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ANTIGUA SHRIMPERY LIMITED

Direct Loan Case Study

PRE Project Number 940-0002.14

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I. Economic Environment

Antigua is categorized as one of the less developed countries of the English-speaking Eastern Caribbean, with an estimated per capita GDP of $ 1,600.

At the time of independence in 1981, its economy was suffering from the effects of oil price movements of the previous 5 years and was in a recessionary period; and as of 1984, Antigua had the dubious distinction of consuming more energy per capita than any other Eastern Caribbean nation.

Antigua is highly dependent on global economic trends, especially in North America. Tourism has traditionally been its strongest sector, employing 25 percent of its labor force, most of which is drawn from agriculture which had been in decline during the decade preceding independence.

The manufacturing sector has been growing at a rapid pace in recent years, due in part to extensive tax holidays, duty-free importation of equipment, and relatively cheap labor costs. The manufacturing sector includes both import substitution and export oriented industries. Major export production in textiles and garments, however, has suffered from intense international competition, for which Antigua has little in the way of competitive advantage. Manufacturing aimed at import substitution has suffered from the extremely small size of the domestic economy and has had little effect on the current account deficit. Imports, principally used to supply the tourism industry, are in the range of 70 percent of GDP, and have included substantial quantities of agricultural products.

Recognizing the burden that declining agricultural production was placing on the economy, the government has made revitalization of the agricultural sector a development priority. In a country with a total population of 80,000 and a labor force of 30,000, the major constraint to this effort has been manpower. Although following independence, large amounts of agricultural land (former sugar estates for the most part) reverted to public ownership and were leased back to small farmers, there is a widespread post independence aversion to work in agriculture, particularly in the face of better opportunities in tourism and manufacturing. This is compounded by the lack of requisite capital inputs, especially machinery, to substitute for the lost labor.

The private sector predominates in the Antiguan economy. Approximately 90 percent of the tourism industry is controlled by the private sector, and most of that is in the hands of foreign companies or individuals. Similar conditions exist in manufacturing and in the banking system. There has been, however, little investment either foreign or domestic, in the agriculture sector. This problem has been noted in the planning of almost all major donors for future activities in Antigua.

II. The Banking Sector

Private banks dominate Antigua's banking sector. There are two local private banks, The Antigua Commercial Bank, which has substantial government equity participation, and the Bank of Antigua (B of A) which is privately owned. Foreign bank branches are by far the major force in this sector, however, and include the Bank of Nova Scotia, Barclays Bank International, Canadian Imperial Bank of Commerce and the Royal Bank of Canada. Two regional banks also have a presence, the Antilles

International Trust Co. and the Virgin Islands National Bank.

The country's Development Finance Institution (DFI) is the Antigua and Barbuda Development Bank (ABDB), which receives financing from donors through the Caribbean Development Bank (CDB). Although ABDB increased loans to the private sector by 35 percent in 1982, loans to agro-industry had been declining considerably during the period the Antigua Shrimpery project was in formulation. Most of ABDB's lending was to the housing sector with some credit extended to small industry and small hotel development. ABDB has also experienced difficulty in servicing the CDB loans, primarily due to collection arrears on the debt service payments of borrowers.

The total debt-to-GDP ratio reached as high as 59.4 percent in 1984. This, together with a relatively low domestic saving rate, and a balance of payments deficit remaining constant at around 10 percent, substantially reduced domestic liquidity requiring infusions of external resources to finance investments. Given the recessionary period in the world economy during the late '70s early '80s, this source of investment capital was not readily available.

Investment by private banks showed overall growth during the period, but almost half of this investment (49 percent in 1981, 47 percent in 1984) was short-term in nature. Medium-term lending (up to one year) to the trading sector used up approximately half of the remaining credit. Long-term lending, which amounted to about 20 percent of the total, was aimed at manufacturing and construction. Total lending by commercial banks to the agriculture sector dropped from 3.5 percent in 1980 to 0.8 percent in 1983.

III. The PRE Loan to Antigua Shrimpery Limited

PRE's investment in Antigua Shrimpery Limited is the smallest direct loan investment the Bureau has made. However, in the context of Antigua, it is a relatively important case. The ASL venture was sufficiently large to place it in the 99th percentile of agribusiness ventures in the country according to the contractor for the Project Development Assistance Program in the Caribbean.

The Antigua Shrimpery project evolved over a period of about three years, and was essentially conceived and designed by Gordon Sanford, a former Peace Corps Volunteer in mariculture in the Philippines. Encouraged by local Antiguan businessmen, Sanford conducted research into the production and marketing of shrimp in Antigua as early as 1981. The project was envisaged as a prototype shrimp production facility, the first of its kind in the eastern Caribbean.

The anticipated local production of approximately 65,000 pounds of heads-on shrimp was aimed at supplanting the existing supplies of imported frozen shrimp consumed, for the most part, in the numerous tourist facilities on the island of Antigua.

The original technical design and preliminary feasibility study were brought to the attention of the Caribbean Project Development Fund (CPDF) of the World Bank, which contributed substantially to the final form of the project and, to a large extent, was responsible for bringing the project to the attention of USAID's PRE Bureau.

In the course of revising and refining the feasibility presentation, CPDF scaled down Sanford's original concept, reducing the budget from approximately $1.1 million to $600,000. There is some confusion about which elements were eliminated from the original proposal.

Sanford indicated that a hatchery was included in the first proposal, while a representative of CPDF who was involved during the initial phases stated that only the number of ponds to be constructed was reduced. Copies of the original proposal were not available to the MSI study team, and since PRE came into the picture after the proposal had been revised, there is insufficient information available in PRE files to clear up this apparent contradiction.

Equity participation by Sanford and two local Antiguan businessmen in the company was arranged with apparent ease, while various avenues for debt financing were being explored. Local long-term debt financing institutions which were initially contacted included Barclays Bank in Antigua and the Caribbean Food Corporation (CFC), which was also asked to be a short-term debt participant.

Although CPDF had taken an active interest in the project from the beginning, and had taken an active role during the conceptual phase of planning, their funds were fully committed by the time equity participation had been arranged. It was at this time, however, that PRE was beginning its program of Revolving Fund investments, and CPDF brought the project to the attention of the Bureau.

PRE's interest in investment in the area was also stimulated by the major U.S. policy initiative in the Caribbean Basin, and the project was seen as a possible prototype aquaculture exercise which had significant demonstration potential in the region. Market studies indicated that the domestic demand from the tourist industry in Antigua was sufficient to absorb almost all of the production, and the steady growth in demand (at one percent per year) in North America represented opportunities for economic diversification in Antigua as well as in the rest of the region.

Although the technology was recognized as being somewhat sophisticated and capital intensive, it represented an opportunity for significant reductions in foreign exchange outflows for Antigua, and a potential for replication using common natural resources in the region.

PRE's contact with the project promoters was direct, as there was no USAID representation in Antigua and, although the Investment Proposal had planned for long-term co-financing involving Barclays and PRE, the B of A eventually became PRE's partner in the debt financing of the enterprise.

The Antigua Shrimpery case involved a direct loan by the PRE Bureau through the B of A, which acted essentially as PRE's agent in Antigua, overseeing the progress of ASL. There was no documentation available explaining why B of A, rather than Barclays Bank, became the partner to PRE in this enterprise. The inference drawn by staff at USAID/Barbados was that the choice was based on a desire to support an Antiguan-owned institution rather a foreign bank.

The final form of financing arrangements involved a $150,000 term loan to ASL by the PRE Bureau, with co-financing by the B of A of $120,000 in the form of a term loan and $50,000 in overdraft facility. Equity participation of approximately $280,000 was secured from Sanford, two local Antiguan businessmen and Sanford's U.S. relatives who became shareholders when a proposed equity participation by the Bank of Antigua was found to be impossible due to Antiguan banking law restrictions.

The PRE Loan to ASL was in the form of a co-financing pass-through arrangement between USAID and the B of A, through which USAID agreed to participate up to an amount of $150,000 with B of A in capitalization of the enterprise.

Co-financing was seen as an effective mechanism for bringing about an increase in the availability of private capital for development projects. Previous co-financing by USAID had been with other international donors, and the ASL exercise was looked upon as an effort to directly leverage a risk-bearing loan from the private sector to a development venture. It was also looked upon as a means for gaining experience, through observation of a commercial lender, that would add to USAID's expertise in long-term debt financing.

The pass-through arrangement, by which B of A lent the total amount of $270,000 and simultaneously sold to USAID a $150,000 participation in the loan, was also unique. It had the effect of providing a buffer between USAID and the borrower with B of A taking the lead in providing technical assistance remedies where necessary, particularly in the area of financial management, and freeing USAID from cross default obligations in case of the demise of the venture. USAID did, however, assume the risk for their portion of the total loan.

The USAID participation stipulated a seven year term at 12 percent, with a commitment fee of one percent, conforming to terms established by B of A. Disbursements from and repayments to USAID were to be in U.S. dollars with a 24 month grace period on principal only. Interest payments were due beginning six months after the first disbursement.

Conditions stipulated by USAID included the applicable standard provisions such as the environmental requirements and the purchase of goods of U.S. origin. Strong emphasis was placed also on the requirement that total capitalization be secured prior to the first disbursement under the loan. In addition, a series of detailed financial covenants were included to protect both co-financers against risk. These covenants included minimum requirements for retained earnings, working capital, debt to net worth and current asset levels.

There were no restrictions concerning the application of the PRE portion of the co-financed loan, however, it was anticipated that the long term financing would be applied to the construction and equipment costs while the overdraft facility which was also being extended by B of A would cover initial running costs.

IV. Project Organization and Operations

A. Organization

The company was incorporated under the laws of Antigua and Barbuda on August 25, 1982. ASL was granted fiscal incentive status under Antiguan law which gave it an income tax holiday for 15 years.

ASL obtained a 25-year lease on 225 acres of government land near Nonsuch Bay on the eastern side of the island of Antigua. A pilot production test using grow-out cages had been performed in the area before the lease was finalized, and the site was generally regarded as a technically sound choice.

As originally designed, the project was to have included a nursery/quarantine building and 12 two-acre grow-out ponds which would be supplied with fresh sea water pumped from an inlet of Nonsuch Bay.

Growing stock (post larval shrimp, or PLs) was to be purchased from a hatchery located in St. Croix, Virgin Islands. This hatchery, which had been established originally under the auspices of the University of Texas as part of a marine biology laboratory facility, was owned by Worldwide Protein, Inc., a Texas-based firm. At the time it was producing an estimated 1 million PLs per month.

Seed algae were to be purchased from U.S. sources and cultured in the quarantine/nursery facility. Algae nutrients are the sole source of food for PLs during the first 30 days of grow-out. Feed supplies for the remainder of the cycle were to be imported from the U.S.

B. Budget

At full production the installation was expected to reach an annual production level of 65,000 lbs. of heads-on shrimp for the local market. Although a substantial world demand exists for shrimp, export potential was not an immediate consideration in the project. Based on a conservative price of $7/lb. (market prices case 17 percent during the period of the feasibility analysis) the shrimpery was expected to reach $455,000 in sales per year at full production by the third year of operation, and a net income (before taxes) of approximately $160,000 by its fifth year of operation.

Employment generation was not a major consideration, and permanent staff were expected to reach a level of only five technical persons. Temporary employment would be generated at the time of harvests, expected to occur 3 times per year.

The total anticipated cost of the project as it was finally designed was $600,000, of which $284,000 was to be equity and $316,000 credit from PRE and the B of A.

V. Implementation and Development Impact

While relatively insignificant in terms of USAID's international private enterprise portfolio, and a veritable "drop in the bucket" relative to overall development activities in the Caribbean Basin, the Antigua Shrimpery Project took on major importance in the local context, and was widely publicized locally and in a number of important U.S. publications dealing with USAID's private sector initiatives.

The process of raising shrimp is a complicated operation, requiring a high degree of technical expertise. In the case of ASL, the approach chosen was also very capital intensive, and required that a substantial amount of costly infrastructure be in place before it began to turn a profit. It was, at the outset, a high risk venture.

While the project was being touted widely, however, it was proving to be a prime example of "Murphy's Law" as it went into operation.

The project was plagued with difficulties from the outset. Although the site chosen was appropriate from a technical perspective, a government-maintained dam upstream from the site collapsed early in the construction phase necessitating major revisions of the design of the Shrimpery's physical facilities, including relocation of the pumping station at a greater distance from the ponds. This substantially increased the cost of the water delivery system.

Subsequently, the anticipated source in the Virgin Islands for growing stock ceased operation, necessitating the establishment of the hatchery facilities which may or may not have been dropped from the original proposal. The inclusion of a hatchery in the project increased the technological risks and costs considerably, as the hatching of PLs is a delicate process requiring close supervision, a strictly controlled hatching environment and carefully phased transfer to growing areas. Because of the fact that an original participant in the project had left to start his own aquaculture business operation in Latin America, the technical resources of ASL were spread very thin by this time. While the need for the installation of a hatchery was being filled, other sources for seedstock were identified; however, commercial production was delayed and indebtedness was growing.

A third major problem arose, due to an apparent misunderstanding as to the responsibility for provision of utilities. When the Antiguan Electricity Authority disclaimed responsibility for the extension of power lines to the installation, the ASL itself was forced to install its own electrical power facilities.

The events noted above dramatically increased the start-up costs of the operation, and resulted in a significant problem of cash availability. By the end of March of 1985, expenses had risen to over $700,000 and the shrimpery was still in the construction phase. Additional capital costs of slightly over $100,000 were anticipated, in addition to all of the project's working capital requirements.

These problems, and the impending cash crisis, had been evident for some time, but financial restructuring was postponed through a series of overdrafts provided by the B of A which ultimately extended its overdraft facility for the project from $50,000 to $150,000. At the time of this study, the ASL loan was B of A's largest loan, representing almost 10 percent of the bank's total assets.

The General Manager of B of A at the time (he subsequently lost his job when the financial crisis at ASL became apparent) indicated to the study team that he had extended the overdraft facility because, even from the outset of the exercise, the failure of ASL would have almost certainly meant the collapse of B of A itself.

While ASL was exploring sources of financing for completion of the installation as planned, the decision was made to begin commercial production using the ponds that were available. The first commercial production occurred in November and December of 1985, using the ponds that had been completed. The total revenues from the first harvest cycle amounted to $34,803 Eastern Caribbean Dollars, approximately $13,000. A second cycle, in April/May 1986 produced approximately

$17,000 in revenues. The third growing cycle was interrupted by the cutting off of electricity to the Shrimpery.

Thus, at the time of this study, electricity had been cut off and the facility had ceased operation with total revenues of approximately $30,000. It appeared that the survival of the company was in jeopardy and required a complete financial restructuring. An attempt at this restructuring was taking place at the time of the study with the assistance of PRE. In January 1987 a new company named Eastern Caribbean Maricultures Ltd. (and owned by Maple Leaf Mills, a subsidiary of Canadian Pacific) was established to replace Antigua Shrimpery Ltd.

There are several who argue that the project was substantially overdesigned when compared to an "appropriate technology" shrimpery project in neighboring St. Kitts. The Antigua facility was designed on a "worst case" basis, and was expected to withstand virtually any climatic onslaught including earthquakes and hurricanes such as those which had destroyed Antigua's sugar production a decade earlier.

From another point of view, however, the project may have been undercapitalized. The original proposal, according to Gordon Sanford, the driving force behind the project, had been for approximately $1.2 million. The total capitalization of the enterprise after restructuring is thus at approximately the same level as originally proposed. The assumption of control of the operation by a major international private firm would seem to indicate that, even at the higher capitalization cost, the venture is potentially profitable. It should be noted, however, that the shareholders of the original Antigua Shrimpery Ltd. have been obliged to assume the total debt burden of the original project and will only begin to recoup their own investments after the original debts have been liquidated.

Throughout this process, technical expertise was supplied by the principal organizers and proponents of the venture, who were regarded as knowledgeable experts by both CPDF and PRE. However, shrimp cultivating is generally regarded as a high risk venture in the best of circumstances, and when one of the original technicians involved in the formulation of the venture left to establish an operation elsewhere, technical management capability was diminished by half.

Although the venture was recognized as a relatively high risk undertaking, external management support and supervision were supplied only on an ad hoc and intermittent basis, by CPDF in feasibility analysis, by the B of A with respect to financial questions and to a lesser extent by PRE during occasional supervisory missions.

ASL, for the most part, has been a "one man show", depending almost exclusively on the enthusiasm of Gordon Sanford, who readily admits that he is a "shrimp farmer, not an accountant". While the end result of this project may ultimately be the transfer of important technology and an economic benefit to Antigua, it will be some time before such impacts can be reasonably claimed. At this point the project presents a picture of failure inasmuch as it is producing no shrimp, creating no jobs, and transferring no technology.

VI. Institutional Impact

A. Bank of Antigua

The loan from PRE appears to have been a major catalyst in the establishment of the operation, leveraging substantial participation by the B of A in the overall financing of the enterprise. In fact, the Bank's participation became so substantial that the financial fate of the bank became dependent on the success of ASL. This occurred when the "overdraft" facility extended by B of A more than tripled original estimates.

The extent to which the problems that have occurred will create an unfavorable environment in Antigua for future PRE or USAID interventions could not be determined. While the participation of PRE in the project was clearly an incentive for its original involvement, the B of A may have gone beyond the bounds of banking prudence in undertaking the project. The new General Manager of the B of A indicated that any future involvement on their part with donor-supported projects would be undertaken with a much higher degree of caution than was the case with ASL.

B. <u>USAID</u>

USAID does not maintain any permanent representation on Antigua and Barbuda, and the USAID Regional Office in Barbados has been minimally involved in this project which they consider to be entirely a Washington initiative. In the context of overall USAID activities in the Caribbean, the Antigua Shrimpery project was a guppy in a sea of whales. With hundreds of millions of dollars being programmed for the region and a number of projects aimed at stimulation of the private sector, a $150,000 loan from PRE was considered to be incidental to Mission objectives and was not regarded as warranting much attention from regional USAID personnel. As a result, the deep involvement of B of A has been a particularly significant structural element in the project, constituting USAID's only implementing or supervising authority with a permanent presence in the region.

There appears to have been little, if any, interaction between the PRE Bureau and the local USAID Mission based in Barbados, despite PRE's invitation for Mission involvement in this project. Discussions with Mission personnel and with the U.S. State Department economic representative on Antigua indicated that the project was of interest locally only to the extent that publicity was generated. Minimal files were maintained on the project in the USAID regional office and no individual in that office was assigned oversight responsibility for the project. The net impact of the ASL project on the performance, policies or portfolio of the Regional USAID Mission thus appear to have been minimal, to date.