by a businessman with extensive international banking experience as well as international development and co-venture experience
Zona Franca:	It is believed the Colombian administrator had government experience; the staff of both government agencies clearly had government experience

TABLE 5

TECHNOLOGY

Type of Technology

Quimicas:	Technology related to textile processing chemicals
Hole Master:	Technology related to manufacturing twist drills; hardware was transferred from Germany to Korea
ALINDECO:	Technology related to producing and processing of abaca pulp; hardware was transferred from Japan to the Philippines
Couvoirs:	Technology related to chicken breeding and food manufacturing; hardware was transferred from Belgium to Tunisia
Zona Franca:	Technology consists of skills and knowledge necessary to plan an Industrial Free Zone

Technology Transferred

Quimicas:	Knowledge/skills
Hole Master:	Hardware/knowledge/skills
ALINDECO:	Hardware/knowledge/skills
Couvoirs:	Hardware/knowledge/skills
RLTW:	Knowledge/skills
Zona Franca:	Knowledge/skills

TABLE 6

METHODS FOR TECHNOLOGY TRANSFER

Training

Quimicas:	Short-term training is provided at the U.S. firm; short-term, problem-solving assistance is provided through international technical seminars offered by the U.S. firm
Hole Master:	Short-term training (3-6 months) was provided by a U.S. twist drill manufacturing firm through a technical assistance agreement negotiated by the U.S. partner; Industrial Advancement Administration, Ministry of Commerce and Industry provides the job technical training
ALINDECO:	The Japanese partner and his associate are frequently on-site to provide assistance; there is an Equipment Sale and Technical Assistance agreement which calls for on-site training during the start-up phase
Couvoirs:	Short-term training is provided at the Dutch firm and short-term specialist training is provided on-site; annual refresher course for technical personnel is conducted at the Dutch firm; long-term assistance (2 years) was also provided in the area of quality control; a management assistance contract was required as part of the long-term debt financing agreement
RLTW:	Long-term training was provided by a Swiss designer; marketing assistance is now being arranged with an international firm (FRIDA)
Zona Franca:	Shannon Development staff provided training in management techniques in Ireland

Consultancy

Quimicas:	Consultancy is provided on-site by employees of the U.S. firm
Hole Master:	Industrial Advancement Administration, Ministry of Commerce and Industry provides on-site technical consultancy
ALINDECO:	None known
Couvoirs:	Consultancy is provided on-site by members of the Dutch firm; every 2 months a specialist checks the quality of food production; a veterinary technology specialist visits every 4-6 weeks to check for disease and immunization effectiveness; Euribrid chief of food production assists in developing management skills, personnel training and productivity development

TABLE 6 (continued)

RLTW:	During the turn-around stage, the Swiss weaver and a local entrepreneur acted as design consultants
Zona Franca:	Consultancy was provided regularly on-site by the Shannon Development staff (site visits are no more than 4 weeks in length)

TABLE 7

BARRIERS TO SMALL/MEDIUM SCALE CO-VENTURING

Government-Related	
Quimicas:	None known
Hole Master:	None known
ALINDECO:	None known
Couvoirs:	Need for approval of foreign investment by the Central Bank and of the project by the Agency for Promotion of Investment in Tunis
RLTW:	None known
Zona Franca:	Colombian laws and practices related to Industrial Free Zones
Cultural/Social	
Quimicas:	Differing business practices, business objectives, expectations of partner and languages
Hole Master:	None known
ALINDECO:	None known
Couvoirs:	Young, unmarried women constitute a portion of the work force and it is not generally acceptable for them to work alone with men; much of the population is nomadic in nature so incentives had to be provided for them to settle and work in one place; creating an understanding of the need for high hygiene and health standards in order for the chicks to survive
RLTW:	The current manager was unmarried until just recently, which created problems concerning his status among the women workers
Zona Franca:	None known
Financial	
Quimicas:	None known
Hole Master:	Limited access to working capital for small/medium scale firms in Korea

TABLE 7 (continued)

ALINDECO:	Length of time it took to obtain agreement about loan guarantee between Philippine and Japanese agencies
Couvoirs:	Perceived risk on the part of the Dutch partners in turning the management of their investment over to a developing country entrepreneur
RLTW:	None known
Zona Franca:	None known

Technology-Related

Quimicas:	None known
Hole Master:	Lack of advanced manufacturing equipment
ALINDECO:	Lack of advanced production equipment and technically skilled labor force
Couvoirs:	Lack of veterinary laboratory testing facilities and knowledge; need for quality control; lack of trained labor force
RLTW:	Lack of labor force with weaving skills; lack of management skills
Zona Franca:	Lack of skills to plan an Industrial Free Zone

TABLE 8

INCENTIVES FOR SMALL/MEDIUM SCALE CO-VENTURING

Government-Related	
Quimicas:	Lack of government regulations and laws regarding co-venturing and foreign investment; government encourages improving the small business climate
Hole Master:	This small/medium scale co-venture is aligned with economic development goals of Korea; government desired to stimulate foreign investment through the establishment of co-ventures
ALINDECO:	Government has established priorities for developing an economic base and this small/medium scale co-venture falls into the preferred category; therefore, it receives financial incentives
Couvoirs:	This small/medium scale co-venture fits into the Tunisian five-year economic development plan well; the Tunisian partner was a working member of the government with a very good reputation; the government is currently encouraging small/medium scale businesses and is stable
RLTW:	This small/medium scale co-venture is aligned with national economic development plan; government encourages foreign investment, especially in co-venture arrangements
Zona Franca:	Project aligned with national economic development plan
Cultural/Social	
Quimicas:	Good reputation of each partner and established standing in their respective business communities
Hole Master:	None known
ALINDECO:	None known
Couvoirs:	None known
RLTW:	None known
Zona Franca:	None known
Financial	
Quimicas:	The venture was already established, therefore start-up costs and problems could be avoided; developing country partner's position in the marketplace

TABLE 8 (continued)

Hole Master:	Tax holiday; specification of cutting tool manufacturing industry as a priority in the Korean third 5-year economic development plan
ALINDECO:	Tax and financial incentives provided to pioneer industries; an assured market existed
Couvoirs:	The initial and expansion markets for the product were assured; tax incentives; availability of low-interest, long-term debt financing
RLTW:	Six-year tax holiday; generous depreciation allowances; unrestricted imports of raw materials to product exportable products; duty-free entry of all finished products into South Africa; duty-free entry of some products into other African markets, the EEC and the U.S.
Zona Franca:	None known

Technology-Related

Quimicas:	None known
Hole Master:	None known
ALINDECO:	None known
Couvoirs:	None known
RLTW:	None known
Zona Franca:	None known

TABLE 9

BENEFITS OF SMALL/MEDIUM SCALE CO-VENTURES

Government-Related	
Quimicas:	None known
Hole Master:	Helps fulfill national economic development plans
ALINDECO:	None known
Couvoirs:	Helps fulfill national economic development plan; helps FMO fulfill its mission
RLTW:	Contributes to implementation of national economic development plan
Zona Franca:	Contributes to implementation of national economic development plan; will serve as a model for similar projects in Latin America; contributes to the development of the Colombian infrastructure; may lead to changes in Colombian laws related to industrial free zone development and implementation
Economic	
Quimicas:	Import substitution; increased employment; increase in number of skilled labor force; increased use of indigenous materials
Hole Master:	Import substitution; increased employment; increase in skilled labor force; developed country partner would like to participate in other small/medium scale co-ventures with Korean partners
ALINDECO:	Increase in skilled employment; increase in gross revenues and concomitant increase in taxes; increase in income for abaca suppliers; establishment of affiliate venture expected to raise abaca
Couvoirs:	Import substitution; increased employment; increase in skilled labor force; establishment of a spin-off venture; expanded potential market for Euribrid and encourages additional co-ventures; increased utilization of raw materials
RLTW:	Increased exports which improve the balance of payments; increase in skilled work force; increased utilization of indigenous raw materials; increased employment

TABLE 9 (continued)

Zona Franca:	Increased employment as a result of the planning project, dirt fill work and road construction; increase in skilled labor force

Cultural/Social

Quimicas:	None known
Hole Master:	None known
ALINDECO:	Created employment opportunities in rural area thereby helping to a small degree to lessen inequities between urban and rural areas in the developing country
Couvoirs:	New social programs for employees; these include provision for on-site housing to encourage employees to settle, land for gardens and goats, medical care, food at reduced costs and the owners encourage parents to send their children to schools
RLTW:	None known
Zona France:	Social programs for workers are in planning stage; these include establishing nursery schools, basic education for women, health and nutrition services, housing, family planning education, personal budget training and providing access to co-operatives for purchasing

Technology Transfer

Quimicas:	Transfer of knowledge and skills enabling the production of improved quality products at a more reasonable cost to the regional market; this technology is considered appropriate in Guatemala as the level of manufacturing technology has been increased and more skilled labor is available within the country
Hole Master:	Transfer of skills, knowledge and equipment necessary to improve the quality of a product being produced in Korea
ALINDECO:	Transfer of skills, knowledge, and equipment appropriate to the co-venture environment
Couvoirs:	Transfer of knowledge, skills and equipment enabling the Tunisian partner to develop a business supporting the national development plan and to produce a used product within the country rather than importing it; business is labor intensive

TABLE 9 (continued)

RLTW:	Skills and knowledge in weaving techniques and design helped improve a product already in production; process is labor intensive; the technology is considered appropriate
Zona Franca:	Knowledge and skills in planning and implementing an industrial free zone have been transferred; this project will result in transfer of appropriate technologies through new venture establishment if implemented as planned