

**Information and Communication
Technology (ICT) for development of
small and medium-sized exporters
in Latin America:
El Salvador**

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IDE-JETRO

This document was prepared by Merlin Alejandrina Barrera López consultants of the International Trade Division of the Economic Commission for Latin America and the Caribbean (ECLAC). This is the complete version of his summary paper, which forms part of the book "Information Technology (IT) for Development of Small and Medium-sized Exporters in Latin America and East Asia", compiled by Mikio Kuwayama, Matsatsugu Tsuji and Yasushi Ueki, 2005. The views expressed in this document, which has been reproduced without formal editing, are those of the author and do not necessarily reflect the views of the Organizations.

United Nations Publication

LC/W.50

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Printed in Santiago, Chile – United Nations

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Abstract

Though there is, today, an abundance of information, most individuals and companies have little knowledge of how to use tools that would allow them to fully exploit this information to enhance the efficiency and operation of their businesses.

This vast informational resource is generally overlooked by companies, due to their inability to use it, thus losing the potential advantage it could provide in improving the productivity and efficiency of their operations.

People use information in different ways, from weather reports to investment in the stock market. Most fundamentally, information enhances the efficiencies of internal processes and provides businesses with knowledge of the markets in which they trade their products or services, as well as information on competition, suppliers, etc., offering a competitive advantage over other firms.

Information technology (IT) tends to be regarded as something used only by large manufacturing companies or in automated systems. However, it is, in fact, used in all types of processes: accounting; relationships with suppliers; recruitment; production automation; quality control; marketing, sales and distribution of products, etc.

Rapid developments in IT have had a dramatic impact on all operational aspects of organizations, as well as in the specific area of technology. IT encompasses all technology utilizing computers and computer-based communications. Such systems are used for purchasing, storing, handling and transmitting information to people and businesses units, both within and outside a company, allowing businesses the ability to efficiently manage and integrate all of their information-processing needs. This produces important savings in time and money, and facilitates problem solving and decision-making. As a result, IT usage has become a central component of any business wishing to increase its competitiveness.

For various economic sectors, particularly those with limited resources and small-scale operations, accessing tools that promote competitive development has been one of the most serious constraints. Thus, it is imperative that companies gain knowledge of these new information technologies, which can be used by small and medium enterprises and can become a tool for development, providing major changes in efficiency and productivity, while creating sustainable growth for the countries involved.

I. Present status of information technology in the Salvadorian market, and IT use by SMEs

Any discussion on promoting and developing small and medium enterprises must consider the internal and external variables that have affected the region in recent years.

First, globalisation has been a worldwide phenomenon, transforming the conditions and rules governing the new global economic environment. Decentralized production processes, new information technologies, capital flows, foreign direct investment (FDI), to name but a few factors, have led to increased FDI and have stimulated trade flows between countries.

This situation points to one central thesis: the more dynamic the effects implemented along the investment-production-trade-services chain, the more one can expect there to be positive multiplier effects on society and on the economy.

This reinforces the idea that competitive positioning of small and medium enterprises must become the focus of national development strategy, with the emphasis on leveraging the opportunities offered by economic openness and the advantages gained from trade negotiations with principal international partners.

In considering what is required to achieve success, the variables must be examined systematically and comprehensively. Small steps can be taken, however, to assist in supporting and increasing the competitiveness of SMEs, while helping them become part of the global marketplace. Such measures include the use of information mechanisms, transfer of know-how and training, technical assistance, promotional activities, international assistance, and establishing a global presence.

Thus, an important aspect of making SMEs competitive is the incorporation of technology and business plans, which lead to greater productivity and increase the efficiency of strategies aimed at achieving greater national value added and stronger economic growth.

Contrary to what might be expected, this is of particular importance for developing economies: in El Salvador, SMEs (companies with fewer than 100 employees) represent 99% of all companies.

Before embarking on a thorough analysis of the IT market in El Salvador and how this has extended to SMEs' productive chains, it is important to highlight some key indicators of the Salvadorian economy:

TABLE 1
EL SALVADOR: KEY ECONOMIC INDICATORS

	2000	2001	2002	2003
Economic activity and prices (Rates)				
Growth Domestic Product (GDP)	2.2	1.8	2.2	1.8
GDP <i>per capita</i>	2 092.7	2 159.3	2 195.8	2 250.8
Consumer prices (Dec-Dec)	4.3	1.4	2.8	2.5
Terms of trade		70.0	70.0	
Private Consumption	11 606.0	12 080.0	12 905.0	
Public Consumption	1 304.0	1 379.0	1 414.0	
Population and labor (Percentage)				
Population	1.9	1.9	1.9	1.9
Labour force (annual growth)	2.1	5.5	-2.3	5.3
Unemployment	7.0	6.9	6.2	
External Sector (US\$ millions)				
Exports of goods and services	2 941	2 864	2 996	3 128
Imports of goods and services	4 947	5 027	5 192	5 754
Balance of goods and services	-2 006	-2 163	-2 196	-2 626
Foreign direct investment	2 241	2 308		

Source: Central Reserve Bank of El Salvador, 2004, San Salvador, September <<http://www.bcr.gob.sv>>.

As can be seen in the table, Salvadorian economic activity during 2003 decreased in relation to the previous year. GDP decreased 1.8% compared to the previous year, a trend that established itself in the early months of the year, in the wake of the weakening seen during previous years, in which there were slow growth trends over a period of several years in terms of *per capita* GDP.

Similarly, exports continue to encounter difficulties. The traditional products showed a general slowdown, while non-traditional goods experienced slight growth. The apparel industry has exhibited low growth rates for 2 consecutive years, contrasting with the accelerated development seen in the second half of the 90s.

Closely related to the level of economic activity in Central America, employment showed a slight decrease, varying from one country to another. The common denominator was the increased unemployment in the formal sector, which expanded to informal activities. Employment has varied according to the sector, with higher unemployment rates in areas related to traditional agricultural products (commodities), spurred by the plummeting of international prices and matched by drops in the manufacturing sector and in the apparel industry.

Considering this unfavourable outlook, SMEs will need to incorporate technology in their businesses in order to increase productivity and efficiency and improve their positioning so as to maintain their presence in local markets, while seeking new markets abroad. The fact that SMEs need to incorporate IT does not mean they are, in fact, investing in it, or that this is happening as fast as necessary to be able to compete in the market. It is important to mention what occurred in El Salvador toward the end of 2002, a situation that has probably changed little between then and now (mid-2003). This produced a qualitative change, though this was not reflected similarly within the ever-expanding SME sector, which uses technology as part of conducting business.

A. Market assessment (hardware, software, IT-related services, B2B, B2C, B2G)

Information and communication technologies (ICTs) consist of hardware, software and electronic media used to collect, save, process, transmit and display information. Thus, an information system is one that meets a social need consistent with the information needs of populations, institutions, policies, processes, incentives, data, information technology and infrastructure (National Information Commission).

After undergoing a widely publicized privatisation process in the telecommunications area at an international level, El Salvador has made significant advances in developing communication and information infrastructure. According to World Bank figures, El Salvador had 93 lines per 1,000 people in 2001, compared to 163 per 1,000, the average figure for Latin America and the Caribbean (LAC). A local 3-minute call in the United States cost US\$ 0.07, compared to US\$ 0.09 in Latin America and the Caribbean. The statistic for outbound traffic in international telecommunications was 264 minutes per subscriber for the United States, compared to 87 for Latin America and the Caribbean during the same year, while the United States had 125 cellular phones per 1,000 people, compared to 160 per 1,000 in Latin America and the Caribbean. These figures show the significant advances the country has made in this area in the wake of greater openness within the sector through the privatisation of services.

TABLE 2
ICTs IN EL SALVADOR

	El Salvador			LAC
	1995	2001	2002	2001
ICT Infrastructure and access				
Telephone mainlines <i>(per 1,000 people)</i>	50	93	109.1	163
In largest city <i>(per 1,000 people)</i>	171	198		175
Waiting list <i>(thousands)</i>	200	38		4 403
Revenue per line (\$)	702	985		827
Cost of local call <i>(\$ per 3 minutes)</i>	0.01	0.07		0.09
Mobile phones <i>(per 1,000 people)</i>	2	125	139.7	160
International telecommunications:				
- Outgoing traffic <i>(minutes per subscriber)</i>	225	264		87
- Cost of call to U.S. <i>(\$ per 3 minutes)</i>	-	1.23		3.20
Computers and Internet				
Personal computers <i>(per 1,000 people)</i>	-	21.9	25.5	59.3
Users <i>(thousands)</i>	-	15.0	24 515	25 666.9
Monthly off-peak access charges:				
- Service provider charge (\$)	-	26.0	-	-
- Telephone usage charge (\$)	-	0.62	-	-
ICT business and government environment <i>(Rating from 1 to 7, with 7 the highest/best)</i>				
Broadband Internet access availability	-	4.5		4.0
Local specialized IT services availability	-	4.4		4.5
Competition in ISPs	-	4.8		4.0
Government online services availability	-	3.3		3.3
Laws relating to ICT use	-	3.4		3.3
Government prioritisation of ICTs	-	3.4		3.4
Secure servers	-	7		2 769

Source: “Data by Country Statistics 2003 and Economic Survey”, World Bank, 2003, Washington D.C. “Encuesta Económica 2002”, Digestyc, 2002, San Salvador, El Salvador.

In a similar vein, use of the Internet, as well as use of computers generally, has seen a remarkable increase.

As can be seen, in 2001 the number of computers per 1,000 people was 21.9, a figure that increased to 25.5 in 2002. According to the most recent Economic Survey taken in 2002 in El Salvador, 5.6% of Salvadoran families had at least one computer, compared to 0.8% in 1995, with 2.3% of families having Internet access. This shows that despite the major progress in communications, developments in information technology and advances in the privatisation process, access to these tools is still limited largely to the capital city and other cities in the vicinity.

TABLE 3
PCS AND INTERNET ACCESS IN EL SALVADOR
(In percentages)

Houses	1995	2001	2002
- With PCs	0.8	4.6	5.6
- With Internet	-	1.7	2.3

Source: “Encuesta Económica 2002”, Digestyc, 2002, San Salvador, El Salvador.

According to the SV net Foundation, a private organization responsible for assigning domains in El Salvador, approximately 5,000 domains have been registered since the organization’s launch in 2000. Likewise, there are 14 large companies that supply connection services, with some 11 providing host websites and approximately 100 small, medium and large companies offering a variety of services.

In November 2003, CID Gallup El Salvador conducted a market study on the IT services market in El Salvador. The results were as follows:

There are approximately 100 companies including website-design services, software suppliers, systems analysts, customer service applications, systems consulting services, business consulting, and post-sale services and consulting. Forty-six percent of these relatively new companies started operations between 1992 and 1997, a period in which the process of privatising telecommunications services began.

A breakdown of the reasons given by companies for entering the IT business as suppliers are as follows: 28% because they identified business opportunities, 28% because they liked the field, and 18% because clients required these services. Eighty-three percent of these companies develop software applications independently; approximately 45% represent or are authorized distributors of international companies, and only 13% have joint ventures with international software companies. Fifty-four percent of these companies have fewer than 10 employees, while 83% of the employees of these companies have university training in the area of information technology.

One of the constraints on the expansion of these companies has been their limited financial resources: 83% use their own resources for product development; 14% obtain loans; and only 3% have joint ventures with international companies.

Ninety-three percent of the suppliers in El Salvador use Windows as their operating systems; 74% use DATA BASES; 43% and 48% use ORACLE for DOS and DATA BASES, respectively; UNIX, MS DOS, MYSQL, INTERBASE, ACCESS and APPLE are also used, though on a much smaller scale.

The areas in which these companies face competition are: 38% from the domestic market; 22% from the international market; and 40% from both.

For 2003, 44% of the business came from commercial firms (B2B), while 35% of business came from government (B2G), 34% of B2B businesses were in the telecommunications sector in 2003, with 30% in services, out of which 25% were financial institutions and 27% were in manufacturing for export.

Among companies that provide IT services, 50% have exported their products, primarily to markets in the United States, Mexico, Guatemala, Honduras and other Central American countries.

B. Penetration of IT and e-commerce among SMEs

According to a study conducted by CID Gallup El Salvador in 2003, among a sample of 100 companies, 25% were government and 75% were private, with SMEs accounting for a third of the private firms; 56% stated that they had contracted local firms for application development services.

Salvadorian companies make extensive use of IT: based on the enterprises surveyed, 14% had 1-25 computers, 18% had 26-50, 24% had 51-100, 19% had 101-200 and 26% had 200 computers or more.

Additionally, 50% of these companies had Internet access, as follows: 21% when the number of computers is 26 to 50, 13% when the number of computers is 51 to 100.

The trend on the part of clients is to use platforms running Visual Studio 6 (51%), MICROSOFT SQL (52%) for DATA BASES and NET MICROSOFT (22%) for application servers.

Firms' use of local IT is mainly for sales applications (72%), human resources (71%), application integration (68%), portals (62%), financial applications (60%), marketing and customer service applications (50%), distribution applications (38%), business to consumer applications (33%) and manufacturing applications (29%).

II. Development of SMEs within the IT revolution

A. Overview of the relative importance of SMEs in the overall economy

Salvadorian SMEs have a fundamental impact on job creation, on efforts to combat poverty, and on the country's socioeconomic development.

SMEs are classified according to the number of employees, being those businesses with up to 100 employees (micro-enterprises have up to four employees; small enterprises have from five to forty-nine employees; and medium-sized enterprises have from fifty to ninety-nine employees).

In terms of job creation, SMEs utilize a high percentage of the economically active population, thus making them vital to the development of the national economy.

TABLE 4
IMPORTANCE OF SMALL AND MEDIUM ENTERPRISES IN EL SALVADOR,
BY NUMBER AND EMPLOYMENT SOURCE 2002

Size of company (by number of employees)	Number of companies	%	Number of employees	%	Average employment
< 10	141 887	91.7	468 567	51.1	1.9
10 to 49	10 541	6.8	308 619	33.6	6.5
50 to 99	1 402	0.9	21 850	2.4	26.0
>100	941	0.6	118 352	12.9	531.2
Total	154 771	100	917 388	100	

Source: "Encuesta Económica 2002", Digestyc, 2002, San Salvador, El Salvador.

According to the Ministry of Economy's economic survey for 2002, there were approximately 465,969 registered establishments including micro, small and mid-sized

businesses, employing a total of more than 700,000 persons. In addition, one sees evidence of the importance of SMEs when the economic sector is analysed by categories: In industry, trade and services, micro-enterprises contribute most to job creation.

It is estimated that SMEs account for 45.3% of GDP.

TABLE 5
GROSS NATIONAL PRODUCT, BY SIZE OF COMPANY AND
NUMBER OF EMPLOYEES

Sector	Under 4	SMEs			Above 100	Total
		5 to 9	10 to 49	50 to 99		
Industry	569 561.48	85 832.11	355 148.68	175 147.65	368 233.48	1 553 923.00
Trade	748 989.48	245 000.45	341 333.71	81 679.77	96 188.34	1 513 191.75
Services	520 908.22	116 651.77	553 982.97	92 789.26	170 130.05	1 454 462.27
Total	1 839 459.20	447 484.34	1 250 465.30	349 616.68	634 551.88	4 521 577.40
Percentage	40.70	9.90	27.70	7.70	14.00	100

Source: “Encuesta Económica 2002”, Digestyc, 2002, San Salvador, El Salvador.

According to the 2002 economic survey, SMEs in El Salvador account for 45.3% of GDP. The data takes on greater significance when comparing the different economic sector: services account for 52% of GDP, with the commercial sector accounting for 44% and the industrial sector accounting for 39.6%.

Despite this major contribution to the economy, SMEs face serious obstacles. These include shortcomings within the firms, which make it extremely difficult to take advantage of opportunities arising from free trade agreements, with these becoming a liability rather than an advantage. Limitations in the ability to purchase goods represent another major constraint. The generally poor negotiating capacity of SMEs presents a further problem, exerting a negative effect on their prices and, hence, on their market competitiveness.

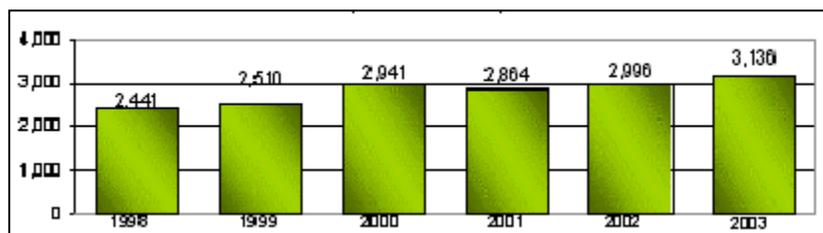
The lack of trained technicians is another serious problem for SMEs, since this, too, affects competitiveness within their sector. Other factors include debt, the cost of maintaining public relations with customers and lack of access to bank loans. These elements in combination contribute to stifling their prospects in the new millennium. In light of these challenges, the private sector is negotiating to persuade the government to provide concrete assistance for the SME sector.

CONAMYPE (the National Commission for Micro and Small Businesses) is the institution charged with promoting, facilitating and coordinating policies, strategies, programs and actions for the integral development of micro and small businesses.

No statistics are available to show SMEs’ contribution to exports of goods, which for December 2003 reached US\$ 3 billion, of which approximately 90% comes from large businesses.

SMEs’ contribution to Salvadorian exports is primarily in non-traditional products. In recent years, this has come to encompass a range of products known generally as “ethnic products,” including food items and beverages targeted to the Salvadoran community living in the U.S. This group comprises 25% of El Salvador’s total population, and is concentrated mainly in California, Washington, D.C., Texas, New York, New Jersey and Massachusetts.

FIGURE 1
EXPORTS IN EL SALVADOR
(In millions of U.S. dollars)



Source: Central Reserve Bank of El Salvador, 2004, San Salvador, September <<http://www.bcr.gob.sv>>.

While this accounts for a relatively small percentage of total exports, it is significant in terms of job creation. Thus, programs have been designed to assist in the development of this sector.

TABLE 6
FOREIGN TRADE, BY PRINCIPAL PRODUCT AND BY COUNTRY OF ORIGIN,
AND DESTINATION
(In annual amounts of millions of U.S. dollars)

Category	1996	1997	1998	1999	2000	2001	2002	2003
Total exports	1 788	2 426	2 441	2 510	2 941	2 864	2 996	3 136
Coffee and Coffee prod.	340	522	326	248	301	119	109	106
Sugar	37	56	66	37	40	70	44	47
Shrimp	39	30	33	25	16	20	9	11
Other	609	763	831	867	975	1 005	1 075	1 092
Apparel	764	1 055	1 185	1 333	1 609	1 650	1 758	1 881

Source: Central Reserve Bank of El Salvador, 2004, San Salvador, September <<http://www.bcr.gob.sv>>.

Among the main programs being implemented are the following:

- The technical assistance fund, or FAT, which offers subsidies of up to 80% for the purchase of technical assistance. The program is linked directly to the benefits of strong supply and with the efforts to create strong partnerships in the country.
- BONOMYPE provides aid to SMEs that request assistance for training. At present, up to 4500 micro-businesses are being trained through 36,000 linkages.
- Program to expand micro-credit, designed to provide micro and small enterprises with higher levels of credit.

All of these efforts are intended to achieve changes within the sector and strengthen competitiveness, in light of new global economic trends. The areas to be covered by these projects are: commerce, industry and services. At the same time, the textile sector continues to be an important market niche for Salvadorian SMEs.

In 2001, textiles became the country's main export product, and SMEs have become important suppliers for the large textiles companies.

In all Central American countries, tourism has become an important source of income. SMEs have great potential not only in this area, but also in services, ethnic crafts, etc.

SMEs also have enormous potential in the agricultural sector, chiefly in the agro-industrial area. Many small and mid-sized agribusinesses offer a wide variety of processed products for the domestic market. All of these small businesses generate jobs in regions where other job opportunities are limited.

Another form of government aid is FOEX, a fund drawing on public resources, created by the Ministry of Economy with assistance from the World Bank, through the national program from competitiveness. Its purpose is to encourage SMEs with export potential to undertake export activities, through the allocation of non-reimbursable financial resources for implementing individual export projects. There are also lines of credit whose purpose is to encourage the development of micro and small businesses in all economic sectors. These include special credits granted by the BMI (Multisectoral Investment Bank), which offers highly advantageous interest rates and grace periods, with high limits established based on the needs of each project presented by an SME. These credits can be used for capital to create permanent jobs, or to pay for studies and technical services, personnel training, acquisition of technology and/or machinery, equipment and installation expenses, as well as for construction and infrastructure, etc.

FUSADES (the Salvadorian Foundation for Socioeconomic Development) also has a promotion program, PROPEMY, whose objective is to contribute to the modernization of SMEs to enhance their local and international competitiveness, along with providing access to financial resources through specialized credit services designed to cover credit needs in the important and dynamic micro, small and mid-sized business sector. According to the data provided by this agency, as of Dec 2000 approximately 16,300 credits had been approved, for a total value of more than 814 million colons, making it possible to carry out major expansion projects.

In addition, SMEs have access to a range of non-profit organizations, financed not only by national resources but, more importantly, by international cooperation. These organizations assist micro, small and medium-sized enterprises, promoting the integral development of the sector and increasing its participation and influence in the country's socioeconomic development by formulating concrete proposals to solve problems facing the sector.

At an international level, FUNDES promotes and stimulates the competitive development of SMEs in Latin America, with a presence in El Salvador and ten other countries. FUNDES describes itself as a network for solutions designed to increase the competitiveness and entrepreneurial spirit of SMEs.

Specifically, FUNDES has integrated its services in three channels: access to financing, access to "know-how," and information on, and assistance in implementing development initiatives. Among the services and projects overseen by this organization are: services to enhance competitiveness, strategic reorientation, upgrading operations to promote innovation, development of new markets, business networks, and an innovative business portal (mipyme.com) created to increase the competitiveness of SMEs in Latin America. The agency also promotes technical change and encourages mergers among SMEs, while offering concrete solutions designed to help firms utilize the Internet as an effective business tool.

In summary, the importance and strength of this sector of the Salvadorian economy is continually growing, helped by government efforts, private-sector initiatives and assistance from international financial organizations.

B. Case studies on the use of e-commerce and supply chain management (SCM) in selected industries

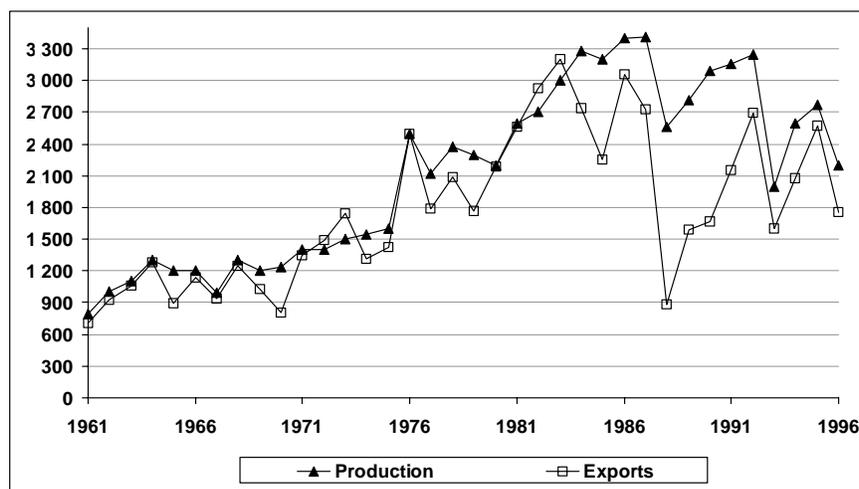
Beginning in 1996, El Salvador began a major National Competitiveness Programme aimed at improving the productivity and competitiveness of Salvadorian companies. This programme identified as strategic economic sectors: textiles and clothing, coffee, apiculture, metal/mechanical, ornamental plants and flowers, handicrafts, tourism, the immigrant community, electronics and information technology (IT).

These productive sectors began by carrying out sectoral analyses to identify their main features, strengths and weaknesses, so as to be able to design a strategy to increase their competitiveness.

The identification of principal features of the apiculture sector allowed the company VAPE S.A., a cluster member, to design a strategy to provide value added to honeybee products, through the acquisition of new technology, improvement of current processes, and development of new products. Examples include:

- (i) Production and export of honeybees, in light of the decrease in Salvadorian exports during the civil war that occurred between 1979 and 1982.

FIGURE 2
PRODUCTION AND EXPORTS OF HONEY
(In thousands of U.S. dollars)



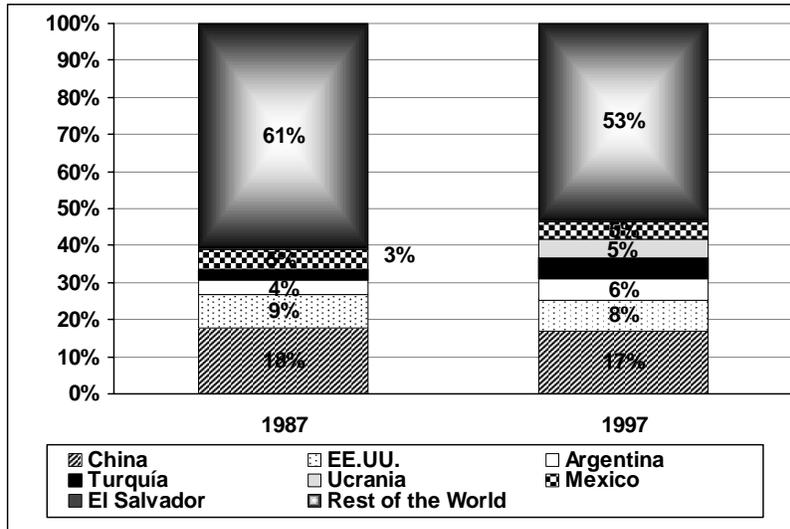
Source: Construyendo las Ventajas Competitivas de El Salvador – Fase III, November 1997 – January 1998, Monitor Company and Ministry of Economy, 1998, San Salvador, El Salvador.

There was a 9.5% increase in honeybee production between 1961 and 1987, with exports growing 8.8%. However, from 1987 to 1996, its production and exports dropped by 4.8% (FAOSTAT).

Despite the fact that honeybee production and exports decreased, the value of exports showed a growth trend.

- (ii) Overall, the country’s share of the international market remained unchanged, with new competitors coming onto the international market.

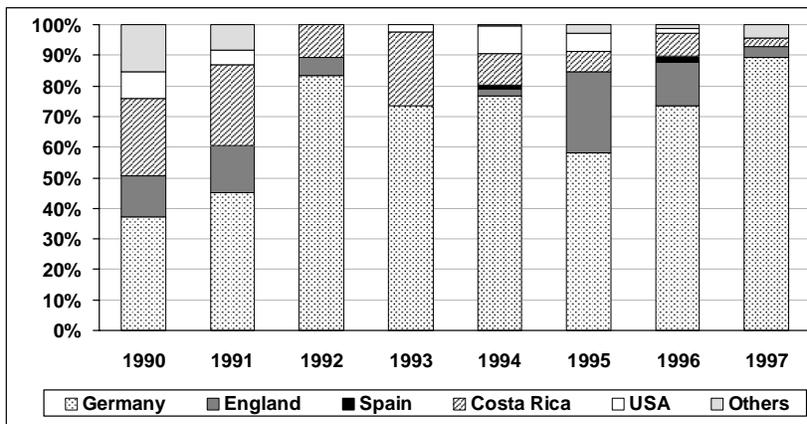
FIGURE 3
HONEY SALES BY DESTINATION
(In percentages)



Source: Construyendo las Ventajas Competitivas de El Salvador – Fase III, November 1997 – January 1998, Monitor Company and Ministry of Economy, 1998, San Salvador, El Salvador.

- (iii) While Salvadorian honeybee exports were increasing, they were also being concentrated in the European market, with 85% of such exports going to Germany.

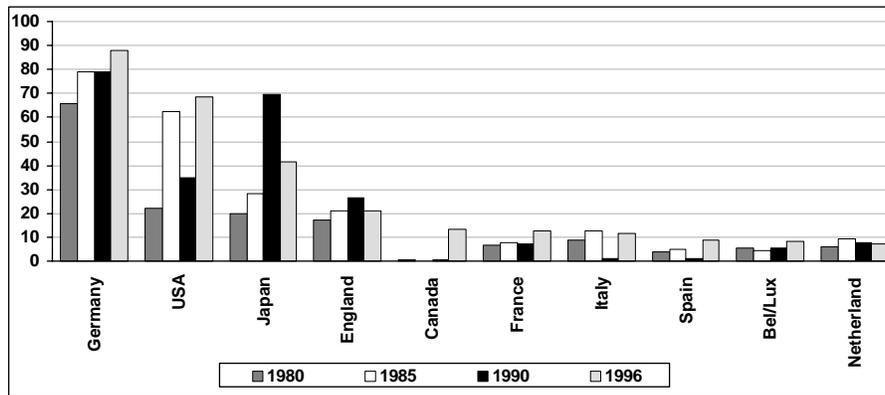
FIGURE 4
HONEY EXPORTS BY DESTINATION COUNTRY
(In percentages)



Source: Construyendo las Ventajas Competitivas de El Salvador – Fase III, November 1997 – January 1998, Monitor Company and Ministry of Economy, 1998, San Salvador, El Salvador.

- iv) There was also a concentration in the buyers’ market:

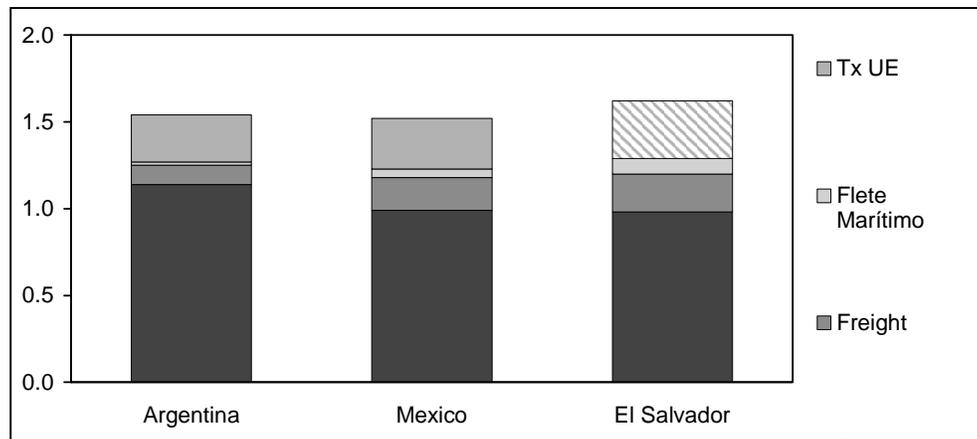
FIGURE 5
HONEY IMPORTS: 10 LARGEST BUYERS
(In percentages)



Source: Construyendo las Ventajas Competitivas de El Salvador – Fase III, November 1997 – January 1998, Monitor Company and Ministry of Economy, 1998, San Salvador, El Salvador.

- (v) Cost analysis showed that production costs were lower than those in competing countries; that advantage, however, had been counterbalanced by transportation and freight charges, making the per-kilogram cost of the product higher.

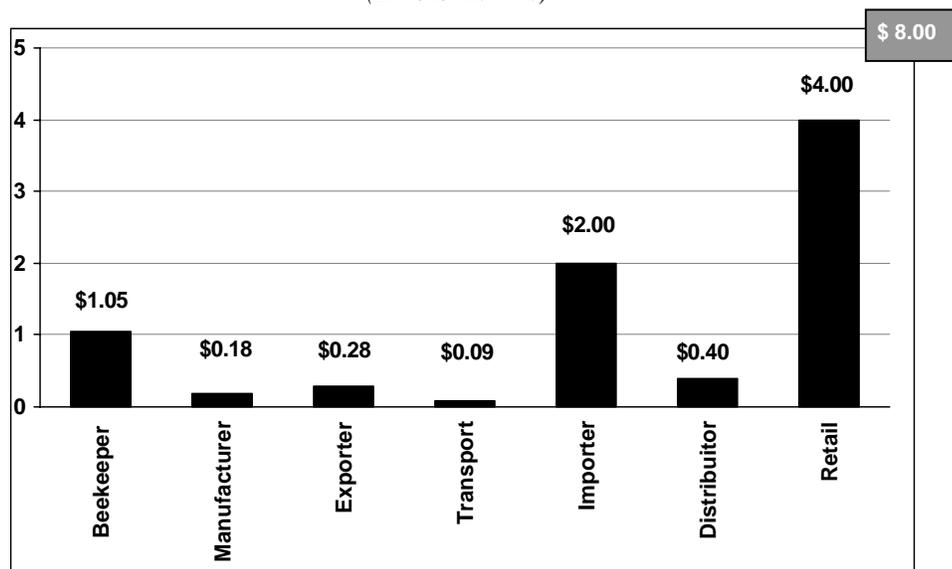
FIGURE 6
COSTS OF APICULTURE INDUSTRY



Source: Construyendo las Ventajas Competitivas de El Salvador – Fase III, November 1997 – January 1998, Monitor Company and Ministry of Economy, 1998, San Salvador, El Salvador.

In the distribution supply chain, it was found that marketing and import costs accounted for the largest percentage of the final price.

FIGURE 7
SUPPLY CHAIN
(En U.S. dollars)



Source: Construyendo las Ventajas Competitivas de El Salvador – Fase III, November 1997 – January 1998, Monitor Company and Ministry of Economy, 1998, San Salvador, El Salvador.

Since the time the industry analysis was conducted, the company VAPE S.A., which produces honeybees, undertook a major restructuring, forming a new firm that made use of new technology, adding value to the product. The new company was called HealthCo Products.

1. Case study: HealthCo Products Company

HealthCo was established in Central America as a business committed to improving consumers' quality of life by means of natural alternatives and use of the highest-quality ingredients, processed exclusively for HealthCo, with the assistance of outside scientific consultants specialising in the field of preventive health care.

The company believed that the solution to consumers' health problems could be found in the curative power of plants, herbs and a well-balanced diet. The firm offers these solutions through products processed under the strictest quality control and endorsed by certifications granted by the High Council of Health.

The company relies on modern facilities of the highest quality, innovative technology and highly skilled personnel for the production of nutritional supplements.

As this introduction is being written, the company's team of researchers are studying and developing new formulas to improve human health.

The goal is to construct a route to a healthier lifestyle, through 100% natural solutions that the company believes to have curative powers.

a) Company facilities

(i) Headquarters

The company's headquarters are located in the future industrial and commercial heart of El Salvador. This convenient location is within close range of all points in the country, thus facilitating distribution. The facilities are also equipped to accommodate seminars, as well as customer service and sales operations.

(ii) Honeybee processing plant

The facilities meet all requirements of the Salvadoran Ministry of Health. It is in these facilities that the company processes gourmet-quality honey, prepared daily for export to countries in the European Union, such as Germany and Spain.

Here, the company also processes the honey used in producing homogenized honeys. The extensive storage area makes it possible to maintain high levels of inventory to supply ongoing demand.

(iii) Laboratory

The laboratory operates under the strictest quality control. The company verifies and monitors each process involved in production. The operation is backed by advanced European technology and by raw materials of the highest quality, making it possible to produce a highly reliable product.

Certified by the High Council of Public Health, with facilities that exceed the required standards, the company engages in good manufacturing practices (GMP).

b) Product distribution

HealthCo sells its products in three ways:

(i) Multilevel

People can select among three business alternatives for the marketing of the products, the first being multilevel marketing.

Product distributors are provided with all of the necessary physical and intellectual materials. They also receive a formal explanation of the multilevel system to provide them with a better understanding of the various steps involved in the process, thus allowing them to gain the necessary clarity and confidence in the products, which in turn will be conveyed to the clients.

(ii) Retail

All products are carefully adapted to the retail market. The appealing presentation is designed to attract consumers' attention, and the profit margins make it possible for distributors to implement individual marketing strategies. HealthCo provide clients with the necessary promotional materials and marketing logistics, based on the market.

(iii) Private label

The extensive production capacity allows HealthCo to supply local and international markets simultaneously, while successfully meeting the high quality standards demanded by the market. There is also an excellent in-house graphic-design department. Their product label designs have helped HealthCo attract new clients at fairs, differentiate the product on store shelves, and adapt products to foreign markets and languages.

c) Information technology (IT) usage by HealthCo

(i) Production process

HealthCo Products has invested in sophisticated, modern equipment, allowing the company to enhance the value added of their products. In addition, the company has made efforts to install and use IT equipment and facilities that will enhance efficiency, product development, access to new foreign markets, and income from exports.

The laboratory operates under strict quality control standards. HealthCo verifies and controls each process involved in production, and is supported by advanced European technology and by raw materials of the highest quality, making it possible to produce a reliable product for consumers.

As mentioned earlier, certified by the High Council of Public Health, with facilities that exceed required standards, the company observes good manufacturing practices (GMP). The facilities meet all requirements of the Salvadoran Ministry of Health.

These facilities also process the honey used in producing homogenized honeys. The large storage area makes it possible to maintain high levels of inventory to supply the ongoing demand.

The value added incorporated in the primary product, honey, makes it possible to produce a range of sophisticated new products:

- Calcium 1000 mg + Magnesium and Zinc
 - Chewables for Children
 - Coloklin
- Femme care
 - Ginkgo Biloba
 - Ginkgo Biloba and Propolis
 - Grape Seed Extract
 - Hair, Skin and Nails Care
 - Herbal Anti-Cellulite
 - Honey Pro Aloe V
 - Honeypro Balsam
 - Honeypro C
 - Honeypro Euc
 - Honeypro Ginger
 - Honeypro Gink B
 - Honeypro Ginseng
 - Honeypro Gse
 - Honeypro Minthoney Pro Royal E
 - Honeypro Ultraplex
 - Royal Jelly
- Ladies formula
 - Mega Fat Burner
 - Mel-Rest
 - Memory Vitamins
 - Natural Bee Propolis
 - Nutra Bones
 - Nutra Skin
 - Osteo Omega 3
 - Bee Pollen

- Propolis capsules
 - Propolis Solution 20%
 - Propomist
 - Propovit
- Test
 - Stress B with Zinc
- Super men's
 - System Seven
 - Varicare
 - Vitamin E
 - Vitamin C 500g

(ii) Marketing and sales

HealthCo's multilevel system includes a worldwide network of 5,000 distributors and salespersons that promote and market the product, maintaining contact with the company through the Internet. HealthCo provides support, training, marketing kits and all materials required to promote and sell the products. Eighty-five percent of sales revenue is derived from this multilevel distribution system.

(iii) Supply Chain Management (SCM)

All products and services that HealthCo requires for its production process are available through a network of services, which provides the honey—supplied by VAPE S.A., the firm that first initiated honey production—and assists in packaging, logistics and transportation.

(iv) Services (EDI)

HealthCo draws on a network of different e-services, which utilize ICTs to enhance efficiency. These provide services related to banking, taxes and customs, while at the same time offering a directory of distributors, a catalogue of products, and a website (www.healthcoproducts.com).

2. Case study: Software Alliance Company

a) Company data

Software Alliance S.A. de C.V. is a small Salvadorian enterprise dedicated to the manufacturing of software with administrative applications and specializing in scientific research and development for the software industry. Created April 11, 2003, it offers an innovative product to the international, as well as the Salvadorian market.

Software Alliance S.A. de C.V. is part of the Equibank group, which includes:

- Equibank
- C. S. Equibank
- Network Alliance S.A. de C.V.
- Software Alliance S.A. de C.V.

Equibank was established eleven years ago as a business dealing with security. Currently, C. S. Equibank S.A. de C.V., part of the group overseeing this market, provides services such as maintenance of ATMs, which it carries out for the majority of banks operating in the country; and manufacturing of theft-proof products for the industrial and commercial sectors. The other members of the group —Network Alliance S.A. de C.V. and Software Alliance S.A. de C.V.—specialize in the information technology area (software and hardware).

Software Alliance manufactures programs for integral solutions. Its distributors, which are in charge of marketing the products, oversee sales and post-sales customer service. They also coordinate training for their customers, designed to provide information about operation and optimal use of the software. The staff includes eight administrative personnel and four programmers. The company has strategic ties with the Israeli firm, Magic Inc., which also manufactures software on a global scale. The linkage is designed to achieve two objectives: first, it allows Alliance Software to obtain technical assistance from this prestigious firm, which also grants the company licensing rights to “Magic International”; second, it allows Alliance Software to market Magic’s products in El Salvador.

The company also has a commercial agreement with the Chilean-based company, E-Commerce Solutions, aimed at furthering its goal of expanding in the Latin America market, particularly in Chile and Mexico. In light of its desire to move into additional markets, Software Alliance has highlighted several points regarding exports, including the following:

- They are members of the cluster designated as the “information technology” cluster by the Ministry of Economy of El Salvador.
- They are in the process of being CMM certified.
- They are associated with Microsoft in technical and commercial matters.
- They are registered on EXPRO in El Salvador.
- They have a very detailed export study carried out by CONAMYPE, through which they gained a recognition of the high export potential of their product.
- They have received assistance from CENTROMYPE for their export project.
- They are members of Exporta El Salvador.

b) The product they offer

The innovative product offered by Alliance Software is called GERENT-E, a program that provides SMEs with administrative solutions. The product has multiple uses and can be accessed simultaneously by different personnel within the same company. It displays multiple times and multiple currencies. GERENT- E is made up of three modules:

- Financial
- Human resources
- Administrative

Each module is independent and is marketed separately. The financial and human resources modules have garnered the highest volume of sales, due to the importance of these areas to SMEs. The company believes that the product offers several advantages, which have allowed GERENT-E to be competitive in the Salvadorian software market alongside other internationally known brands. Among these advantages are the following:

- i) The product is oriented specifically to Salvadorian SMEs, meeting many of the needs, from processing to administrative control, typically required of this highly productive sector.
- ii) It is made in El Salvador.
- iii) It is an innovative product with cutting-edge technology.
- iv) There is a broad and expanding market, given that SMEs account for 80% of the country’s economy.

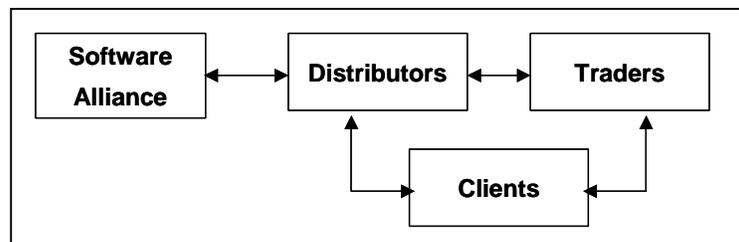
- v) Its cost is low compared to other competitive products.
- vi) It is user friendly and flexible, in terms of both installation and operation.
- vii) It lowers operational and administrative costs.
- viii) It eliminates redundant information in the system, since it is digitised by operational personnel.
- ix) It does not require specialized IT personnel, since it provides an online tutorial.
- x) It has multiple uses, i.e., its use is applicable to a wide range of businesses.
- xi) It provides a clear definition of functions and responsibilities within the company, particularly in the areas of finance, human resources and management.
- xii) It provides security by denying access to non-authorized users, thus preventing illicit access to data and providing security and confidence to the user.
- xiii) It can quickly and easily download information and assess the company's economic activities.
- xiv) It can be integrated successfully in any network and is compatible with numerous software programs currently on the market.
- xv) It complies with International Accounting Standards (IAS).

As mentioned earlier, GERENT-E is an innovative product that can be installed and be operative in five minutes. It has an animated tutorial that not only answers FAQs, but also provides a complete guide to use of the program. Additionally, the product offers interactive assistance via e-mail, drawing on a specialized team of engineers and technicians employed by Alliance Software to ensure that the program performs, as it should to meet the customer's needs.

Other features of the product are as follows:

- xvi) It offers intelligent updating of balances.
- xvii) It provides graphic reports for the user that gives comparisons between the user and the competition.
- xviii) It catalogues account charts, based on international standards.

FIGURE 8
MARKETING PROCESS OF SOFTWARE ALLIANCE



Source: Author.

C. Problems SMEs face in participating in the trade-oriented value chain

In a globalised world, companies' attempts to be competitive have evolved in tandem with advances in technology.

The value chain is generally defined as the chain of activities that transforms raw materials into something that can be purchased by an end consumer. A value chain can be short, as in the case of commodity products, or extremely long and complex, as in the case of automobiles or houses. The term "value chain" refers to a network of strategic alliances between several enterprises, involving independent companies within a category of products or services.

The internationalisation of these companies, the opening of new markets resulting from the signing of trade agreements, and the economic development they engender, along with the use of ICTs, have allowed the integration of ever-expanding and more complex value chains, ranging from the providers of raw materials to the logistics management involved in distributing to end consumers. Despite this fact, in El Salvador SMEs have a low level of participation in these value chains, due to both internal and external factors. Internal factors are the following:

(i) Low level of technification in the productive and administrative processes within SMEs

One of the major features of Salvadorian SMEs is the relatively intensive use of labour compared to reliance on capital and technology, which would allow them to enhance efficiency in the production process. The lack of technology in production, as well as in management, increases production costs for these companies, while reducing their productivity and competitiveness. Thus, the possibilities of becoming part of the value chain with highly technological companies are very limited, especially considering the intense competition among companies to establish a presence in new markets.

(ii) Problems in accessing financing

Though there is a wide range of credit lines oriented to providing financing for SMEs in El Salvador, the stringent requirements and low-risk culture within the financial system act as constraints. The debt accumulated over past years, on the part of certain subsidized sectors, further limits efforts to modernize production plants and enhance competitiveness. This situation is common in Latin America, where non-profit organizations have become expert in addressing the financing needs of SMEs. However, the limits on the loans they offer often make it difficult to cover the costs of modernization and of increasing productivity, thus limiting SMEs' integration in value chains.

(iii) Limited management capacity

The great majority of Salvadorian SMEs are family owned businesses and are passed from generation to generation, leading to a certain "imprinting" in management style. The centralized decision making, as well as style of supervision and production, makes them less competitive, even though some SMEs have access to technologies capable of increasing efficiency in the production, distribution and marketing of their products. Centralization creates bottlenecks, which hinder the competitive development of the enterprises.

(iv) Deficiencies in creating businesses and in entrepreneurial culture

The globalisation of economies has demonstrated that the businesses that survive in a highly competitive market are those with visionary managers, capable of acting strategically and

quickly anticipating changes in the global markets. In El Salvador, the economy's dependency on commodities exports, the high degree of protectionism in the form of tax barriers, affecting certain sectors in the past, and the tendency to form family owned businesses, limited the training of an entire generation of managers capable of anticipating the changes demanded by new conditions in the global economic environment and of modernizing the business so as to be able to rapidly become part of large-scale value chains.

At the same time, the lack of information regarding partnerships as a means of competing in the increasingly globalised world limits SMEs' capacity to become part of the increasingly complex value chain in producing and marketing their products and services. Since the end of the 1990s, El Salvador has undertaken a series of initiatives to introduce the concept of "associativity and business-to-business cooperation". These new forms of organization, seen more commonly in production and in public relations with customers and providers, have developed largely through cooperatives designed to secure supplies and raw materials at lower cost (step backward), and less frequently in the form of strategies for market penetration of products in new markets (step forward).

(v) Poor development of aid services

In order for SMEs to become part of the value chain, one important factor is the availability of aid services from the State, such as the use of standards, certification, packaging design, measurements for shipping, research and development facilities, new-product development, marketing strategies, etc.

El Salvador has no network of services providing comprehensive assistance to help SMEs become part of the value chain through: standardization in the production of goods and services; certification and accreditation of labs; design and adaptation of new products and packaging; technological research and development oriented to the productive sector; marketing strategies; and focus on sectors of strategic importance. All of this greatly limits SMEs' ability to become integrated in the value chain, which represents the modern scheme for cooperation.

III. Government policies designed for SMEs, IT, and international trade

A. IT policies in the country's overall development strategy

Because of the social, economic, political and cultural impact of technology, all countries require an information technology policy. This need has led the major powers to formulate a policy on computer science, along with a set of governmental programs, projects and approaches aimed at providing strategic support for macro-level actions to foster development.

El Salvador has already outlined a path to allow for the formulation of an IT policy. Many variables need to be taken into account in the final formulation of this policy. Defining the route that best guarantees success in implementing such policy is a complex task. To be successful, it must address the country's immediate demands for development. El Salvador has launched initiatives aimed at achieving the national objective of bringing well-being to the country's population, and an effective IT policy will play an important role in the development process.

The need to define a computer science policy has been linked with various factors and motivations related, in part, to the nature of technology itself, how it is disseminated, the economic opportunities it represents, and its impact on other areas.

Computer science policies are based on criteria relating to the environment, more general policy approaches, the role of the State, the specificity with which the policy is defined, its scope, and the instruments used to implement it. Moreover, it should incorporate strategic policy guidelines that have been debated in the society, along with effective measures to help implement and define a scheme for creating a set of concrete projects.

The effort to create a national computer science policy in El Salvador is based on major achievements in the field. First, the country has accumulated an important physical inventory of technology capable of supporting IT efforts. At the same time, advances in establishing an information system that can provide the society with access, via IT, to databases of national interest, are currently under development. This includes access to information on the Central Reserve Bank and the Superintendence of Values. Work is also underway to provide access to information on the Ministries of Treasury, Economy and Customs. In the cultural realm, the

country's major universities have been involved in this system, providing information ranging from library content to databases detailing national research efforts. Thus, the infrastructure of the Salvadorian Internet Network is, in principle, facilitating the creation of an eventual National Information System. Implementation of this system will constitute a major advance for computer science development in El Salvador and, combined with a suitable national policy, will move the country toward achieving its objectives: modernization, greater competitiveness, and economically, socially and culturally sustainable development.

In summary, El Salvador's strength is based on: the development and implementation of competitiveness policies; interest, on the part of the productive, academic and State sectors, in developing the computer culture; efforts aimed at improving and automating technical-administrative processes in public and private areas; improving the telecommunications system; developing the Salvadorian Internet Network, SVNet; making the National Council of Science and Technology (NCST) an effective operating entity; and strengthening the National Computer Science Committee (CSNC).

The NCST is a government agency charged with formulating, directing, coordinating and expanding national science and technology policies in El Salvador. Its goal is to play a leading role in promoting, furthering, disseminating and supporting science, technology and innovation for the sustainable economic and social development of the nation.

One of the main objectives of the National Computer Science Committee (CSNC) of El Salvador, instituted by the NCST in 1996, is to propose and formulate national policy proposals regarding computer science.

To this end, the CSNC includes representatives from, and participation by, 28 entities from the country's public, private, academic and professional/non-governmental sectors. The NCST also acts as Permanent Secretary of the CSNC.

This group of institutions is formulating National Computer Science Policy, with the support and assistance of other international institutions. National Computer Science Policy is formed around six main axes:

- (i) Handling and management of information
- (ii) Education and training of human resources
- (iii) Computer applications
- (iv) Infrastructure, interconnection and data networks
- (v) The national computer industry
- (vi) Positioning the information technology sector within the economic and social development of the country

For each one of these axes, a vision has been formulated, detailing El Salvador's approach to the future, along with a series of objectives and concrete lines of action for each.

Acting as a strategic force, the National Computer Science Policy must guide, stimulate, validate, support and reinforce efforts and specific projects by individuals, companies, institutions and other entities, so that they will develop clear policies that project the national goals.

National Computer Science Policy should become the strategic, tactical and operative reference point, endorsing IT initiatives and actions taken by officials, businesspeople, professionals, technicians and the general population.

The NCST also carries out other activities and projects aimed at technology development in El Salvador. These include:

- The administration of more than 6,000 active domains in SVnet, which operate under El Salvador’s “top level” (.sv) and have been established between June 1999 and December 2003.
- The Technological Administration Program to support small and medium enterprises, comprising more than 500 regional SMEs.
- The execution of the Inter-American Development Bank (IDB) projects: “Improvement of quality control and environmental administration in SMEs” and “Fund for Financing Scientific and Technological Development.”
- Establishment of mechanisms to organize a national information network incorporating scientific and technological information from the Information and Documentation Centre of the National Commission for Micro and Small Enterprise, the Foundation to Promote the Competitiveness of Micro and Small Enterprise, infocentres (local connectivity centre), etc.
- Creation of the “Directory of Support Services for Scientific and Technological Innovation in Medium and Small Enterprises in El Salvador, Central America” (<http://www.conacyt.gob.sv>).
- Development of the Quality Certification Program for Quality Seal and Design, involving training programs for entities providing product and quality certification.

1. Future prospects

The plan of the current President of El Salvador, Elías Antonio Saca, presents a strategic line of action, called “Connectivity Agenda: Toward the Knowledge Society.”

The Connectivity Agenda seeks to incorporate the use and extension of information and communication technologies as a tool for the country’s economic and social development. To carry out this work, the government is attempting to coordinate activities with the nation’s productive sector, academia and civil society, with the objective of formulating a national policy on IT use, under the guidance of the National Computer Science Committee (CSNC).

2. Specific actions carried out in this area

- (a) **Access to infrastructure, i.e.:**
Promoting access to information and knowledge technologies (IKTs) for the majority of the population throughout the country.
- (b) **Generation of content:**
Developing administrative networks to bring together the knowledge gained through research, academic, productive and governmental sectors and communities within the country.
- (c) **Education and training:**
Promoting the use and expansion of IKTs as educational tools.
- (d) **Online companies:**
Identifying and taking advantage of opportunities offered by effective use of the Internet and Internet-related services, and supporting companies—particularly SMEs—in moving toward the knowledge society, as well as facilitating their involvement in international trade.

(e) **Government, academia and online municipalities:**

Fostering optimal use of ICTs for purposes of public administration, Salvadorian education and municipal administration, through the provision of online information services. Public institutions, such as the Ministry of Treasury, have already incorporated this strategy in their operations.

(f) **Implementation of IT:**

Supporting the IT industry, promoting an environment conducive to the consolidation and development of the IKT industry by providing support to companies in this sector.

B. Policies to support SMEs

1. Export promotion

El Salvador is currently moving toward developing international markets in commercial areas, since this is seen as a potential source of economic growth. SMEs are also attempting to gain a share of this international market, giving rise to numerous institutions and programs to support these firms. The most important of these are:

a) The National Export Promotion Agency (Exporta El Salvador)

This new export agency began serving the country on February 12 of the current year. “Exporta El Salvador” is a platform for the development and promotion of exports in El Salvador, with the objective of: “supporting the development of the export process and the internationalisation of Salvadorian companies, opening new markets and incorporating new companies and products.”

Exporta El Salvador focuses on 3 services:

(i) **Foreign markets and networks:**

EXPORTA is responsible for: coordinating, researching, analysing and disseminating information on foreign markets; using commercial intelligence and commercial linkages in strategic markets to connect the country’s productive sectors with opportunities, while providing information about risks; contributing to the internationalisation of companies; and providing a clear and defined guide for their export efforts. Some of the support provided to companies includes identifying buyers and commercial representatives, organizing meetings with potential clients; and organising promotional events abroad, such as tasting, show rooms, seminars and business conferences.

(ii) **Fairs and missions**

EXPORTA helps the productive sectors participate in fairs and missions, in order to promote exports and open international markets, positioning El Salvador as a competitive country.

(iii) **Trade-point**

This serves as an export facilitation centre, with specialized services on foreign trade, provided via a portal with access to global networks. This allows for the exchange of information, identifies business opportunities and helps participating companies project an international presence.

This office was established under the government's "New Alliance" program, within the strategic "Export Development" area. It is a supplementary service provided by EXPORTA.

b) EXPRO (Export Program for Micro, Small and Medium Enterprises)

EXPRO is a program of the Agency for International Development (USAID) and the Government of El Salvador, designed to promote and support exports of micro, small and medium enterprises to the United States and other international markets. This provides SMEs the means to take advantage of the opportunities opened up by international trade liberalization.

EXPRO offers services to exporters in several areas. The objective of these services is to increase Salvadorian exports and/or increase export values by aligning with the needs of the final consumer or adding value and/or an intellectual component to the products. The services include: technical assistance, training, marketing studies, production of commercial pamphlets, and participation in fairs and trade missions.

Some of EXPRO's priority areas of concern include:

- Agro industry and nutritious products, including ethnic, organic and specialty items.
- Home and ornamental articles, gifts and crafts.
- Furniture and other wooden products.
- Pharmaceutical and cosmetic products and cleaning products.
- Services, including: receptive tourism, software development, call centres, marketing services and logistics, design services, financial services, training services, franchise sales, and other professional services.

c) CONAMYPE (National Commission for Micro and Small Enterprise)

CONAMYPE's main support consists of offerings designed to meet the needs of micro and small enterprises. Services are oriented toward training, technical assistance, support for specific sectors, etc. Projects include:

(i) Technical Assistance Fund (FAT)

The "FAT Exporter" program consists of providing technical assistance regarding potential export activities, development of export plans, improvement of product quality, packing, laboratory testing, research on specific markets and business consolidation.

(ii) BONOMYPE:

The Training Fund Program is a program through which funds are granted to businesspeople in the eastern region and in the area around the centre of the country (specifically in the departments of: La Paz, La Unión, Morazán, San Miguel, San Vicente and Usulután). These funds may be used to purchase training services from different suppliers. Seventy-five percent of the cost of the training is subsidized by the government, through funds from the Salvadorian Institute of Professional Training (INSAFORP) or from the Inter-American Development Bank (IDB), with the individual entrepreneur contributing 25%. To be eligible for the training funds offered by CONAMYPE, a company must fulfil certain requirements, such as: being located in the departments of San Miguel, Usulután, La Unión, Morazán, San Vicente or La Paz; having been in operation for at least 6 months; having sales not exceeding US\$ 5,714.28 per month; and being involved in trade activities, industries or services.

(iii) CEDART:

This is a centre for handcraft development, providing artisans, producers and distributors with training and technical assistance in areas such as: design, marketing, business management, and computer services.

(iv) Business procedures centre:

This is an initiative of the Ministry of Economy, carried out through CONAMYPE, which supports increased productivity among micro, small and medium enterprises, by helping to reduce costs and time involved in carrying out business procedures. The centre's primary objective is to not only facilitate businesspersons in conducting necessary formalities, but also to provide them with information about procedures, since they typically do not know where to go to complete them. These include the forming of a company, payment of taxes, and all matters involved with exports.

d) Centromype Foundation to promote the competitiveness of micro and small enterprise (CENTROMYPE)

This is a non-profit private organization, created by the Government, with the mission of promoting the competitiveness of SMEs by providing business connections in the domestic and international markets.

Among the services offered by Centromype are: the program for identifying and promoting business in local and international markets, consisting of the search for clients in local and international markets for products marketed by the country's micro and small enterprises. The Foundation's services extend beyond mere identification of potential clients, also offering support that includes business management and practices. It also provides a co-financing program for export activities.

2. Financial instruments

a) Fund for Technical Assistance on Exports (FAT)

From the financial perspective, the FAT program represents an economic contribution that the government offers to enterprises with export potential, allowing them to obtain assistance services for strengthening the competitiveness of their exports. Thus, the program is not limited to offering technical assistance, but rather helps businesspersons find ways to finance this assistance.

To obtain this assistance, micro and small entrepreneurs must fulfil the following requirements:

Be operating in the market for at least 6 months; have annual sales not exceeding US\$ 685,714.29; have no more than 50 employees; be able to pay 20% of the total cost of the consulting to be provided, with the Government of El Salvador providing the remaining 80%; and, most important, have export potential.

b) Export Promotion Fund (FOEX)

The FOEX is another source of support that the Salvadorian government provides to promote project creation and to facilitate the execution of projects. FOEX is a fund drawing on public resources, created by the Ministry of Economy with the support of the World Bank,

through the National Competitiveness Program. Its objective is to foster the exports of small and medium export enterprises and/or enterprises with export potential, through the allocation of non-reimbursable financial resources for implementing individual and joint projects in the area of exports.

Co-financing activities are designed to meet the different needs enterprises face in developing foreign trade activities. These may be directed at prospecting for markets, entry in new international markets, or market consolidation.

Small and medium enterprises that wish to receive funds must meet certain well-defined requirements that include: submitting complete information regarding the firm (copy of the firm's by-laws, certified license of registration and operation, with relevant renewals, number of branches, partners' authorized powers and photocopies of identification documents, the two most-recent audited financial statements, earnings statements and VAT for the last fiscal year); provide a business plan aimed at promoting exports while meeting the requirements for duration of activities, costs and consistency with the program's objectives.

All projects submitted will be subject to an evaluation procedure based on two basic criteria:

- Export capacity; and
- Consistency of the Project. The project must be consistent with the program's objectives and with the activities planned. A presentation of the cost structure, which should be in line with the anticipated results, must also be submitted.

c) EXPRO-CENTROMYPE Fund:

This is also a strengthening program for micro and small enterprises, with co-financing of up to 80%, for providing technical assistance services that allow firms to improve and develop their products to meet export requirements. The company contributes only 20% of the cost.

For these services, EXPRO provides up to a maximum of US\$ 7,000 for individual companies and up to US\$ 8,750 for each company in a joint operation involving three or more companies.

To be eligible for funds, requirements are similar to those in the previously-mentioned programs, with the only difference being that the company must have monthly sales not exceeding US\$ 57,200 and must be located in one of the following departments: Ahuachapán, Sonsonate, La Libertad, Cuscatlán, La Paz, San Vicente or Usulután.

d) Multisectoral Investment Bank (BMI) credit program

The BMI, which is a second-tier bank, has a range of financing programs, such as support to sectors considered important to the development of the country. These include a program for micro and small enterprise, and one targeting the development of exports. The support is provided through the private financial system and, as of recently, through a network of non-profit institutions authorized to administer these resources.

Both programs set terms and grace periods with high limits, established according to the needs of each project. Grace periods are included in the terms. Details are as follows:

e) Credit program for micro and small businesspersons:

TABLE 7
MICRO ENTERPRISE
(In years)

Purpose	Term	Grace period
Permanent working capital	-	-
Studies and technical services, staff training, technology acquisition	Up to	0
Acquisition of machinery, equipment, and transportation expenses and installation	4	-
Construction, facilities and physical infrastructure	-	-

Source: Banco Multisectorial de Inversiones (BMI), San Salvador <www.bmi.gob.sv>

Maximum Total Financing: up to 90% of the investment with a maximum of US\$ 18,285.71.

TABLE 8
SMALL ENTERPRISE
(In years)

Purpose	Term	Grace period
Permanent working capital	4	1
Purchase or repair of machinery and equipment	10	2
Construction, facilities and physical infrastructure	15	4
Acquisition of land, facilities and construction for productive use	15	4

Source: Banco Multisectorial de Inversiones (BMI), San Salvador <www.bmi.gob.sv>

f) Export credit program:

The BMI offers a broad line of credits aimed specifically at financing the export of goods and/or services produced in the country, thus helping to strengthen Salvadorian export-oriented enterprises.

The credit line supports: short terms for exporting products; promotion of domestic products and services; marketing export-oriented enterprises; and development of free zones.

Based on the particular credit program, terms vary, as follows:

TABLE 9
SHORT TERMS FOR EXPORT PRODUCTS
(In years)

Purpose	Term	Grace period ^a
Working capital to produce and export non-durable goods	0.5	0
Working capital to produce and export durable goods	1	0

Source: Banco Multisectorial de Inversiones (BMI), San Salvador <www.bmi.gob.sv>

^a Included in the term.

The financing limit for industrial and commercial enterprises and services is 80% of the FOB price or 70% of the CIF price; for apparel enterprises it is 30% of the FOB price. The interest rate is based on the LIBOR rate plus an intermediation charge, set by the BMI and fixed for the life of the loan.

TABLE 10
PROMOTION OF DOMESTIC PRODUCTS AND SERVICES
(In years)

Purpose	Term	Grace period
Participation in fairs; processing and distribution of advertising pamphlets and promotional material	4	1

Source: Banco Multisectorial de Inversiones (BMI), San Salvador <www.bmi.gob.sv>

TABLE 11
MARKETING ENTERPRISES THAT EXPORT PRODUCTS
(In years)

Purpose	Term	Grace period
Permanent working capital	4	1
Studies, technical services, staff training and technology acquisition	5	1
Machinery purchase, and new or properly rebuilt and guaranteed used equipment	10	2
Construction, facilities and physical infrastructure	15	4
Acquisition of land and facilities, and construction for productive use	14	4

Source: Banco Multisectorial de Inversiones (BMI), San Salvador <www.bmi.gob.sv>

TABLE 12
DEVELOPMENT OF PRIVATE FREE ZONES
(In years)

Purpose	Term	Grace period
Permanent working capital	4	1
Machinery purchase, and new or properly rebuilt and guaranteed used equipment	10	2
Civil construction works, construction of industrial facilities. Purchase of industrial warehouses and land for productive use.	20	5

Source: Banco Multisectorial de Inversiones (BMI), San Salvador <www.bmi.gob.sv>

For this last case, total financing is a maximum of 75% of the total cost of the development of a free zone or of the value of acquisition or construction of industrial warehouses in private free zones. However, the BMI establishes certain special conditions for granting the financing, with the enterprise being required to submit specific information required by the bank.

g) Mutual guarantee fund

Another type of financial support to SMEs is the recently created Mutual Guarantee Associations (SGRs). The Law of the System of Mutual Guarantees for Micro, Small and Medium Rural and Urban Enterprises entered into effect on 22 November 2001, and provides for the establishment of Mutual Guarantee Associations. The basic mission of these associations is

the financial strengthening and resulting development and consolidation of micro, small and medium Salvadorian enterprises.

As the name indicates, these associations provide guarantees to partnership companies that request their services. These services are classified as follows:

(i) Financial guarantees:

Those issued in favour of a third party, guaranteeing payment of a loan granted to a participating partner.

(ii) Commercial guarantees:

Those issued in favour of a third party, guaranteeing execution of a payment originating in a commercial transaction.

(iii) Technical guarantees:

Those that guarantee the execution of an obligation made for technical or professional purposes.

(iv) Services:

Consulting, information and/or training.

To be eligible for these services, the enterprise or individual must first become a participating partner in the SGR. For this purpose, the enterprise must submit quantitative and qualitative information about a new project, operating enterprise, or investment it plans to make. If the enterprise is accepted as a partner, the SGR becomes the co-debtor in relation to the bank granting the financing, or in relation to the supplier or other entity extending the credit.

The businessperson or natural/juridical person must have annual sales of no more than US\$ 4,560,000 and have less than 200 employees.

The SGR does not grant credit; rather, it guarantees that the bank or lending institution does so under conditions superior to those that the enterprise would obtain through a personal guarantee.

Becoming a participating partner involves using a small portion of the value of the guaranteed loan to purchase “social shares,” which the association reimburses once the credit guaranteed by the association has been repaid. Moreover, in order to cover the association’s operating costs, the businessperson pays a fee for the guarantee being granted. At present there are 8 founding partners, consisting of the country’s major banks and one large private company. In addition, there are more than 120 partners receiving services offered by these associations.

h) Tax incentives

As part of the tax incentives, El Salvador passed an Export Revitalisation Law, designed to promote export of goods and services beyond the Central American region, and to provide benefits and tax incentives to natural or juridical persons, both domestic and foreign, engaging in export activities.

Approval of this law was an effort to eliminate the anti-exporting bias that has been prevalent as a result of industry protectionist measures based on import substitution. The law is designed to benefit domestic, foreign, natural or juridical persons that export goods and services beyond the Central American region. Exports of coffee, sugar and cotton are excluded from these benefits. However, such exports will be eligible to receive such benefits when they incorporate at least 30% of domestic-origin value added in their traditional products, with the prior approval of the Ministries of Treasury and Economy.

For the purposes of the present law, refined sugar and coffees known in the international trade as organic and gourmet are not considered to be in their traditional form, which would qualify them to receive the benefit, with the prior authorization of the relevant authorities.

The purpose of this law is to promote the export of goods and services beyond the Central American region through appropriate instruments, with the beneficiaries being domestic, foreign, natural or juridical persons engaged in such exports. The exports of coffee, sugar and cotton are excluded, unless they have been subjected to processing that incorporates at least 30% of value added to the original product.

Some of the benefits of the law are the following:

- Refund of 6% of the FOB value of exports shipped beyond the Central American region, based on the value according to current exchange rates.
- Exporters are charged a zero percent rate of the Value Added Tax (VAT).
- Tax exemption for the import of raw material and intermediate goods used in partial or temporary apparel manufacturing operations.
- Owners of companies that export, market, or engage in partial or temporary manufacture of goods or services, will also receive an adjustment on taxes of assets, in an amount equal to the exported value, as established by this law.

These benefits apply to apparel-related activities and are calculated on the value added amount.

Another effort by the government, aimed at globalising the country's economy, is the establishment of a legal and regulatory framework that promotes the establishment and development of free zones in the country, as these are considered to be strategically important. Regulations providing for free zones provide the national economy with jobs and generate foreign revenues, through revenues from exports.

In September of 1998, the Salvadorian government repealed the old law of Regulation of Free Zones and Fiscal Precincts, and approved the new Law of Free Zones and Active Improvement Sites, whose purpose is to regulate the operation of Free Zones and Active Improvement Sites (known previously as "Fiscal Precincts"). The new law also delineated the benefits and responsibilities of the owners of companies that develop, manage or utilize a company for the production, assembly, manufacture, processing, transformation or marketing of goods and services for direct or indirect export within the Central American region.

The establishment, management and operation of Free Zones must be authorized by the Ministry of Economy, with supervision and control of the tax regulation of these areas overseen by the Ministry of Treasury.

(i) For people who develop free zones (developers):

Total tax exemption on rent, and exemption from municipal taxes and real estate transfer taxes.

(ii) For people who manage free zones (managers):

Total tax exemption on rent and municipal taxes.

(iii) For people who establish free zones (users):

Free transportation to the Free Zones, of machinery, equipment, tools, raw materials, parts, apparatuses, lubricants, catalytic converters, fuel, etc., and total tax exemption on rent, municipal taxes and real estate transfer taxes.

To qualify, such persons must be located in a free zone or in an establishment declared by the Ministry of Economy to be an Active Improvement Site. In neither case may such people receive the benefits of the Export Revitalization Law.

There is presently a bill, which is part of the General Regulation of the Law of Industrial Free Zones and Marketing, providing for the application of that law, for the purpose of fulfilling the principles established in the law. The bill has not yet been approved.

Those who violate the provisions of the law may be sanctioned with temporary suspension or final annulment of benefits granted to the offending party.

Special emphasis was placed on expanding the number of activities that do not qualify for benefits and fiscal incentives under the law, including the production, assembly, manufacture, processing, transformation or marketing of sugar products packed in bags or in sacks of natural, synthetic or artificial textile fibres. Likewise, other elements such as production, assembly, manufacture, processing or transformation of alcohol of any origin were included; as well as any good that directly or indirectly incorporates alcohol of any origin, with the exception of products dedicated exclusively to distillation of ethylic alcohol.

The benefits granted by the Export Revitalization Law and those granted by this law are mutually exclusive.

3. Trade facilitation

The Government of El Salvador, through the Ministry of Economy, has been working to create a business environment conducive to increasing the competitiveness of the productive sector, in order to promote its success in a changing and globalised world, and to assure investors fair and equal treatment for their investments, through legal norms and transparent institutional mechanisms.

The Ministry of Economy, through the Trade and Investment Office, has introduced reforms to the legal and institutional framework to facilitate the establishment and operation of domestic and foreign investment in the country. These mechanisms are intended to promote and increase domestic and foreign investment in all aspects of the economy, leading to the creation of productive jobs and, consequently, to the improvement of the living standards of all Salvadorans, by reducing the transaction costs of doing business in El Salvador and thus enhancing the climate for investment.

The process of formalizing investments has been simplified by reducing procedures required under the new legal framework, consisting of the Law of Investments, Reforms to the Commercial Code, the Law of Trade Registration, the Law of the Superintendence of Mercantile Duties, and the Accounting Regulations Law, which entered into force on April 1, 2000.

The Law of Investments standardized regulations regarding the establishment and operation of domestic and foreign investments, and created the National Office of Investments (ONI), which functions as a single window to process the necessary authorizations.

a) The National Investment Office (ONI)

The ONI (<http://www.minec.gob.sv/oni/index.html>) has established a single window to process, at one location, all investor-related formalities. Currently, the ONI offers services utilizing staff from various areas of government, including: the National Centre of Registrations, the Ministry of Treasury, the Salvadorian Social Security Institute, the Ministry of External Relations and the General Office of Statistics and Census. It also draws on representatives of the Ministry of Labour and Social Service and the Ministry of Government. The intention is that the

investor should be able to complete all necessary formalities in a single location, without having to deal with separate agencies, thus saving time and money when establishing a business.

Through this system, local and foreign investors are able to complete all requirements and be ready to begin operations within 7 working days. Services provided include:

- Legal and technical advisory services
- Investment registration within 24 hours
- Immigration permits for foreign personnel
- Securing all necessary permits within 2 hours

The Export Electronic System (SIEX) (http://www.centrex.gob.sv/scx_html/acerca_sicex.html)

- An electronic clearinghouse for export permits
- Automatic export authorization by electronic means
- Export permits issued in 45 minutes
- Subscription free of charge
- 24 hours a day, 365 days a year
- Provides relevant trade information

El Salvador has already signed various trade treaties with different countries, which further enhance the climate for investment. To direct and supervise the administration of agreements, accords, treaties and other trade instruments, the Office for the Administration of Commercial Treaties (DATCO) has been created, through a legislative agreement on December 20, 2000. It provides for the monitoring of tariff concessions, access to markets, use of preferences, agricultural contingencies and shares, and oversees the application of the trade defence mechanisms envisaged in the legal instruments on international trade. This provides benefits to the nation's productive sectors and provides for the enforcement of obligations of the country's trade partners.

El Salvador has signed the following commercial treaties:

(i) General Treaty on Central American Economic Integration

El Salvador has been part of the Central American Common Market since 1960, and economic integration has been achieved among the member countries, which share a common-market model, a free trade area with common external tariffs, and common customs rules.

For products from member countries, the importation of products is free of tariffs; only domestic taxes, or a charge for services levied by governmental institutions is paid. Within the Common Market, products that are not subject to free trade between the member countries are: sugar and unroasted coffee.

Bilateral free trade agreements have been signed for the following products: ethylic alcohol (whether denaturalised or not), products derived from petroleum, and distilled alcoholic beverages.

A process to establish a Customs Union began in 1996, among countries that, for several years, have been common market participants, namely, Guatemala, Honduras, El Salvador and Nicaragua. In July 2002, Costa Rica joined the process. Measures include advances in customs modernization, movement of products within the customs area, unification of controls, and registrations and other requirements vital to developing the system. Issues such as tariff consolidation, mutual recognition of sanitary and pharmaceutical registrations, and other regulations have been implemented pursuant to the Plan of Action of the Central American Presidents.

(ii) Free Trade Agreement between El Salvador and Mexico

The Free Trade Agreement between El Salvador and Mexico was ratified by the Legislative Assembly of El Salvador on December 7, 2000 and entered into effect in May 2001. Implementation of this treaty represents, for Salvadoran exporters, tariff-free access for 76% of products within the tariff universe, including products from the agricultural and industrial sectors.

In 2003, certain tariffs for exports to Mexico reached their lowest levels ever, i.e., zero percent, allowing enterprises to be more competitive in that market and to take advantage of the asymmetry favouring El Salvador.

This Treaty is designed to strengthen commercial exchanges between El Salvador and Mexico, making it possible to foster conditions of free competition inside the free trade area, eliminating non-tariff barriers, in addition to attracting investment and eliminating barriers to the movement of capital and businesspersons.

The Agreement covers normative aspects based on World Trade Organization (WTO) regulations, and establishes protection mechanisms dealing with unfair trade practices, verification of origin, security measures, and a range of solutions.

Certain products that are sensitive for the economy of the country were excluded, namely: sugar, rice, dairy products, lemons, oranges, poultry, grains, tomatoes, pork, beef, vegetables, vehicles and cement.

(iii) Free Trade Agreement between El Salvador and the Dominican Republic

This agreement was signed between El Salvador and the Dominican Republic in April 1998. A high percentage of products are subject to zero tariff. This is a mutual treaty, in which the preferences are the same in both countries, though the list of excluded products, such as sugar, petroleum derivatives, milk, ethylic alcohol, etc., differs.

The Treaty entered into effect in October 2001. With its implementation, trade flows and investment have increased in both countries. Among the products free of import tariffs are: textiles, garments (shirts, T-shirts, pants), foods, drinks (canned juices, sodas), cookies, seafood products (shrimp, fish), footwear, handbags, leather belts, plastic products, disposable glasses, snacks, cosmetics, furniture, plastic products, paper and cardboard, and their inputs.

(iv) Free Trade Agreement between El Salvador and Chile

El Salvador and Chile signed the Protocol to the Free Trade Treaty in October 1999. Ratified in El Salvador in October 2001 and in Chile in February 2002, it entered into effect in June 2002. This treaty grants free trade for 83.3% of Salvadorian products. Certain Chilean products are subject to a five-year waiting period before receiving zero tariff treatment in the Salvadorian market. This was the result of negotiations to gain asymmetries favouring El Salvador. The textile and manufacturing sectors, as well as the footwear industry, were beneficiaries of this five-year asymmetry.

Two hundred and fifty products were excluded in the agreement between El Salvador and Chile. These included beer, sugar, rice, dairy products and poultry. The products in these categories will enjoy free trade status if produced with materials from the region. If the inputs do not originate in the region, Chile will grant special treatment to such products.

The products receiving free trade treatment are: vegetables, flour, fish or crustaceans, whole-grain or non-whole-grain cocoa, tobacco and cigarettes, fertilizers, leathers and skins, windows, shutters and their frames, iron and steel products, etc.

(v) Free Trade Treaty between El Salvador and Panama

Changes in the commercial relationship between the two countries have brought about the need to negotiate a Free Trade Treaty, which occurred in April 2000. It envisages issues such as phyto-sanitary and zoo-sanitary measures, technical barriers to trade, rules of origin and technical standards. This treaty was concluded in January of 2002 and was ratified by Panama in January 2003, with implementation expected during the first trimester of 2003.

With the signing of this Treaty, El Salvador and Panama will establish a free area that allows for the exchange of goods and services, in order to: perfect the free trade area, stimulate the expansion and diversification of trade in goods, while eliminating trade barriers and facilitating the circulation of goods and services.

Among the products excluded in this Treaty are: meats, hams, fats, milk and dairy products, coffee, corn, rice, oil, sugar, alcohol, cardboard boxes, cotton, fabrics, garments, footwear and vehicles, among others.

(vi) Free Trade Agreement between El Salvador and Canada

El Salvador and Canada have conducted negotiations on completing a Free Trade Treaty. Issues such as investment, access of goods and services, and excluded articles, have received particular attention by the governments. The treaty develops broad opportunities for Salvadorian products to gain access to the Canadian market. The agreement is expected to be completed during the first half of 2003.

(vii) Free Trade Agreement between Central America and the United States (CAFTA)

One of the most important commercial agreements for the Salvadorian economy is the free trade agreement with the largest market in the world, that of the United States.

The treaty seeks to gradually achieve symmetry, and to expand the opportunities for economic and technological development, in addition to attracting foreign investment.

The first negotiating meeting between Central America and the United States took place in San José, Costa Rica, on February 24-28, 2003. During this meeting, lower-level officials from the governments of Central America and the United States met to begin discussions on negotiating a Free Trade Agreement.

Issues being negotiated are market access, in addition to matters such as technical standards, free zones, quotas, taxes on exports, and others related to access of products by both parties. Additional topics covered have been access to and use of telecommunications, dispute resolution, public sector procurement, intellectual property rights and sanitary standards.

Also incorporated in this treaty are labour issues. Matters that will receive additional attention include labour rights legislation, effective child labour legislation and environmental issues. There will also be efforts to analyse enforcement of laws, in member countries, related to environmental protection.

In terms of cooperation, projects with potential for being financed by participating entities have been analysed in formulating this Treaty.

(viii) Partial-scope Agreement between Colombia and Venezuela

Several years ago, El Salvador signed a Partial-scope Agreement with the Republic of Colombia, in which Colombia granted tariff and non-tariff preferences t

El Salvador. It decreased or eliminated the obligations and other restrictions applied to the importation of products included in the agreement.

At the same time, a Partial-scope Agreement was signed between Venezuela and El Salvador, for the purpose of strengthening trade flows by granting tariff preferences and decreasing or eliminating non-tariff restrictions.

(ix) Free Trade Treaty between El Salvador and the Andean Community

The Andean Community of Nations (Colombia, Venezuela, Ecuador, Peru and Bolivia) has begun negotiations of an Expanded Partial-scope Agreement with El Salvador. This type of agreement excludes some international trade disciplines; concessions on tariff rollbacks or elimination of tariffs are specifically envisaged. Issues under negotiation are: market access, standards of origin, investment and dispute resolution.

The agreement also envisages establishing that grantor countries will be extended the greatest possible mutual benefits for trade promotion in their respective territories. These benefits will consist of the exchange of trade missions and delegations, as well as participation in fairs and exhibitions in their respective territories.

This agreement will replace the Partial-scope Agreements signed previously. The restart of negotiations is still pending.

b) Physical infrastructure

El Salvador has made significant efforts to improve the country's infrastructure as a means of facilitating trade and exports. Some of the significant advances in this area include:

(i) Highways:

The system of highways in El Salvador covers more than 15,119 Km. The Pan-American highway crosses the country from East to West, extending from the border with Guatemala to the Honduras border, thus uniting all Central American capitals, as well as linking these to the countries of North and South America.

The condition of the highways is good, though some of the roads are not asphalted. The most common means of transportation consists of buses, and in recent years these have been largely modernized. There are numerous routes connecting most populated areas. In the larger population centres, taxi service is common.

(ii) Railroads:

El Salvador has a rail system that services the main cities and the principal ports used for shipping. The system extends throughout the country, linking the capital, San Salvador, the ports of Acajutla and Cutuco, and the principal cities, such as Santa Ana, San Miguel and Sonsonate.

The rail system provides trade and industry with transportation services for import, export and local transport, carrying fuel, steel, dairy products, cement, containers and passengers.

(iii) Airport:

The "International Airport of El Salvador" is located only 38 km from the capital of San Salvador, and is considered one of the most modern in Latin America, offering daily service to and from the United States, Mexico, other Central American countries, South America and Europe.

The flagship airline is Taca, while numerous domestic flights are handled by TAES and Air Transport of El Salvador. Cities linked by air are San Miguel, Santa Rosa de Lima, San Francisco Gotera, La Union and Usulután. Domestic flights depart from the Ilopango Airport, 13 kilometres from the capital.

(iv) Ports:

El Salvador has five ports on the Pacific Ocean: Acajutla, Cutuco, La Libertad, La Union and Puerto El Triunfo. On the Atlantic Ocean, there are links with the Guatemalan ports of Barrios and Santo Tomás Castilla, which are easily accessible by road.

Major initiatives include:

(v) Customs service:

Previously, customs offices were considered the main barrier to entry for products targeted to the international trade. This is now little more than a myth from the past, at least in El Salvador. The primary objective of the General Office of Customs Revenue is to facilitate and control international trade, in a manner consistent with the regional integration process. It also provides for standardized, efficient services, implementing continuous improvements in all processes, while using appropriate and up-to-date technology to meet the needs and expectations of those using the services.

The General Office of Customs Revenue of El Salvador is the only government institution in El Salvador that employs a quality-guarantee system, under international ISO 9000 standards.

As part of the modernization of the General Office of Customs, the TELEDELIVERY system, operating via the Internet, entered into effect. Its purpose is to implement a system of virtual declaration, by which importers and exporters can make declarations from their homes and from any part of the world, using digital signatures. The use of this new system brings major benefits to the user, such as reducing the time required to complete the process, which involves filling out some 60 fields, in around 30 minutes per client. A further advantage is the fact that declarations can be made 24 hours a day, 365 days a year.

At the same time, the governments of the Central American region have made great efforts to achieve tariff harmonization. The proposed tariff harmonization agreement seeks to establish uniform treatment for products entering Central America or circulating between the countries, while applying a common tariff within the region. Since 1996, it has been possible to harmonize a large number of items corresponding to products that are exported and imported in Central America. However, complete harmonization has not been achieved, though all of the countries are working together to bring this about as soon as possible, particularly in light of Central America's pending Free Trade Agreement with the United States.

4. FDI promotion

El Salvador is becoming increasingly attractive to foreign investors. Starting in the 1990s, it established democratic systems and achieved macroeconomic stability. State doctrines have been abandoned, and numerous advances have been made in terms of economic liberalization, including measures such as the elimination of state subsidies, the floating of currencies and privatisation of State services, etc.

El Salvador has one of the most open economies in the region, and has made great progress toward modernization, according to data from the Salvadorian Chamber of Commerce and Industry.

The government promotes investment, with a particularly favourable policy with regard to foreign investment. The general regime is completely open and does not discriminate against foreign investors, who receive the same incentives as local investors.

This favourable investment climate has been brought about by the following factors:

- El Salvador signed the GATT, and is now a member of its successor, the World Trade Organization (WTO).
- There are prospects for expansion of markets, with El Salvador's participation in free trade treaties and with the integration of the Central American and South American markets.
- A decisive effort has been made by the government to increase the efficiency and competitiveness of the productive sector.

At the same time, in order to reduce interest rates, the Law of Monetary Integration, approved at the end of 2000, was implemented. As of January 1, 2001, the U.S. dollar is to be the legal currency, circulating in parallel with the colon, with no deadline by which the Salvadorian colon will cease to function as legal currency, though, in practice, it no longer circulates. The exchange rate, fixed in colons, is 8.75 per dollar, with the dollar serving as the financial system's billing unit. The prices of goods and services are expressed in both dollars and colons. The Law of Monetary Integration established the colon at 8.75 per dollar as of January 1, 2001. By July 2001, the dollar represented 80.3% of the circulating currency.

The Public and private sectors work together in an ongoing way to improve the investment environment. The objective is to contribute to the economic and social development of the country, increase productivity, create jobs, promote the exportation of goods and services, and diversify production. An appropriate legal framework has been created (the Law of Investment, the Law of Industrial Free Zones, and the Law on the Marketing and Revitalization of Exports), containing clear and precise rules, based on best practice in this area and allowing El Salvador to compete internationally in attracting new investment. For this purpose, "PROESA" (Promoting El Salvador) was created as a government office to oversee the promotion of investment and to facilitate the execution of procedures required by the laws.

PROESA is a public-private organization dedicated to offering support to foreign investors in search of opportunities in El Salvador. It offers information, contacts and the necessary services to guide investors in their decision to invest in the country.

PROESA has defined certain strategic sectors in which to promote foreign investment: textiles and garments, call centres, agro industry, electronics, manufacturing and tourism.

Since the creation of PROESA, foreign investment has increased in the country, The Central Reserve Bank estimates that foreign direct investment inflows totalled some US\$ 2.2 billion up to September 2001, an increase of 15.79% from the US\$ 1.9 billion reported in 2000. The primary laws governing foreign investment in El Salvador are the 1999 Investment Law (enacted in October 1999), the 1990 Export Revitalization Law, and an updated Law of Free Zones, enacted in 1998 (PROESA, 2004).

5. Business promotion

El Salvador has created an atmosphere favourable to the development of new businesses, both local and international. There are also agencies, which, in coordination with other foreign

institutions, have created programs to provide incentives to different productive sectors for the creation of new enterprises. The prime example of this is the program, “Launch Your Idea” (ETI).

ETI is a program implemented jointly, beginning in December 2001, by Technoserve, the Entrepreneurial Foundation for Social Action (FUNDEMAS), the National Commission for Micro and Small Enterprise (CONAMYPE) and the Salvadorian Foundation for Economic and Social Development (FUSADES).

This platform for competitiveness began three years ago, and was designed to train young people who wanted to establish an enterprise, teaching them to formulate their own plans and rewarding three of the best efforts with seed capital. The top 48 enterprises for 2003 generated 585 jobs in the rural and urban areas of the country.

This program also provides participants the opportunity to expose their business ideas to investors interested in financing promising enterprises. In addition, it offers US\$ 60,000 in prizes, which are distributed among the five best ideas each year.

C. Special measures to correct the “digital divide” between companies

1. Human resources

a) *Escuela 10* program

This program is designed to offer opportunities for educational excellence to children and youth at public educational centres throughout the country. The program consists of support, dissemination and accreditation of the educational quality of public educational centres in El Salvador.

It seeks to strengthen school autonomy, and is supported through actions of the Institutional Education Project (PEI) carried out at each educational centre. This includes emphasis on pedagogical processes, management processes, and the evaluation process.

At the end of 2001, selections were made based on formal criteria (size, location, etc.) and quality (evaluation of institutional performance, evaluation of the educational centre’s PEI, etc.). A total of 59 educational centres were benefited during 2002. After a new selection at the end of 2002, a total of 103 schools have been “Candidates for *Escuela 10*,” benefiting a population of 79,686 students and 2,416 teachers. A great diversity exists in terms of size, method of administration and location. The schools in the program include a highly heterogeneous group, with the common goal of improving their educational quality. Schools are visited weekly by the supervision work team.

Though many areas of school improvement are covered, the program focuses on 10 essential elements: An organized educational management system, centered on an institutional educational plan; a curriculum that addresses the needs, interests and potential of the students and that is oriented to the local environment; appropriate pedagogical practices to optimise academic excellence; enhancement of the learning environment; use of a Team Leader within the school organization, with a participatory scheme that includes the community, and an institutional culture of contribution among the school actors, oriented to achieving a high level of academic performance; an organization focused on making teaching and learning the focus of the school’s activity; reasonable rules, transparent relationships, knowledge; systems for evaluating learning; educational monitoring of student performance; and incentives to enhance the performance of all members of the educational community.

Based on the understanding that the process of enhancing quality is an integral one, the features mentioned above follow three basic lines: pedagogical processes (curriculum, environment and practical applications), management processes (leadership, participation and organization), and evaluation processes.

These schools, located in the 14 departments of the country, have the benefit of infrastructure and communications resources that facilitate the process of teaching/learning, by connecting with the world at large through the Internet and through use of new CRA technologies.

CRA is a group of technological resources that supports the implementation of pedagogical/didactic strategies utilized in the cultural, curricular development of the community, in order to facilitate the process of learning, enhance abilities, skills and competence in educating students.

b) Ciberolimpiadas

The Cyberolympic initiative consists of a contest in which students with basic and average education within the Salvadorian educational system employ information and communication technologies to develop websites. Through the Cyberolympics, learning dynamics are developed, contributing to active participation on the part of the school community, while motivating the training of students and teachers in the use of the new information and communication technologies for school activities.

c) Promotion of values

The Cyberolympics are not limited to the use of educational technologies for teaching and learning; they have also been useful in promoting student values, including:

- Cooperation and teamwork
- Friendship and solidarity
- Effort, dedication and discipline
- Self-learning

The publication detailing the first competition (2003) included the following points:

- Two phases are involved, the first concentrating on researching an educational topic, the second related to developing a website using the content developed in the first phase.
- Participating students in private and public institutions (average and basic education) organized in teams of 3-5 students each, coordinated by an educational advisor.
- Two categories of participation were established: educational institutions in rural areas and educational institutions in urban areas.

d) Organization

The Cyberolympics were organized for a CyberSchool project designed to promote educational technology by allowing the school to access the Internet. Through the contest, the Department of Education, through its Office of Children and Youth of the Future El Salvador, in conjunction with private enterprise, dedicated itself to developing school content for both public and private schools, acting as the certifying authority in the evaluation process.

The contest is supported by private enterprises, which underwrite the costs associated with publicity, training, materials and prizes.

2. Technical aspect

One of the most important instruments for promoting the use of IT in SMEs is the electronic commerce guide, titled “The Secret of Electronic Commerce.” Preparation of this guide was an initiative supported by the International Trade Centre (ICC), the Central Reserve Bank of El Salvador and the Corporation of Exporters of El Salvador.

The objective of the guide is to encourage a culture of electronic commerce in El Salvador among SMEs and to promote the advantages that the system offers for doing business.

Access to ICTs and to the Internet has provided greater access to practical and technical information, and has reduced the costs of communication. In tandem with this, it has facilitated access to businesses abroad and to consumer markets, thus increasing the capacity to do business. In addition, it has led to improvements in the quality of products and to reduced prices for consumers.

Nevertheless, the majority of the SMEs in developing economies, such as El Salvador, have little awareness of the potential benefits of this new tool, in terms of business organization, communications and marketing and sales.

In this regard, the ICC carried out a study with 269 SMEs and export development organizations in 20 developing countries, and the most frequent questions posed by SMEs related to technical issues, including the formulation of strategies for electronic commerce, privacy protection, etc.

In El Salvador, in 2001, the book, “The Secret of Electronic Commerce: A Guide for Small and Medium Exporters,” was published, with 105 questions and answers on issues covering:

- An introduction to Internet and electronic commerce terminology
- Development of an electronic commerce strategy
- Research on online markets, online marketing techniques, and online communication techniques
- Legal aspects of electronic commerce
- Security and encryption
- Financial considerations
- Characteristics of successful websites
- Technical aspects of establishing an electronic commerce platform
- National aspects and political considerations
- Electronic commerce
- Online purchases
- International assistance on issues related to electronic commerce

This guide has become one of the most important technical tools for small and medium businesspersons, explaining in a practical manner, aspects of using IT, and how businesses can utilize IT to promote sales.

Along with providing a brief guide to electronic commerce, the book contains a list of possible projects for SMEs, including a list of solutions suppliers and electronic commerce services.

3. Financial aspects

a) Technology development fund

In order to promote the use of technology as an engine of sustainable growth, the Department of Economy and the Multisectoral Investment Bank (a second-tier bank) has supported the development of a Technological Extension System and of a Technology Development Financing System for El Salvador.

The Financing System includes the development of three funds for small and medium enterprises, offering non-reimbursable resources to support the process of innovation and the marketing of products.

The project is based on Chile's technology development financing model, which has had a major impact on innovation and technological development among Chilean SMEs.

Currently negotiations are underway for an agreement with KfW of Germany to form a Technical Assistance Fund for businesses interested in industrial restructuring for the purpose of implementing cleaner production technologies. This fund will contribute non-reimbursable funds for businesses that undertake projects involving ecologically beneficial production methods.

b) Export Promotion Fund

The Export Promotion Fund, detailed previously, receives public funds to support activities of SMEs aimed at promoting and strengthening export development among these firms. In addition to financing research activities, income, market consolidation and development of franchises, the fund finances technologies intended for:

- Quality certification
- Processes for acquisition and adaptation of hard and soft technologies, excluding replacement of specific lines and equipment.
- Technical consulting to facilitate the process of identification and adaptation of technology for the most appropriate industrial processes
- Design, improvement and certification (ASTM type, etc.) of products and processes

4. Infocentres

In attempting to move the country toward the future, an initiative was created by the Government of El Salvador, with the support of the World Bank, to define a development strategy based on creating and making productive use of information and knowledge. The document arising from this study represents the result of 18 months of work, involving multisectoral circles of learning, studies, forums, electronic, national and international exchanges, and fieldwork.

In the circles of learning, assessments were carried out and project proposals presented, covering six major areas concerned with the nation's development: education, migration, local development, rural development, SMEs, and large private and public organizations.

Many of the proposals are linked with development of the Infocentres project, a participatory, non-profit partnership dedicated to creating a national network, including content and applications to increase productivity and quality among the Salvadoran population, along with establishing local centres that provide access to information tools.

An infocentre is a local connectivity centre that provides access to information services, various types of communication, distance education and training, suppliers and markets, business skills, etc. Services most commonly offered are: telephone, fax, e-mail, Internet access and photocopies. A centre may also offer training, meeting space, videoconferencing, and production of information tools and content.

Based on conversations with people and organizations concerned with the educational community in El Salvador, a series of foci was defined for the purpose of guiding the discussion and achieving concrete results. Six circles of innovation were created:

- education, training and innovation
- small, medium and micro enterprises
- entrepreneurship organizations
- migration and transfer of knowledge
- rural development
- local and municipal development

The groups are made up of representatives of the local and national governments, the private sector and civil society. Within these groups, areas of strategic concentration were defined, along with obstacles and opportunities related to specific areas of learning, as well as potential projects and strategies capable of contributing to the broader objective. Included were projects to identify financing, and efforts to forge alliances between different sectors, in order to provide for better distribution of risk. The circles of learning have contributed to the development of pilot projects, e.g., local multipurpose infocentres (telephone, fax, Internet, computer instruction), as tools for local development. Other possible pilot projects are: sectoral infocentres (focussing on agriculture, business, etc.), information networks and tools, distance learning projects, etc. The process of creating pilot projects will provide a means of gauging learning, the impact on development, and the creation of Salvadorian electronic content.

A series of forums and workshops was held during the course of the project to inaugurate and maintain the study circles, and efforts were made to formulate pilot projects. Representatives of best practices from other countries were invited to share their experiences and to motivate participation in the innovation process.

Infocentres are being created on the basis of identified demand for information and services. Some examples of local needs include information on:

- national and international markets and suppliers for local producers
- relevant training and information on production techniques
- distance education
- medical information, diagnostic support, prescriptions
- appropriate technology
- experiences in environmental management and local administration
- communication with emigrants regarding personal and productive goals

Infocentres in El Salvador operate as a franchise, offered to private businesspersons who invest in the localities and in the support infrastructure. The content is developed for the Infocentres Foundation, which has the technology necessary to provide technical backup and maintenance, and to design and host websites of other companies, as well as the ability to conduct teleconferences, online forums and online training.

One of the major contributions of the Infocentres is in helping to reduce the digital divide, through a project to design and host websites for 1,500 small and medium Salvadorian enterprises. Though few of these businesses utilized the opportunity to develop online marketing, promotion and sales activities, the project served to sensitise SMEs to the advantages of using these technologies to position their businesses in the market.

5. Others: Red del Desarrollo (Development network)

Since 2003, El Salvador has been creating the Development Network Programme, an executive network, located in 41 infocentres throughout the country. These telecentres support SMEs seeking information about loans, providing direct contact with executives in banks and financial institutions, based on the needs of the client. Non-financial services, such as technical assistance programs (FAT), matching grants for exports, and toolboxes for SMEs, are also provided, in addition to contact with guarantee programs and trade organizations for SMEs.

D. E-government targeted to SMEs and trade promotion

1. Overall strategy/structure of e-government

El Salvador, the smallest country in the Central American region, has scant natural resources and limited domestic competitiveness. The country's economy is heavily dependent on the agricultural sector, and the use of IT is still in its infancy.

The Government that assumed power in June 2004 has included, in its strategic lines of action, the "Connectivity Agenda," designed to incorporate the use and large-scale application of ICTs, as tools for the country's economic revitalization and social development. To this end, there must be coordinated activities within the government, the productive sector, the academic sector and civil society, to formulate a national policy on information technology use. The specific areas of action will include, among others, the following:

(a) *Access to infrastructure:*

To promote access to information and knowledge technologies (IKTs) for the majority of Salvadorians throughout the country.

(b) *Creation of content:*

To promote the nationwide dissemination of the totality of productive knowledge, through the development of networks for the administration of knowledge, made up of the research, academic, productive and government sectors and communities.

(c) *Education and training:*

To promote the large-scale application of IKTs, e.g., educational tools, transforming the quality of education, promoting virtual collaborative work, promoting research, training programs, and use of the technology as a tool for community development.

(d) *Online companies:*

To promote, within the national productive sector, identification and use of the opportunities offered by appropriation and effective use of the Internet and its related services, providing support to companies, particularly MSMEs, in moving toward a knowledge society. This will also be used as an effective tool to facilitate the international trade of MSMEs.

(e) Online government:

To promote optimal use of IKTs in government by providing services and online information to increase efficiency and transparency, in order to bring government to the people and facilitate implementation of the State's mission. This will allow the government's actions to be monitored by all, providing direct services with no scheduling restrictions, lines, middlemen, and under conditions of equal access.

(f) Online academy:

To promote the use of IKTs in Salvadorian education, as a tool in the dissemination and growth of knowledge, in order to provide students access to remote information, that was previously inaccessible, and to increase the quality of local education.

(g) Online municipalities:

To articulate and take advantage of existing projects and programs, improve municipal administration and promote broad citizen participation. This will also serve as an instrument to secure cooperation between different municipalities, in order to generate more efficient use of available resources.

(h) Development of the information technologies industry:

To promote the creation of an environment conducive to the consolidation and development of the country's IKT industry, supporting companies in this industry by addressing their potential.

In tandem with this, the Connectivity Agenda, established by the current Salvadorian Government, coincides with the IT Master Plan for Central America, formulated in the framework of the Plan Puebla Panama (PPP) integration project, an initiative representing a common regional development approach among the countries of Central America and Mexico, encompassing 8 areas of development. El Salvador heads the committee related to communications.

Although the telecommunications activities of the PPP include development of an IT infrastructure, there have been no significant advances on specific projects in this field. El Salvador, along with most of the Central American countries, lacks active IT policies. Moreover, the countries have differing legal systems and approaches to IT investment.

The pilot study for development of an IT master plan for the PPP, concluded in March 2004, was based on (a) an evaluation of existing IT conditions in the eight countries of the PPP region; (b) development of a master plan for El Salvador; and (c) programs and high-priority projects to be executed through the IT master plan.

The evaluation of current conditions in El Salvador produced the following conclusions:

(i) Current condition of ICTs

Although there is a National Computer Science Policy approved by the National Council of Science and Technology, this has not been endorsed by the government.

(ii) Legal and institutional framework

- There is no government agency authorized to oversee IT issues.
- The Law of Electronic Trade was created and is currently in the authorization process.

(iii) Use of IT in the government

- Each government institution has developed its own system of electronic government, under the guidance of the Ministry of Treasury.
- At the moment, there is no common platform for all government institutions. There is also no secure system for handling data, nor is there standardization across the software platform.

(iv) Industry and trade

- Public finances will be faced with a serious lack of resources.
- There is a large trade deficit.
- Large-scale industries will be key factors in coming decades.

(v) IT industry

There is no hardware manufacturing industry. International software companies have a weak presence in El Salvador, as in the rest of the countries of Central America.

(vi) Human resources

- the government's education expenses are the second-lowest in the PPP region. Priority has been given to reconstruction of schools damaged by the earthquake of 2002, rather than to investment in training human resources.
- There is no formal IT training system. Training in IT is offered by private companies, the Salvadorian Institute of Professional Training, the Investment Promotion Agency and the Foundation for Economic and Social Development, through its infocentres.

(vii) IT use in the society

- Public access to the Internet is provided through 41 infocentres nationwide. There is only limited access to data through cellular telephones.
- Advanced technology, such as ERP, is used in only a few large companies, such as airlines.
- Bank automatic teller machines are available on a 24/7 basis.

(viii) Telecommunications infrastructure

- Competitive conditions are fair in the telecommunications sector. The current network covers the demand for basic phone service.
- It is now becoming necessary to establish infrastructure for Internet routes, such as NAP.

2. Some applications

Compared to other countries in Central America, including Panama and Southern Mexico, El Salvador's IT has a moderate to high level of maturity, in terms of the government's use of, and the legal conditions governing IT. However, there is no authorized national policy, and within industry, in the overall economy and in terms of telecommunications infrastructure, the level of maturity is only moderate. Finally, in terms of IT use and human resources, the level of maturity is low.

These observations are particularly relevant to the government sector: in the private sector, a number of enterprises with highly developed systems already use digital processes such

as electronic funds transfers, electronic document exchange and, even more common, Internet and extranet, in addition to online marketing and publicity and e-mail.

Some important applications include the following:

a) E-procurement

The Road Conservation Fund (FOVIAL) is a government organization that draws on private participation. It was created by the government to provide services for conservation and maintenance of roads, encompassing all of the country's paved and unpaved roads.

This entity (www.fovial.com) has created a portal that publishes, on a daily basis, all of its projects, bids, awards, bid records and online opening of offers, along with publishing online all legal norms, documents, projects and other necessary information, so that companies dedicated to these areas can offer their services to the State.

The Law of Procurement and Awards mandates that the exact time at which bids for a given project are opened must be recorded. Participating enterprises may also monitor this process from their offices, through the "Online Opening of Offers."

b) Customs and other trade-related procedures

(i) TELEDESPACHO (Teledelivery)

As part of the effort to modernize the General Office of Customs (DGRA), the Teledelivery system was implemented. Since February 14, 2004, the use of TELEDESPACHO is mandatory for all importers when declaring their goods to the Office of Customs. The service is available 24 hours a day, 365 days a year.

This change was designed to establish a system of virtual declaration, by which importers and exporters could make declarations from their homes and/or from anywhere in the world using digital signatures.

This provision means that customs officials will no longer have to digitise the information contained in the Declaration of Goods form; instead, they will simply have to verify the relevant data.

TELEDESPACHO is an integrated system for providing information to clients, banks, the customs service and related institutions, making it possible to establish connections through a private VPN network (Virtual Private Network). Thus, clients are connected with the customs service on a confidential basis, without the data being accessible to other Internet users.

The technological requirements for carrying out tariff procedures using TELEDESPACHO are: a Pentium 2 or Pentium 3 computer (or the equivalent), a modem card, a public IP (to provide connection to the customs service), a computer with CD-ROM capability and 64 MB of RAM.

Currently, there are twelve enterprises offering technical support to users of TELEDESPACHO. This ranges from installation of the communications software and digitisation, to configuration of the necessary hardware to allow for connection to the customs service.

(ii) SIEX (Integrated Foreign Trade System)

This is a system that connects, through the Internet, exporters, State institutions, organizations concerned with foreign trade, and the Centre for Export Procedures (CENTREX), which is part of the Central Reserve Bank of El Salvador.

(a) Objective

The fundamental objective of the Integrated Foreign Trade System (SICEX) is to facilitate, simplify, and authorize export documents, and to contribute institutionally to the competitiveness of El Salvador in world trade.

(b) Services

- Issuing of export documents within companies. These include: Declaration of Goods, Uniform Central American Customs Form, Certificates of Origin and Sanitary Certificates, as well as issuance of export invoices and packing lists within enterprises.
- Interactive online consultation regarding their own operations, quotas, the tariff system, statistics, manuals and user provisions.
- Direct connection to information about trade opportunities. Online news and notification system.
- No payment required for software installation. The only requirement is Internet access and a Web browser.
- Integration of TELEDESPACHO in the General Office of Customs Revenue. This provides a single electronic procedure for CENTREX and Customs authorizations.
- Easy worldwide connectivity. From anywhere in the world, one will be able to access information and carry out transactions.
- Increased productivity. Effective delivery of goods to clients.
- Secure transactions. Service 24 hours a day, 365 days a year.

(c) Minimum requirements for operation:

- Staff trained in use of the Internet.
- Pentium processor with 90 mhz + processor.
- 64 MB RAM and 75 MB of free permanent hard disk space.
- ISDN or dedicated Internet connection.
- Version 5.5 Internet Explorer.
- Laser or Inkjet printer
- 56k modem and/or Ethernet card, depending on the Internet service provider.

c) E-finance and/or e-payment

There is no legal recognition of e-signatures and e-documents in banking operations, since no legal framework has been established for e-payment systems involving the participation of businesses and consumers.

However, despite a well-developed banking infrastructure, many account transactions can only be carried out, via the Internet, within one's own bank.

• **Online taxes**

The handling of online tax payments is carried out through the portal of the Ministry of Treasury. It is anticipated that, increasingly, other government procedures, such as visa applications, passports, birth registrations, etc., will be incorporated in the system.

The General Office of Internal Taxes, in order to provide high-quality service to the taxpayers, and pursuant to Articles 92 and 93 of the Tax Code, has designed and developed the Electronic Tax Declaration System (TED), a tool to facilitate the preparation of various tax declarations by magnetic means (diskette 3.5), thus eliminating the inconsistencies resulting from errors in arithmetic, NIT (Tax Identification Number) and tax period. In the new system, the current account is updated immediately.

Tax obligations that can be prepared and submitted through TED include the following:

- Income tax
- Tax on the transfer of goods and services
- Advance payment to an account
- Withheld income tax.

On the website, programs for electronic declarations can be downloaded, along with installation and user manuals (www.elsalvador.gob.sv). In addition, answers to technical questions are provided.

d) Other

The new government, which assumed power in June 2004, has made considerable progress in promoting e-government, providing an excellent website with various procedures and services for citizens and businesses.

This website offers the following services:

- **Citizen services:**

- Tax declaration
- Request for ID document
- Driver's licenses
- Criminal records

- **Business services:**

- Tax declaration
- Self-delivery of customs declarations
- Import and exports information
- Food regulations
- One-stop company registration

E. Institutional issues

Compared to the advances in IT use within the government sector, use of IT in the private sector is relatively low. Government IT investments and procurements account for the vast bulk of the total for the country. The present government has established a Puebla Panama master plan, created through the collective efforts of Salvadoran professionals, Japanese experts and public officials, providing financial support for conducting this study, through the Japan Bank for International Cooperation. This has defined a vision for the future, in which Salvadorian companies utilise information technologies based on the following:

1. Legal and institutional framework

The government authorized the National Enterprise Commission on Information as the primary entity responsible for all matters related to IT. Under this central entity, various subcommittees

will be formed to discuss specific topics relating to the promotion, use and regulation of IT. Budgetary support and allocation of personnel to the central entity will be necessary in order to successfully implement the master plan's Action Plans.

A Vice Ministry of Technology was recently created, setting in motion two pilot projects for digital literacy instruction, which is being used to introduce the basic concepts of computers and the Internet to 400 children in rural areas. This also provides instruction in the English language for 500 of the country's youth. In addition to establishing the necessary framework, this effort will promote foreign investment and technology transfer, including plans of action to promote use of IT, development of local industry, construction of telecommunications infrastructure, and development of human resources.

Establishing laws to promote IT is a priority concern, covering the development of the IT sector, e-government, security, a legal database, and building capacities, as well as funds to finance promotion of the sector and the use of IT in other sectors.

2. E-government

In order to effectively implement e-government, the functions should be centralized under the proposed structure referenced earlier. It is also important to erect a building to house the Centre for Electronic Government, so as to serve as a symbol of the country's intention to be a major player in IT. Among the priority projects are those related to centralizing the functions of electronic government. These include a centre for electronic government, coordination centre, technology bank, training centre, government relations system, government entry, government WAN, standardization, etc. Applications systems for the electronic government platform are being developed to provide for software development in the private sector, particularly for small enterprise.

3. Industry and commerce

The programs proposed require substantial proficiency in IT, and even the lower-level programs require some knowledge of IT. Thus, some projects cannot be carried out efficiently under current conditions. However, once set in motion, the projects will have a positive impact, demonstrating that the government is intent on providing an enhanced business environment. Proposed initiatives include the creation of a business database, with an inventory of IT businesses and experts; statistics on IT-related commercial and industrial activities; assigning high-priority business to the national IT industry; establishing incubation centres; providing a network environment; and creating an electronic-learning package, etc.

4. Development of human resources

According to an evaluation of the list of projects, the most effective human resources development projects are: "Improving Knowledge of IT in Enterprises" and "IT Training in Schools." The latter includes purchase of PCs, programs to train teachers and community leaders, networks linking the country's schools, development of educational content, etc.

5. ICT infrastructure

The status of ICT infrastructure in El Salvador is relatively good compared to that in other countries of Central America. Thus, the priority projects in this sector relate mainly to improving access to the Internet. Establishment of the Neutral Access Points (NAP) is considered a high priority, since the present condition of the system will have trouble accommodating the increasing traffic of data projected for the near future. Other priority areas include: introduction of a G3 cell

phone system to promote electronic commerce and improve Internet access in rural areas; and improvement of statistical data and strengthening of the Superintendency of Energy and Telecommunications, which is the principal entity regulating access to the Internet—an important element in future broadband traffic.

IV. Regional networks

There is no cooperative network in El Salvador to promote trade by SMEs, trade facilitation, or coordination with others trade systems. There are, however, numerous private and public websites oriented to providing trade information to Salvadorian SMEs, promoting exports, fostering foreign investment, and promoting catalogues listing Salvadorian products and companies.

The most-visited websites in El Salvador, due to their ability to provide useful and effective information, are:

a) www.elsalvadortrade.com

- Objective: to provide economic and trade information relevant to foreign visitors
- Type of website: public, created by the Central Bank of El Salvador
- Languages: Spanish and English

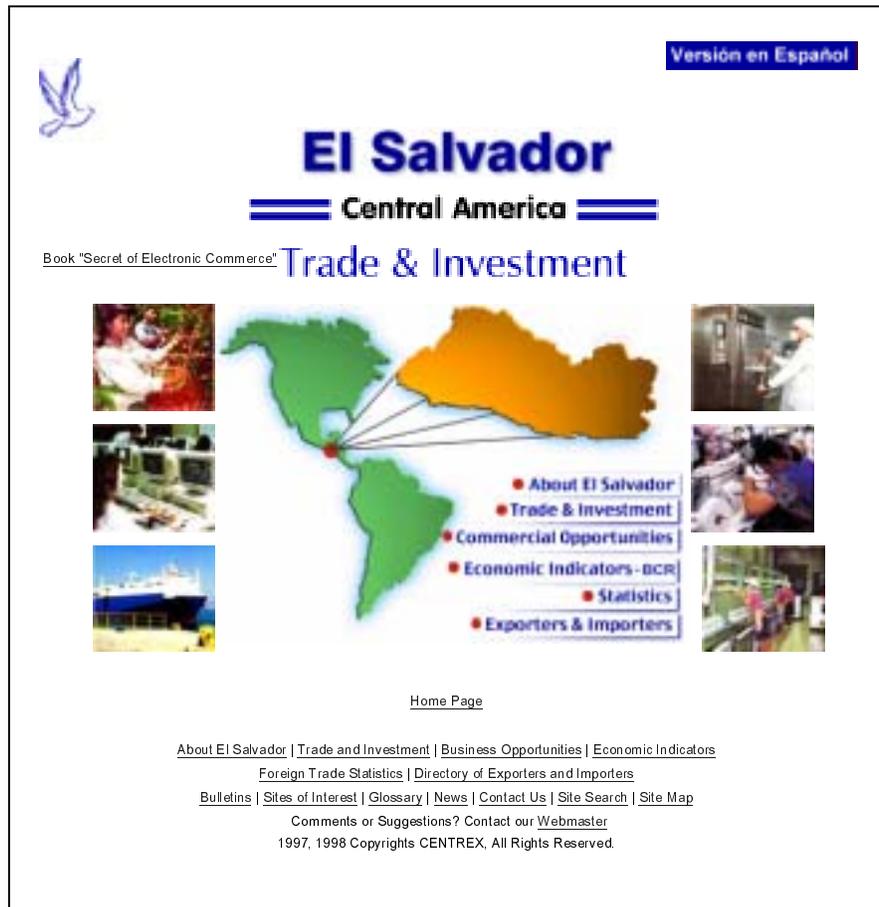
b) www.coexport.com

- Objective: to promote exports and to provide relevant information for the members of organizations and other interested entrepreneurs
- Type of website: private, created by Exporters Corporation of El Salvador
- Languages: Spanish, English and Dutch

c) www.centromype.com.sv

- Objective: to promote business for SMEs and provide trade information and business opportunities
- Type of website: private, created by the Foundation for Promoting Small Business Competitiveness
- Languages: Spanish and English

FIGURE 9
EL SALVADOR TRADE AND INVESTMENT



Source: “Secretos del Comercio Electrónico. Una guía para pequeños y medianos exportadores”, Central Reserve Bank of El Salvador, 2001, Corporación de Exportadores de El Salvador y Centro de Comercio Internacional, San Salvador, El Salvador.

d) www.camarasal.com

- Objective: to provide trade information and promote business for members of the Salvadorian Chamber of Commerce
- Type of website: private, created by the Salvadorian Chamber of Commerce and Industry
- Languages: Spanish and English

e) www.agronegocios.gob.sv

- Objective: to provide trade information and promote agribusiness
- Type of website: public, created by the Ministry of Agriculture
- Language: Spanish

f) www.tradepoint.gob.sv

- Objective: to support a worldwide trade point network and provide trade information, in order to identify business opportunities and promote Salvadorian companies around the world
- Type of website: public, created by the Ministry of Economy and now overseen by the Salvadorian Export Agency
- Languages: Spanish and English

g) www.infocentros.org.sv

- Objective: to promote connectivity in numerous points around the country and provide relevant information to the Salvadoran population
- Type of website: private, created by the Infocentros foundation. It is one of the most-visited websites in El Salvador and is consulted by Salvadorans both inside and outside the country.
- Language: Spanish

h) www.exporta.gob.sv

- Objective: to promote Salvadorian exports of products and services around the world
- Type of website: public, created by the Salvadorian Export Agency
- Languages: Spanish and English

i) www.fusades.com

- Objective: With the aim of promoting trade with Europe, PRIDEX, in an alliance with the European Union, has dedicated itself to the strengthening of commercial ties and investment between this country and members of the European Union through the EUROCENTRE for Commercial Cooperation in El Salvador.

Its goal is to promote business and cooperative agreements between local and European companies. The EUROCENTRE is a member of a broad network of business organizations in Europe and Latin American, enabling it to perform a wide range of activities. PRIDEX is the only institution that systematically promotes the country and fosters investment with a high degree of credibility and strong recognition both nationally and internationally

- Type of website: private, created by the Salvadorian Foundation for Economic and Social Development
- Languages: Spanish and English

V. Conclusions and recommendations

A. Conclusions

1. SME development

SMEs' contributions to the Salvadorian economy, as well as to GDP and to job creation, are beyond question. However, despite the extensive efforts carried out by public and private organizations to develop the skills needed by SMEs and supply important resources and services, this process is still in its early stages, with SMEs still finding it difficult to become part of the supply chain. These firms labour under the following problems:

- Low level of technification in production and administrative processes among SMEs
- Limited access to financing
- Limited management capacity
- Poor capacity to form businesses and weak entrepreneurial culture
- Poor development of assistance services

2. Export promotion policies

El Salvador has various initiatives aimed at promoting exports of goods and services to foreign markets, taking advantage of the benefits provided by several free trade agreements that have been signed with a number of countries.

These initiatives are oriented to providing technical assistance, financial and non-financial services, trade information, trade intelligence, etc. However, all of these efforts are offered to entrepreneurs in a non-integrated manner, rather than as an integrated set of services. The result is that the services reach some businesses, while others lack access to them.

Moreover, export promotion policies have not taken into account the need to provide services for developing exports, a responsibility that normally falls to the government. This includes areas such as research and technology centres for the adaptation and development of new products, institutions for the design of packaging, laboratories for quality control and product content verification, standardization of products and services, etc.

3. Information and communication technologies (ICTs)

The level of ICT development in El Salvador is moderate. The country has developed one of the best physical communications infrastructures in Central America, as a result of its efforts to implement the Telecommunications Privatisation Law, which has been judged to be one of the best in the world.

The private sector, particularly large enterprises—represented by the banking and commercial sectors—has introduced improvements in the use of IT, in regard to management processes, human resources management, marketing and consumer services, as well as in relation to design of EDI and CRM systems. However, among SMEs, the use of ICTs is limited almost entirely to designing promotional websites and use of e-mail.

In terms of the general population, it should be pointed out that the establishment of Infocentres has aided enormously in promoting connectivity among citizens. Related initiatives have been undertaken by the Ministry of Education and within the private sector. Nevertheless, the use of ICTs by the population as a whole is still very limited.

4. Networks

Although there are many initiatives to foster the use of ICTs for purposes of trade promotion and development of SMEs, there are no initiatives geared to creating a cooperative network to improve the efficiency of trade promotion and to use the ICT sector to enhance the operations of development institutions and organizations.

B. Recommendations

1. Export and development policies for SMEs should take into account the need to create government support services designed to increase the productivity and competitiveness of Salvadorian companies.
2. ICTs should be used to encourage export promotion policies for SMEs, through fully integrated programs that include a set of multidisciplinary institutions, working to improve assistance to SMEs, stimulate use of these resources, and raise the efficiency of the productive sectors.
3. Based on the recommendations of the Pilot Study for the Formulation of the El Salvador Master Plan for Information Technology, promoting ICT usage and connectivity should take place after the introduction of e-government applications and improvements in infrastructure to facilitate access. At the same time, this process should be used by the ICT industry for marketing efforts within the country.
4. Cooperative networks should be designed, drawing on various commercial and trade promotion institutions in El Salvador. The Puebla Panama Plan (PPP) should be used to integrate these networks in larger, complementary regional initiatives, taking advantage of joint efforts with other Central American countries to promote the development of SMS and ITC industries in the Central American region.

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