

A MATTER OF PERCEPTION:
LOCATIONAL CONSIDERATIONS OF
INDUSTRIALISTS IN GUATEMALA*

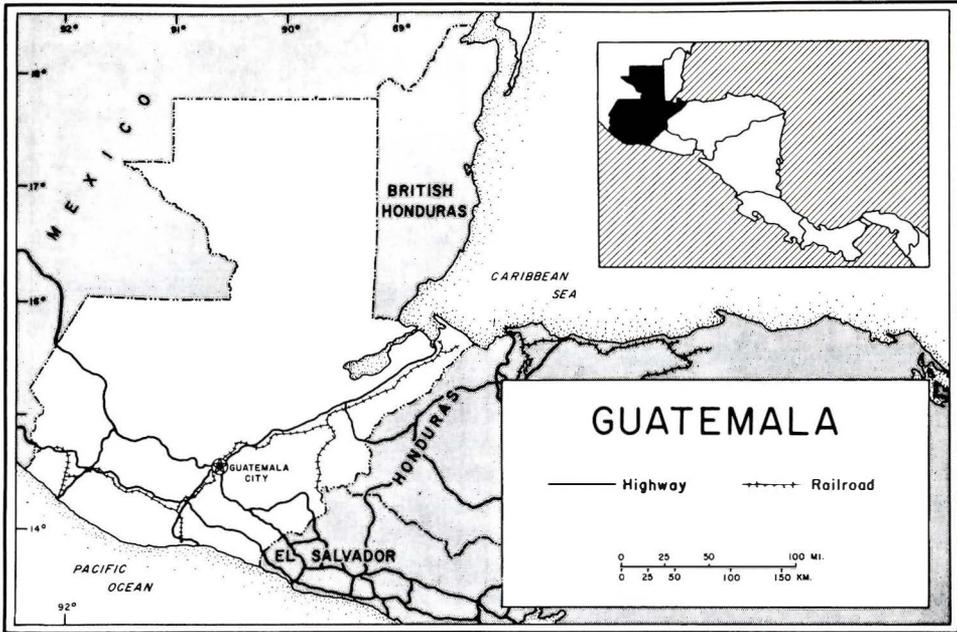
BRUCE E. BECHTOL
Chico State College

HUMAN DECISION MAKERS determine the environment into which an industry is placed. This location process is one that is extremely subjective, as it is a reflection of how a potential setting is perceived by an individual or group. Industrial plants do not perforce develop at all favorable sites or in the most desirable situations. Indeed, there is no principle, economic or otherwise, that can guarantee the location of a plant in the best or most rational site. The decisions of men can be reasoned or effected by bias. And industry's important locational considerations are not necessarily found in textbooks or in the abstract simulations of the real world constructed by model builders. Truth lies in the description and analysis of the situation as it exists.

The objective of this study was to determine why industry located in Guatemala. It is a problem approached through an examination of the locational considerations perceived in the attitudes of the entrepreneurs themselves. The question posed was: "Why did you locate your plant here in Guatemala?" The data utilized represent the responses of Guatemala's 1,076 largest manufacturers. Some of the typical responses are shown below:

1. This is my home. (candle-maker)
2. My grandfather built this business with his own hands. When he arrived in this country (from Italy) there wasn't a single.....manufacturer in Central America. It was an opportunity he recognized and took advantage of. (non-metallic mineral products manufacturer)
3. My uncle worked for over eight years in a.....plant in the United States. When he came back home he borrowed money from my father to build a factory. We really didn't expect him to be so successful but when he was we bought in. We raise coffee too but the sale of..... makes more for us now. (textiles products)
4. I went to school in the United States. Do I come home to raise pigs with a degree in engineering? (plastics manufacturer)
5. While I was in the service I passed through this lovely little country and fell in love with it. After the Korean thing was over I came back and started the business just to see what I could do with it. I never thought that it could snowball into something like this. (furniture products)
6. We've sold in this area for years and, quite frankly, were afraid that if we didn't put in a branch plant they would fence us out with a damn tariff. (chemical products)
7. Competition . . . , and moved in here so we felt we had to, too. (chemical products)
8. As far as we were concerned the country was ideal. Not only is the climate pleasant but Guatemala is centrally located with respect to the whole region. It (Guatemala) was our biggest buyer (in Central America) before we moved here. (transportation products)
9. The choice was between Costa Rica and here. The very day that the board was deciding, Irazu (a volcano near the proposed plant site in Costa Rica) blew its top and the decision was made to come to Guatemala. (pharmaceuticals)
10. Our market for was dying a slow death in the States while our exports to Latin America continued to grow. We made a survey of the region and found we could produce the same product here, do it for less in costs, and sell it for the same price. The local government went out of its way to assist us so Guatemala was the choice. (metal products)
11. Have you ever noticed how much and cost in the stores here? They used to be just about half as much but still more expensive than our home price. Honestly, it was possible for us to clear a better profit margin using labor and local resources and we did want to put up a branch plant here in the region anyway. (food products)

*Preliminary Field study in Guatemala in 1966 under a grant from the Institute of International Studies and Overseas Administration, University of Oregon. Field work completed in 1967-1968 under contract with U.S. AID, Guatemala.



Principal roads and railroads in Guatemala

Table 1
 PERCEIVED LOCATIONAL CONSIDERATIONS OF INDUSTRIALISTS IN
 GUATEMALA

Factor	First Response	
	Number	Percent
Market	699	65
Labor	118	11
Raw Materials	96	9
Communications and Transportation	76	7
Special Incentives	76	7
Other Factors	11	1
Total	1,076	100

Source: Personal interviews by the author, 1967-1968.

12. We've got a good market here now and labor is a helluva lot cheaper, but don't think we're in the region to exploit the people . . . we're just here to live within the economy. (chemical products)

13. Well, let's look at it this way—we pay nine cents a pound for . . . (a raw material) in the States and sell . . . (the product) for about thirteen or fourteen cents a pound. Here we get our raw materials for next to nothing and sell the finished product for twenty-five cents a pound. (food products)

14. To make money, what else? (clothing products)

The untypical response to the locational query came from an American firm of international standing:

None of your . . . business. All you bleeding heart idealists think we're here to screw the damn people regardless of how much good we do. Forget it . . . we don't answer any questions we don't have to.

MARKET

The most often-cited factor for plant location in the Republic of Guatemala was market. In fact, almost 65 percent of all respondents specifically indicated market as the prime motivation in the selection of their business site. Moreover, this basic economic element was mentioned as an important locational consideration during virtually every interview. It appears that market has grown to prime significance as a perceived influence because of the increasing demand for all manner of manufactured goods within the country and the Central American Common Market (CACM).

However, in spite of this market expansion, there are still many products that will probably never be economically feasible for production in the area. For example, no matter how much the market expands, its needs for machine tools, sophisticated electronic apparatus, and heavy industrial products are better filled by industries lying outside the region in the more developed areas—primarily from North American, European, or Japanese sources. But market is industry's prime attraction to the area.

Guatemalan industry is oriented to three levels of market service: (1) local, (2) national, and (3) international, with a strong emphasis on exchange within the Central American Common Market countries. The smaller manufacturers producing goods for immediate or local sale are almost ubiquitous in the republic. These firms include such activities as baking, shoe production, printing, and woodworking. However, the medium-sized plants (25 to 99 employees) and large-sized firms (over 100 employees) tend to cluster along the region's major transport lines and in the central places connected by those lines such as Guatemala City, Quezaltenango, or Escuintla.

The cities provide a strong local market base for sales, furnish an available labor pool for the larger factories, serve as collection points for raw materials, and also maintain the more reliable city services required for the operation of the more mechanized large industrial plants. Typical firms in the urban centers that would fit into the large-sized category are textiles manufacturers, breweries, mechanical bakeries, assembly operations of all types, and pharmaceutical plants.

LABOR

Guatemalan labor is largely unskilled or, more accurately, untrained. Manufacturers must teach their employees the skills they require through on-the-job schooling. In the industrial establishments interviewed, the average wage of workers was determined to be \$2.50 per day. However, it must be noted that "average" tends to be misleading since wages ranged very widely—from less than \$1.00 to as high as \$5.50 per day. The employees working in the less-mechanized plants received the lowest wages, while those that earned the most were found classed as semi-skilled or skilled laborers and involved in more technical operations where some skill or mechanical aptitude was required. Production output is highly variable, but generally tends to be low per man-hour and per man-day. Also, the wages of labor are relatively low when compared to the cost of living in the highly urbanized areas such as Guatemala City.

Although the purchasing power of the average industrial worker is limited, he at least receives some hard cash for his labor. Most of the Guatemalan people are rural agricultural folk who customarily live at a level that does not yield much in the way of wages. This small real cash income of the bulk of the population has operated as a limiting factor on the expansion of the potential domestic market. Indeed, perhaps

less than 14 percent of the people in Guatemala make up the present market for most industrial goods. The industrial labor force, therefore, may also develop into the region's most important group of consumers. Without such growth, manufacturing will cease to expand.

Labor relations in Guatemala were one of the most frequently mentioned problems for industry. Nonetheless, cheaper labor was one of the factors cited for its importance to location. Foreign firms tend to follow policies of hiring and training personnel that are more enlightened than their national counterparts. There are two reasons for this: (1) it is less expensive to hire a Guatemalan national for a job if the foreigner must be transferred in from outside, and (2) it also makes for good public relations if the firm can demonstrate its "national character." In spite of this, however, in the foreign firms key positions in the business hierarchy are filled by foreign managers and technicians.

There is at present no really unreasonable attitude toward industrial management by labor. Unions in the manufacturing industries are, at best, weak. The problem with labor is more a problem of discipline. The traditional pattern of Guatemalan culture dictates a paternalistic relationship in the society. He who controls takes care of his workers; they are dependent upon him for survival. By most foreign standards, this is a much different business arrangement than is desired; nevertheless, foreign industry has accepted the cultural challenge.

The highest wages paid to labor are noted in foreign firms. If anyone follows the labor laws of the country to the letter, it is a foreign firm. Thus, as a general rule, the foreigners provide the best working conditions and are the most concerned for their employees' welfare. More familiar with working in advanced societies where labor is frequently more demanding of management, the foreign industrialists have gone out of their way to prevent labor discontent. If anyone is exploiting labor it is the Guatemalan businessman . . . the national. Foreigners are outsiders and they are well aware of the fact that because of this they are more subject to criticism—deserved or not. Consequently, labor fares relatively well under foreign management. In fact, given a choice most Guatemalan laborers prefer to work for foreign concerns. The pay is better, the fringe benefits are greater, and there is usually more opportunity for advancement.

RAW MATERIALS

The requirement for production materials is an important consideration of all industries. As a location factor, therefore, it is an influence of considerable import, especially for the operations where perishable products or weight loss are involved. Few major Guatemalan industries listed this influence of prime concern to their location. But some of the country's largest industrial concerns were among the respondents who cited raw materials as their prime location factor. Industries that reported a strong raw materials orientation were, for example: the producers of cement, pumice, concrete products, lime, wood products, lumber, sugar, cotton processing, and the various food industries.

The raw materials for Guatemalan industry come from both internal and external sources. Domestic agriculture provides the base for most industry, with coffee being predominant; yet, other products of the fields are becoming increasingly important. Sugar cane is the base for the production of *panela* (unrefined sugar), sugar, liquor, industrial alcohol, and yeast. Domestic cotton ultimately ends as thread, yarn, clothing, other textiles products, animal feed, and oil—all goods produced within the country. Animals provide meat, dairy foods, hides for leather goods, tallow for soap and candles, and bone for fertilizer. Oil derived from the citronella plant is used as an ingredient in chemical manufacturing. And some soft wheat is grown and utilized in the milling and bakery industries.

Other raw materials are provided by forest and mineral resources. Guatemala's forests furnish chicle for gum and the various woods that are employed in the manufacture of lumber, furniture, and similar types of items. Mineral resources yield such basic materials as limestone for cement, clay for bricks and pottery, and the precious and semi-precious metals and stones that provide a basis for the jewelry and handicraft

industries. Except for chromite and salt, very little has been done to develop other mineral resources, but sulphur and nickel hold much future promise.

Chemicals, paper, metals, petroleum, some textile fibers, e.g., nylon, rayon, kenaf, and other materials in short supply locally, are imported and consumed by the domestic manufactures. Under the protection of the Central American Common Market, a great many industries have come into existence that rely on imported inputs in their operations. For these manufacturers, of course, national resources mean very little, but the question is: how realistic are activities of this type? Guatemala needs to find new ways to utilize its existing resources, but it needs to press the search for other resources as well.

COMMUNICATIONS AND TRANSPORTATION

Sure means of communication and transportation are basic requirements for all industry. Through communications the needs of markets are ascertained, orders are placed, and the flow of industrial activity is maintained. Efficient transport facilities insure delivery of both raw materials and finished commodities on demand. For industry, the ideal is to have several alternatives in communications and transport, but both of these have been major problems for Central America. As a result, industry has gravitated toward those countries with the largest populations (market) or toward population clusters with the best communications and transport linkages, as is the case in the northern part of the region where Guatemala and El Salvador have both the population and transport linkages that are desired.

Overland transport has been difficult to develop and very costly in Central America, largely because of the nature of the terrain and the area's traditional economic orientation to foreign nations rather than adjacent countries. This picture is changing, though. As the Common Market has developed, the increase in its trade has encouraged changes in the orientation of commerce and improvements in transport. Yet, much still remains to be done.

Central America is deficient in communications and transportation lines. It is not only served by inadequate systems; in fact, no systems exist. Telephone connections, for example, are being built, but at best they are only serving the capitals; outlying parts of the region rely almost solely on radiophone or telegraph for communications. The picture in Guatemala, although somewhat better than it is in some of the other countries, is still bleak. All of Guatemala's principal population centers are served by routes open to all-weather vehicular traffic, but less than 20 percent of the country's estimated 12,000 km. (7,500 miles) of roads are paved. The bulk of all domestic and interregional traffic moves on these highways.

Rail shipment is also available to industry in Guatemala, but it is not a major consideration for locating factories. Although the country has only some 1,280 km. (800 miles) of rail line, the railroad links both coasts, Mexico, and El Salvador by means of narrow-gauge track. Rail efficiency, however, varies a great deal, as does reliability. Industries located along the tracks reported both dissatisfaction and satisfaction with service. Generally, industrialists felt that door-to-door shipment via trucks was more desirable, a great deal more reliable, and far superior.

Over a third of Central America's international traffic moves through Guatemalan ports.¹ On the Pacific, the major ports are San José and Champerico; however, both lack the ability for adequate and efficient cargo handling. Located on a harborless coastline, these ports require lighter service to shuttle goods between the ships and their "port facilities" (piers). On the Atlantic side, both Puerto Barrios and Matías de Gálvez are larger and better equipped to handle shipping. The bulk of Guatemala's imports and exports via the sea, therefore, justifiably move through the Caribbean ports.

Air service for freight and passengers is available for industry throughout Guatemala and internationally. Aviateca, the Guatemalan national airline, provides domestic and international service. However, Pan American Airways is the major international carrier, even though other lines such as KLM, Lufthansa, and TACA provide similar types of services. LACSA and SAHSA furnish minimal connections to other Central American states. The large companies are the chief means of transport

for international air traffic. Internal air freight is primarily moved by regional carriers or through contracts with individual pilots. The republic's major air terminal is situated in Guatemala City; smaller landing strips are distributed over the country, but these are primarily for private use. Thus, except for the capital, there is a lack of air service for industry in Guatemala.

As far as most industrialists in Guatemala are concerned, transportation is really a market ministering problem. And, since the bulk of the market for manufactured goods lies in the northern part of Central America where transport facilities are best developed, their interests have brought them there.² Communications and transportation were considered by entrepreneurs, but essentially in relationship to the prime locational factor—market service to Guatemala and El Salvador, the two countries that account for 50 percent of all intra-CACM trade by value.³

SPECIAL INCENTIVES

Guatemala is now committed to a policy of industrial expansion. This is evident in the government concessions that have been extended to industry. Manufacturers have obtained virtual grants of monopoly, tax breaks, duty-free imports of raw materials and machinery, and even shipping assistance when required. In addition, tariff protection is extended to many commodities to encourage the purchase of domestic-made goods. Most recently, loans acquired through the influence of the United States have been earmarked for use within the country's economic development program. Thus, the influence of government in all phases of development presently seems to be a strong motivation to industrialization.

Investment incentives offered by the Guatemalan government have been instrumental in attracting industry into the country. During this survey almost every large firm interviewed made some reference to the "special privileges" made available by the government. Probably the most important of these, however, was tariff. High tariffs protect goods made within the region by keeping out non-CACM competition. Nevertheless, this is also potentially dangerous for development since it may force people to pay more for goods made in Central America than if they were imported. But, as one factory manager put it:

We had a choice—either move into the region with tariff protection now before we had any real market going for us . . . or wait until the competition moved in first, established a market, and fenced us out with a tariff. Frankly, we felt caught between the devil and the deep blue sea . . . this is a worldwide concern with an international reputation to maintain, so what could we do?

OTHER LOCATIONAL FACTORS

There are several other considerations for industrial location that were indicated by business entrepreneurs in Guatemala, but they are not considered of great importance. Most of these were mentioned only once or twice during the interview period, and all are more appropriately classed as secondary locational considerations or specific site factors. These would include such things as: water availability, land, climate, warehouse space, already existing plant facilities, power, and similar factors. Most industrialists gave more than one reason for plant location. In the end, however, market is the major factor affecting the development of industry in Guatemala.

REFERENCES

¹James R. Snitzler and Enrique Soto, *Central American Transportation Study*, Regional Office for Central America and Panama Affairs (ROCAP), Agency for International Development of the U.S. Department of State, Guatemala, 1965, Table V - A-2.

²Guatemala and El Salvador have five times as much improved road (508 miles per 1,000 square miles) as the Central American average (100 miles per 1,000 square miles). Bureau of International Commerce, *International Commerce*, Vol. 74, No. 14 (April 1, 1968), p. 4.

³*Ibid.*, p. 3.