EXPLORATION OF RURAL-URBAN LINKAGES AND MARKET CENTERS IN HIGHLAND ECUADOR

by

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I. INTRODUCTION

This paper explores some key rural-urban linkages, especially market flows, in a highland region of Central Ecuador, around the city of Ambato, a very dynamic intermediate urban center, surrounded by a densely settled peasant population. The study region and the problems dealt with here in regarding the "equitable modernization" of traditional Andean peasant economies are typical of a vast area in South and Central America. At issue is the survival and development of campesino communities of ancient Indian heritage, just emerging from centuries of feudal exploitation and now confronted by commercial market forces and large-scale urbanization. What mix of rural-urban activities, based on a more dynamic network of small and intermediate towns, could revitalize the traditional Andean heartland?

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Economic Background

Formed from a fragment of Simón Bolivar's dream of a Gran Colombia in 1830, Ecuador is an amalgam of Andean highland, tropical coastal plains and a largely unsettled Amazonian rainforest. With its cultural and traditional heartland in the high Sierra but with its commercial and industrial power on the coast, Ecuador is a study in contrasts. For a country of a quarter million square kilometers, it has one of the most diverse environments in the world. Given its rich resources, including oil, Ecuador has considerable capacity for growth.

Yet, Ecuador entered the 1970s as one of Latin America's poorest countries. Until then, agriculture was the backbone of the economy, with bananas, coffee and cocoa accounting for 90 percent of total export earnings.

In the 1970s, however, the economy became more buoyant, with strengthened export performance and favorable terms of trade. The economic boom, triggered by petroleum, generated export earnings which soared from about US$200 million in 1971 to over US$683 million in 1980. The increased export earnings allowed the government to deal with two major constraints: low domestic savings and limited import capacity. From 1972 to 1978, GDP growth averaged about 9 percent annually. The country became overwhelmingly dependent on oil revenues and foreign borrowing, as well as on an inward-looking, import-substitution industrialization policy as a vehicle for development. Agriculture was not given high priority and several essentials - such as imports of food, energy and services - were subsidized by the government on a large scale.

The transformation of the Ecuadorian economy in the 1970s, dominated by the petroleum sector, brought about rapid economic growth and affluence, unparalleled in the country's history. In the midst of this prosperity, economic,

social, and political changes occurred, which nudged Ecuador toward democracy and modernization and raised expectations for sustained economic growth and increasing wealth. As the government espoused industrialization and income transfer programs, Ecuador increased its interdependency within the world economy, becoming more vulnerable to external shocks as well as increasing its indebtedness due to burgeoning external borrowing to underwrite various investment programs.

However, as Ecuador entered the 1980s, the economy began to slow down, responding to the world recession with sagging demand, high interest rates, a rising tide of protectionism, declining prices for primary export commodities, and growing scarcity of capital resources. These forces have culminated in serious balance of payments problems for the country. Now, Ecuador, after nearly a decade of rapid economic growth, is faced with formidable social and economic challenges, requiring a reassessment of its growth policies and strategies.

Prior to the discovery of oil, agriculture was the cornerstone of the economy and was the principal source of foreign exchange earnings, employment, and food supply. As the importance of the petroleum sector dwindles, especially if oil reserves are not replenished, agriculture could re-emerge as the main engine of growth.

The agricultural sector is still the largest source of employment in Ecuador, accounting for about one-half of the economically active population. Export earnings from agricultural products account for about 35 percent of all exports making them the main source of foreign exchange earnings, after petroleum and petroleum products. Despite the economic importance of agriculture, its growth rate between 1972 and 1980 (slightly over 2 percent) has seriously lagged behind that of population growth, estimated at 3.4 percent, and far

behind the demand for foodstuffs which increased at the rate of 5 percent. This situation has resulted in continuously high imports of food supplies, rising at an average annual rate of 13 percent in real terms.

Ecuador has the natural potential to increase its agricultural production significantly. The Sierra and Costa regions are currently the two most important agricultural areas, although the Oriente has long-term potential. Given the vast difference in climatic and ecologic conditions, patterns of production and specialization differ: the Sierra accounts for the bulk of food crop production (except rice), while export crops and other high-value products are grown in the Costa. As in other Andean countries, the cultivated acreage of food crops in the high Andes has declined in the 1970's, while the area devoted to export-oriented commercial crops has increased. The relative priorities of highland vs. coastal investments have generated sharp controversies in all Andean countries. Given the complimentarity of the two regions and their respective comparative advantages, agricultural strategy must address both types of development. It is clear, however, that if one stresses equitable, participatory growth, with broadly distributed access to resources and income, then Sierra development deserves a much larger role than is currently given in most countries. Small-farm diversified agriculture which maintains some subsistence production for local needs is well adapted to the Sierra. Such a system uses family labor most effectively, saves scarce capital, and can be gradually combined with non-farm employment opportunities in the same area. Hence the importance of market town development for the highlands.

Spatial Dimensions in the Era of Petroleum

Recent economic trends have also generated changes in the national system of urban places. The two metropolitan areas, Guayaquil and Quito grew at rates

far greater than the national population. Today, with more than 1.2 million people in Guayaquil and one million in Quito, about one-third of the total population resides in metropolitan areas. Coastal cities grew at a much higher rate (50-70 percent) then highland towns (25-50 percent). Three intermediate centers, which lie at critical points in the transport network between Quito and Guayaquil, have expanded rapidly; Santo Domingo (119 percent), Cuenca (44 percent) and Ambato (31 percent). All are at cross-roads between coast and mountains, and Ambato is situated at a major entrance to the Amazon.

At another scale, regional centers increased their domination over smaller market towns and are providing increasing linkages to the rural population. As roads reached virtually every settlement with more than 1,000 people and bus transportation proliferated, accessibility costs fell dramatically, and the time-space convergence of local market towns with regional centers accelerated. As a result, there was less protection afforded smaller town merchants from their competitors in regional capitals and many merchants migrated to regional centers or went out of business. Farmers took temporary jobs in the cities and purchased durable goods there; thus, a number of traditional market towns lost local business. However, in recent years many of the intermediate and smaller centers, especially the ones with periodic markets, have grown considerably.

These periodic markets (ferias) adapted well to the advent of motor transport. As in previous generations, peasants congregate at a weekly fair in a central square (plaza) where merchants make a stop on their weekly rounds. There, they bargain, trade, and gossip. One day a week, sometimes twice, the market town comes alive and economic activity is intense. These periodic markets are the most visible link between town and country in the Sierra.

Town/country relations in Andean nations have been described frequently in terms of urban domination by the small town elites, generally mestizos. 1/ However, recent agrarian reforms, better communication networks and the shift from subsistence to market crops have all acted as mitigating factors.

In order to understand the current concern with rural-urban linkages in Ecuador, it should be stressed that unlike some other countries recently studied with regard to intermediate and small town development, Ecuador does not yet have decentralization policies or programs in which public sector effort is explicitly directed to the strengthening of regional and local economies. With the exception of five regional corporations, established to foster regional planning, and some more recent spatially organized integrated rural development projects, there are no institutional mechanisms for comprehensive development at the sub-national level.

Regional planning in Ecuador, as an intellectual exercise, has a long history. But, as elsewhere in Latin America, it has been used mostly as a conceptual and descriptive framework for mapping resource use, population distribution, and physical facilities such as the transport network and, with the exception of a few large-scale municipal master plans, has seldom served as a practical guide to action. Most plans are a collection of sectoral analyses. Even in the case of regional corporations, there has been very little socioeconomic planning and practically no research on spatial flows of productive factors. However, the current economic problems have highlighted demographic and sectoral imbalances in the country. There is growing concern with the

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1/ The relevant literature is summarized by David A. Preston in Farmers and Towns, Rural Urban Relations in Highland Bolivia. Geo Abstracts Ltd. University of East Anglia, Norwich, England, 1978.

acute metropolitan problems of the two dominant cities, with the increasing income disparities, and with rural poverty. Interest centers on promoting the more orderly development of intermediate centers and on strengthening the capacity of municipal administrations to enable them to acquire a larger revenue base for investment and management of their own affairs and to lessen their traditional dependence on the central government. It is in this context that the exploratory study on which this report is based should be viewed.

The premises of the research project are that eventual decentralized, regional development in Ecuador must take more explicit account of urban-rural linkages, and that these linkages can be most meaningfully captured at the level of the intermediate and small scale urban hierarchy. In order to strengthen regional economies and achieve better urban-rural integration, development of the urban hierarchy should have as its principal objectives: (a) to retain and re-cycle a much larger share of the rural surplus, (b) to become focal points of decentralized non-farm employment and income, and (c) to improve the service network in its sphere of influence. Special stress should be placed on the identification of economically productive activities in the various market centers, as opposed to the usual and almost exclusive local concern with urban infrastructure.

The next section describes the physical setting and settlement patterns in the Ambato region, identifies the demographic and functional characteristics of towns, and delineates the urban hierarchy within the region. Subsequently, after an overview of the general food marketing situation, the agricultural marketing function of the network of urban places is analyzed. The final section presents an interpretation of the findings and policy implications for decentralized development.

II. THE ORGANIZATION OF SETTLEMENTS IN THE AMBATO REGION

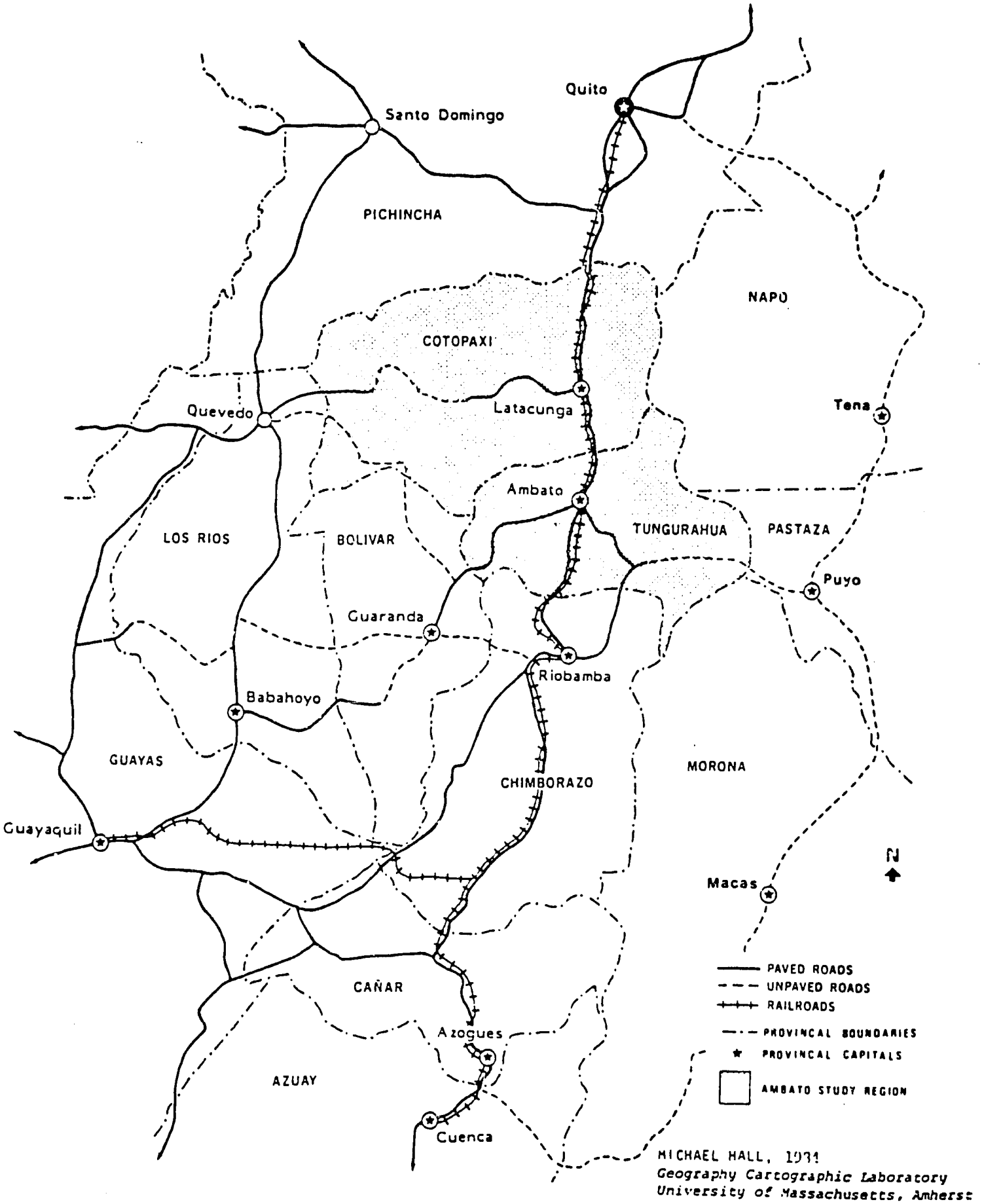
Approximately two-thirds of the Ambato region study area (for location, see Map 1) falls within the headwaters of the Pastaza River system, with Río Cutuchi draining the eastern half of Cotopaxi Province and Río Ambato draining most of the province of Tungurahua. Much of the fertile valley of eastern Cotopaxi around the provincial capital of Latacunga is between 2,800 and 3,200 meters in altitude. At the northeastern end of the valley stands the Cotopaxi volcano at 5,897 meters, while on the northwestern end are the twin volcanoes of Iliniza Norte and Sur, the highest at 5,248 meters. As the Río Cutuchi flows south, it cuts through a narrow connection between the eastern and western cordilleras on the border between Cotopaxi and Tungurahua provinces. This is a much drier and poorer area, deeply dissected by the river flowing to the south. High on the terraced hillsides on the eastern side of the canyon are the Píllaro and Patate potato and onion growing areas characterized by considerably greater rainfall. Nearby the Río Ambato joins with the Río Cutuchi to become the Río Patate. This canyon, several thousand feet deep, is a tremendous barrier to transportation and communications between the two sides of the valley.

The settlement plain that focuses on the major regional city of Ambato on the western side is at nearly the same elevation range of the Latacunga area further north (2,800 to 3,200 meters), and is one of the widest intermountain basins in the entire Sierra of Ecuador. This gives Ambato a crucially strategic location within the nation. At the southwestern corner of the Ambato basin stands Chimborazo, the 6,310 meters volcanic peak that is the highest mountain in Ecuador. At the opposite southeastern corner of the Ambato basin, the Río Patate cuts even more deeply into the landscape as it turns to the east

MAP 1

THE AMBATO REGION

IN THE QUITO - GUAYAQUIL TRANSPORTATION CORRIDOR



MICHAEL HALL, 1971
Geography Cartographic Laboratory
University of Massachusetts, Amherst

and drains sharply down 2,200 meters (6,000 ft.) to the jungles of the Oriente and continues on into the Amazon River Basin as the Río Pastaza. Near Baños, where this river meets the Río Chambe coming from the Riobamba basin in Chimborazo province, is the volcano of Tungurahua (5,016 meters). In all, approximately nine volcanic peaks surround the valley of Tungurahua and eastern Cotopaxi on virtually all sides.

Settlement Subregions in Tungurahua and Cotopaxi

Four distinct settlement regions can be identified within the Río Pastaza drainage system in these two provinces, and two others make up the western half of Cotopaxi province. The following six sub-regions classified by settlement density and complexity are illustrated on Map 2 and Tables 1 and 2:

1. The Ambato Urbanized Region (188,000 population): A highly urbanized zone of smaller satellite urban centers and rural villages closely tied to Ambato, the fifth largest city in Ecuador with a population of 101,000 in 1982.

2. The Central Valley of Cotopaxi (190,000 population): Five times the area of the Ambato Urbanized Region and with virtually the same population, this agricultural zone focuses on a moderately well-developed hierarchy of lower-order urban centers and villages. Latacunga (29,000 population) is the major urban place, with Salcedo (5,844), Pujilí (3,941) and Saquisilí (2,914) also playing important central place roles, especially on market days.

3. Eastern and Southeastern Tungurahua (93,000 population): An area slightly smaller in size than the Central Valley of Cotopaxi, but with only half as much population, this region is almost exclusively involved in agriculture. Elevations of these agricultural zones vary greatly, ranging from 3,600 meters near Píllaro (4,290 population), to Pelileo (4,500 population) at 3,000

MAP 2

SIX SETTLEMENT SUB-REGIONS OF TUNGURAHUA AND COTOPAXI

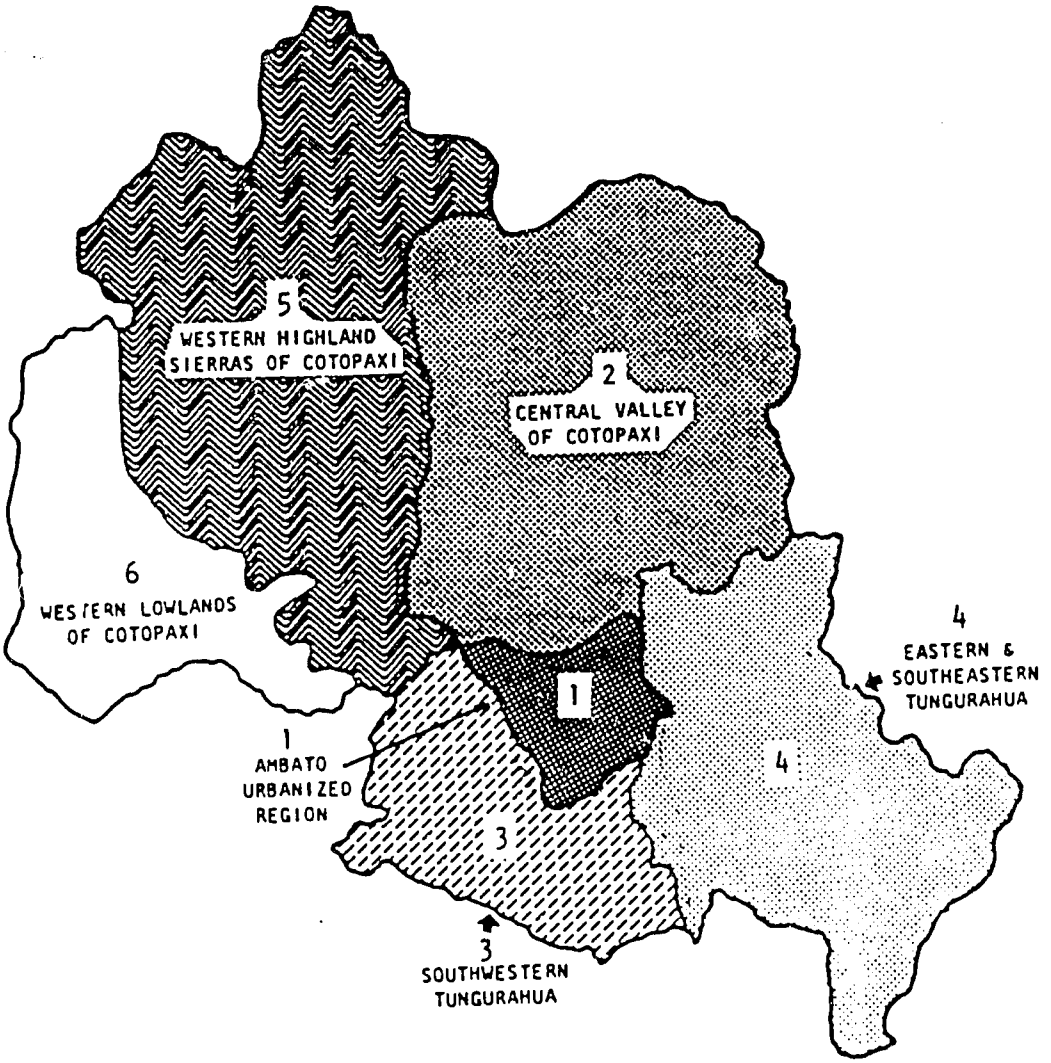


TABLE 1

TOTAL ECONOMIC ACTIVITIES IN SIX SETTLEMENT SUB-REGIONS OF TUNGURAHUA AND COTOPAXI IN 1980

Six Settlement Sub-Regions	1982 Total Population	%	1982 Urban Population	%	TOTAL ECONOMIC: Nu. Econ. Establishments	%	TOTAL ECONOMIC: Number of Employees	%	MANUFACTURING: Nu. Estab.	%	MANUFACTURING: Nu. Employees	%
COTOPAXI PROVINCE:												
2. CENTRAL VALLEY OF COTOPAXI -including Latacunga, Pujilí, Salcedo, Saquisilí, etc.	190,232	31.6	51,953	24.2	2,576	22.5	5,493	22.1	730	18.8	2,461	21.1
5. WESTERN HIGHLAND SIERRAS OF COTOPAXI: includes Sigchos, Zumbahua, Angamarca, etc.	47,627	7.9	4,173	2.0	0	0	0	0	0	0	0	0
6. WESTERN LOWLANDS OF COTOPAXI -including La Maná, Moraspungo, El Corazón, etc.	36,419	6.0	6,118	2.8	301	2.6	464	1.9	55	1.4	113	1.0
TUNGURAHUA PROVINCE:												
1. AMBATO URBANIZED REGION -including Urban Ambato and the Greater Ambato Satellite Cities	188,073	31.2	114,422	53.2	6,872	60.2	16,053	64.7	2,563	65.8	7,803	67.0
3. SOUTHWESTERN TUNGURAHUA -including the remainder of Cantón Ambato and Cantón Quero	47,298	7.9	9,699	4.5	266	2.4	460	1.9	133	3.4	384	3.3
4. EASTERN & SOUTHEASTERN TUNGURAHUA -including Píllaro, Patate, Pelileo, Baños, etc.	92,699	15.4	28,577	13.3	1,403	12.3	2,344	9.4	411	10.6	892	7.6
TOTALS:	602,348	100.0	214,942	100.0	11,418	100.0	24,814	100.0	3,892	100.0	11,653	100.0

Six Settlement Sub-Regions	COMMERCE (Retail Sales): Nu. Estab.	%	Nu. Employ.	%	SERVICES: Nu. Estab.	%	Nu. Employ.	%	HOTELS/RESTAURANTS: Nu. Estab.	%	Nu. Employ.	%	MINING: Nu. Estab.	%	Nu. Employ.	%
COTOPAXI PROVINCE:																
2. CENTRAL VALLEY OF COTOPAXI -including Latacunga, Pujilí, Salcedo, Saquisilí, etc.	1,100	22.6	1,569	20.1	289	24.8	507	23.1	450	30.5	957	29.7	7	63.6	41	61.2
5. WESTERN HIGHLAND SIERRAS OF COTOPAXI: includes Sigchos, Zumbahua, Angamarca, etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6. WESTERN LOWLANDS OF COTOPAXI -including La Maná, Moraspungo, El Corazón, etc.	156	3.2	189	2.4	40	3.4	73	3.3	49	3.3	74	2.3	1	9.1	15	22.4
TUNGURAHUA PROVINCE:																
1. AMBATO URBANIZED REGION -including Urban Ambato and the Greater Ambato Satellite Cities	2,920	60.0	5,142	65.9	596	51.1	1,219	55.4	788	53.5	1,878	58.3	3	27.3	11	16.4
3. SOUTHWESTERN TUNGURAHUA -including the remainder of Cantón Ambato and Cantón Quero	94	1.9	119	1.5	11	1.0	14	.6	27	1.8	39	1.2	0	0	0	0
4. EASTERN & SOUTHEASTERN TUNGURAHUA -including Píllaro, Patate, Pelileo, Baños, etc.	601	12.3	790	10.1	230	19.7	387	17.6	160	10.9	275	8.5	0	0	0	0
TOTALS:	4,871	100.0	7,809	100.0	1,166	100.0	2,200	100.0	1,474	100.0	3,223	100.0	11	100.0	67	100.0

TABLE 2

ALL ECONOMIC, MANUFACTURING, AND COMMERCIAL ESTABLISHMENTS IN URBAN CENTERS OF THE AMBATO REGION, 1980

1982 Rank	AMBATO REGION Urban Centers	1982 Population	Percent Change 1974-82	% of Urban Popul.	Canton Location	---ALL ECONOMIC ESTABLISHMENTS--- Total Establishments	%	No. of Employees	%	----- TOTAL MANUFACTURING ----- No. of Factories	%	No. of Employees	%	--- TOTAL COMMERCE (Retail Sales)-- No. of Stores	%	No. of Employees	%
1.	AMBATO	100,635	+ 31	46.8	A1	6132	53.7	14,599	58.8	1979	50.8	6577	56.4	2809	57.7	4993	63.9
2.	LATACUNGA	28,857	+ 31	13.4	B1	1609	14.1	3,925	15.8	448	12.0	1841	15.8	687	14.1	1070	13.7
3.	Baños	8,548	+ 53	4.0	A2	451	3.9	762	3.1	81	2.1	155	1.3	180	3.7	245	3.1
4.	Salcedo	5,844	+ 41	2.7	B4	409	3.6	761	3.1	110	2.8	301	2.6	189	3.9	239	3.1
5.	Pelileo	4,523	+ 19	2.1	A5	511	4.5	885	3.6	178	4.6	424	3.6	237	4.9	305	3.9
6.	Píllaro	4,290	+ 3	2.0	A6	287	2.5	452	1.8	97	2.5	188	1.6	113	2.3	152	1.9
7.	La Maná	3,983	+192	1.9	B3	196	1.7	323	1.3	32		74		98	2.0	119	1.5
8.	Pujilí	3,841	+ 14	1.8	B3	205	1.8	330	1.3	65	1.7	157	1.3	94	1.9	105	1.3
9.	Saquisilí	2,914	+ 10	1.4	B5	224	2.0	314	1.3	52	1.3	98		82	1.7	103	1.3
10.	San Bartolomé	2,305	+ 36	1.1	A1	112	1.0	194	.8	82	2.1	152	1.3	22		29	
11.	Izamba	2,221	+ 59	1.0	A1	164	1.4	486	2.0	122	3.1	412	3.5	25		36	
12.	Santa Rosa	1,940	+ 11	.9	A1	113	1.0	273	1.1	83	2.1	227	1.9	23		36	
13.	Montalvo	1,732	+184	*	A1	*(not listed in the Economic Census of 1980)*											
14.	Quizapincha	1,694	+ 34	.8	A1	138	1.2	174	.7	103	2.6	134	1.1	26		29	
15.	A.M.Martínez	1,683	- 9	.8	A1	106	.9	169	.7	93	2.4	151	1.3	10		12	
16.	Patate	1,609	+ 16	.7	A3	97	.8	144	.6	23		57		52	1.1	61	.8
17.	Pilahuín	1,544	- 8	.7	A1	40	.4	45	.2	6		6		27		31	
18.	Huambaló	1,438	+ 33	.7	A5	57	.5	101	.4	32		68		19		27	
19.	Atahualpa	1,313	+ 78	*	A1	*(not listed in the Economic Census of 1980)*											
20.	Quero	1,267	+ 38	.6	A4	63	.6	102	.4	28		54		29		37	
21.	El Corazón	1,245	+ 21	.6	B2	74	.6	105	.4	17		32		42	.9	51	.7
22.	Mulliquindil	1,225	+ 19	.6	B4	22	.2	32	.1	11		21		9		9	
23.	Cevallos	1,150	+ 6	.5	A1	111	1.0	194	.8	61	1.6	132	1.1	27		32	
24.	Toacazo	1,089	+ 5	.5	B1	63	.6	70	.3	8		13		24		26	
25.	Cuaytacama	948	+ 1	.4	B1	39	.3	45	.2	11		14		15		17	
26 through 36		*(not listed in the Economic Census of 1980)*															
37.	Moraspungo	668	- 14	.3	B2	31	.3	36	.1	6		7		16		19	
38 through 50		*(not listed in the Economic Census of 1980)*															
51.	Ambatillo	495	- 52	.2	A1	107	.9	158	.6	101	2.6	150	1.3	5		7	
52.	Marcos Espinel	471	0	*	A6	*(not listed in the Economic Census of 1980)*											
53.	Totoras	443	- 60	.2	A1	52	.5	119	.5	38	1.0	96		11		19	
54 through 55		*(not listed in the Economic Census of 1980)*															
56.	La Victoria	406	+ 28	.2	B3	5	.1	16	.1	5		16		0		0	
57 through 90		*(not listed in the Economic Census of 1980)*															

meters, and down to Baños (8,548 population) in the citrus fruit area at 750 meters.

4. Southwestern Tungurahua (47,000 population): This is an important agricultural zone to the south and west of the city of Ambato. Since it is in the shadow of the region's largest city, it has few important urban centers, and services in this primarily agricultural satellite need to be developed to a much greater degree.

5. Western Highland Sierras of Cotopaxi (48,000 population): Two other settlement zones are included in this study, both in the western half of Cotopaxi province, outside the Pastaza/Patate river system that drains most of the region. The first of these regions is a rugged area of mountains, isolated villages, poor roads, and very limited urban services. Commercialization in this area is channeled primarily through the periodic markets at Saquisilí, Pujilí, and Latacunga.

6. Western Lowlands of Cotopaxi (36,000 population): Statistically this region is included in the study as part of Cotopaxi, but in reality it is functionally connected with the provinces of Los Ríos and Western Pichincha in the Pacific lowlands. Agriculture, environments, ethnic heritage, and life styles are vastly different from those in the major part of the Ambato study region.

These six settlement regions provide a framework for the analysis of existing urban services and employment. According to the 1980 economic census, the Ambato Urbanized Region has a majority of the area's urban population (53 percent) and economic activities (60 percent) even though it has only one-third of its total population (31 percent). The Ambato Urbanized Region furthermore, provides roughly two-thirds of total employment (65 percent), manufacturing (67 percent), and commercial employment (66 percent). Employment in services and hotels/restaurants is more evenly distributed with respect to each area's share

of urban population, except that the two regions in the western half of Cotopaxi are underrepresented. The western highland sierras of Cotopaxi, with 8 percent of the population, have virtually none of the economic, commercial, or service activities (see Tables 1 and 2 Figure 1, and Maps 3, 4, and 5).

The Urban Hierarchy of the Ambato Region

More than 602,000 people live in the two provinces of Tungurahua and Cotopaxi and are a part of the total hinterland population of the city of Ambato. In addition, Ambato as an administrative center has a provincial hinterland population of 328,070 (54 percent of the region's inhabitants) and cantonal (county-wide) hinterland population of 221,392 (37 percent of the total region). Ambato is the primate city.

Based on a five-tiered classification of settlement types, the hierarchy of settlements in the Ambato region is remarkably similar in structure to that of the nation as a whole. As Figure 2 indicates, Guayaquil and Quito have 28 percent of the national population in the first tier, designated "metropolitan" (see Figure 2); Ambato has 21 percent of its regional population in this tier. Contrasting national and regional shares of total population in 1982, the second tier of "complex urban centers" (20,000 to 500,000 population), had 16 percent as compared to 21 percent, the third tier of "simple urban" centers (2,000 to 20,000) had 10 percent and 6 percent, and the fourth tier of "villages" (100 to 2,000) had 6 percent and 8 percent respectively. The share of non-"metropolitan" population in the fifth tier of "rural dispersed", however, is greater in the Ambato Region with 65 percent to 40 percent nationally. As illustrated in Figure 2, overall population growth was about 12.7 percent in both Tungarahua and Cotopaxi. "Complex urban" centers in both

FIGURE 1

PERCENT OF TOTAL POPULATION IN SIX SUB-REGIONS OF TUNGURAHUA AND COTOPAXI EARLY 1980's

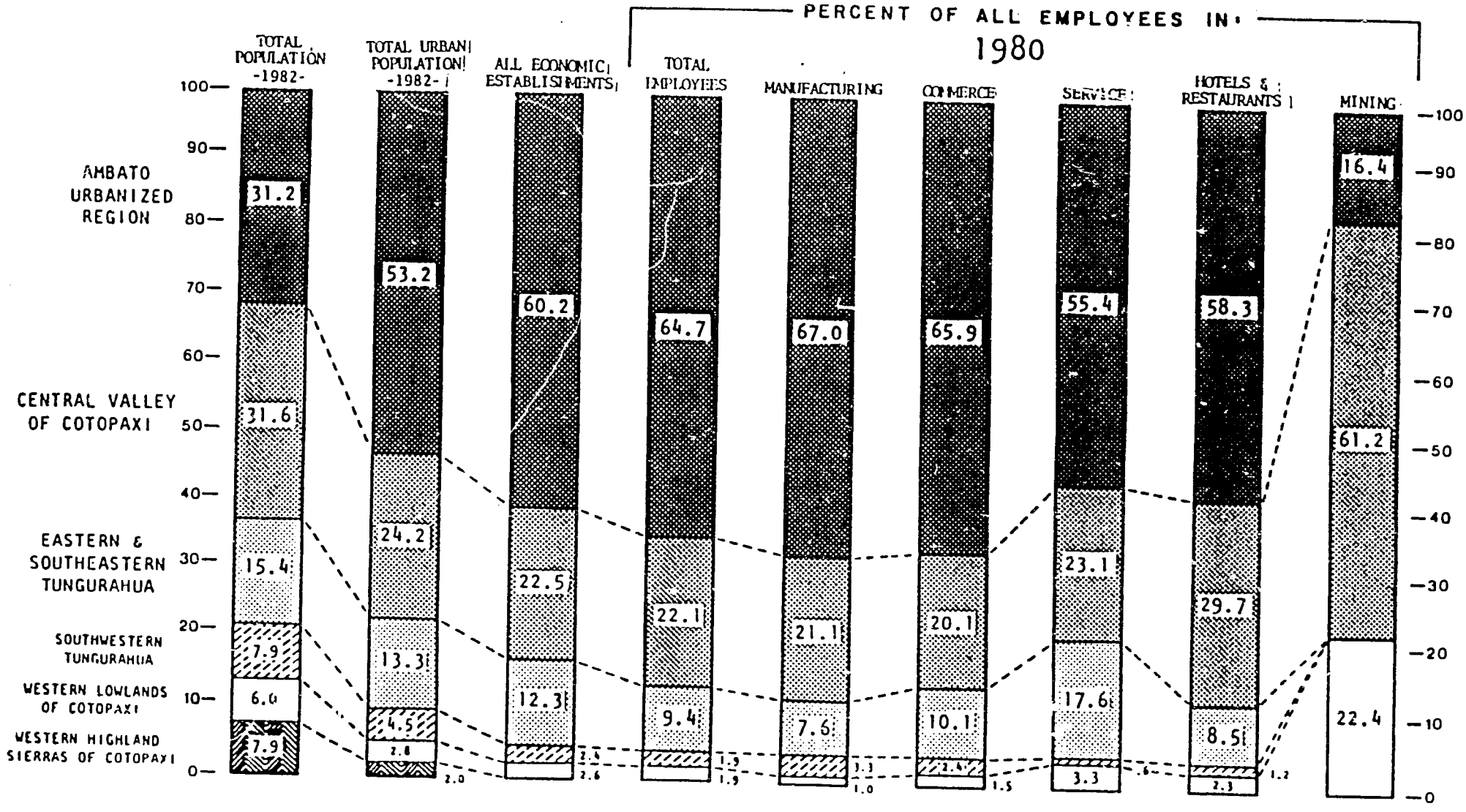
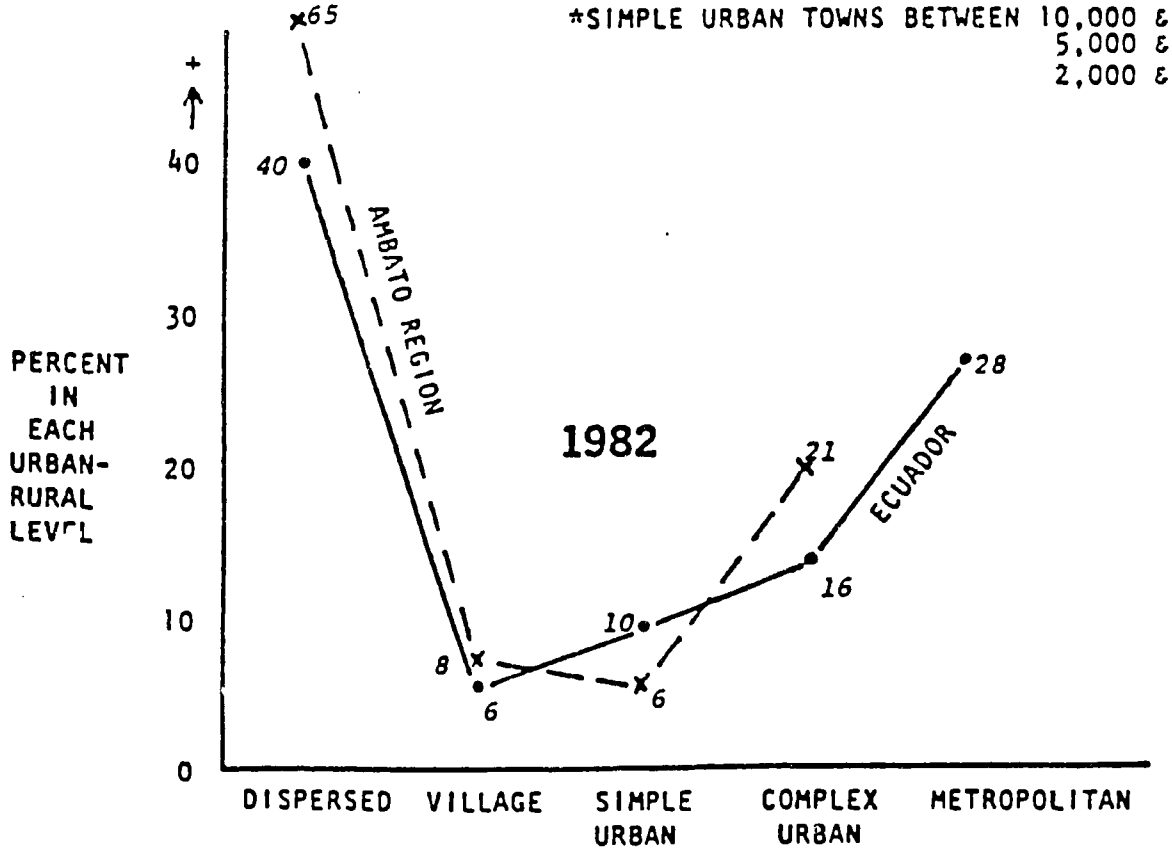


FIGURE 2

POPULATION CHANGE IN ECUADOR AND THE AMBATO REGION
BY URBAN-RURAL LEVEL IN 1974 AND 1982

ECUADOR 1974 Population	ECUADOR 1982 Population	ECUADOR Percent Change	TOTAL POPULATION BY LEVEL	AMBATO REGION 1974 Population	AMBATO REGION 1982 Population	AMBATO REGION Percent Change
6,829,967	8,053,280	+17.9	TOTAL POPULATION	539,299	607,692	+12.7
1,576,651 23.1%	2,291,220 28.4%	+45 %	METROPOLITAN over 500,000	0	0	
864,337 12.8%	1,330,679 16.1%	+54 %	COMPLEX URBAN 20,000--500,000	99,158 18.4%	129,462 21.3%	+31 %
574,331 8.4%	794,519 9.8%	+38%*	SIMPLE URBAN 2,000--20,000	23,729 4.4%	38,469 6.3%	+62 %
355,060 5.2%	335,812 4.2%	- 5%	VILLAGE LEVEL 100--2000	50,180 9.3%	47,308 7.8%	- 5 %
3,459,588 50.6%	3,320,472 41.1%	- 4%	DISPERSED POPULATION under 100	366,232 67.9%	392,453 64.6%	+ 7 %
0 - 4 73.7%	0 - 4 69.5%		CLASSIFICATION Percent in Top 2 Categories	0 - 3 86.3%	0 - 3 85.9%	
Dispersed--Metropolitan Settlement Landscape				Dispersed--Complex Urban Settlement Landscape		

*SIMPLE URBAN TOWNS BETWEEN 10,000 & 20,000 GREW BY 73 %
5,000 & 10,000 GREW BY 16 %
2,000 & 5,000 GREW BY 32 %

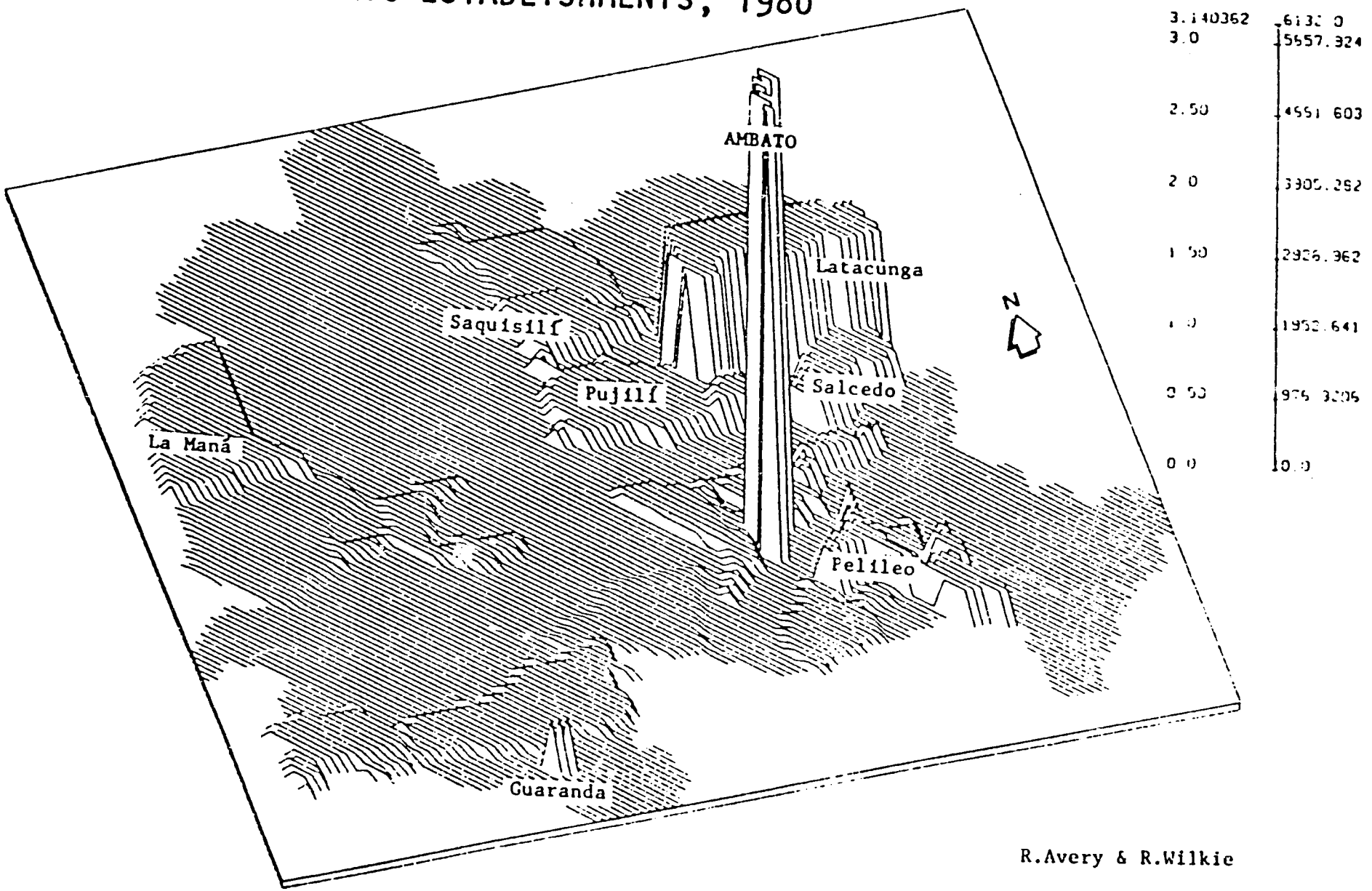


b

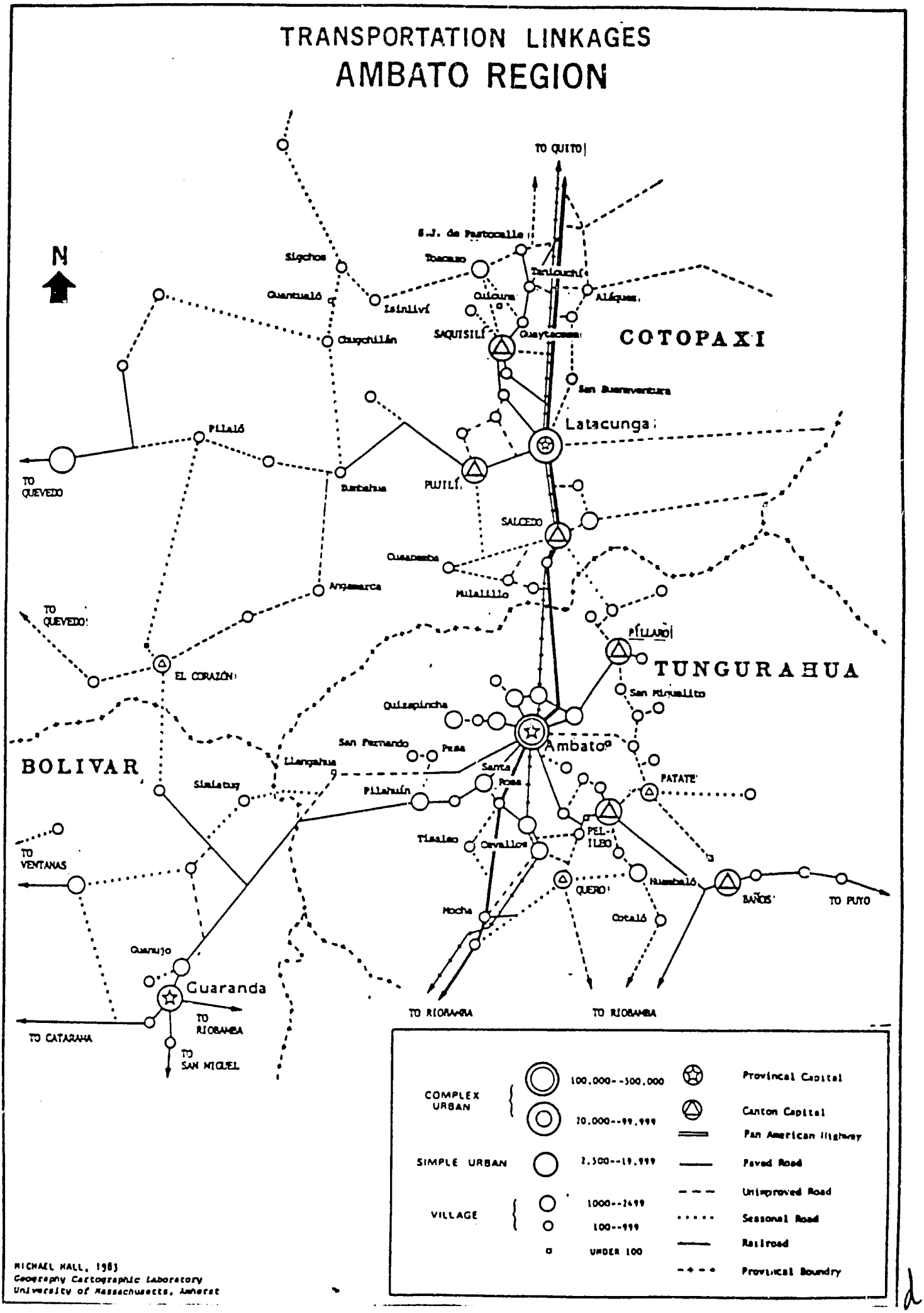
MAP 3

AMBATO REGION

TOTAL ECONOMIC ESTABLISHMENTS, 1980



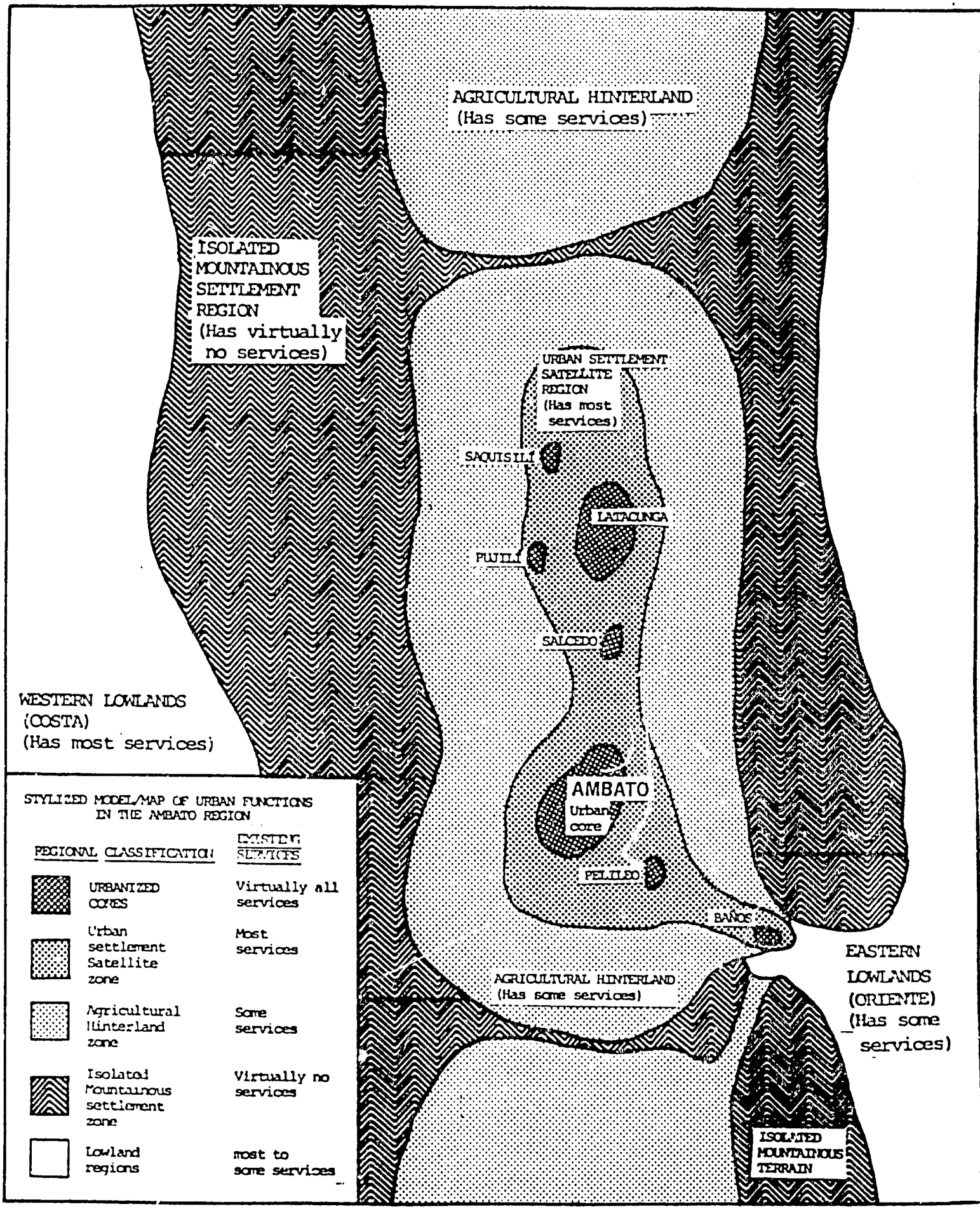
R.Avery & R.Wilkie



MICHAEL HALL, 1983
Geography Cartographic Laboratory
University of Massachusetts, Amherst

MAP 5

STYLIZED MAP OF REGIONAL SETTLEMENT TYPES RELATED TO THE EXISTENCE OF URBAN FUNCTIONS



provinces grew by 31 percent, "simple urban" centers had nearly identical increases of 61 and 63 percent, and the "dispersed" populations were up 5 and 9 percent respectively. At the "village level", however, Cotopaxi remained the same while Tungurahua lost 8 percent. Clearly similar patterns of urban growth or decline occurred in both provinces.

III. SOME BACKGROUND ON FOOD MARKETING IN ECUADOR

The agricultural marketing system in Ecuador has developed to serve two distinct sets of outlets - export markets for bananas, coffee, cocoa and some other less important crops, and domestic markets for food and other products. Ambato, strategically situated between Quito and Guayaquil, the two main market destinations, has developed as a key assembly point, linking the Sierra with the Costa and potentially the Ecuadorian Amazon as well. 2/

The marketing system has evolved to integrate production by a few large farmers and a large number of small ones and the two major sets of market outlets. Production is located mainly near the coast and moves to the ports of Guayaquil and Manta where the main exporting firms are based. Firms supplying the domestic market also operate mainly in the two large cities. Private wheat and rice miller-wholesalers, dairy plants, livestock wholesalers, and distributors of sugar, food legumes and potatoes constitute the main elements in the domestic marketing structure. Private firms processing coffee and cocoa and commercial exporters of these products and bananas make up the main export marketing structure.

The public marketing sector in Ecuador is very small by comparison. There are two main public institutions for marketing food products: one is ENAC which was set up in 1974 to help stabilize the marketing of products such as wheat, rice, maize and cotton. It has handled only around 10 percent of the quantities of these crops marketed in some years. The second public entity is ENPROVIT established in 1971 to ensure that products for general consumption

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2/ The following paragraphs draw on the work of Harold Riley of Michigan State University from unpublished reports prepared for the World Bank in 1983.

are available at official prices. It handles 2 to 3 percent of the retail sales of products such as rice, sugar, and cooking oil.

Urban Food Distribution

Most food products reach urban consumers through numerous very small retailers. Within each urban center there are one or more municipal market facilities where tiny stalls are made available to retailers at highly subsidized rental rates. As urban populations have grown, food retail and wholesale activities have spread into buildings and streets surrounding the municipal markets, creating traffic congestion and product handling difficulties. Concurrently, retailers have established small food stores in various locations within expanding residential areas. The heavy influx of rural migrants, the lack of alternative employment opportunities and the ease of entry into some form of food retailing contributes to the small-scale, extremely fragmented system of retail food distribution.

Modern supermarkets and smaller self-service stores have successfully entered the Quito and Guayaquil markets, but as yet handle only a small percentage of total retail food sales. The leading supermarket firm, La Favorita, has its own wholesale warehouse in Quito, a special facility for receiving, cleaning, and packaging fresh fruits and vegetables, and a vertically integrated linkage to farm level production of selected perishable products. The management of La Favorita plans to continue expanding operations in Quito and Guayaquil and to open stores in the larger secondary cities. Although these initiatives do not directly and immediately have a major impact on the retailing of food in the lowest income areas, there will be a long-term positive contribution to the development of a larger-scale, more technically efficient system of urban food distribution.

A new, modern wholesale market facility was built on the outskirts of Quito in 1980. The land and buildings are owned by the municipality, but the market is operated by a mixed enterprise composed of 30 shareholders including the provincial chamber of agriculture, the local association of wholesale grocers, two producer cooperatives, and the supermarket firm, La Favorita. By early 1983, the new market had become established as a wholesale center for rice, food legumes, dry groceries, potatoes, and eggs, but had not yet attracted a high volume of fresh fruits and vegetables. These perishable products still go directly to traditional municipal market locations within the city. A new wholesale market is being planned for Ambato.

Rural Markets

The periodic rural market continues as an important institutional arrangement for organizing the purchase and sale of agricultural products and the distribution of farm inputs and consumer goods. Municipalities provide space, rudimentary facilities, and supervision of market activities. The market day has great social, religious, and political, as well as commercial, significance in the life of the community. With the improvement of transportation and communication services, however, these markets are increasingly drawn into the regional and national market network. This broadens the variety of products available in local markets and creates additional potential competition for surplus agricultural commodities that can be transshipped to other markets.

The main orientation of the government's price policy for food and agricultural products has been toward the urban middle class. In view of general inflation, the government had tended to maintain a particular price

level until pressure for an increase becomes overwhelming. Official prices have been revised upward, mainly under such circumstances.

For many products prices are fixed at the producer, wholesale and retail levels. These products include milk, sugar, rice, and wheat flour, and their prices are widely enforced. For an additional range of products, including eggs and many fruits and vegetables, indicative prices are established.

In public city retail markets, boards in conspicuous locations display official retail prices for 20 or more products. These are used, however, only as a guide in pricing. Thus, immediately below one such board in Quito, eggs were recently sold at a price 10 percent higher than that indicated. When, as with many products, market values vary substantially with size, freshness and other quality factors, the indicated prices can only serve as a starting point for bargaining. If these are to be at all realistic, such official prices must also be adjusted, almost weekly for some products, to reflect seasonal variations in supply.

The main food products in the study area are cereals (wheat, barley) potatoes, vegetables (tomatoes, onions), livestock, and dairy products. A key role in the marketing of major cereals has been assumed by wholesaling enterprises equipped with drying and cleaning facilities, mills, and storage. In the case of wheat, the mills are located primarily in highland intermediate centers, such as Latacunga. During the last decade, the mills have become increasingly dependent on imports. Ownership is becoming increasingly concentrated - dominated by a few large enterprises based in Guayaquil.

Potato marketing has improved considerably by the establishment of the new wholesale market in Quito, the major consumption center. Some two-thirds of the total potato supply for the city passes through this market. Roughly 40 percent is brought in by trucker wholesalers who buy directly in the producing

areas. An additional 20 percent come from so-called fomentadores who finance producers, often linked through family relationships, furnishing seed, fertilizers, etc. The remaining 40 percent is brought to the market by the growers themselves and sold there to wholesalers.

Traditional arrangements for the marketing of potatoes and other vegetables and fruits are reflected in the situation at Ambato, the major assembly center for the Sierra and Guayaquil. Specific streets and squares have become the focus for the marketing of particular products. Trucker wholesalers and some farmers display their produce in the squares and along the street. Resident wholesalers occupy buildings nearby, combining display space for products currently on sale and warehouse type storage.

Tomatoes, another important product of the region, are sold in boxes graded informally to a fairly uniform quality size and color. Most other fruits are moved through market channels in bulk graded informally without any specific packing. Fruit and vegetables are sold from the back of trucks, both wholesale and retail, with a small discount for larger quantity purchases. This is common both at new wholesale market in Quito and in the street around the city retail markets.

A key role in livestock marketing is played by specialized wholesalers called introductores. They buy animals directly from farmers or at periodic livestock markets, have them slaughtered at a municipal abattoir, and sell meat in quarters to retail butchers with whom they have a continuing association. They may also provide short-term financing. Slaughterhouses in Guayaquil are supplied by wholesalers based in Ambato. The meat is transported in quarters daily in sealed vehicles, but without refrigeration. Deliveries are made directly to retailers by pre-arrangement. This system lacks many elements of hygiene and efficiency. In 1983, for example, there was no water

at the Ambato abattoir, and no formal market information was available to producers.

Dairy production, concentrated in the Sierra, involves mostly small producers who each raise few native cattle. There are also a number of large modern dairy farms in the Ambato area with high production (10 liters a day per cow for lactation period up to 300 days). Small producers who use cattle for dual purposes obtain only about 2 liters per day with lactation periods of about 120 days. Milk production, as is the case with meat, is far short of domestic requirements. Soft cheese is an important item moving through the feria system.

This brief sketch of some of the elements of the national marketing system was intended to provide a setting for the next section which deals with the periodic market network in the Ambato highland area.

IV. ELEMENTS OF AGRICULTURAL PRODUCE MARKETING IN THE AMBATO REGION

During the first phase of the study completed in 1983, the Ecuador research team was only able to undertake the initial steps demanded by a rural-urban market linkage analysis. The team ascertained the structure of the marketing system in a quick and cost-effective manner and derived tentative conclusions as to the relative importance and economic reach of market towns in the region. Future phases of the research would extend the range of data to include behavioral information to determine the dynamics behind the system, to acquire pricing data necessary to identify where, how much, and by whom value is added, and to determine the degree of participation by social groups in market opportunities for specific products in order to specify which interventions in the systems may result in improved access to markets. It is also the intention to estimate how much of the value added could be retained in the region at various points in the urban hierarchy.

The Hierarchy of Market Towns in the Ambato Region

Two kinds of marketing systems operate in the Ambato region. One consists of permanent stores and outlets, at fixed locations. A second type of commercialization arrangement, more traditional and mobile, and by far more important, is the network of periodic markets. Bromley 3/ has classified periodic markets in the Sierra as follows:

3/ Bromley, Ray. Periodic and Daily Markets in Highland Ecuador, Unpublished Ph. D. Dissertation. Cambridge University. Cambridge, England, 1975.

> "Markets are most easily classified on the basis of their periodicity. They can be divided into two main classes; 'daily markets', and 'periodic markets'. Daily markets are markets which take place on every day, or at least on every working day, of the week. Periodic markets take place less frequently than daily, occurring regularly on one or more fixed days each week. In many market centers, small daily markets are supplemented on one, two or three days each week by more substantial periodic market gatherings."

The city of Ambato is the only town in the region with a significant daily market for agricultural produce. The region, however, has one of the most developed periodic market systems in Ecuador. Based on vendor counts, Ambato ranked second in importance in the entire Sierra, Latacunga fifth, Salcedo tenth, Saquisilí twelfth, and Pelileo and Píllaro were fourteenth and fifteenth respectively. Thirty-eight centers in the Ambato region have periodic markets, 20 in Cotopaxi Province and 18 in Tungurahua Province. In general, two out of every five population centers had significant periodic markets.

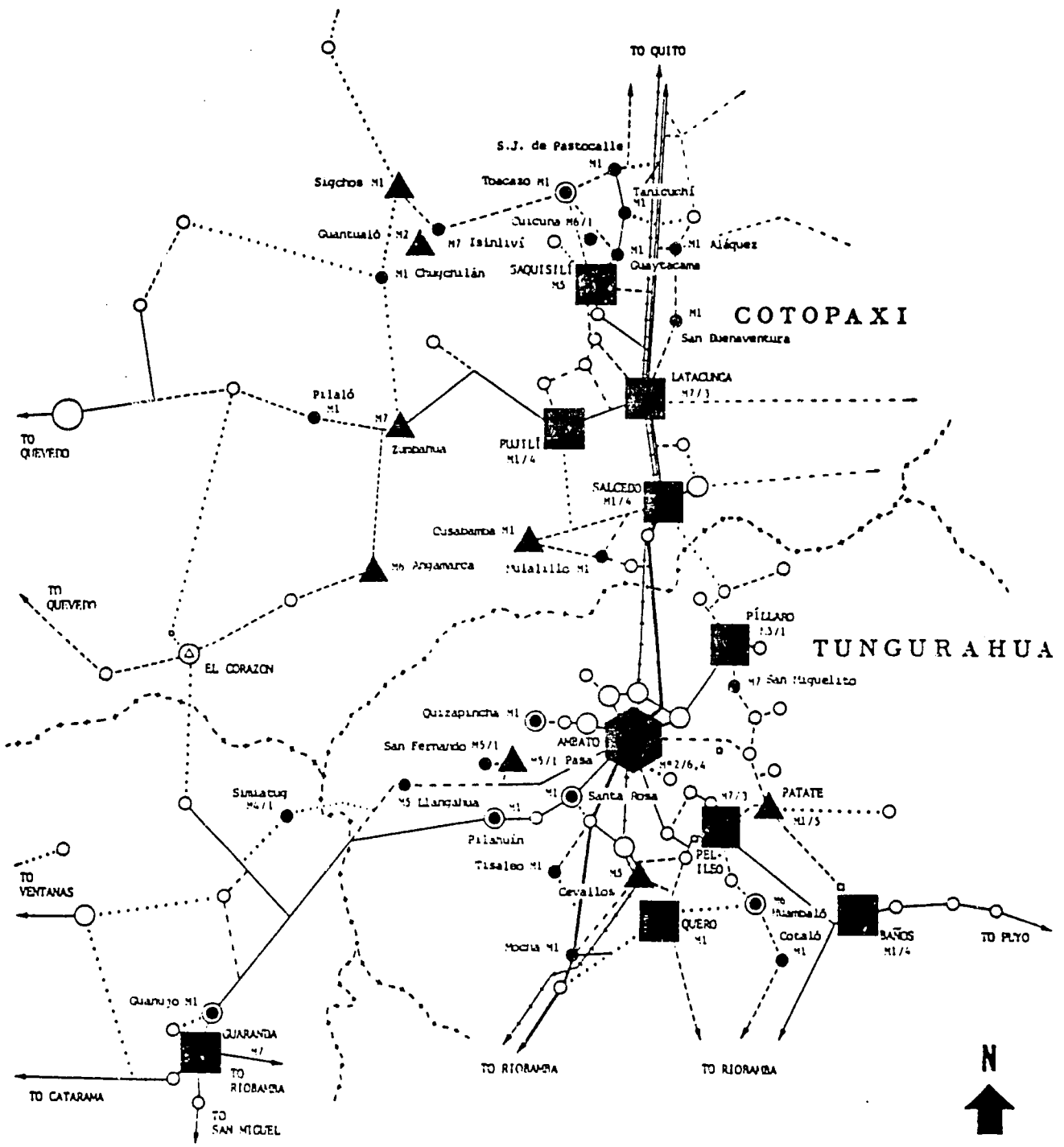
Bromley classified these 38 markets into four levels: regional centers - 1; subregional centers - 8; locally interactive markets - 8; and locally isolated markets - 21. The number of markets falling into the lower three levels of the hierarchy are roughly the same for the Tungurahua and Cotopaxi Provinces with Ambato serving as the regional center for both.

The map of the periodic market system in the Ambato region (Map 6) illustrates the spatial distribution of the markets by their hierarchical ranking. Ambato is centered around eight subregional markets: Pujilí, Salcedo, Quero, Baños, Saquisilí, Latacunga, Píllaro, and Pelileo. All of these subregional markets are coincident with cantonal (county) seats, except Latacunga which is a provincial capital.

MAP 0

PERIODIC MARKET SYSTEM

AMBATO REGION



BOLIVAR

COMPLEX URBAN — 100,000+–100,000 — Provincial Capital
10,000+–99,999 — Canton Capital
Pan American Highway
SIMPLE URBAN — 1,500+–10,000 — Paved Road
Unimproved Road
VILLAGE — 1000+–1499 — Seasonal Road
100+–999 — Railroad
under 100 — Provincial Boundary

MARKETS VISITED

Market Rankings

- RANK 1 — Locally Isolated Markets
- RANK 2 — Locally Interactive Markets
- RANK 3 — Sub Regional Market Centers
- RANK 4 — Regional Distribution Centers

Market Days

M1 = Sunday / Domingo
M2 = Monday / Lunes
M3 = Tuesday / Martes
M4 = Wednesday / Miercoles
M5 = Thursday / Jueves
M6 = Friday / Viernes
M7 = Saturday / Sabado
M* = daily / diario
M*2 = daily with known largest diario con Lunes mas grande
M1/5 = primary day Sunday secondary day Thursday
dia principal Domingo
dia secondario Jueves

MICHAEL HALL

Connectivity Linkages of the Market System in the Ambato Region: Commodity Flow Analysis

Commodity flow data were obtained for eleven central places with significant periodic market activity using the traffic cordon method. Road-blocks were installed on all major access roads to a town, with the cooperation of the local government and national highway police. Every truck entering and leaving a town was stopped and its driver interviewed. The truck was tagged when interviewed to avoid double counting. Since trucks haul produce in the late evening and early morning in order to market fresh goods the same day, interviewing can generally be completed before noon.

The traffic cordon method has its limitations. Data for these studies were collected on only three days in August. These may not have been representative days in terms of seasonal fluctuation in commodity production. The method also requires application of a very short questionnaire, in order not to detain traffic, and necessitates concentration on a relatively small number of places because of the costs involved. Also, cordons work effectively only with truckload sizes of cargo. Small cargoes carried locally by people and animals and transactions within the towns are missed. What is measured are the gross flows in and out of town, which represent the bulk of all inter-urban shipments. Nevertheless, there is probably no more cost-effective way of obtaining basic connectivity data for a central place system.

The selection of cordon sites included seven of the eight centers classified as of sub-regional importance by Bromley: Quero, Pelileo, Píllaro, Salcedo, Pujilí, Saquisilí, and Latacunga. Baños was not selected because it is basically a vacation resort with a very small agricultural hinterland, lying as it does in a very narrow valley leading down to the Amazon. Instead, three

smaller markets were chosen from among the lower order centers designated by Bromley as locally interactive markets. Data for Ambato was collected previously.

In all, 9,100 interviews were conducted over a three-day period in August of 1983. These places are highly representative of the local marketing network of the Ambato Region. (The data from Quero are analyzed separately and not included in this report).

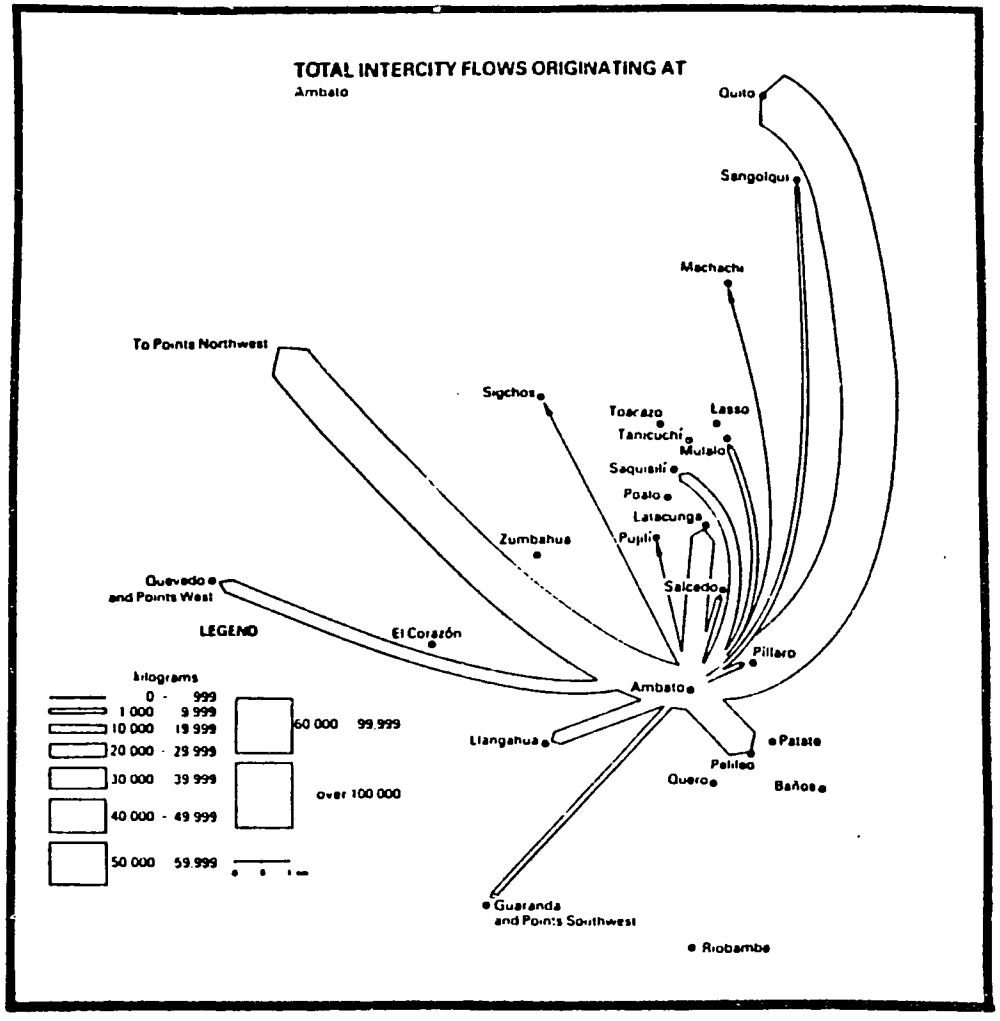
A Flow Analysis of the Urban System

City-to-city flows were used to estimate overall connectivity. Intercantonal flows were used as the level of aggregation for particular commodity groups. Total flows are computed by adding the weight of virtually all non-animal commodities with the exception of pineapples and bananas, in kilograms between fixed points of origin and all destinations recorded. Flows whose destination lay outside the two provinces were indicated by either the nearest major city or the general direction of the cargo. The width of the arrows on the flow maps is in proportion to weight up to 100,000 kilograms. A very wide arrow is used for flows of more than 100 metric tons. Intercantonal flows by commodity group are aggregated for all towns in a particular canton which are destined to another canton. Animals on-the-hoof, pineapples, and bananas are excluded from this preliminary analysis because they were measured in units and not weights. The reader is urged to consult the flow maps accompanying the text as a graphic aid for understanding the next paragraphs.

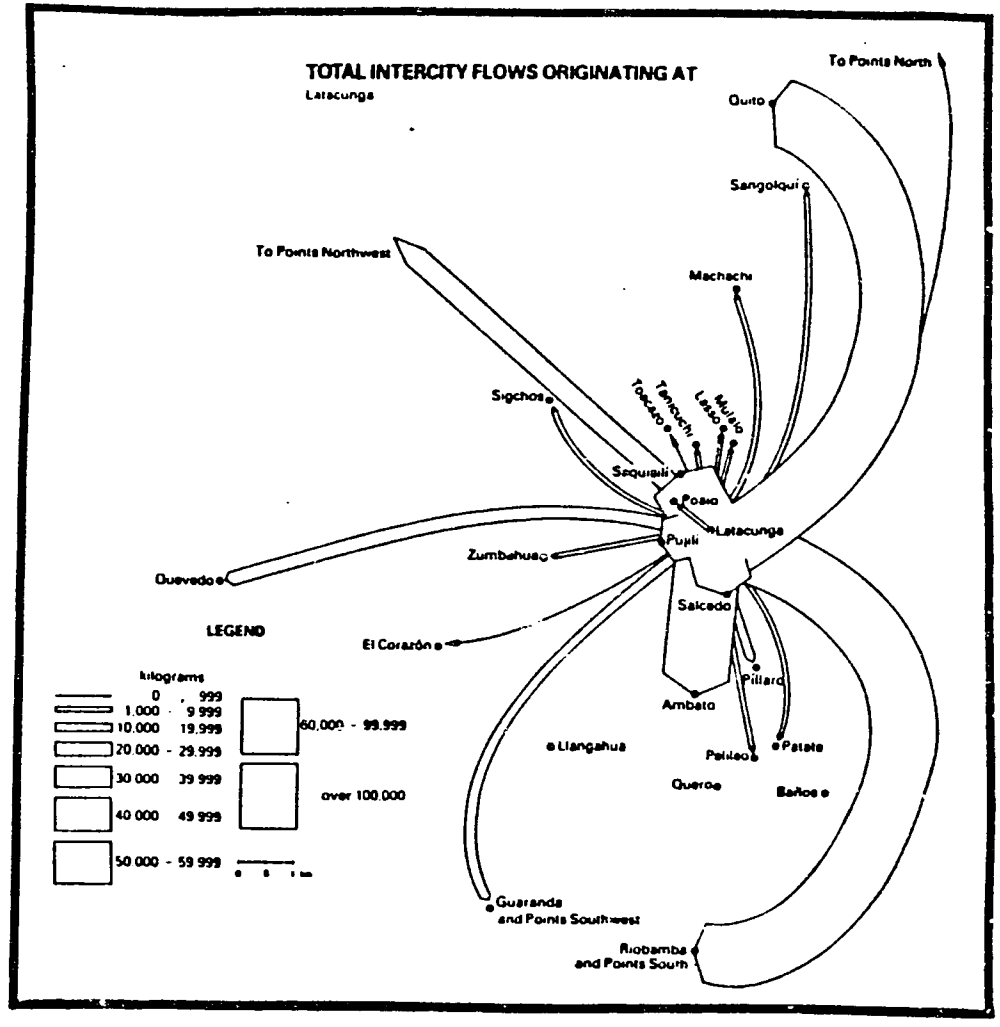
General Intercity Flows

Beginning with Map 7 showing total intercity flows originating at Ambato, a reasonably clear spatial pattern emerges. Quito, as expected, is the major destination point for produce shipments from Ambato. Next in importance are

MAP 7


TOTAL INTERCITY FLOWS ORIGINATING AT
Ambato
Quito
Sangolqui
Machachi
To Points Northwest
Sigchos
Toacazo
Tanicuchi
Lasso
Mulalo
Saquisili
Poalo
Latacunga
Pujili
Zumbahua
Salcedo
Quevedo
and Points West
LEGEND
El Corazón
Pillaro
Ambato
Kilograms
0 - 999
1 000 9 999
10 000 19 999
20 000 - 29 999
30 000 39 999
40 000 - 49 999
50 000 59 999
60 000 99 999
over 100 000
Llangahua
Patate
Pelileo
Quero
Baños
Guaranda
and Points Southwest
Riobamba

MAP 8


TOTAL INTERCITY FLOWS ORIGINATING AT
Latacunga
To Points North
Quito
Sangolqui
To Points Northwest
Machachi
Sigchos
Toacazo
Tanicuchi
Lasso
Mulalo
Saquisili
Poalo
Latacunga
Pujili
Zumbahua
Quevedo
Salcedo
LEGEND
El Corazón
Pillaro
Ambato
Kilograms
0 999
1.000 9 999
10.000 19.999
20.000 - 29.999
30 000 39 999
40 000 49 999
50 000 - 59 999
60.000 - 99.999
over 100.000
Llangahua
Patate
Pelileo
Quero
Baños
Guaranda
and Points Southwest
Riobamba
and Points South

the shipments to the northwest coastal areas. This large flow in part represents a normal complementarity in commodity exchange (potatoes, onions, oats, barley, vegetables and temperate fruits such as apples and pears), and in part, the unusual deficit of basic foodstuffs on the coast due to the flooding which occurred during 1983 in the wake of the disastrous "El Niño" Pacific Ocean weather reversal. Pelileo formed the third most important destination of produce shipments from Ambato. This confirms Pelileo's role as an entropot (intermediate transhipment point) for the Amazon region whose products are highly complementary with those of the highlands. Pelileo may have a major role to play in the future as a major linkage between the Amazonian and highland regions because it lies astride one of the three national highways connecting the Sierra with the eastern lowlands. Latacunga, capital of Cotopaxi Province and half way from Ambato to Quito on the Pan American highway, is the fourth most important trading partner of Ambato. Latacunga is far exceeded by Ambato in interprovincial trade. The most important locally interactive market for Ambato is Saquisilí which lies to the northwest of Latacunga. Given Saquisilí's relatively small size, the presence of a major intervening trade opportunity represented by Latacunga, and its sheer remoteness from the Ambato regional center relative to other towns of comparable size, the economic importance of this third order market is noteworthy. The remaining flows are relatively minor.

Ambato links its agricultural region to the two national metropolitan areas. A large proportion of the materials shipped from Ambato to Quito and Guayaquil originates from smaller towns in its immediate vicinity. Ambato also receives some shipments of produce from virtually every settlement in the region, although some bulking occurs in the market towns with significant periodic markets.

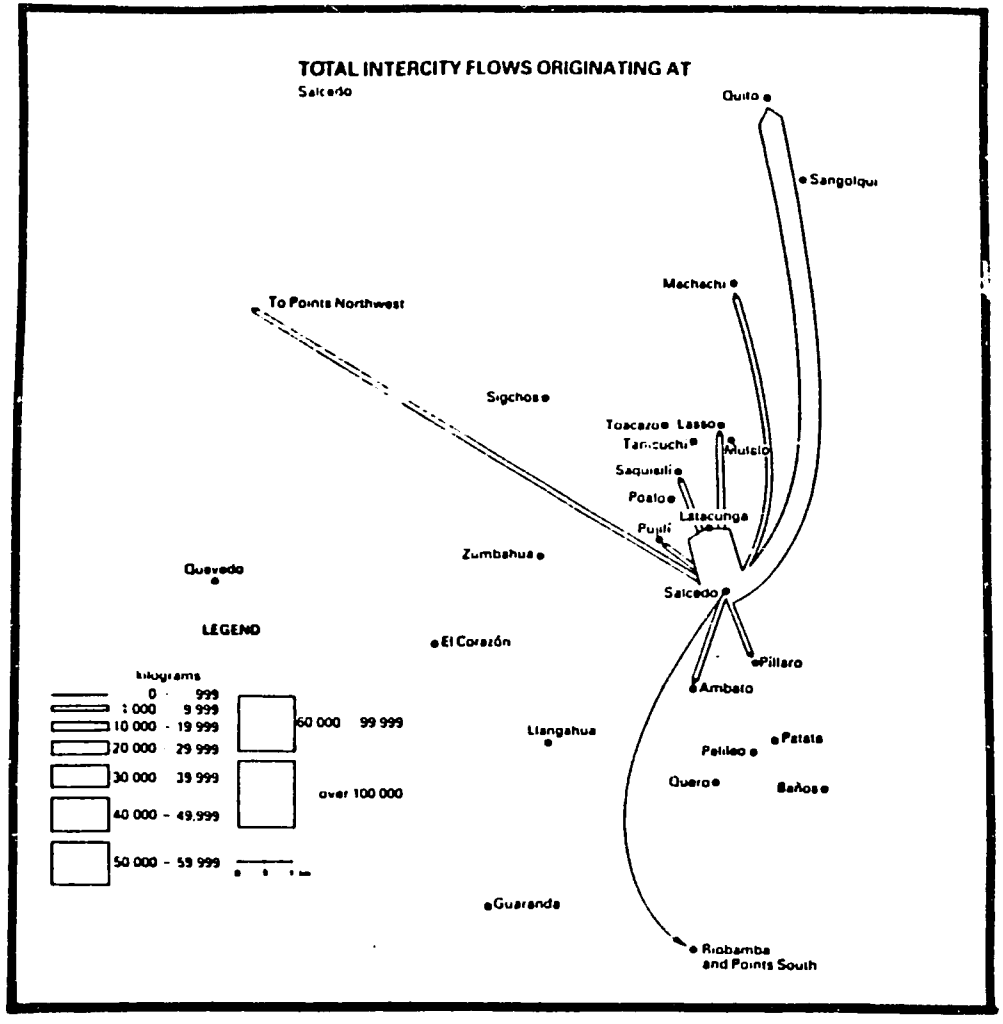
The other provincial capital, Latacunga, shows a complex pattern (Map 8). The primary pattern is dominated by interprovincial shipments to Quito, Ambato and Riobamba (the capital of Chimborazo Province which lies south of the study area). Latacunga's principal intra-provincial trading partners are Salcedo, Pujilí and Saquisilí. Latacunga also trades with the other major regions of Ecuador but to a much less significant degree than Ambato. Finally, Latacunga ships far more to Ambato than Ambato ships to Latacunga. This asymmetry in the dyadic pair relationship 4/ reflects Ambato's dominance as the region's functional capital.

Salcedo (Map 9), a city of about 6,000 people situated about halfway between Latacunga (30,000) and Ambato (100,000), is clearly dependent on its provincial capital, Latacunga, since the physical volume of Salcedo's shipments to Latacunga are far greater than to any other city. Destination to Quito is next in importance and all other flows are relatively minor. Nonetheless, it is notable that Salcedo ships as much to Saquisilí (with about 3,000 people) as to Ambato which is much closer.

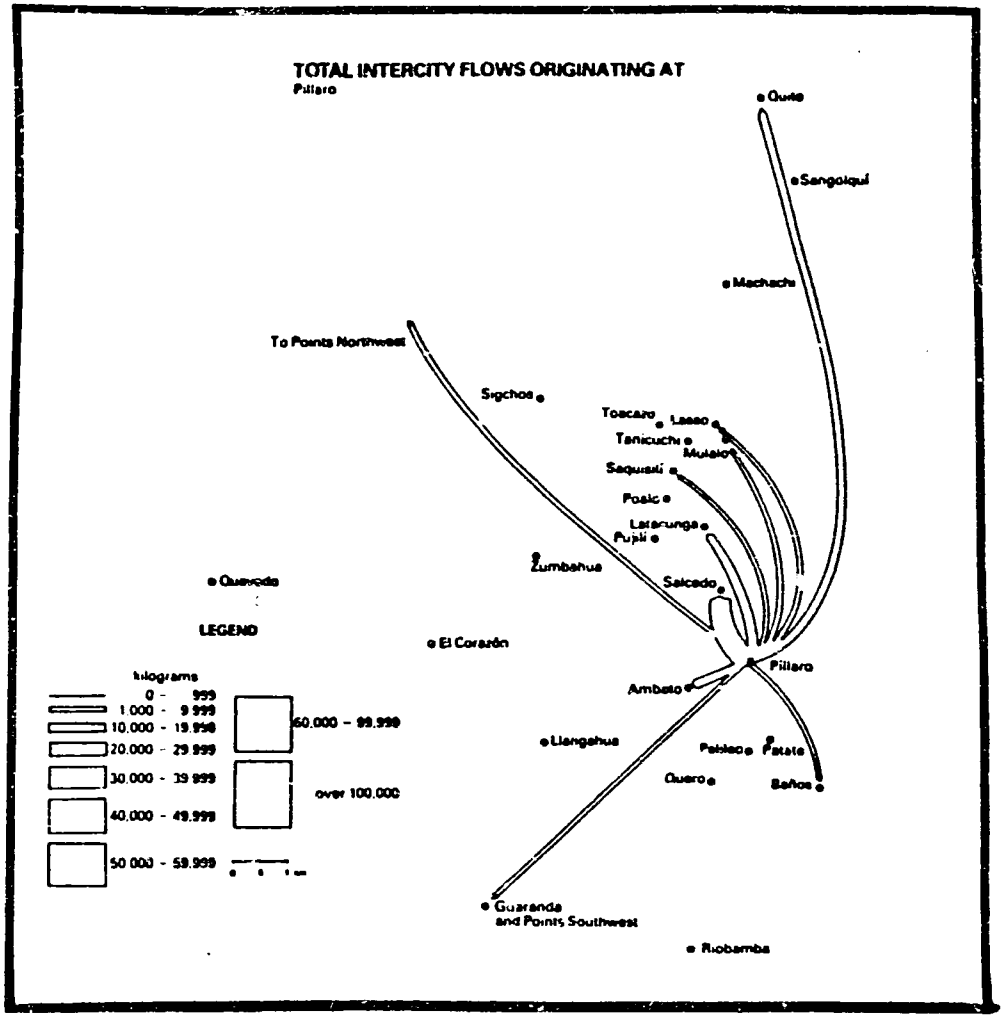
Píllaro (Map 10) is also a dependency of Salcedo. Píllaro, while legally in the Province of Tungurahua, actually has most of its economic ties with towns in the central valley of Cotopaxi to the north. Pelileo (Map 11) to the south of Píllaro is also oriented to the north. However, its prime trade is with Ambato. A smaller quantity of goods are shipped to the resort town of Baños on the eastern gateway.

4/ Paired cities in an urban system which are directly connected by commodity traffic.

MAP 9


TOTAL INTERCITY FLOWS ORIGINATING AT
Salcedo
Quito
Sangolqui
Machachi
To Points Northwest
Sigchos
Toacazo
Lasso
Tanicuchi
Mulalo
Saquisili
Posto
Latacunga
Pujili
Zumbahua
Quevedo
Salcedo
LEGEND
El Corazón
Pillaro
Ambato
kilograms
0 - 999
1 000 - 9 999
10 000 - 19 999
20 000 - 29 999
30 000 - 39 999
40 000 - 49 999
50 000 - 59 999
60 000 - 99 999
over 100 000
Llangahua
Patate
Pelileo
Quero
Baños
Guaranda
Riobamba
and Points South

MAP 10


TOTAL INTERCITY FLOWS ORIGINATING AT
Pillaro
Quito
Sangolqui
Machachi
To Points Northwest
Sigchos
Toacazo
Lasso
Tanicuchi
Mulalo
Saquisili
Posto
Latacunga
Pujili
Zumbahua
Salcedo
Quevedo
LEGEND
El Corazón
Pillaro
Ambato
kilograms
0 - 999
1 000 - 9 999
10 000 - 19 999
20 000 - 29 999
30 000 - 39 999
40 000 - 49 999
50 000 - 59 999
60 000 - 99 999
over 100 000
Llangahua
Patate
Pelileo
Quero
Baños
Guaranda
and Points Southwest
Riobamba

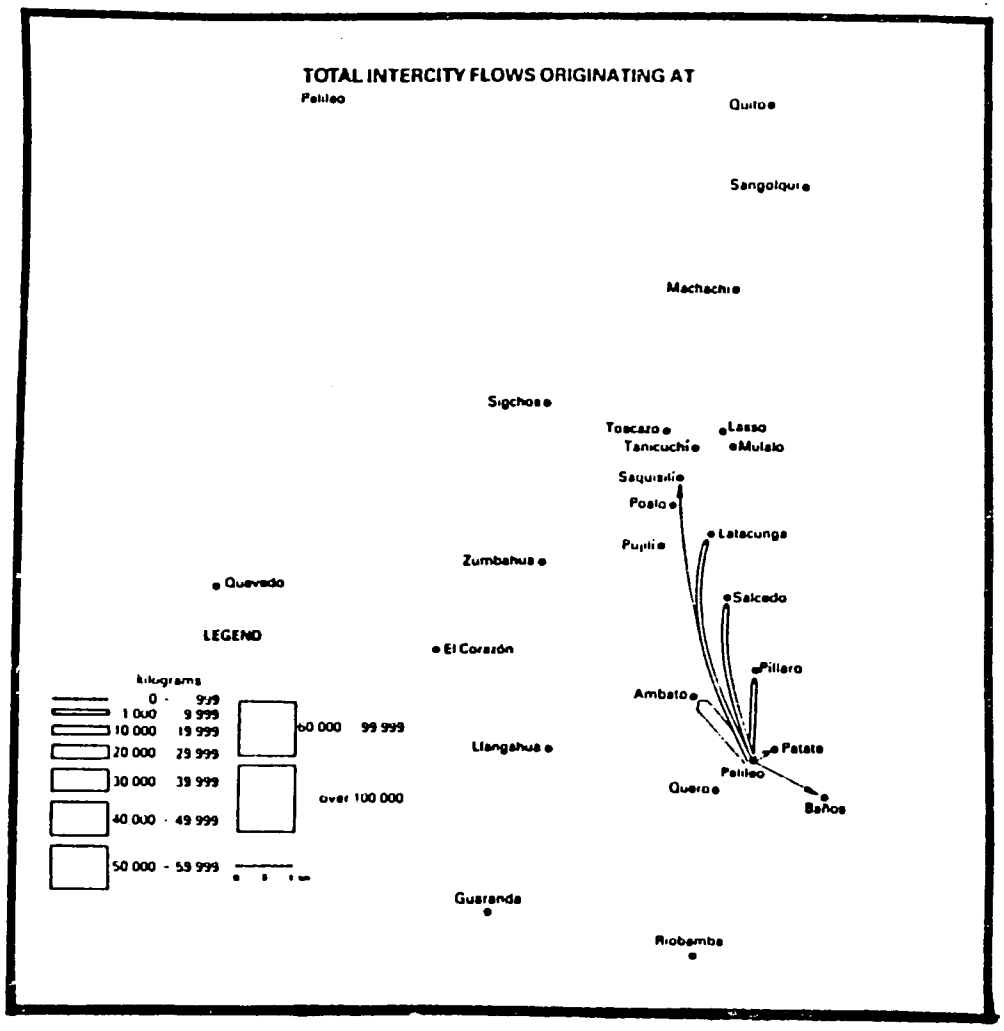
In the Province of Cotopaxi, the two major market towns in the foothills of the western Andean wall of Ecuador's central valley are Pujilí and Saquisilí. Pujilí (Map 12) is a very old, well-established town with fine colonial architecture and an active small-scale shoe industry. Pujilí's principal trading partner in both purchases and sales is Latacunga which lies only a short distance to the east by a modern all-weather road. In fact, many residents of Pujilí commute to Latacunga by bus for daily work. Other trading partners are Salcedo, Saquisilí (where a modern paved highway between the two is under construction) and the two small centers of Zumbahue and Sigchos which lie in a high parallel valley to the west.

As indicated above, Saquisilí (Map 13) ships truly astounding amounts of tonnage to Ambato and Latacunga. This small town of less than 3,000 population also ships four to five tons of material to the coast and to Quito. In fact, the only center clearly dominant to Saquisilí from the viewpoint of commodity flow is Ambato itself (Ambato ships far less tonnage to Saquisilí than the reverse).

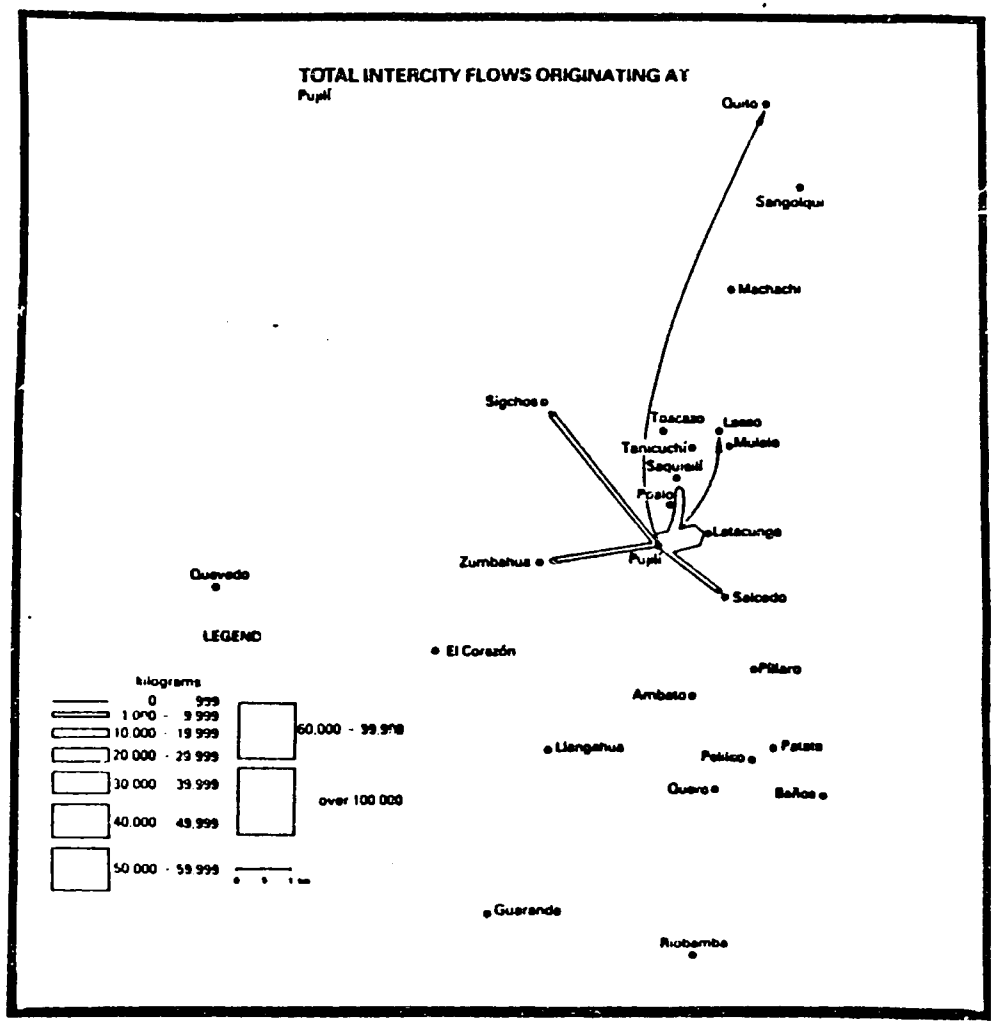
The last map in this set (Map 14) shows commodity flows originating at a number of smaller places. The map serves to highlight the centrality of Pelileo for the cluster of towns in southeast Tungurahua and the importance of Latacunga and Saquisilí in the Cotopaxi sub-system.

Finally, it should be noted that the eastern side of the central valley seems relatively devoid of both towns and trade. This sub-region is dominated by large mechanized dairy farms with a small residential population because of mechanization. The western side of the valley is populated by small holders and teems with life and trade. The area immediately to the south and east of Ambato has retained its peasant character.

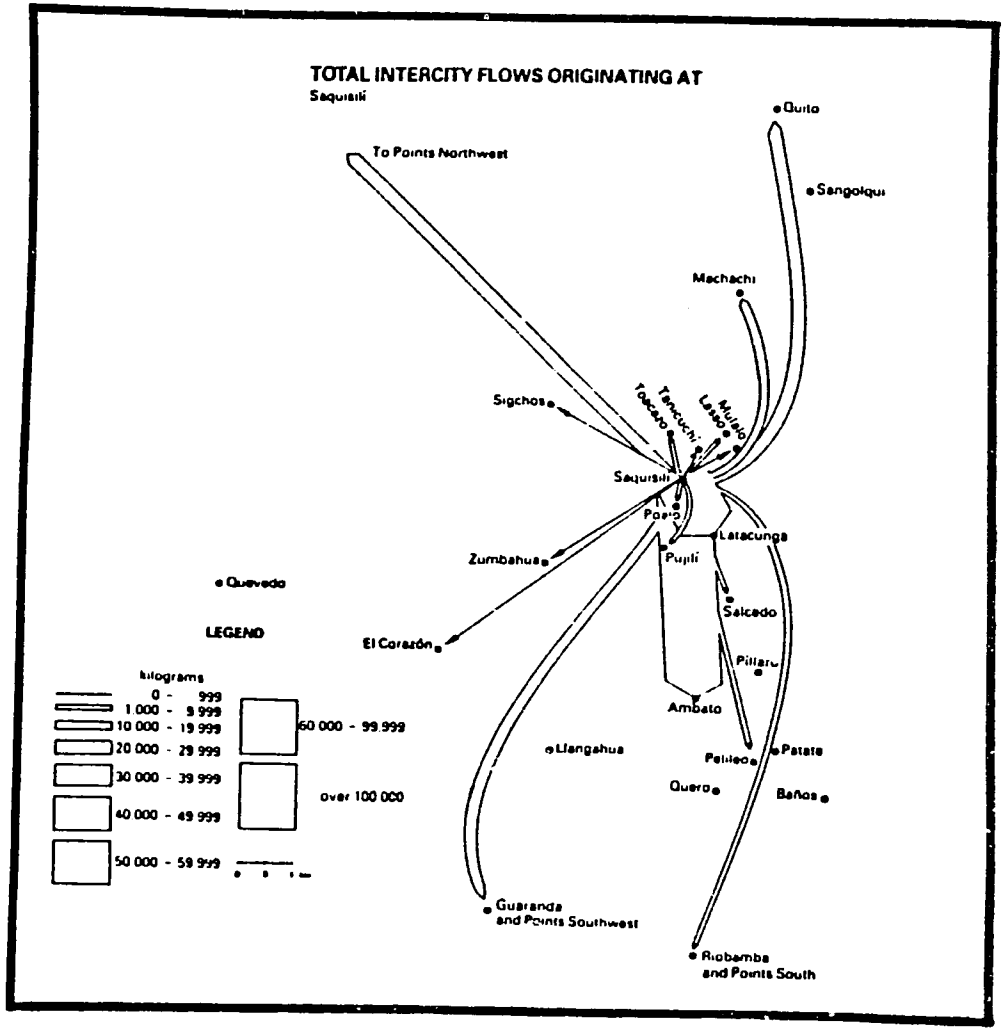
MAP 11


TOTAL INTERCITY FLOWS ORIGINATING AT
Pelileo
Quito
Sangolqui
Machachi
Sigchos
Toacazo
Lasso
Tanicuchi
Mulalo
Saquisili
Poalo
Pujili
Latacunga
Zumbahua
Salcedo
Quevedo
Pillaro
El Corazón
Ambato
Llangahua
Patate
Pelileo
Quero
Baños
Guaranda
Riobamba
LEGEND
kilograms
0 - 999
1 000 - 9 999
10 000 - 19 999
20 000 - 29 999
30 000 - 39 999
40 000 - 49 999
50 000 - 59 999
60 000 - 99 999
over 100 000

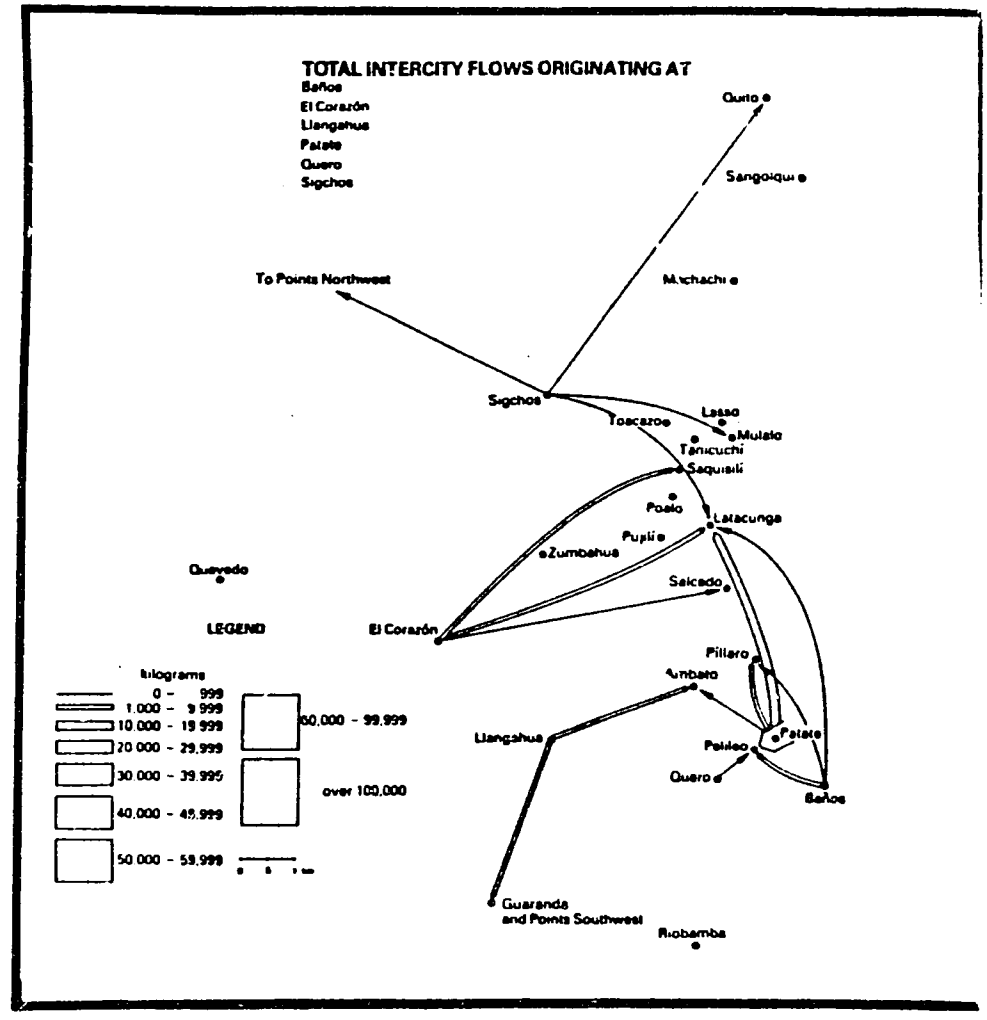
MAP 12


TOTAL INTERCITY FLOWS ORIGINATING AT
Pujil
Quito
Sangolqui
Machachi
Sigchos
Toacazo
Lasso
Tanicuchi
Mulalo
Saquisili
Poalo
Latacunga
Zumbahua
Pujil
Salcedo
Quevedo
El Corazón
Pillaro
Ambato
Llangahua
Patate
Pelileo
Quero
Baños
Guaranda
Riobamba
LEGEND
kilograms
0 - 999
1 000 - 9 999
10 000 - 19 999
20 000 - 29 999
30 000 - 39 999
40 000 - 49 999
50 000 - 59 999
60 000 - 99 999
over 100 000

MAP 13


TOTAL INTERCITY FLOWS ORIGINATING AT
Saquisili
Quito
To Points Northwest
Sangolqui
Machachi
Sigchos
Toacazo
Tanicuchi
Lasso
Mulalo
Saquisili
Pujili
Latacunga
Zumbahua
Quevedo
Salcedo
El Corazón
Pillaro
Ambato
Llangahua
Pelileo
Patate
Quero
Baños
Guaranda
and Points Southwest
Riobamba
and Points South
LEGEND
kilograms
0 - 999
1.000 - 9.999
10.000 - 19.999
20.000 - 29.999
30.000 - 39.999
40.000 - 49.999
50.000 - 59.999
60.000 - 99.999
over 100.000

MAP 14


TOTAL INTERCITY FLOWS ORIGINATING AT
Baños
El Corazón
Llangahua
Patate
Quero
Sigchos
Quito
Sangolqui
To Points Northwest
Machachi
Sigchos
Toacazo
Lasso
Mulalo
Tanicuchi
Saquisili
Pujili
Latacunga
Zumbahua
Quevedo
Salcedo
El Corazón
Pillaro
Ambato
Llangahua
Pelileo
Patate
Quero
Baños
Guaranda
and Points Southwest
Riobamba
LEGEND
kilograms
0 - 999
1.000 - 9.999
10.000 - 19.999
20.000 - 29.999
30.000 - 39.999
40.000 - 49.999
50.000 - 59.999
60.000 - 99.999
over 100.000

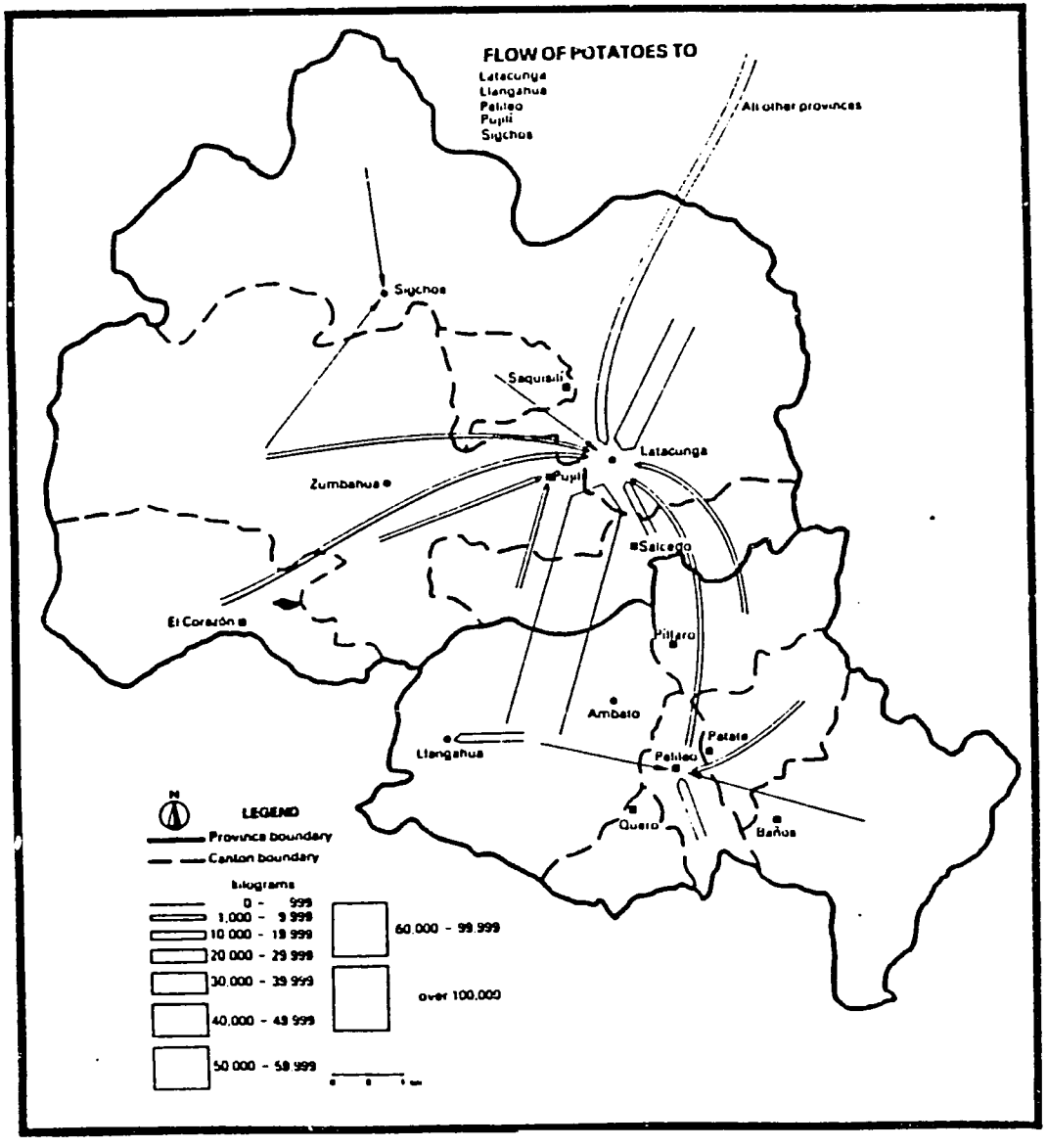
Intercantonal Flows

Maps 15 and 16 present a measure of the physical flow volume of potatoes, the leading crop, to eight cities from the eleven cantons of the two provinces and also from the rest of Ecuador. These maps clearly indicate that at the level of sub-regional markets the most important collectors of wholesale lots of potatoes are three towns: Latacunga, Saquisilí and Píllaro in that order. The major wholesale potato market is in Ambato itself with volumes which far exceed those of the other markets in the region combined. The leading sources of supply are Salcedo, Píllaro, Quero, Latacunga and Mocha, a small town in the far south of the study area.

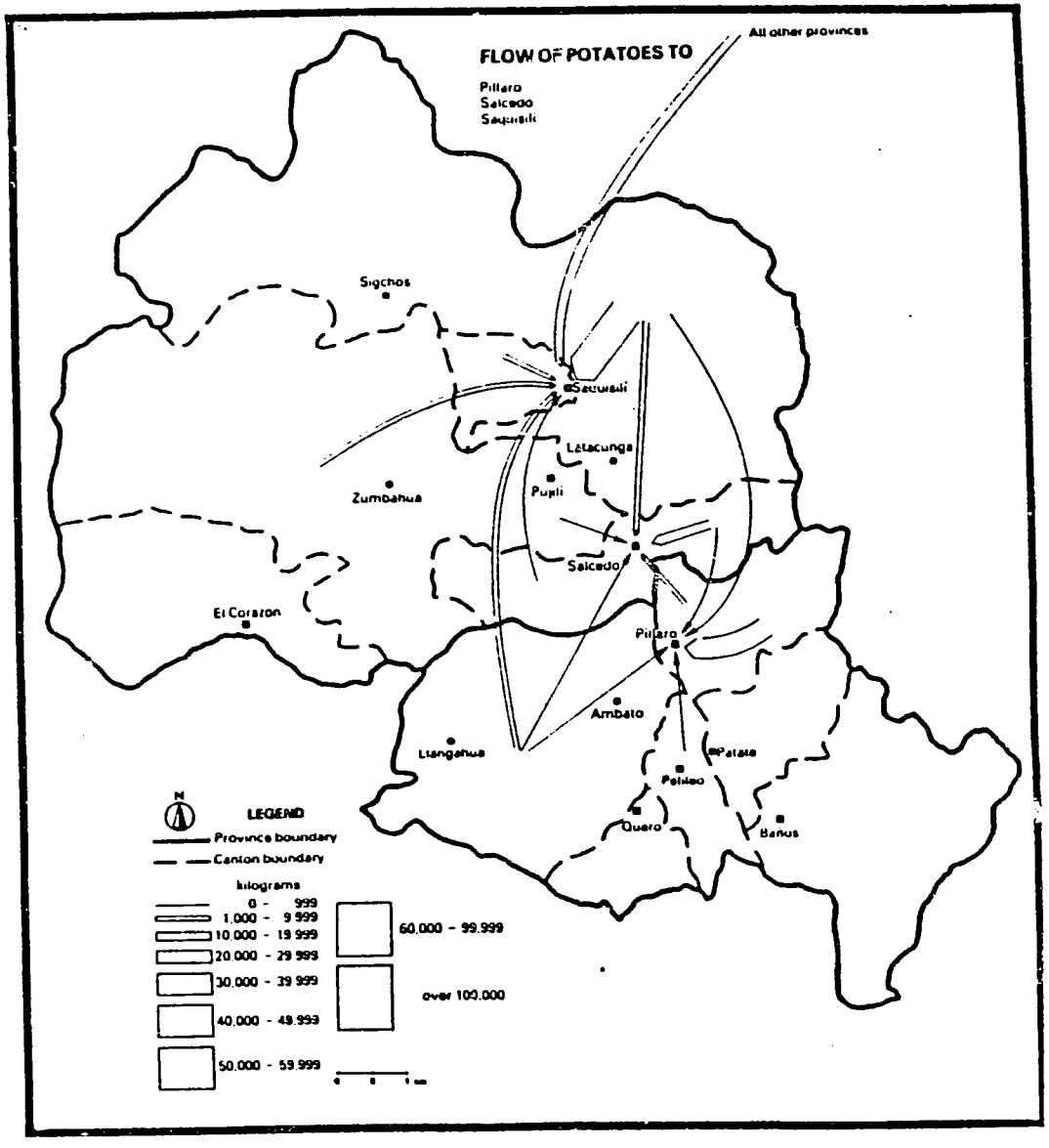
Maps 17 and 18 present a measure of the intercantonal flows of onions, the second most important crop. The only sub-regional centers to emerge are Latacunga and Pelileo with Saquisilí, Salcedo, Píllaro and Pujilí as much smaller collectors. Again, the bulk of the produce is shipped to the city of Ambato (Maps 17 and 18). Most of the onions come from the southern part of the Province of Tungurahua.

Maps 19, 20 and 21 present intercity (not cantonal) flows of fruits throughout the region. The region is temperate due to high elevation. There are two types of flows, the intraregional flow of apples, pears and plums, and the interregional trade from the coast of tropical products, bananas, oranges, pineapples, papayas, etc. The major flow is from the wholesale markets of Ambato to Quito. Pelileo plays a major assembly role from all neighboring towns, including Baños which transhipps tropical fruit from the Amazon. Latacunga and Saquisilí play major roles as entrepots for fruit. Saquisilí, in particular, collects respectable volumes of goods from coastal towns, such as

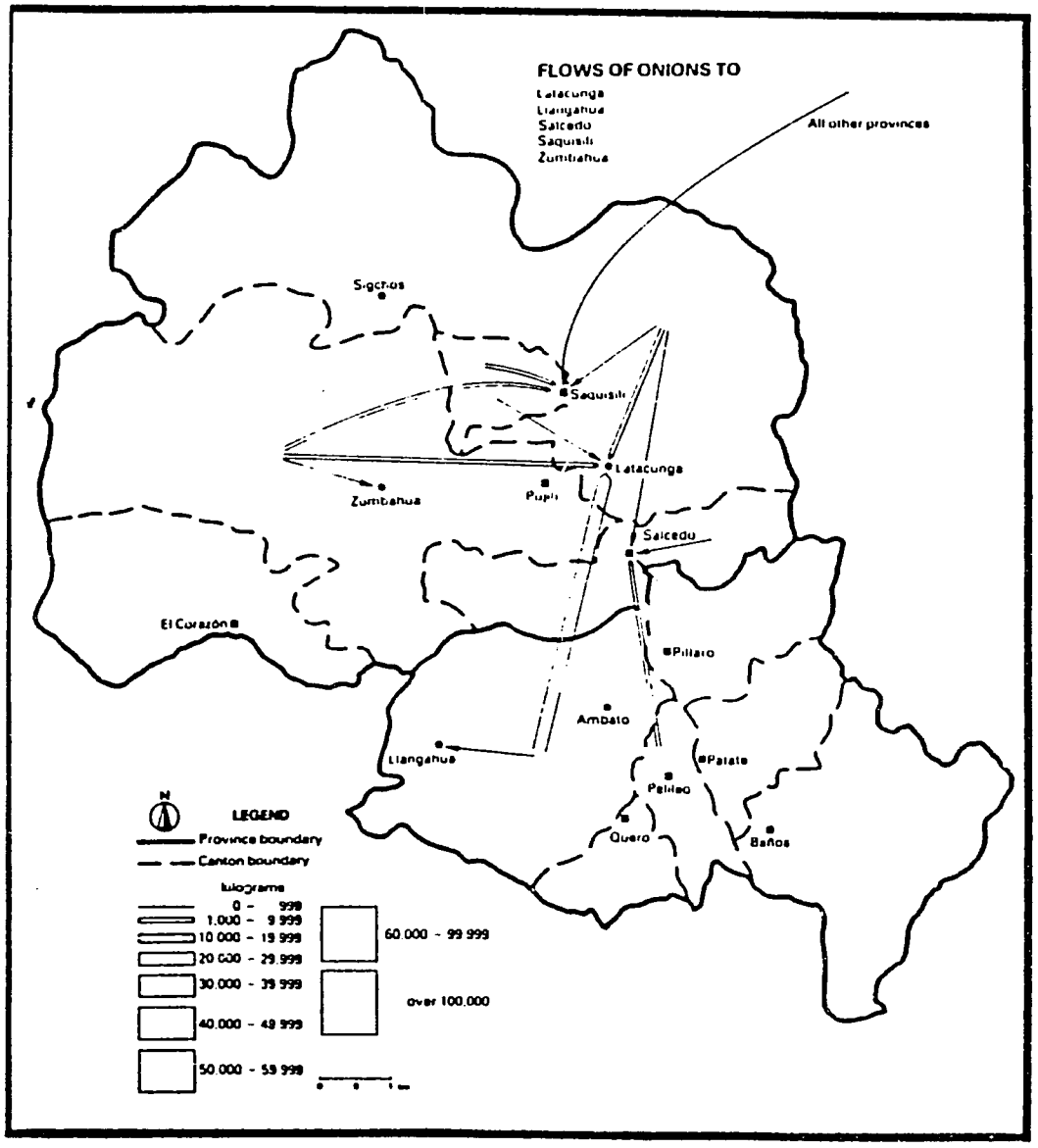
MAP 15


FLOW OF POTATOES TO
Latacunga
Llanganua
Pelileo
Pujili
Sigchos
All other provinces
Sigchos
Saquisili
Latacunga
Zumbahua
Pujili
Salcedo
El Corazón
Pillaro
Ambato
Llanganua
Pelileo
Patate
Quero
Baños
N
LEGEND
Province boundary
Canton boundary
kilograms
0 - 999
1,000 - 9 999
10 000 - 19 999
20 000 - 29 999
30 000 - 39 999
40 000 - 49 999
50 000 - 59 999
60 000 - 99 999
over 100 000

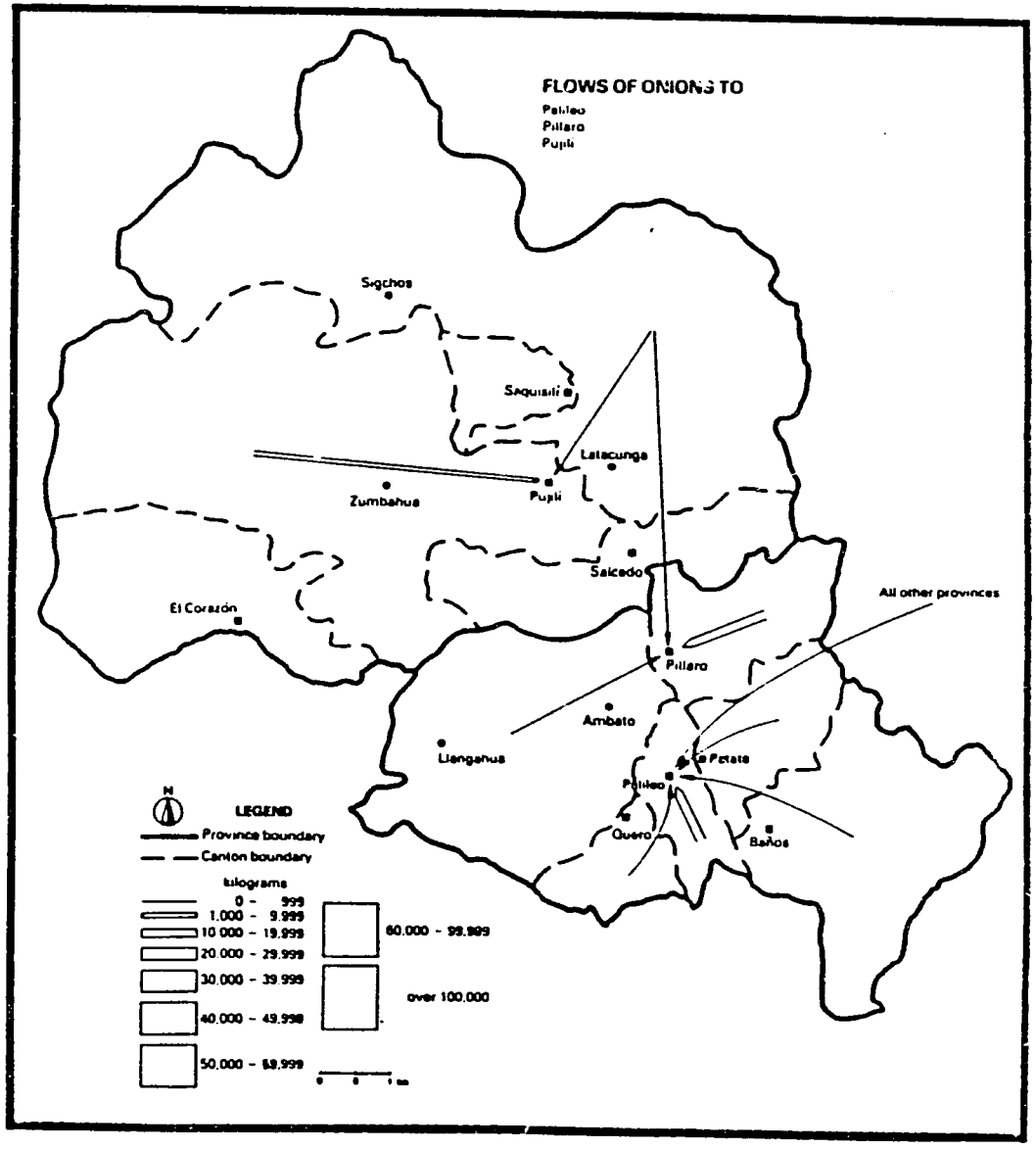
MAP 16


FLOW OF POTATOES TO
Pillaro
Salcedo
Saquisili
All other provinces
Sigchos
Saquisili
Latacunga
Zumbahua
Pujili
Salcedo
El Corazon
Pillaro
Ambato
Llanganua
Patate
Pelileo
Quero
Banos
N
LEGEND
Province boundary
Canton boundary
kilograms
0 - 999
1,000 - 9 999
10,000 - 19 999
20,000 - 29 999
30,000 - 39 999
40,000 - 49 999
50,000 - 59 999
60,000 - 99 999
over 100,000

MAP 17

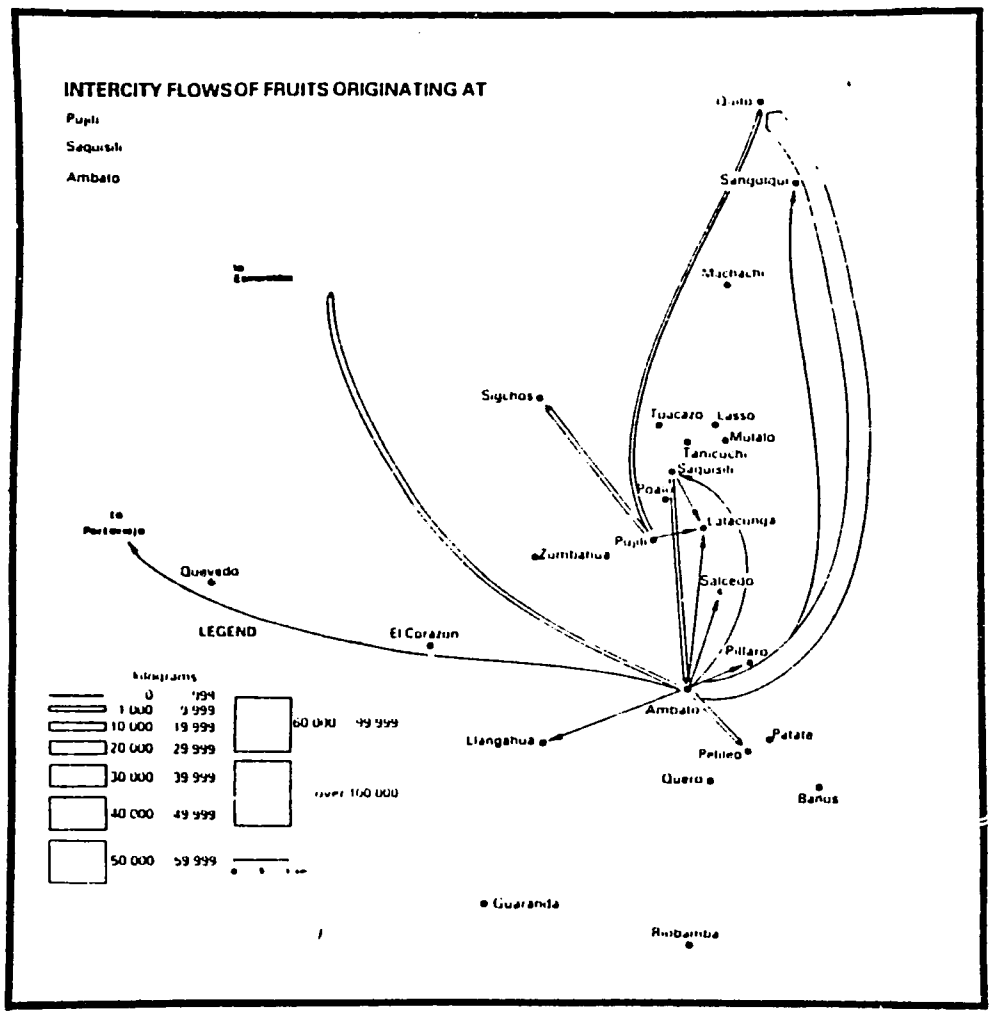


MAP 18

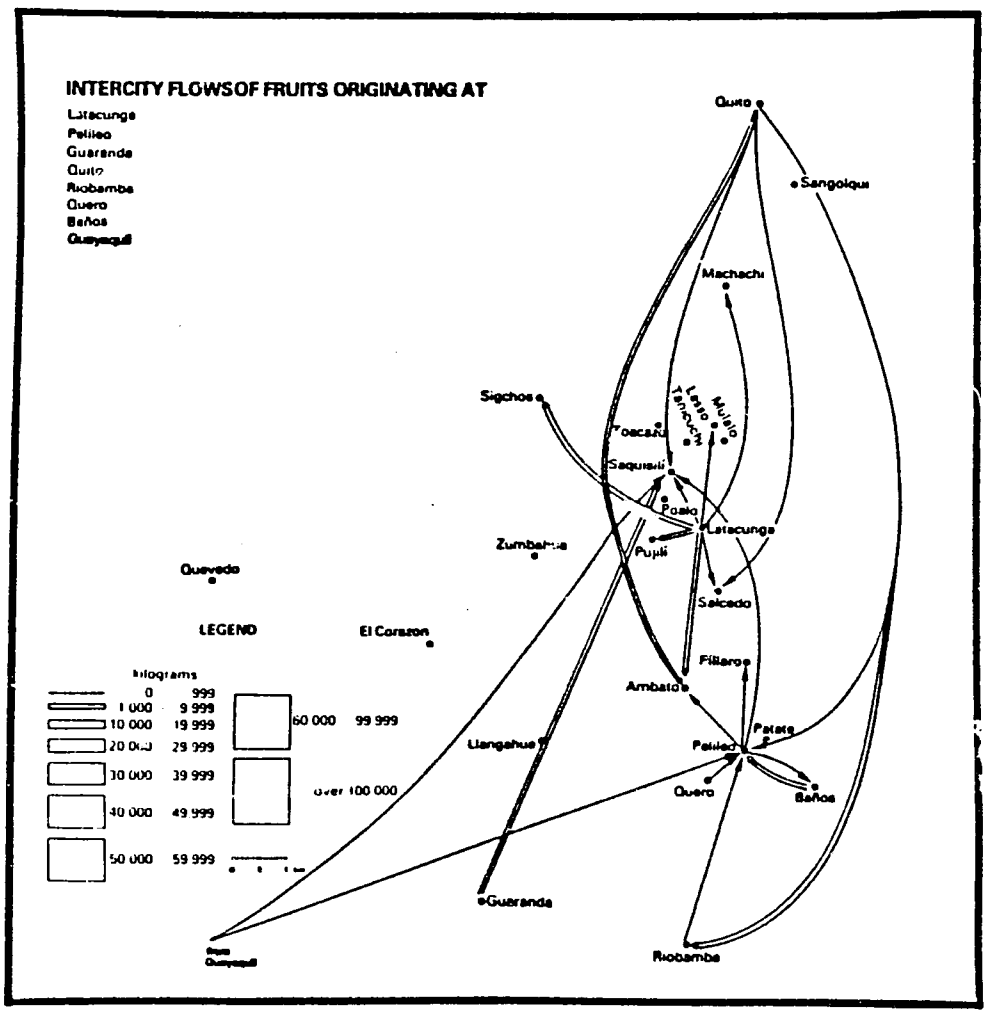


6

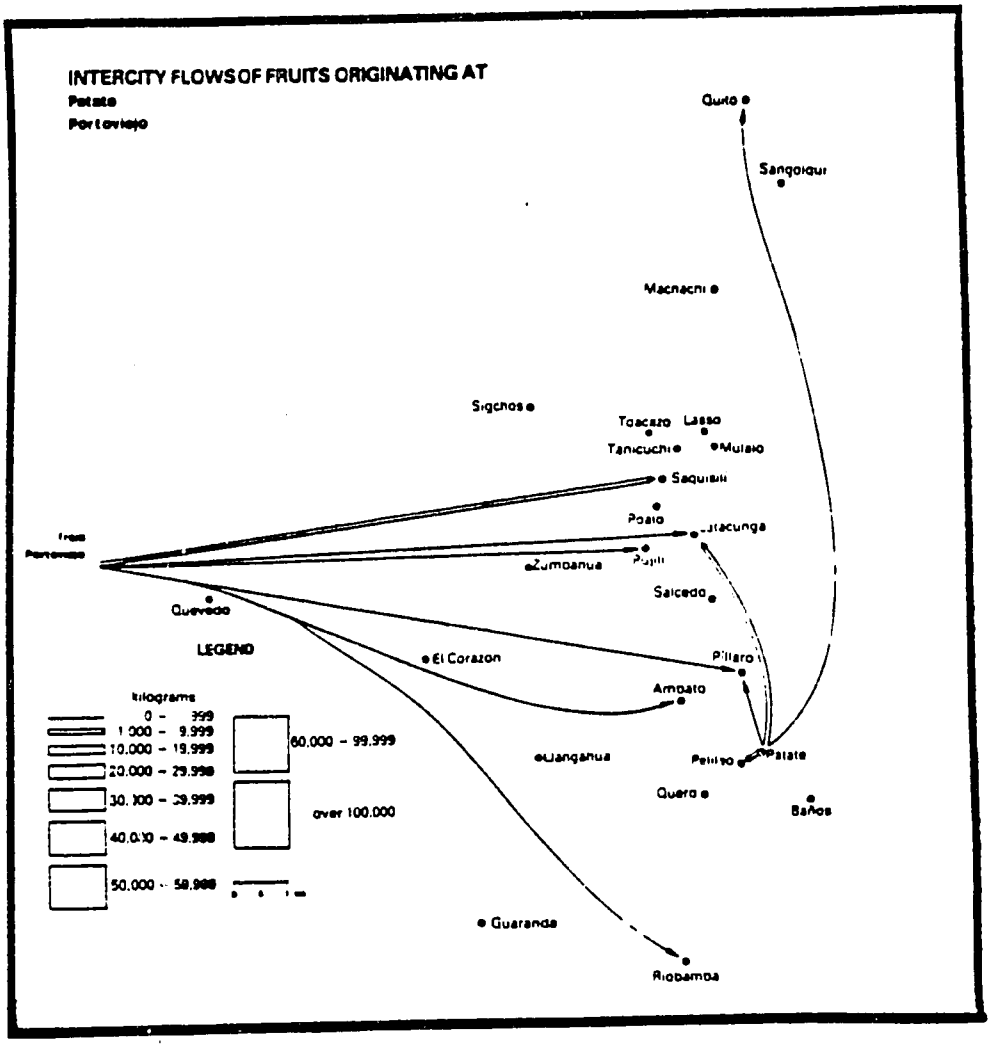
MAP 19


INTERCITY FLOWS OF FRUITS ORIGINATING AT
Pupli
Saquisili
Ambato
Sangolqui
Machachi
Sigchos
Tuacazo
Lasso
Mulalo
Tanicuchi
Saquisili
Poaló
Latacunga
Pupli
Zumbahua
Salcedo
Pillaro
Ambato
Quevedo
LEGEND
El Corazon
Llangahua
Patate
Pelileo
Quero
Baños
Guaranda
Riobamba
kilograms
0 999
1 000 9 999
10 000 19 999
20 000 29 999
30 000 39 999
40 000 49 999
50 000 59 999
60 000 99 999
over 100 000

MAP 20


INTERCITY FLOWS OF FRUITS ORIGINATING AT
Latacunga
Pelileo
Guaranda
Quito
Riobamba
Quero
Baños
Quevedo
Quito
Sangolqui
Machachi
Sigchos
Tuacazo
Lasso
Tanicuchi
Mulalo
Saquisili
Poaló
Latacunga
Zumbahua
Pupli
Salcedo
LEGEND
El Corazon
Pillaro
Ambato
Llangahua
Patate
Pelileo
Quero
Baños
Guaranda
Riobamba
kilograms
0 999
1 000 9 999
10 000 19 999
20 000 29 999
30 000 39 999
40 000 49 999
50 000 59 999
60 000 99 999
over 100 000

MAP 21


INTERCITY FLOWS OF FRUITS ORIGINATING AT
Potato
Portoviejo
Quito
Sangolqui
Machachi
Sigchos
Toacazo
Lasso
Tanicuchi
Mulalo
Saquisili
Pujili
Zumbahua
Salcedo
Quevedo
LEGEND
El Corazon
Pillaro
Ambato
Llanganua
Penipe
Patate
Quero
Baños
Guaranda
Riobamba
kilograms
0 - 999
1.000 - 9.999
10.000 - 19.999
20.000 - 29.999
30.000 - 39.999
40.000 - 49.999
50.000 - 59.999
60.000 - 99.999
over 100.000

Guayaquil, Guaranda and Porto Viejo, and even handles some shipments from Quito.

The category of "general merchandise" is examined separately because it refers to general dry cargo (such as household supplies, utensils and electrical goods). These flows are likely to move down the urban hierarchy, from the metropoli to small villages, given the provenance of this type of merchandise. As can be expected, the importance of places as destinations for consumer goods bears a close relationship to their demographic sizes. A rank ordering of some of the more important places with their daily tonnages is the following: Ambato (47), Quito (33), Latacunga (25), Salcedo (12), Pasa (9), Pujilí (2), and Llangahua (1.7). Pujilí's extraordinarily low tonnage testifies to its increasing dependence upon Latacunga for household purchases. Aside from the dominant role of Ambato in retail trade, the three most important commodity trading centers appear to be Latacunga, Saquisilí and Pelileo.

Conclusions from the Commodity Flow Data

The methodology of rural origin and destination studies by means of traffic cordons appears valuable for analyzing a regional marketing system such as in the Ambato area. It can identify different types and sizes of market towns where public support activities are warranted. In this particular case, the economic dominance of the city of Ambato, both as a transshipment and consumption center, is confirmed. Latacunga, a well located provincial capital, is the next in importance. It is, however, being challenged commercially by Saquisilí, a small town of 3,000 population that is ten times smaller than Latacunga's 30,000. This periodic market center deserves closer

scrutiny to identify the reasons for its prominence and to help its future growth. The lessons might be valuable in promoting rural-urban development elsewhere. Pelileo, a town at the crossroads between a major irrigation project presently under construction and the rapidly developing Amazon, also appears promising as a future economic center.

Three of the formerly more important centers, Pujilí, Salcedo and Píllaro, seem to have been laggard in adjusting to the new transport and economic changes sweeping the region. In addition, several towns in the vicinity of Ambato show promise as centers for cottage industries and as places from which the new integrated rural development projects recently initiated in the region can be effectively served.

V. SYNTHESIS AND INTERPRETATIONS

The Ambato region, which extends over the major portion of two Central Sierra provinces, is already better articulated and more dynamic than most other comparable regions in Ecuador. This is the consequence of the following factors: (a) the strategic economic location of Ambato at a North-South and East-West crossroads; (b) the relative abundance and variety of natural resources which are being developed to satisfy both national and local demand; (c) a relatively good transport network; and (d) the beginning of secondary and tertiary industries, centered in Ambato. While the region is still highly dependent on Quito and Guayaquil for both markets and capital, there is an incipient regional economy which, if properly fostered, could lead to a much more balanced type of growth.

In fact, what emerges from the pilot study is that decentralized, spatially articulated development in this region is not quite as implausible or difficult in a highly centralized country such as Ecuador as originally believed. The study team started with the impression that virtually all the ideas which in other countries have contributed to a pattern of greater regional autonomy would prove to be "counter-cyclical" or would require reversal of observed tendencies - a prospect which would have made this sort of planning extremely difficult, without major shifts in national policies. But, it appears that on a number of fronts there are promising trends in the Ambato area which indicate that decentralized planning could work "with the grain," rather than against it. Some of these trends include the following:

- Very high rates of population growth in some of the key market centers in the region, especially in towns between 1,000 and 10,000 population.

- The persistence and growth in importance of the traditional periodic market system for agricultural commodities.
- The emergence of some decentralized industrial development, not restricted to urban locations.
- The little-noticed development of non-farm labor-intensive cottage industries.
- The expansion of education and health facilities.
- The diversification of earning sources by farm families, which often includes remittances from temporary migrants to semi-skilled urban jobs, without change of residence.
- A willingness by some provincial and municipal officials to look beyond the town limits.

One should not read too much into these observations. In many cases these tentative occurrences are counterbalanced by opposite forces and socioeconomic trends unfavorable to decentralized, equitable development. However, they do indicate hope that proper policies and strategies could reinforce some of these current tendencies.

One central and overriding fact in the region, with both positive and potentially negative consequences, is the increasing importance and dominance of the city of Ambato. In the past decade Ambato has become a truly significant secondary city, gradually filling an important role between the two metropolitan areas and the rural countryside. From the point of view of regional development, this is a healthy trend because the area has acquired a truly dynamic character. It is, however, potentially dangerous because, in the absence of spatial policies, Ambato could grow at the expense of its hinterland, assuming the exploitive role of the capital city and concentrating all the wealth, jobs and facilities in one dominant place, and at the same time

reproducing some of the very same metropolitan problems which plague the larger urban concentration. Hence, it is wise to acknowledge the crucial importance of a spatial strategy which carefully balances Ambato's growth with the development of tertiary urban settlements of various sizes and which assures a harmonious and symbiotic development of the urban and rural portions of this region.

For a future urban-rural strategy, the great dispersion of the rural dwellers in the region is a crucial point to consider. The historically scattered settlement pattern in the Central Sierra is still predominant. In 1982, almost two-thirds of the rural population of 440,000 persons in the two provinces of the region, still lived in dispersed settlements, with very little change having occured in this respect since the last census of 1974. Small towns of 2,000 to 20,000 inhabitants grew by an impressive rate, 62 percent, but they still represent less than 7 percent of the total population. The implications of this situation are the following: (1) the extreme difficulty and high cost of supplying the dispersed rural households with adequate social services and the consequent need to find sensible ways to agglomerate rural dwellers; (2) the expected additional demand for urban and semi-urban housing, water, education, etc. by that portion of the rural population which will gradually move into more nucleated settlements, rather than migrate out of the region; (3) the increased demand for productive inputs and services, especially when the agricultural intensification projects now underway are completed; and (4) the key role of accessible non-farm employment opportunities, as the occupational structure and educational skills diversify.

All of these factors point to the urgent need for a new approach to the development of the region's urban hierarchy. This in turn requires a determination of the future role of the various kinds of existing towns in the

region. The team suggests that future decentralized development in Tungurahua and Cotopaxi may be planned at a minimum of three levels:

1. The basic service center or village center. There are 26 such small towns in the region if the cut-off point in population is 500, and 50 such places if the cut-off point is 200. The future role of these centers is to serve as sites for basic or primary rural services for the surrounding population. Very few of them have periodic markets, but all are important for schools, health, community development, water supply and housing in the social realm and handicrafts, cottage industries, small storage, primary assembly of perishables and retail trade for basic necessities in the economic sphere.

2. The intermediate market center. There are currently 22 towns in the region with populations of 1,000 to 10,000 which potentially fall in this category. Some of these town are close satellites of Ambato, and others such as Baños have either too small a rural hinterland or gravitate toward the western tropical lowlands. The study team has identified 7 to 8 towns in the core region which are currently playing a significant role as focal points for periodic markets and commercial activity. Most of them are also cantonal seats and therefore have a role in offering upgraded administrative services as well.

It is proposed that these intermediate centers should be the prime candidates for municipal/rural development. Two intermediate market centers, Saquisilí and Pelileo, have been identified as particularly dynamic and they should receive high priority for development. They offer possibilities for substantial improvements of the feria system, can offer higher order social and economic services, such as credit extention or input supply, and could also gradually attract more private enterprise for generating employment. In these centers it would make sense to plan for packages of investments which could

mutually reinforce each other so that gradually a critical mass of urban-rural development activity can be reached to make the system self-sustaining. The market flow analysis developed in the body of the report serves as a useful guide to the nature and dispersion of marketing facilities, storage, and agro-industrial and farm service installations which are suitable to each center.

3. Diversified regional centers. These are towns of population sizes between 10,000 and 100,000. Besides Ambato, which is already in this category, Latacunga is the only present candidate. It so happens that both are provincial capitals and hence have the advantage of gradually building up their regional administrative as well as their socio-economic capacity to serve their regions. The study team envisages a more "centrifugal" role for these regional centers than past history represents. In addition to their role as sites for complex market functions, the building up of their industrial and entrepreneurial potential to benefit the region deserves the highest priority.

Marketing Reform

The research confirms the notion, indicated in previous studies, that the marketing system is both inefficient and inequitable. Marketing margins, which seem to greatly exceed costs, are, in a large measure, a function of too many levels of intermediaries, most of whom provide little value added. The lack of credit and storage forces the producers to sell quickly to those who can offer cash. In fact, many of the local revendones (resellers in the same market) provide essentially a source of ready cash, which recirculates at the market in the form of farmer's purchases of farm inputs and household necessities.

The most important point is that, while the large margins and extreme seasonal fluctuations in prices offer a great deal of scope for marketing reform, the issue is not simply the reduction of monopoly/oligopoly or the provision of physical facilities but the putting in place a series of public services, including finance, which makes the existing private system function better.

The spatial analysis of the marketing process indicates that (a) the producer's share of the retail value can be substantially increased and (b) the market towns in the region can greatly augment their retention of the value added in the system. Given the region's crucial role in food production for domestic consumption, there may be little contradiction between marketing efficiency and market decentralization criteria. Retention of farm surplus in and around market towns is likely to be beneficial to urban consumers and also provide enhanced demand for domestic industry. It is the improvement of periodic market systems that in the short-medium run offers the best opportunity for spatially-oriented marketing reform.

The following points summarize the possibilities for <u>feria</u> improvement:

- Selection of those market centers for upgrading which have the best possibility of serving as (a) assembly and transshipment points, (b) storage and processing for perishables, (c) a growing farm demand for consumer items.
- Provision of public and up-to-date price information on main commodities by standard units.
- Control of weights and measures.
- Milling and temporary storage service at reasonable cost for local farmers.

- Low-cost improvements of physical conditions of the plazas (roofing, floors, sanitation, water).
- Permanent storage and warehousing facilities, combined with credit, with some elements of cooperative or farmer participant ownership.
- Upgraded municipal parking lots with appropriate security features.
- Facilities for acquisition of basic food and consumer items at a reasonable cost.
- Availability of health, legal and technical services during market days - if necessary on a mobile basis.
- Municipally-sponsored buildings (casas de campesinos) to provide low-cost sleeping, bathing, and short-term storage facilities to campesino families who come to the market.

With the exception of providing physical space and collecting fees, it is remarkable how little attention Ecuadorian municipalities have paid to the periodic market system, which in the case of most of the small towns is the lifeblood of their economic existence. There ought to be an institutional formula by which improved markets could be administered by a board on which the municipality, the ministry of agriculture, the traders, and the farmer organizations could be represented. Most probably, such an operation should be run by a paid professional manager, selected by and responsible to the board.

Employment Creation

After marketing reform, the second most important area for the strengthening of rural-urban linkages is non-agricultural employment creation, centered around the small and intermediate population centers. Employment in the study area is becoming more diversified, especially in and around the city

of Ambato but also in other smaller centers. Nevertheless, there is a virtual absence of policies and programs which aim at the spatial decentralization of productive enterprises and the increased generation of small-town employment.

Non-farm employment may take a number of forms including: (a) small manufacturing, including agro-industry; (b) construction; (c) service enterprises; (d) handicrafts; (e) home-based cottage industry.

It is notable that over one-sixth of the industrial establishments in the region are located outside the city of Ambato. In interviews with industrial entrepreneurs, the reasons for rural location were associated with the low costs of land and labor, clean and abundant water supply, and access to raw materials. Transportation, power access, and service facilities, which often condition industrial locations, do not seem to impede decentralization to most of the area's market towns which are within a two-hour bus or truck ride from Ambato.

While the region seems to have benefited from the spatial spill-over effect caused by growing diseconomies of industrial locations in Quito, small industry programs have not, so far, used spatial criteria for site selection. Some large municipalities have established industrial parks (not always well located or equipped), but municipal planning has given scant attention to attracting private enterprise to their areas. Relevant successful examples exist from other countries. Opportunities for more aggressive private enterprise abound:

(a) Because of the heavily traveled Panamerican Highway, municipal initiative could help to establish more outlets for locally produced goods at the wholesale/retail level in such products as leather goods, shoes, textile articles, native handicrafts, or food products;

(b) The development of agro-industry in and around market towns offers many possibilities, especially once the major horticultural programs based on irrigation are well under way. The demand for processed and semi-processed fruits, juices, and vegetables as well as dairy and poultry products is growing rapidly;

(c) Considerable skills for handicraft production (weaving, pottery, wood carving, furniture) exist in the area with virtually no concerted effort at market development, quality upgrading, financial organization, or training;

(d) The tourism and recreational industries in the region have excellent potential and could be very important. There is an excellent climate, exceptional scenery, thermal waters, and parks for sporting activity. A number of second (summer) homes for Guayaquil families have already been built;

(e) There is a remarkable and almost unnoticed, spread of home or cottage industry in a number of towns, especially in the smaller rural centers for the manufature of shoes, skirts, blue-jeans, and other low-cost textile articles. This process has provided additional income for hundreds of rural families, especially among local women. A more systematic promotional effort, combined with measures to upgrade quality, provide financing, and even attempt cooperative organization among producers, could multiply these jobs where they are needed most;

(f) The building and construction sector is completely underdeveloped. Most contracts go to large and middle-sized firms located in the metropolitan areas, which then subcontract to smaller firms as

needed. Often raw materials and skilled workers are imported into the region from elsewhere.

In general, a small enterprise program must pay increased attention to supplying the growing regional market in the Central Sierra. It appears that virtually everything which is sold in the ferias in the way of consumer products comes from elsewhere. While most of the more modern industrial plants generate very little direct employment, the multiplier effect in such areas as beverages, leather, milling, and metal mechanical firms may prove to be very high, especially in Ambato and Latacunga. Therefore, while the stress should initially be on semi-skilled enterprises, the region lends itself to small-medium sized technologically modern establishments which provide opportunities to more highly skilled workers in the core industries.

The Issue of Service Delivery

Based on the available data, it appears that, while the sectoral distribution of services is not spatially planned, the service coverage of the region in the social fields, especially health and education, but also potable water supply and communication, is either adequate or rapidly improving. Exceptions are the more remote communities and the areas with strong indigenous populations which are poorly served. In the smaller communities, sewage facilities are completely lacking. This does not mean that the actual delivery of services and their quality are uniformly good, but that a physical network of schools and health facilities will soon be in place, especially when the various internationally financed programs are completed. This is not so in the field of economically more relevant services, especially agricultural extension, farm credit, input supply, and, of course, marketing.

The major immediate improvement in the effectiveness of rural services can be realized through a link with the periodic market system with which service availability and development should be synchronized.

Institutional Issues

The prevailing institutional situation is generally unfavorable to decentralized regional development and the strengthening of urban-rural linkages.

In the Central Sierra no regional development corporation or other similar sub-national organization exists. The scope of activity of the two provincial councils covering the region is very limited and mostly involves infrastructure construction supplementing the role of national agencies. There is an absolute divorce between rural development and municipal efforts. In fact, rural development staffs appear to view the market towns as adversaries rather than potential allies in their program to help campesinos. Most municipalities, on the other hand, have little interest in helping or servicing the rural portions of their constituencies. Farmer representation on municipal councils is rare and on provincial councils non-existent.

The fiscal and managerial incapacity of the smaller and medium-sized municipios in Ecuador is well documented. What is less well perceived is that the vast majority of municipal concerns remain in the field of traditional urban infrastructure, housing, water, transport, electricity, etc. and do not extend into the economically productive and employment-creative activities.

The national sectoral agencies are highly centralized and their work at the regional level is uncoordinated among each other and unintegrated into the local government structure. The one exception is SEDRI (the Integrated Rural

Development Secretariat), which represents an interesting institutional innovation. SEDRI works through area-based multi-faceted projects and at the national level is tied directly to the President's office.

However, SEDRI's activities are organized around specific ad-hoc projects financed largely by international agencies. While potentially serving as a possible model for an area coordinating body, however, SEDRI is often considered as just another of the many national agencies operating in the area. Moreover, as mentioned earlier, SEDRI completely by-passes the urban hierarchy. This view of town-farm antagonism is based on well documented historic mistreatment and exploitation of Sierra peasants by urban-based merchants, landlords and bureaucrats. There is no question that SEDRI's basic strategy for strengthening campesino organization and collective power is a correct approach. Nevertheless, it may be an error to focus this emergent organization on the national scene away from the market towns or local governments. 5/ For example, SEDRI's idea of marketing improvement was until recently to sell directly at the Quito and Guayaquil level, by-passing the periodic market centers.

The hypothesis developed by the study team is that there is now a considerable overlap and coincidence of interests between small farmer families and the dwellers of small towns, and that it is advantageous for both to work toward alliances, especially in economic matters. This would imply stronger participation by emergent campesino organizations in municipal affairs in

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5/ Frank Young, a rural sociologist, has suggested that rural organizations which are capable of strengthening peasant power are not determined by a territorial base. However, the existing settlement pattern may facilitate the emergence of such organizations. Commentary to "Rural Settlement Patterns and Social Change in Latin America" by Marshall Wolfe. Latin American Research Review, Vol. I. No. 2, 1966, pp. 57-58.

recognition of the crucial role the towns can play in upgrading living conditions in the countryside.

The study indicated that the Ambato region is a prime candidate for an investment/action program that could be called "market town development" or "urban-rural municipal development". Such a program can take different forms and could be carried out under a number of institutional arrangements, but, whatever the form, its focus should be the systematic and selective improvement of the small and intermediate urban network in the region to create stronger territorial centers for marketing, employment generation and services, as well as to build up the more traditional urban infrastructure facilities.

The importance of new institution-building cannot be overemphasized. There is a real dilemma between well targeted single-sector approaches and some form of a multisectoral institutional approach. It is tempting to believe that the various portions of the suggested rural-urban strategy could be carried out separately and at different times by the various existing specialized institutions, i.e., marketing by the Ministry of Agriculture, infrastructure by revitalized municipalities, and industry by FOPINAR (small industry fund). But it is unlikely in the Ecuadorian setting that such an approach would be realistic. Either a new organization has to be created or an existing one must be adapted and expanded to serve as a responsible institution for decentralized multisectoral local development.

The reasons for this judgement are the following: First of all, the experience of similar programs for decentralized, multisectoral investments in other countries, such as Brazil, Guatemala or Panama, indicates that it is necessary to have an umbrella organization to administer and coordinate such a program in which the various components are supposed to have a joint or "synergistic" effect. This could be done through a development bank, a

municipal development institute, or a regional or state planning body having effective coordination powers which can assume overall accountability. Second, the novel or experimental nature of such a program, the lack of field data, scarce managerial experience, and little opportunity for standardization call for some sort of a central office with sufficient power to assume the role of continuous planning, monitoring, evaluating and periodic re-planning so that feedback and flexibility are maintained. And thirdly, such a program would require a significant change in the usual sectoral mentality, design criteria and evaluation methods, especially in stressing locational factors, linkage effects and spatial income distribution issues. In sum, market town planning seems to require a shift in the way specialists think about development and in the customary way of doing things. This is the most powerful argument for creating some permanent central institution which can guide and stimulate the sectoral agencies toward the new approach suggested by the Ecuadorian study.

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This study has shown the crucially important role that small and intermediate towns play in the agricultural marketing and distribution system in rural regions and indicates ways by which strategically located settlements could foster broad-based regional development. By promoting decentralized marketing reform, creating employment in and around market towns and by providing an effective service network, a more equitable and widespread growth and population distribution could be achieved.