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THE DISTRIBUTION OF CACAO CULTIVATION IN PRE-COLUMBIAN AMERICA[1]

JOHN F. BERGMANN
University of Alberta, Edmonton, Alberta, Canada

ABSTRACT. On the eve of the Spanish conquest aboriginal cacao cultivation extended from the two coasts of central Mexico to Costa Rica. Although the districts of greatest production were located within the Maya language areas of southern Mexico and Pacific Guatemala–El Salvador, a large and increasing market for cacao lay in the Nahua language areas of highland Mexico. To this area important amounts of cacao moved in trade from the southern zone of production. Distributions of Indian cacao cultivation have been plotted from published and unpublished primary sources. An unpublished tribute assessment list (*Tasación de Tributos* 1548–51) provides the most detailed distributional information available for the significant cacao zones of Guatemala and El Salvador.

LATE in July, 1502, the small fleet of Christopher Columbus, on his fourth voyage, encountered a large Indian trading canoe off the isolated coast of northern Honduras. The Spaniards were intrigued by the native trade items, which included colorfully dyed and decorated cotton cloth, stone and copper tools and weapons, and a substantial supply of cacao beans, or *almendras* (almonds), as the Spaniards first called them.[2] This encounter was the first European contact with the source of chocolate, although they could not then have appreciated the significance of the event.

Possibly two thousand years before this accidental meeting in the Caribbean, wild strains of the genus *Theobroma* had already been brought into domestication by some unknown Indian cultivators, probably in the area of Mayoid languages in Middle America. By A.D. 1502 the cultivation and utilization of cacao had become a well established culture trait among many of the Middle American Indians. Extensive cacao orchards were under cultivation by that time on the wet, warm lowlands bordering the Gulf of Mexico, the Pacific Ocean, and the Caribbean Sea (Fig. 1). It was from these orchards that large quantities of valuable aromatic cacao beans moved in the native trade channels to the cool highland of Mexico where *Theobroma cacao* could not be cultivated.

After mainland Middle America had been conquered, the Spanish discovered native cacao orchards under cultivation in scattered locations ranging from the lowlands of Colima and Tuxpan, Mexico, to as far south as Costa Rica. However, areas producing on a large scale for trade with the Mexican Plateau were restricted to a few districts, principally those of Soconusco and Tabasco.

Among the higher cultures of pre-Columbian Mexico and Central America, cacao had several important uses. The cacao beans were ground by hand for use in the native beverage concoction *chocolatl.* In its native form chocolate proved very distasteful to the Spaniards, being an unsweetened mixture of cold water, ground cacao, ground corn, and ground chile pepper, flavored variously with a number of highly scented tropical blossoms or vanilla. However, in this form it was much esteemed by the native peoples. Large quantities of chocolate, for example, were prepared daily for the Aztec chieftain, Montezuma. Chocolate was served to him by young maidens several times during a meal.[3] The royal house-

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[1] The author gratefully acknowledges financial assistance received from the Henry L. and Grace Doherty Foundation, which made possible the basic research for this study carried on in the archives and in the field in Central America and Mexico.

[2] Bartolomé de Las Casas, *Historia de Las Indias* (Mexico: Fondo de Cultura Económica, 1951), Vol. II, p. 274.

[3] Bernal Díaz del Castillo, *Historia Verdadera de la Conquista de la Nueva España* (Mexico: Oficino Tipográfica de la Secretaría de Fomento, 1904), Vol. I, p. 280.

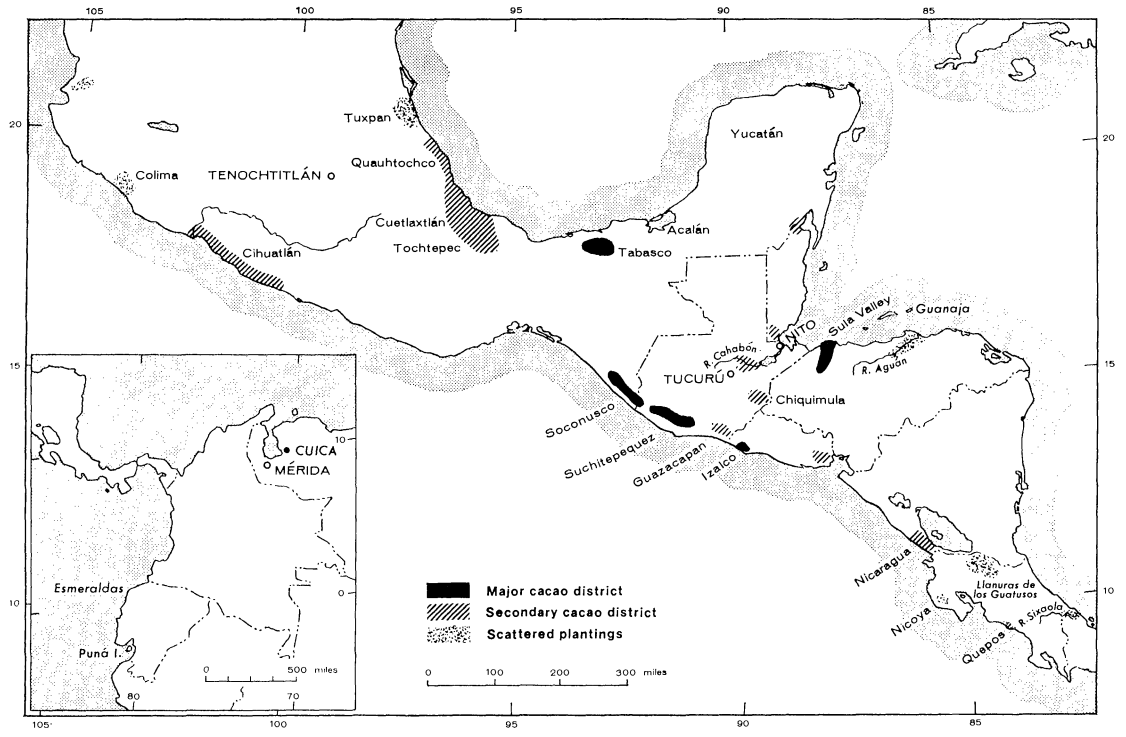

FIG. 1. The Distribution of Cacao Cultivation in Pre-Columbian America

hold of the neighboring Texcoco chieftain, Nezahualcoyotzín, consumed about fifty pounds of cacao daily.[4]

There is some evidence that before the Conquest beverage chocolate may have been a luxury restricted largely to the households of the nobility. However, it must always have been available, at least to some extent, to other classes. Bernal Díaz, for example, found it for sale in the great native market place of Tlaltelolco.[5] It seems probable that the use of beverage chocolate spread widely among every class of Indian after the Conquest.

So greatly was cacao prized by Middle American natives that the almond-like beans circulated widely as a medium of exchange. Nearly all goods and services were obtainable in exchange for cacao beans. Oviedo stated that in Nicaragua:[6]

> everything is bought with cacao, however expensive or cheap, such as gold, slaves, clothing, things to eat and everything else . . . . There are public women . . . who yield themselves to whomever they like for ten cacao beans . . . which is their money.

Although lacking a fixed value, cacao beans enjoyed several advantages as a monetary token. As a universally desired food commodity, cacao beans were low enough in value to be used in small transactions. A modest number of cacao beans, for example, could be exchanged for such staple food as corn. Relatively durable, cacao beans could withstand considerable handling and could be stored for lengthy periods without spoilage, several years at least. Montezuma maintained a large storehouse of cacao which served mainly as a treasure-house rather than as a food depository.[7] Moreover, any old or broken cacao beans could always be made into a cup of chocolate!

[4] Juan de Torquemada, *Monarquía Indiana* (Mexico: S. Chávez Hayhoe, 1943–1944), Vol. I, p. 167.

[5] Díaz, *op. cit.*, footnote 3, Vol. I, p. 287.

[6] Gonzalo Fernández de Oviedo, *Historia General y Natural de las Indias* (Madrid: Imprenta de la Real Academie de la Historia, 1851–55), Vol. IV, pp. 36–37.

[7] Antonio de Herrera y Tordesillas, *Historia General de los Hechos de los Castellanos en las Islas i Tierra Firme del Mar Océano* (Madrid: En la Imprenta Real de Nicolás Rodríguez Franco, 1726), Vol. II, p. 219.

Another advantage of cacao beans as a monetary unit was that they could easily be estimated as to quantity by experienced traders. A measure of 400 beans constituted a *zontle* of cacao. Twenty *zontles*, or 8,000 beans, made up the basic Indian measure, *xiquipil*. Three *xiquipiles*, or 24,000 cacao beans, equalled about as much as an Indian porter could carry and was called by the Spaniards a *carga*, or "load." Doubtless the weight of a *carga* varied with the size of cacao beans from different districts; but the range fell somewhere between fifty and sixty pounds.

The cultivation of cacao as a crop plant at the time of the Conquest was confined to the lowlands of Central America and Mexico, as already noted. It was not found in the West Indian islands, for which we have Oviedo's categorical statement, "The tree called *cacao* or *cacaquat*, is not of these islands but of the mainland. These trees are in New Spain and in the province of Nicaragua and elsewhere . . . ."[8]

SOUTH AMERICA

The remarkable absence of cacao from the culture patterns of Andean peoples in South America is worthy of consideration before examining the distribution of cacao in its principal areas in Middle America. The celebrated nineteenth century American historian, Prescott, stated that the men of Pizarro's 1526–1527 expedition along the Ecuadorian coast encountered "plantations" of cacao.[9] In Book II, Chapter III, referring to the coast of today's Esmeraldas Province, Prescott wrote, ". . . broad patches of cultivated land intervened, disclosing hillsides covered with the yellow maize and the potato, or checkered in the lower levels, with blooming plantations of cacao." None of the sources cited by Prescott refers to cacao, however, nor is there anything that could be rendered "blooming plantations of cacao." Prescott's sources make note of the native customs and dress and mention "plantings," "gardens," "cotton," and "cánamo," in addition to gold, silver, and emeralds, which interested the Spaniards most.[10]

Erneholm cited a 1741 source verifying substantial production of cacao on the island of Puná in the Gulf of Guayaquil.[11] However, this occurred more than two centuries after the Spanish Conquest. Cacao is not mentioned in the earlier Lizárraga account of the island, written about 1605, in which the bishop described the Indians as fine sailors and made note of the products brought by them for trade in Guayaquil.[12] Thus, the documentary evidence fails to support the presence of cacao along the coast of northwestern South America at the time of Pizarro. Moreover, the account of Acosta says categorically, "in Peru it is not grown."[13]

For the area of modern Colombia Erneholm concluded that "in all probability there was not cultivation of cacao during the first two

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[8] Oviedo, *op. cit.*, footnote 6, Vol. I, p. 315.

[9] W. H. Prescott, *History of the Conquest of Peru* (various editions), first published 1843.

[10] The following authorities were used by Prescott (here cited in later editions): Francisco de Xeres, "Verdadera Relación. . . ." in *Colección de libros y documentos referentes a la historia del Perú* (Lima: H. H. Urtiaga y C. A. Romero, 1917), Vol. VI, pp. 1–76; "Relación de los primeros descubrimientos de . . . Pizarro y . . . Almagro, sacada del códice CXX de la Biblioteca Imperial de Viena," in *Colección de documentos inéditos para la historia de España* (Madrid: Imprenta de la Viuda de Calera, 1842–1895), Vol. V, pp. 193–201; Pedro Ruiz Naharro, "Relación de los hechos de los españoles en el Perú desde su descubrimiento hasta la muerte de . . . Pizarro," *Colección . . . España*, Vol. XXVI, pp. 232–56; Fernando Montesinos, "Memorias antiguas historiales y políticas del Perú," in *Colección de libros españoles raros o curiosos* (Madrid: Imprenta de M. Rivadeneyra, 1871–1896), Vol. XVI, pp. 1–176; Agustín Zárate, "Historia del descubrimiento y conquista de la Provincia del Perú y las Guerras y cosas señaladas en ella . . ." in *Biblioteca de Autores Españoles. Historiadores primitivos de Indias* (Madrid: Imprenta y estereotipia de M. Rivadeneyra, 1862), Vol. XXVI, pp. 459–574. A fuller account of the early experiences of the Spanish conquerors of Perú is that of Pedro Pizarro, "Relación del descubrimiento y conquista de los reinos del Perú . . . Arequipa, 1571," in *Colección . . . España*, Vol. V, pp. 201–388, which mentions a number of crops used by natives, but in no place mentions cacao. Nor is cacao mentioned in the "Relación de varios sucesos del tiempo de los Pizarros, Almagros, La Gasca, y otros," in *Colección . . . España*, Vol. XXVI, pp. 193–203.

[11] I. Erneholm, *Cacao Production of South America. Historical Development and Present Geographical Distribution* (Gothenburg: Goteborgs Hogskolas Geografiska Institution, 1948), p. 53.

[12] Reginaldo de Lizárraga, *Descripción y Población de las Indias* (Lima: Imprenta Americana, 1908), p. 12.

[13] Joseph de Acosta, *Historia Natural y Moral de las Indias* (Mexico: Fondo de Cultura Económica, 1940), p. 286.

centuries of the colonial age," noting further that Cieza de León, who travelled widely in northwestern South America, did not mention cacao; nor did López de Velasco record it for that area. The first mention of cacao in Colombia, referring apparently to uncultivated trees in the forest of "Zaragoza de Antioquia," occurred in 1636.[14]

The early literature on Venezuela provides us with a single reference to cacao in pre-Columbian South America; however, the reference does not infer cultivation. Pedro de Simón, writing of the Cuica Indians in the lowland and foothill country of the southeastern Maracaibo Basin, described religious ceremonies performed in their temples, which included the burning of cocoa butter in small earthen braziers to appease an evil spirit.[15] Simón told of their grinding and boiling the cacao, of cooling it, and of gathering the hardened white cocoa fat from the top. The fat was then burned to the devil. Significantly, the Simón account did not indicate that cacao was cultivated by the Cuica, nor that it was used as a drink or food. Sufficient indigenous wild cacao was probably available in the local forests for ceremonial purposes. Nevertheless the utilization of cocoa butter in a religious ceremony suggests some antiquity to the knowledge and use of cacao by the Cuica.

López de Velasco (1571–1574) recorded that Mérida, Venezuela, was "very abundant in all kinds of food and cacao as in New Spain . . . ."[16] This is the earliest reference to cacao in Venezuela. López de Velasco commented that the cacao was like that of New Spain, but lacked any suggestion that it was cultivated by the local Indians.

Further east, in the area of modern Brazil, there is no reference to cacao in Soares de Souza's 1587 description of the Portuguese colony, its cultivation there coming much later.[17]

[14] Erneholm, *op. cit.*, footnote 11, p. 62.

[15] Pedro de Simón, *Noticias historiales de las Conquistas de Tierra Firme en las Indias Occidentales* (Bogotá: M. Rivas, 1882–1892), Vol. I, p. 240. Simón's work was first published in 1626.

[16] Juan López de Velasco, *Geografía y Descripción Universal de las Indias* (Madrid: Establecimiento Tipográfico de Fortanet, 1894), p. 371.

[17] Gabriel Soares de Sousa, *Tratado Descriptivo do Brasil em 1587*, Terceira ediçao (Sao Paulo-Rio de Janeiro: Companhia Editora Nacional, 1938), *passim.*

MEXICO

Cacao was cultivated in Mexico both along the Pacific slope and on the Gulf Coast. Along the Pacific slope in southwestern Mexico its cultivation by pre-Columbian farmers was widely distributed, although cultivation was not intensive in most places. In this region cacao production was mostly an adjunct to gardening, a few trees being tended near places of habitation. The northernmost cacao may have been that planted in the valley of the Rio Ameca along the Jalisco-Nayarit border.[18] To the south the Colima Valley contained important concentrations of cacao. Throughout this Pacific region, however, cacao was primarily for local use.

On the Atlantic slope the most northerly cacao of Veracruz was located near Tuxpan and Papantla.[19] Cacao cultivation was common in the aboriginal provinces of Quauhtochco (Huatusco), Cuetlaxtlán, and Tochtepec.[20]

Within the province of Tabasco the comparatively small district of Chontalpa constituted an area of great productivity of cacao. Chontalpa supplied cacao to highland

[18] "Carta al Rey del Licenciado Tejada . . . a 11 de marzo de 1545," in Paso y Troncoso (Ed.), *Epistolario de Nueva España* (Mexico: Antigua Librería Robredo de J. Porrúa e Hijos, 1939–42), Vol. IV, p. 187. For discussion of Colima cf. *Suma de Visitas de Pueblos*, in Paso y Troncoso (Ed.), *Papeles de Nueva España* (Madrid: "Sucesores de Rivadeneyra," 1905), series 2, Vol. I; Lorenzo Lebrón de Quiñones, *Memoria de los Pueblos de la Provincia de Colima*, in Paso y Troncoso (Ed.), *Papeles de Nueva España* (Mexico: Vargas Rea, 1944), Vol. II; "Carta al Rey, de Pedro de Mendoza . . . 27 de febrero de 1552," in Paso y Troncoso (Ed.), *Epistolario de Nueva España*, Vol. VI, p. 149; C. O. Sauer, *Colima of New Spain in the Sixteenth Century*, Ibero-Americana: 29 (Berkeley and Los Angeles: University of California Press, 1948), pp. 93–95, *et passim*; R. F. Millon, *When Money Grew on Trees, A Study of Cacao in Ancient Mesoamerica* (Doctoral dissertation, Columbia University, 1955), p. 52 ff.

[19] *Suma de Visitas, op. cit.*, footnote 18, pp. 204 (Tuxpan) and 176 (Papantla).

[20] J. C. Clark (Ed.), *Codex Mendoza* (London: Waterlow & Sons, Ltd., 1938), Vol. III, fol. 45v., covers the subject for the first two provinces; production in the third province is referred to in D. Durán, *Historia de las Indias de Nueva-España y Islas de Tierra Firme* (Mexico: Editora Nacional, 1951), Vol. I, pp. 252–53, and in H. Alvarado Tezozomoc, *Crónica Mexicana: Escrita Hacia el Año de 1598* (Mexico: Editorial Leyenda, 1944), pp. 171–74.

Mexico as a trade item, but never as tribute, for unlike most of the other cacao areas of New Spain, Tabasco was not politically subjugated to the highland peoples. The significance of cacao production in Tabasco is suggested by the fact that in this area alone was the cultivation of cacao so profitable that the producers were much inclined to import food staples from their neighbors.[21]

CENTRAL AMERICA (INCLUDING SOCONUSCO)

Soconusco

The aboriginal province of Soconusco lay mostly in what is now modern Mexico, *i.e.*, the Pacific coastal zone west of the Suchiate River.[22] In colonial times, however, the province belonged to the Captaincy General of Guatemala, and so it is included under Central America rather than Mexico.

The Soconusco district (Fig. 1) includes a coastal plain, about twenty miles in depth, and the adjacent foothills of the Sierra de Chiapas. Heavy rains fall here from May to October, and a relatively dry season prevails during the rest of the year. Although the rainfall is too low near the coast to permit the cultivation of cacao, the interior margin of the lowland receives an annual rainfall of almost 100 inches, more than sufficient for cacao. Soconusco was a significant cacao district in aboriginal times. Each year this province sent 400 *cargas* (about 24,000 pounds) as tribute to the Valley of Mexico.[23]

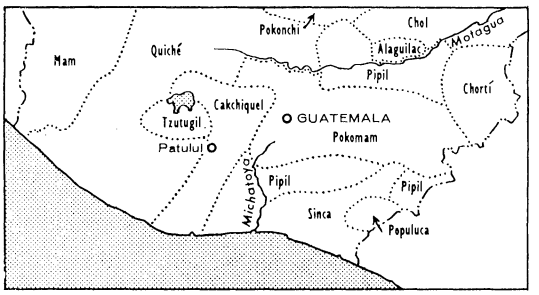

FIG. 2. Language Areas in Pre-Columbian Guatemala.

Southern Guatemala

The sequence of landforms found in Soconusco continues into the adjacent Guatemalan province of Suchitepéquez, *i.e.*, coastal plain, foothills, and highland slope. Similarly, in the pattern of rainfall the wettest areas are along the piedmont and lower highland slopes. In pre-Columbian times cacao cultivation extended more or less continuously along the foot of the Pacific highland of Guatemala. West of Patulul the tree was cultivated by Maya speaking peoples, the Cakchiquel, Tzutugil, Quiché, and Mam; in the Izalco district of Cuscatlán (El Salvador, also within the Captaincy General of Guatemala), by peoples speaking Pipil, a dialect of Nahua (from the Mexican highland), and in the Guazacapán area by a group of Indians speaking Sinca (Xinca or Jinca) and Populuca, languages of undetermined affiliation (Fig. 2).

Pedro de Alvarado, the *conquistador* of Guatemala, entered from Soconusco, and in

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[21] R. L. Roys, *The Indian Background of Colonial Yucatán* (Washington, D. C.: The Carnegie Institution, 1943), p. 106.

[22] Alonso Ponce, *Relación Breve y Verdadera de Algunas Cosas de las Muchas que Sucedieron al Padre Fray Alonso Ponce en las Provincias de la Nueva España* (Madrid: Imprenta de la Viuda de Calera, 1875), Vol. I, p. 305. Ponce's *Relación* bounds Soconusco on the east by the Tilapa River, a few miles inside modern Guatemala. This boundary, rather than the Suchiate River, is used by early writers.

[23] Clark, *op. cit.*, footnote 20, Vol. III, fol. 46v-47r. Soconusco was the most distant area yielding tribute to the Valley of Mexico. According to the Codex Mendoza the total tribute in cacao sent annually to the Valley of Mexico from all subject areas was 980 *cargas*, collected as follows:

Cihuatlán	80 *cargas* semi-annually	= 160 *cargas*
Tochtepec	200 *cargas* annually	= 200 *cargas*
Xoconochco	200 *cargas* semi-annually	= 400 *cargas*
Quauhtochco	20 *cargas* annually	= 20 *cargas*
Guetlaxtlán	200 *cargas* annually	= 200 *cargas*
	TOTAL	980 *cargas*

R. H. Barlow in his study, *The Extent of the Empire of the Culhua Mexica*, Ibero-Americana: 28 (Berkeley and Los Angeles: University of California Press, 1949), p. 25, was in error regarding the amount of cacao tribute from Tochtepec. From this province he listed 20 *cargas* instead of 200. This may be a misprint. The 16th century Spanish annotation on the Codex Mendoza clearly states as a part of the tribute for Tochtepec province, "y mas dozientas cargas de cacao"; and this amount is indicated in the Indian pictograph, showing as the symbol of cacao tribute, two wicker baskets marked with a cacao pod, each basket flying five flags, the flags designating twenty *cargas* apiece, or 100 *cargas* per basket. There is no question but that the tribute from Tochtepec was 200 *cargas* annually, not twenty.

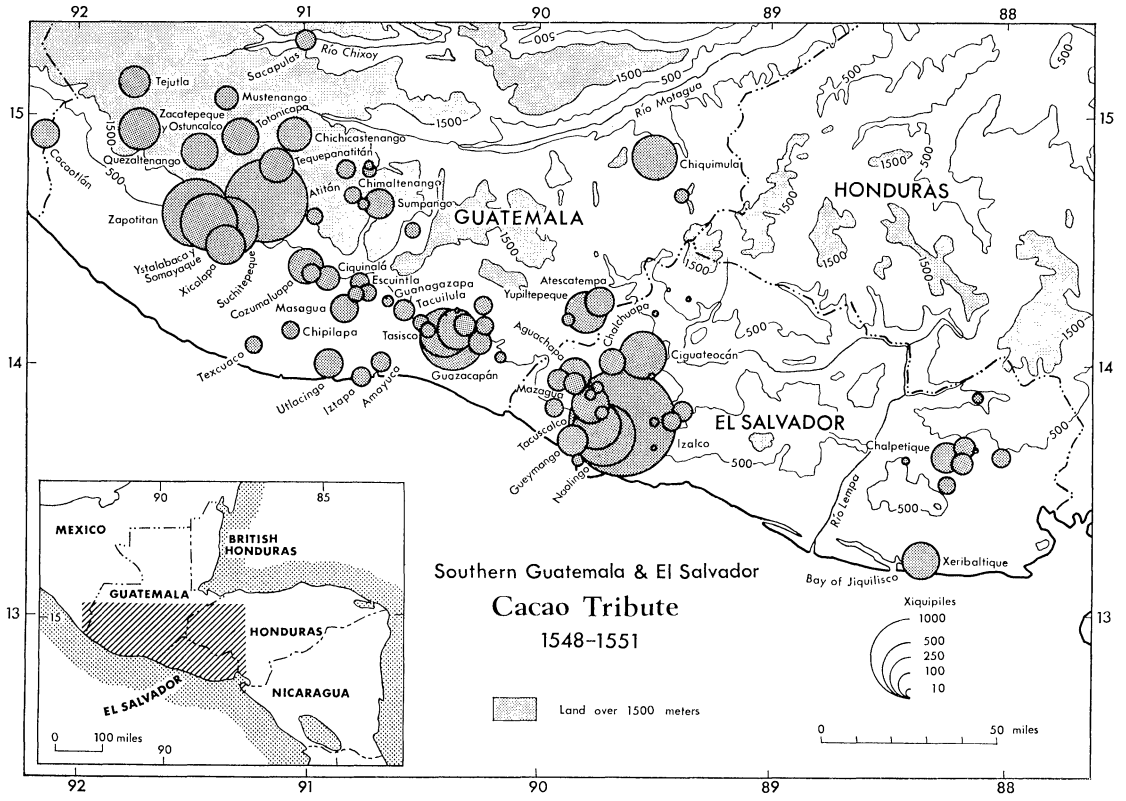

FIGURE 3

his march to Cuscatlán (El Salvador) traversed most of the cacao areas of the coastal lowland. His letter to Cortés, however, contains little more than the narrative of conquest and subjugation of Indians, with only incidental reference to non-military matters.

The earliest record of cacao in Guatemala is found in Alvarado's second letter to Cortés (1524) in which he reported his band of men having had to force its way through a dense growth of forest and cacao orchards on entering the native town of Zapotitlán in Suchitepéquez province.[24] From Suchitepéquez, Alvarado proceeded north into the highland where he captured both the Quiché and Cakchiquel capitals. He then returned to the lowlands to subjugate the belligerent Pipil town of Escuintla, and continued to Cuscatlán, traversing en route the rich cacao areas of Taxisco and Guazacapán (Fig. 3).

Distributional data for aboriginal cultivation of cacao in the area of Guatemala–El Salvador are derived primarily from the 1548–1551 *Tasación de Tributos*.[25] This document represents for 16th century Guatemala the earliest comprehensive, carefully executed list of native tribute from both private and royal *encomiendas* in the province. In addition to listing the number of tributaries of the *pueblo* and naming the Spanish *encomendero*, the *Tasación* in each case stated the amount of tribute assessed in products of the land and local manufactures. Assessments were in amounts approximately commensurate with the ability of the *pueblo* to pay. By mapping the location of *pueblos* assessed in cacao it

[24] Pedro de Alvarado, "Relación . . . a Hernán Cortés," *Cartas de Relación de la Conquista de América* (Mexico: Editorial Nueva España, n.d.), p. 596; A. Recinos, *Pedro de Alvarado* (Mexico: Fondo de Cultura Económica, 1952), pp. 64–65.

[25] *Tasaciones de los naturales de las provincias de guathemala y nicaragua y yucatan e pueblos de la villa de comaiagua q se sacaron por mandado de los senores presidente e oidores del audiencia y chancilleria real de los confines*, 1548–1551. MS. Seville, Archivo General de Indias, Aud. de Guatemala, leg. 128. 401 folios. Microfilm copy was consulted in the Sauer Collection of the Department of Geography, University of California, Berkeley.

has been possible to reconstruct an approximate distribution of cacao cultivation in Guatemala for the mid-sixteenth century (Fig. 3).

It must be noted, however, that during the twenty-five years between Alvarado's first entry into Guatemala and the assessment of *encomiendas* in 1548–1551, some changes in the patterns of agriculture may have occurred. The *Tasación* record may not necessarily portray an accurate representation of Guatemala's pre-Conquest economic geography. However, insofar as cacao is concerned, there is nothing in the early documentation to suggest that the earliest Spaniards caused any change in the distributional pattern of cacao in the years prior to 1548. There is no evidence, for example, that new areas were planted to cacao where cacao had not been previously cultivated, nor that production was eliminated from an area during the course of the campaigns of conquest. The *Tasación* record, if anything, probably errs on the conservative side; that is, some areas of cacao production in 1524 may have declined prior to 1548 and, thus, not have been assessed tribute in cacao. For example, the tiny *pueblos* of Amayuca and Iztapa were in a serious state of decline by the time of the *Tasación* and forty years later were no longer productive *encomiendas*, owing to decimation of the Indian population.[26]

According to the *Tasación de Tributos* heaviest production came from three areas: Suchitepéquez (Zapotitlán), Guazacapán, and Izalco. Production from the intervening areas was less, though not insignificant.

Zapotitlán, Samayac (Ystalabaca y Samayaque), and Suchitepéquez bore the heaviest assessments of the Suchitepéquez piedmont *pueblos* listed in the *Tasación de Tributos*. However, towns in the lowland cacao zone were not the only ones assessed in cacao; the largest assessment of the 1548–1551 *Tasación* was for Santiago de Atitlán, a highland town on the south shore of Lake Atitlán. Santiago was assessed at 1,200 *xiquipiles* annually (400 *cargas*, or 24,000 pounds). Other important cacao assessments from highland towns were those of San Pedro Sacatepéquez-Ostuncalco, 300 *xiquipiles*; Quezaltenango, 240 *xiquipiles*; Totonicapán, 240 *xiquipiles*; Santo Tomás Chichicastenango, 200 *xiquipiles*; and Tecpanatitlán (modern Sololá), 200 *xiquipiles* (Fig. 3). Cacao could not be raised in any of these highland locations.

That these highland communities should be assessed such quantities of cacao was related to the pre-Columbian political geography of southwestern Guatemala. Each of the territories of Mam, Quiché, Tzutugil, and Cakchiquel peoples included a section of highland and an adjacent section of lowland (Fig. 2). For example, the heavily assessed Santiago de Atitlán, a Tzutugil town, owned many cacao plantations in the adjacent lowland.[27] From these plantations Santiago obtained cacao to meet its tribute assessment. Quezaltenango, Totonicapán, Santo Tomás Chichicastenango, and Sacapulas, highland towns in the Quiché area, drew upon plantations of the Quiché lowlands, a day's journey downslope in the Suchitepéquez district. Tecpanatitlán (Sololá) and other Cakchiquel towns east to Chimaltenango and Sumpango obtained cacao from their lowland orchards in the vicinity of Patulul. The Mam towns of San Pedro Sacatepéquez, Ostuncalco, and possibly Tejutla were less fortunate. Pineda observed that these towns, located well within the Sierra, were assessed tribute in cacao, as well as *mantas* (a standard square of cotton cloth) and corn.[28] In order to meet their obligation in cacao the natives had to travel to Soconusco, a journey of three days, and work in the orchards to earn the required cacao.

The Pipil area, centering on Escuintla, was not a large source of cacao tribute during the mid-sixteenth century. This area included the *pueblos* of Guanagazapa, Tacuilula, and Amayuca, and extended east to the Michatoya River (the modern Río María Linda, Fig. 2). Although cacao was not commonly grown near the coast, there were three exceptions in the Pipil area. The 1548–1551 *Tasación* shows an astonishingly high assessment of 140

[26] Juan de Pineda, *Descripción de la Provincia de Guatemala. Año 1594*, in *Colección de Libros y Documentos Referentes a la Historia de América*, Vol. VIII, *Relaciones Históricas y Geográficas de América Central* (Madrid: V. Suárez, 1908), p. 429.

[27] F. W. McBryde, *Cultural and Historical Geography of Southwest Guatemala* (Washington, D. C.: Carnegie Institution, 1945), p. 33; and Pineda, *op. cit.*, footnote 26, p. 438.

[28] Pineda, *op. cit.*, footnote 26, p. 437.

TABLE 1.—MAJOR CACAO-YIELDING PUEBLOS OF IZALCO ACCORDING TO THE 1548–1551 *Tasación de Tributos*

Pueblo	*Xiquipiles*
Izalco	2,000
Nahuilingo (Naolingo)	685
Tacuscalco	400
Ciguateocán (modern Santa Ana)	350
(Santa Catarina) Masagua	250
Yupiltepeque (Guatemala)	300
Aguachapa	190
Guaymango	160
Atescatempa (Guatemala)	150

Source: MS cited in footnote 25.

TABLE 2.—CACAO TRIBUTE BY DISTRICT

Cacao District	No. *Pueblos* Assessed Cacao	Assessment *Xiquipiles*	Assessment (Pounds)
Suchitepéquez	26	5,585	(111,700)
Escuintla	13	1,080	(21,600)
Guazacapán	13	1,946	(38,920)
Izalco	31	5,302	(106,040)
Chiquimula	3	390	(7,800)
San Miguel	12	800	(16,000)
Unidentified as to district	11	606	(12,120)
	109	15,709	(314,180)

Source: MS cited in footnote 25.

xiquipiles (2,800 pounds) for Otasingo with only eight payers of tribute! Iztapa with four tribute payers was assessed sixty *xiquipiles* (1,200 pounds) and Amayuca with only three tribute payers gave sixty-five *xiquipiles* (1,300 pounds)! Two other cacao towns located near the coast, each paying fifty *xiquipiles* of cacao tribute were Chipilapa and Texcuaco.[29]

Pineda noted the immediate decline of population in the Iztapa and Amayuca areas following the Spanish invasion, which decline left most of the cacao orchards without owners. Having been appointed by the Crown to arrange for increasing the tribute from Royal *encomiendas*, Pineda construed the decimation of population in this area as a reason for increasing it, for as he wrote:[30]

> the Indians of this *pueblo* have no work whatever except to go to gather the cacao along with the Indians that are hired, because they gather cacao from their own *milpas* as well as those left by Indians who have died, which, as I have said, were many, and they have no owners and thus they are rich and they and their women and children are well clothed.

East of the Río Michatoya the Sinca area appeared as an important cacao producer on the 1548–1551 *Tasación* list. This district included the *pueblos* of Atiquipaque, Taxisco, Guazacapán, and Chiquimulilla. It was assessed a total of 1,946 *xiquipiles* of cacao with Guazacapán alone contributing 600 (Fig. 3).

Izalco

The first tribute assessment in Izalco was made in 1549 by President Cerrato of the Royal Audiencia. Indian tribute in cacao from the Izalco area was approximately the same as that of the entire Suchitepéquez coast of Guatemala (Table 2). The most heavily assessed Izalco *pueblos* are listed in Table 1. Referring to Table 2, it is seen that by around 1550, less than twenty years after the pacification of western El Salvador, cacao tribute was collected in Izalco in quantities second only to those from Suchitepéquez. Nevertheless, there is no reference in the literature to aboriginal cacao production in this area. Neither Pedro de Alvarado, the *conquistador* of Cuscatlán, nor any of his party, made mention of the occurrence of cacao in Izalco. Several points of inferential evidence, however, strongly suggest pre-Columbian cacao cultivation here.

In the first place, it seems improbable that cacao tribute of such proportions could have been collected in 1549 from plantations only newly established by the invading Spaniards. Juan de Pineda, who took up residence in the Izalco area in 1552 as one of the original Spanish founders of La Villa de la Santísima Trinidad de Sonsonate, had firsthand knowledge of cacao production in that area. He stated that the Indians had always given tribute in cacao. Barón Castro, in a carefully documented history of the first decades of the Spanish occupance of El Salvador, asserted that the period of conquest and pacification lasted from 1524 until 1530, but that instability continued until about 1535.[31] Serious Indian insurrections on the nearby Balsam Coast, for example, had to be suppressed in 1532 and again in 1535. Inasmuch as substantial quanti-

[29] Pineda, *op. cit.*, footnote 26, p. 429.
[30] Pineda, *op. cit.*, footnote 26, p. 429.
[31] R. Barón Castro, *Reseña Histórica de la Villa de San Salvador* (Madrid: Ediciones Cultura Hispánica, 1950), pp. 170–71.

ties of cacao were being collected by the Spaniards as tribute as early as 1549,[32] it seems certain that cacao was produced there by the Indians before the Spanish conquest and pacification, a scant fourteen to nineteen years earlier. Moreover, cacao cultivation demands specialized knowledge and skill. Had cacao not been propagated and cultivated in the Izalco area at the time of the Conquest, one could scarcely expect the abundant production of 1549 to have been achieved by Indians having no previous familarity with the crop.

Further evidence indicating the aboriginal cultivation of cacao at Izalco is found in the account of Diego García de Palacio, *Oidor* of the Audiencia of Guatemala, written in 1576.[33] Palacio related that "many ceremonies" were used in planting cacao, and that the beans were carefully selected and planted in conjunction with the moon. The association of special ceremony with cacao planting suggests antiquity of use rather than a cultigen recently introduced. Palacio also related how cacao was used in birth ceremonies and as wedding presents.

Some distance north of the main Izalco district, three large towns, Ciguateocán, Yupiltepeque, and Atescatempa, were assessed large amounts of tribute cacao. This is surprising, for in these interior locations the period of drought is lengthy and rainfall totals would appear to be inadequate for any significant cacao production. Near Ciguateocán (Santa Ana) Fray Alonso Ponce (1586) reported a good stream with which the Indians irrigated their cacao orchards. But it seems doubtful that very large amounts of cacao originated in these drier areas. Probably the cacao needed to meet the tribute quota was obtained through trade with the Izalco towns.

Central and Eastern El Salvador

Elsewhere in what is now modern El Salvador the pre-Spanish distribution of cacao was restricted. The late 16th century accounts of Palacio, Ponce, and Pineda, and the early 17th century account of Vázquez de Espinosa all recorded cacao cultivation in the area of modern Zacatecoluca, known then as the Nonualcos. But cacao must have been introduced to the Nonualcos by the Spaniards after the 1548–1551 *Tasación*, which lists no cacao tribute for these towns. Palacio's 1576 account, moreover, stated that cacao cultivation had recently been commenced in that area.[34]

For eastern El Salvador, the *Tasación de Tributos* shows a total of 800 *xiquipiles* of cacao tribute collected from several *pueblos* located north of San Miguel. This cacao must have been irrigated because the region has a prolonged dry season. It seems improbable in this case that the tribute cacao was obtained from other than local sources, for no area possessing natural conditions more advantageous for cacao cultivation was to be found within a convenient distance. One-half the assessment came from just two *pueblos*, Chalpetique (150 *xiquipiles*), and Xerebaltique (250 *xiquipiles*).[35]

The distribution of cacao in southern Guatemala and El Salvador is summarized by district in Table 2. A total of 109 cacao assessments were listed in the 1548–1551 *Tasación*. Their distribution is indicated in Table 2. The sum of all cacao tribute listed from the Guatemala-El Salvador region equals 15,709 *xiquipiles* (5,236⅓ *cargas*), or 314,180 pounds per year.

It may be well to recall at this time that this quantity represents only *tribute* cacao and

[32] A total of 5,302 *xiquipiles* (Table 2) or about 106,000 lbs.

[33] Diego García de Palacio, "Relación hecha por el Licenciado Palacio al Rey D. Felipe II, en la que describe la provincia de Guatemala, las costumbres de los indios y otras cosas notables," in L. Fernández, *Colección de Documentos para la Historia de Costa Rica* (San José de Costa Rica: Imprenta Nacional, 1881), Vol. I, pp. 1–52.

[34] "On the flank of a high volcano [San Vicente] are four Indian towns called the Nunualcos, where for a short time in this district, cacao has been grown and processed in abundance, and in such quantity that proportionately, it exceeds that of the province of the Izalcos." Palacio, *op. cit.*, footnote 33, p. 33.

[35] Chalpetique survives today to the northwest of San Miguel, but the exact site of Xerebaltique remains unknown. Xerebaltique was chosen by Pedro de Alvarado and Viceroy Mendoza as the site for a shipyard to build a fleet for trade with the Moluccas. Barón Castro believes that it must have been on the Bay of Jiquilisco, and it may well have been on one of the eastern reaches of this bay near the Jucuarán Hills. The location indicated on Fig. 3 represents no more than the foregoing conjecture. Cf. R. Barón Castro, *La Población de El Salvador* (Madrid: Consejo Superior de Investigaciones Científicas—Instituto Gonzalo Fernández de Oviedo, 1942), p. 609, note 12.

not total annual production. An estimate of colonial Guatemala's total annual cacao production in the late 16th century has been ventured by only one historian of Guatemala in this period. Francisco de García Peláez, Bishop of the church and resident of Guatemala for most of his life, reckoned a round figure of 100,000 *cargas*, or 6,000,000 pounds as the average annual yield for the latter 16th century.[36] If one accepts this figure as perhaps approximately correct—and it tends to be supported by Vázquez de Espinosa[37]—it can readily be seen that tribute cacao (5,236⅓ *cargas*) represented little more than five percent of the area's total yield. Guatemala's production was never greater than during the sixteenth century; in the seventeenth century the crop declined to one of minor importance.

The Caribbean Versant

Evidence relating to pre-Columbian cacao production in eastern Guatemala and northern Honduras is at best fragmentary. Two principal areas of production appear to have been the Izabal Lowland, particularly lands bordering the Río Polochic, and the Sula Valley of Honduras (Fig. 1). Elsewhere, cacao was grown only in scattered areas of the Petén, in southern British Honduras near the Sarstoon River, and in some of the coastal valleys of northern Honduras as far east as the Aguán. In these latter districts cacao production was on a smaller scale than in either the Izabal Lowland or the Sula Valley.

The earliest account of cacao in the region of eastern Guatemala is given by the Conqueror of Mexico himself, Hernán Cortés. With a band of Mexican Indians and Spanish soldiers Cortés, in 1524, departed from Mexico City on an incredibly arduous overland journey to western Honduras via the wet lowlands of Tabasco, Yucatan, and Guatemala's Petén. Apart from the extensive areas of cultivated cacao in Tabasco, Cortés did not refer again to cacao until he reached Tahuycal near the Sarstoon River.

In the Izabal Lowland he encountered a number of villages well supplied with corn, cacao, chile, fowl, and dogs raised for meat. Cacao in the Izabal Lowland was more widespread than in other nearby districts, and it was also cultivated in the tributary valley of the Cahabón River. A 1574 account of the province of Verapaz indicated that highland Indians gathered small amounts of cacao from poorly maintained orchards in nearby lowlands to the east. The town of Tucurú on the eastern edge of the highland, for example, had two cacao orchards. The 1574 account related that because the orchards were somewhat distant from town they were not well cared for nor guarded, and, therefore, most of the crop was lost to forest animals.[38]

Pre-Columbian cacao from the Izabal lowland was a native trade item exchanged at Nito for salt and cotton textiles from Yucatán. Cortés discovered an entire quarter of the Nito settlement occupied by Nahua-speaking traders, many of them from Acalán (Fig. 1). In addition to cacao from the Izabal Lowland, Yucatán traders obtained it from the Sula Valley of Honduras, and from Tabasco.[39] Traders from Yucatán came great distances by canoe and by land, although the principal contact with the Sula Valley was by canoe. It was such a trading canoe that Columbus met near the island of Guanaja along the north coast of Honduras.

The scale of pre-Columbian cacao production in the Sula Valley is difficult to ascertain. Early chronicles indicated a flourishing trade

[36] Francisco de García Peláez, *Memoria para la Historia del Antiguo Reino de Guatemala* (Guatemala: Tip, Nacional, 1943–44), 2nd ed., Vol. I, p. 184.

[37] A. Vázquez de Espinosa, *Compendio y Descripción de las Indias Occidentales* (Washington, D. C.: Smithsonian Institution, 1948), p. 209.

[38] *Relación de la Provincia de Verapaz Hecha por los Religiosos de Santo Domingo de Cobán 7 de diciembre de 1574*, MS, University of Texas Library, JGI XX-4. Cf. also *Descripción de la Provincia de la Verapaz Hecha en Cobán a Fines del Siglo 16 por Francisco Monterol de Miranda*, MS, University of Texas Library, JGI XX-3.

[39] R. L. Roys, in *The Indian Background of Colonial Yucatan* (Washington, D. C.: Carnegie Institution of Washington, 1943), stated (p. 113) that the Motagua Valley was another "important commercial tributary of Nito" and thus a source of cacao, but he cites no authority for his statement. The early accounts of this area give no indication that the Motagua Valley was a commercial source of cacao for the Nito traders. Cacao does well near the river's mouth, and was raised during the early colonial period at Zacapa (doubtless with irrigation), but we have no record of production from the lower valley.

of Sula Valley cacao in exchange for textiles and salt from Yucatán, but in no case revealed the extent of the cacao plantings. That the cacao plantings may have been quite extensive is suggested by Oviedo's report that both banks of the Río Ulúa were heavily planted in cacao orchards for a distance of thirty leagues.[40]

In the non-Maya lowlands east of the Sula Valley, Cortés found small Nahua speaking colonies among the local Jicaque, Paya, and other groups, which he said spoke a language that differed but little from that of the highlands of Mexico. No doubt some of these Nahua speaking people were engaged in the cacao trade. López de Velasco recorded cacao orchards along the Río Aguán.[41]

The 1548–1551 *Tasación de Tributos* listed no tribute in cacao from Honduras. Perhaps the area was not sufficiently well known to the Spaniards at this time. When Alvarado assigned the first *ecomiendas* of Honduras in 1536, this was the case. Chamberlain has described the task faced by Alvarado as follows:[42]

> He had prepared these partitions [San Pedro and Gracias a Dios] hastily and without adequate information regarding the numbers of inhabitants or the resources available for tribute. Place names were confused and erroneous. Alvarado, Chávez, and other captains had gathered much intelligence from direct observation and from reports of native rulers and other Indians, but it was both insufficient and inaccurate. Districts which the Spaniards had never actually entered, or at best had passed through rapidly, were included in Alvarado's partitions. The result was that names of rivers and mountains were thought to be those of pueblos, and that the same towns were assigned two or more times under different names.

It may be noted, finally, that there is no evidence to suggest that cacao production in eastern Guatemala and northern Honduras, the areas which supplied Yucatán, was ever on a scale approaching, much less equal to, that of the Pacific side of the Isthmus.[43]

[40] Oviedo, *op. cit.*, footnote 6, Vol. III, p. 254.

[41] López de Velasco, *op. cit.*, footnote 16, p. 312.

[42] R. S. Chamberlain, *The Conquest and Colonization of Honduras, 1502–1550* (Washington, D.C.: Carnegie Institution of Washington, 1953), pp. 60–61.

[43] R. F. Millon, "Trade, Tree Cultivation, and the Development of Private Property in Land," *American Anthropologist*, Vol. 57 (1955), p. 703, for a contrary opinion.

Nicaragua

Cultivated cacao in pre-Columbian Nicaragua was restricted to the Pacific region. The 1548–1551 *Tasación* indicated some minor cultivation in the districts of León and Granada. López de Velasco, writing about twenty years later, mentioned that cacao was also gathered near Nueva Jaén (at the head of the San Juan River), although this was probably cacao obtained from untended trees in the forest. The significant areas of cultivation in Nicaragua in aboriginal times remained those near León and Granada.

Oviedo related that it was the Nahua-speaking Nicarao groups who introduced cacao to Nicaragua, and that the "native" Chorotegans did not previously have it, nor did they cultivate it after the arrival of the Nicarao.[44] Production apparently was sufficient only for local needs. It is significant that of the entire area covered by the 1548–1551 *Tasación de Tributos*, only in Nicaragua was the assessment of cacao measured in Spanish units—*fanegas, almudes*, and *celemines*, rather than in the customary Indian *xiquipiles* and *zontles*. Oviedo, who knew Nicaragua well, did not tell of measuring cacao by *zontles* and *xiquipiles* in his lengthy discussion of cacao in that province (Lib. XXX), although it was common for writers who discussed cacao in the main districts to the north to describe this system. This serves to indicate that in pre-Conquest Nicaragua there was no commercial movement of cacao and hence no necessity for these measuring units. However, cacao beans were locally used as a monetary medium in Nicaragua as they were in the other cacao producing areas.

Costa Rica

Possibly the earliest account confirming cacao in Costa Rica is that of the Adelantado Juan Vázquez de Coronado. Describing the

[44] "The Indians of the Chorotega tongue are the ancient lords and native people of those parts, and they are an uncultured people and courageous . . . , and those that are called and are of the Nicaragua tongue are an immigrant people, they (from wherever they may have come) are the ones who brought to the land cacao, or the almonds that circulate as money in those parts; and those people own the plantings of trees that bear that fruit, and the Chorotegans do not own a single tree of it." Oviedo, *op. cit.*, footnote 6, Vol. IV, pp. 60–61.

Indian province of Quepo on the Pacific slope of the Central Cordillera, Coronado's account referred to "cacao, textiles, thread like that of Nicoya, all kinds of Indian foods in great quantities. . . ."[45] Aboriginal cacao in Quepo is confirmed also by a 1563 *provanza* (testimony) taken to record the accomplishments of this initial Spanish expedition into Quepo.[46]

The probable range of pre-Conquest cacao in Costa Rica can be further extended to three other areas, the Llanuras de los Guatusos south of Lake Nicaragua, Nicoya Province, and the Sixaola River Valley. The Guatuso country of north-central Costa Rica was never conquered by the Spaniards, and even today the region is inhabited principally by Indians. As late as 1783 the Bishop of Nicaragua sent a party into the area in an unsuccessful attempt to pacify the Indians. Although the party was repulsed, it did discover cacao cultivated by the Guatuso at that time. An indication of the antiquity of the use of cacao by the Guatusos was their practice of offering beverage chocolate to their sun god.

Nicoya and the Sixaola Valley both sustained colonies of Nahua traders at the time of the Conquest, although in Sixaola they had only recently arrived. Oviedo confirmed the use of cacao in Nicoya,[47] and in the case of Sixaola it is probable that a Nahua-speaking colony (Sigua) had brought cacao to that area. In 1610 Fray Agustín de Ceballos observed of the Sixaola Valley "it abounds in cacao, and [it is] of the best in the kingdom, in quantity and quality. . . ."[48]

CONCLUSIONS

This study has reconstructed, as nearly as known source materials permit, the distribution of cacao cultivation in the New World at approximately the time of European contact. It has shown that cacao cultivation centered in the Meso-American areas of the Maya languages, *i.e.*, Tabasco, Suchitepéquez, and the Caribbean slope of Guatemala and Honduras. Cacao, as a highly prized beverage base, moved over lengthy trade routes on both the Pacific and Caribbean sides of the Isthmus. It was an important item of aboriginal tribute and continued as such well into Spanish times.

There is evidence that cacao was expanding in its distribution at the time of the Conquest. From its principal centers of cultivation in the area of Maya tongues cacao and its cultivation had been taken southward through Central America as far as Costa Rica by Nahua-speaking colonists, and also northwest as far as the lowlands of Colima, Mexico. Whether the peoples of central Mexico were more addicted to chocolate than their Maya neighbors may be a moot point. But their enormous fondness for the beverage must have played an important role in broadening the distribution of cacao cultivation in pre-Columbian America.

[45] Quoted by P. Perez Zeledón, "El Pueblo de San Bernardino de Quepo; Identidad del Pueblo de Quepo y el de Cochira o Cuchira," *Revista de los Archivos Nacionales* (San José, Costa Rica), Vol. IV (1940), p. 578.

[46] *Provanca hecha a pedimento de Juan Vázquez de Coronado acerca de sus méritos y servicios.*—Año de 1563, in León Fernández, *Colección de Documentos para la Historia de Costa Rica* (Paris: Imprenta P. Dupont, 1886) Vol. IV, p. 228.

[47] Oviedo, *op. cit.*, footnote 6, Vol. I, p. 318.

[48] Fray Agustín de Ceballos, "Memorial para el Rey nuestro Señor de la descripción y calidades de la provincia de Costa Rica," March 10, 1610, in M. M. de Peralta, *Costa Rica y Colombia de 1573 a 1881. Su jurisdicción y sus límites territoriales* (Madrid: M. Murillo, 1886), p. 26. When Vásquez de Coronado first entered the Sixaola area, his attention was distracted from the natural fruits of the land to grains of placer gold found in the streams, and his failure to mention cacao in this lowland does not necessarily constitute evidence against pre-Columbian cacao cultivation in Sixaola.