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THE MARKET FOR AGRICULTURAL LAND IN EL SALVADOR

HAMMIG MARCH 1986

INTRODUCTION

The purpose of this report is to present information pertaining to the Salvadoran land market as it appears upon entering the 1986/87 crop year. Data cited here were gathered from a survey of current land owners, from banks holding unpaid mortgages on agricultural lands, and from government agencies involved in the agrarian reform program. Bank and government agency information is used primarily to amplify information obtained by the survey by detailing the extent to which these entities are involved on the supply side of the land market.

A complete analysis of the market would include reliable data on the market's demand side to ascertain the willingness and ability to pay of potential purchasers. However, demand side data are quite difficult to obtain. There is no central registry of recent land transactions, so gathering information on recent sales would require a considerable expenditure of time and effort. If such information were available it would be of some help toward a better understanding of market conditions in the recent past, but it would offer little insight into the land market in the future; especially if a fundamental institutional change in market structure takes place. Given the resources and time

available, and with the demand side caveat, it was concluded that a thorough investigation of the potential availability of agricultural lands would provide an adequate basis for important inferences of market conditions that could be expected to prevail under alternative institutional environments.

This report will concentrate primarily on land available from private owners. To acquire these data a survey instrument was designed and pretested in November 1985 (Appendix 2). The survey was then completed by PERA personnel during January-March 1986. The survey sample was taken from a list of landowners maintained by the Salvadoran Instituto Geográfico Nacional, and it was last updated in 1983. The sample was stratified according to size of property holding and by region within El Salvador. Four size strata were used: 100-245 hectares, 245-300 hectares, 300-400 hectares, and 400-500 hectares. Since the first strata had by far the greatest proportion of landowners, a random sample of about 25 percent was drawn to be surveyed. The total populations of the other three strata were included in the total sample. Surveys were completed by personal interviews with the landowners.

QUANTITY OF LAND FOR SALE

The total area of land included in the survey sample accounts for approximately 11 percent of all agricultural lands

in El Salvador (Table 1).^{1/} However, the availability for sale cannot be determined for nearly half of these lands. The remainder is nearly evenly divided between lands for sale (24.8%) and lands not for sale (26.3%). Regionally, the breakdown is somewhat more revealing. In region I relatively little land is currently for sale (9.4%) as compared to land not for sale (29.1%). By contrast, the proportion of land for sale in region III is relatively large; 38.8% versus 22.4% not for sale. In regions 2 and 4 the proportions for sale and not for sale are about equally divided. If the lands in the inconclusive category fit those where information is clear, it can be inferred that about half the agricultural land in El Salvador could be for sale.

The amount of land that could be appropriated under Phase 2 of the agrarian reform program can be calculated from the IGN data used to design this survey (see Table 8 and Appendix Table 1). A total of 112,088.4 Ha. of land are owned by 389 individuals, each of whom owns 245 ha or more. If each were to claim the 245 ha exemption from Phase 2 reforms, a total of 16,783.4 ha (24,000 Mz.) would be susceptible to expropriation. These lands are very likely to be currently on the market. More detailed information later in this report will reveal that somewhat more than 16,783 ha are currently for sale by landowners in the 245 ha and up categories.

^{1/} Calculated by first calculating the proportion of total land for sale that can be cultivated or used for pastures (91%) and applying that percentage to the total amount of land in the sample. The total amount of land utilized for agricultural purposes in 1985 was given by MAG as 1,806,385 Mz.

TABLE I QUANTITY OF LAND FOR SALE

Region *	Total area in sample	Area for sale (% of total)	Are not for sale (% of total)	Area inconclusive (% of total) **
I	38,918.5	3,669.6 (9.4)	11,311.0 (29.1)	23,937.9 (59.5)
II	107,218.7	26,951.7 (25.1)	25,881.2 (24.1)	54,385.8 (50.7)
III	26,834.9	10,415.0 (38.8)	6,012.1 (22.4)	10,407.8 (38.8)
IV	54,204.9	15,228.5 (28.1)	16,593.0 (30.6)	22,383.4 (41.3)
TOTAL	227,177.0	56,264.8 (24.8)	59,797.3 (26.3)	111,114.9 (48.9)

* Region I: Ahuachapan, Santa Ana, Sonsonate
 Region II: Chalatenango, La Libertad, San Salvador, Cuscatlan
 Region III: La Paz, Cabañas, San Vicente
 Region IV: San Miguel, Morazán, Usulután, La Unión

**Inconclusive because land ownership has changed from IGN list (previously sold, listed owner dead, etc), the owner was not found for interview, the land is in a conflict zone, the landowner refused to give information, or other reasons.

VALUE OF LAND FOR SALE

An accurate market price for agricultural land is difficult to predict because the data available pertain solely to the seller side of the market. Furthermore, the "all else equal" level of economic forecasting is particularly dubious in El Salvador's uncertain economic and political environment. Given these caveats, some information is available to give at least a starting point from which to estimate a market price.

In the PERA survey owners were asked to give an estimate of their land's value. An alternative perspective is available from ISTA's list of properties offered for sale. Survey and ISTA price estimates are given in Table 2.

TABLE 2. ESTIMATED PRICES FOR AGRICULTURAL LAND*

Source Location	ISTA	PERA Survey
	C/Ha	
Region I	7782 (5363)	8618 (4727)
Region II and III	4487 (3513)	5986 (4083)
		5581 (2537)
Region IV	2911 (2345)	4389 (1948)
National Average	4213 (3203)	5650 (3261)

*Numbers in parentheses are standard deviations.

Prices estimated from the ISTA list are averages for each region of sale prices dated from 1978 to 1985. Each estimate was obtained by weighting the offer price by the area of land offered and inflating to 1985 values by a wholesale price index. 2/ For each average price the sample size is relatively small (11 each for regions I and II-III, and 17 in region IV). Regional average prices calculated from the survey are derived from landowners' perceptions of their land's value. Thus, these averages are likely to be biased upward. This upward bias is apparent since the survey averages are uniformly higher than ISTA averages.

The variability of land values is understated in Table 2. Standard deviations of survey estimates reflect variability of substrata averages. As such they do not represent the true variance of individual prices. It is clear that land values should be highly variable considering the myriad factors involved in agricultural production. Location, soil fertility, topography, and capital improvements to the land all contribute to its value. In a situation such as El Salvador, where the factors that determine value are highly variable from site to site, land value variance should be expected to be quite high.

2/ Banco Central de Reserva de El Salvador. Revista, Departamento de Investigaciones Ecorómicas, Julio-Agosto-Septiembre 1985.

Thus, the PERA survey price estimates in Table 2 should be interpreted as seller. Offer prices and standard deviations should be considered as minimum expected price variation. 3/

OWNERSHIP STATUS

The current ownership status of lands for sale is given in Table 3. For the nation as a whole, over half the land for sale has no current mortgage. Regionally there is relatively little difference in the ownership pattern in different parts of the country. The highest proportion of full ownership is in Region I, where 66 percent of the land is free of any mortgage. Region II has the lowest proportion of full ownership, but even there nearly half of the land is not under mortgage.

Compared to the value of land, a very small percentage is financed. Only 25 percent of the total value of mortgaged lands is financed. Including the value of fully owned land, only about 13 percent of lands currently for sale are encumbered by existing financial requirements.

3/ As a rule of thumb, the standard deviation can be interpreted to imply that two-thirds of the time individual prices will fall within the range of the given average plus or minus one standard deviation.

TABLE 3. OWNERSHIP OF LANDS FOR SALE

Location	Lands with current Mortgage			Lands with no Mortgage		Unkonwn Area
	Area (Mz)	Total Value (Million C)	Amount of Mortgage (Million C)	Area (Mz)	Total Value (Million C)	
Region I	1096.0	4.79	4.38	2417.0	15.05	156.6
Region II	12045.0	52.54	10.55	13008.7	51.56	1898.0
Region III	4074	16.61	4.66	6241.0	15.04	100.0
Region IV	6362	30.71	6.57	8796.5	21.58	70.0
Total	23577.0	104.65	26.16	30463.2	103.23	2224.6

Survey results indicate that within the next 5 years another 2000 Mz. will be offered for sale, in addition to land currently on the market. Less than 3 percent of the value of these additional lands is currently financed.

LAND USE

Landowners in the survey were asked to report the agricultural use of their lands in 1985/86 and to give similar information for the year in which the land was most intensely cultivated. A summary of these responses is given in Table 4. From this table, some notion of the agricultural potential of lands currently for sale becomes clear.

As would be expected, there is relatively little difference in area for perennial crops; however, the 1985/86 areas used for annual crops is little more than one-third the historical potential for these crops. Similarly, potential pasture land is nearly four times the area used for pasture in 1985/86. In 1985/86 over 22,000 Mz were not cultivated, while only 1,800 Mz were traditionally not cultivated. The shift of these unused lands into agricultural production would compensate for most of the lost potential in 1985/86. Only Region I has maintained a relatively consistent land use pattern. In Region II over half the land was not cultivated in 1985/86 as compared to only 4.9 percent when the land was in full use. Conclusions about region III are unclear because

TABLE 4. AGRICULTURAL LAND USE

Location	Land Use in 1985/86						Land use in most intensive year					
	Annual Crops	Perennial Crops	Pasture	Not Cultivated	Rented	Unknown	Annual Crops	Perennial Crops	Pasture	Not Cultivated	Rented	Unknown
Region I	827.0 (22.5) *	600.0 (16.4)	1068.0 (29.1)	837.6 (22.8)	-	337.0 (9.2)	1042.0 (28.4)	600.0 (16.4)	1437.0 (39.2)	-	-	590.6 (16.1)
Region II	1807.0 (6.7)	3434.0 (12.7)	1811.5 (6.7)	14,687.0 (54.5)	1361.4 (5.1)	3850.8 (14.3)	4894.5 (18.2)	4857.0 (18.0)	9751.5 (36.2)	1318.0 (4.9)	2125.4 (7.9)	4005.3 (14.9)
Region III	682.0 (6.5)	255.0 (2.4)	1259.0 (12.1)	1186.0 (11.4)	145.0 (1.4)	6888.0 (66.1)	2787.0 (26.8)	170.0 (1.6)	6531.0 (62.7)	50.0 (.5)	350.0 (3.4)	527.0 (5.1)
Region IV	778.0 (5.1)	390.0 (2.6)	2683.0 (17.6)	5322.5 (35.0)	4755.0 (31.2)	1,300.0 (8.5)	2518.0 (16.5)	635.0 (4.2)	7178.0 (47.1)	432.0 (2.8)	984.0 (6.5)	3481.5 (22.9)
TOTAL	4,094.0 (7.3)	4,679.0 (8.3)	6,821.5 (12.1)	22,033.1 (39.2)	6,261.4 (11.1)	12,375.8 (22.0)	11,241.5 (20.0)	6,262.0 (11.1)	24,897.5 (44.3)	1,800.0 (3.2)	3,459.4 (6.1)	8,604.4 (15.3)

*Percentage of regional totals is given in parentheses

1985/86 information is missing for a large proportion of lands in that area; presumably these would fall predominantly in the uncultivated category. Region IV has a large proportion that is uncultivated and a relatively large proportion of rented land for which enterprise use is unknown.

It is clear that El Salvador's agricultural output could be increased substantially by increasing the quantity of land in production. It is also clear that there exists a large quantity of land for sale that has historically been used for agricultural purposes.

QUALITY OF LAND

The PERA survey was designed to elicit information on the quality of land as well as its availability. Three non-political factors affecting land quality are summarized in Table 5: topography; distance to the nearest asphalt road; and capital improvements, represented by area under irrigation.

Nearly 30 percent of lands for sale are predominantly level areas while nearly 14 percent are on steep hillsides. The remainder are moderately sloped or of mixed topography. More than 10 percent of the lands for sale in region I are irrigated while for the nation about 6 percent have irrigation.

Distance from the location of production to the nearest market is a well known factor affecting land quality.

TABLE 5. FACTORS AFFECTING LAND QUALITY *

Location	Region I	Region II	Region III Mz	Region IV	TOTAL
Topography:					
Level	1,177.5 (32.1)	6,290.4 (23.3)	5,323.0 (51.1)	3,523.0 (23.1)	16,313.9 (29.0)
Moderately sloped	1,429.5 (39.0)	6,359.5 (23.6)	4,209.0 (40.4)	8,194.5 (53.8)	20,192.5 (35.9)
Hillside only mixed	962.6 (26.2)	4,733.0 (17.6)	583.0 (5.6)	1,445.0 (9.5)	7,723.6 (13.7)
Irrigation:					
Area Irrigated	100.0 (2.7)	9,568.8 (35.5)	300.0 (2.9)	2,066.0 (13.6)	12,034.8 (21.4)
Area not irrigated	415.0 (11.3)	1,202.0 (4.5)	616.0 (5.9)	1,217.0 (8.0)	3,450.0 (6.1)
Distance to paved roads:					
< 1 Km	3,254.6 (88.7)	25,749.7 (95.5)	9799.0 (94.1)	1,217.0 (8.0)	3,450.0 (6.1)
1-1.9 Km	943.0 (25.7)	6,124.0 (22.7)	1,643.0 (15.8)	1,123.0 (7.4)	9,833.0 (17.5)
2-4.9 Km	115.0 (3.1)	1,696.8 (6.3)	822.0 (7.9)	605.0 (4.0)	3,238.8 (5.8)
5-9.9 Km	880.0 (24.0)	3,048.4 (11.3)	3,659.0 (35.1)	2,910.5 (19.1)	10,497.9 (18.7)
> 9.9 Km	1170.0 (31.9)	6,766.5 (25.1)	1,816.0 (17.4)	3,451.0 (22.7)	13,203.5 (23.5)
	561.6 (15.3)	9,316.0 (34.6)	2,475.0 (23.8)	7,139.0 (46.9)	19,491.6 (34.6)

* Regional percentages are in parentheses.

For the total sample of land for sale, over 50 percent is located more than 5 Km. from the nearest paved road, and almost 35 percent is over 10 Km. However, there are significant differences among regions. In regions I and III the majority of lands are within 5 Km. of a paved road. In region IV almost half are beyond 10 Km.

On balance the land quality factors imply that the highest land values are in region I where most land is of reasonable topography, near a paved road, and the highest proportion of irrigated lands is found. Region III also scores favorably by this system since little land is severely sloped; the incidence of irrigation is about the national average and most lands are within 5 Km. of a paved road. Quality characteristics of regions II and IV are not consistent by these standards.

POLITICAL ACTIVITIES AFFECTING LAND VALUE

The political situation in El Salvador will also be an important factor affecting the agricultural land market. Though less than 5 percent of the individuals in the sample were not interviewed because they reside in conflict areas, the impact of potential military activity will have a significant bearing on land purchases. Therefore, lands in the sample were classified according to the incidence of political disturbances. This information is summarized in Table 6. The

TABLE 6. POLITICAL CLASSIFICATION OF AGRICULTURAL LAND *

	Class:			
	I	II	III	IV
Region I	2,177.0 (59.3)	821.6 (22.4)	671.0 (18.3)	-
Region II	4,391.5 (16.3)	3,774.0 (14.0)	7,141.2 (26.5)	11,645.0 (43.2)
Region III	583.0 (5.6)	1,050.0 (10.0)	1,072.0 (10.3)	7,710.0 (74.0)
Region IV	1,353.0 (8.9)	7,131.0 (46.8)	3,730.5 (24.5)	3,014.0 (19.8)
Total	8,504.5 (15.1)	12,776.6 (22.7)	12,614.7 (22.4)	22,369.0 (39.8)

Regional percentages are given in parentheses.

classification system is as follows: class I implies no problem with military activities; class II implies infrequent military disruptions; class III implies frequent military activity; and class IV implies that lands are unusable for agriculture because of the conflict.

Again region I shows the greatest potential for agricultural enterprises. No land in region I is completely unusable because of the conflict, and only 18 percent is affected with significant frequency. For the nation as a whole, over half of lands currently for sale are in classes III and IV, while only 15 percent is considered unaffected by political activities. Lands in regions IV are about equally divided between moderate and frequent military actions while lands for sale in regions II and III are predominantly in areas of significant conflict.

The impact of political and military activities clearly affects the risk involved with undertaking agricultural projects, especially when investments amortized over long periods are involved. Land is the major fixed factor used in agriculture, so the institutional environment will have an important impact on land use decisions.

OWNER FINANCING

A major source of financing for the transfer of agricultural lands could be the landowner himself. The proportion of lands currently for sale whose owners would finance sales is given in Table 7. Nationally, more than 20 percent of agricultural land for sale could be financed by the seller. In regions I and II nearly 30 percent has potential owner financing, while about half that proportion is available in Region IV.

The period for which owners would finance land sales and the interest rates they would require are also given in Table 7. Most owner financed sales would involve a financing period of less than 10 years. Interest rates would be 10 percent or higher for most transactions. Cash is the preferred form of payment for most sellers, though a significant proportion would also accept bonds. ^{4/}

^{4/} Presumably the selling price would be adjusted according to actual bond values. This may be one factor contributing to the rather high declared land values in Region I (see Table 2), where nearly 20 percent of the sellers said they would accept bonds.

TABLE 7. POTENTIAL OWNER FINANCING *

	Owner will finance	<u>Finance Period</u>			<u>Acceptable form of payment</u>			<u>Interest Rate</u>		
		1-5 y B	5-9 y B	9 y B	Cash	Bonds	5%	5-9%	9%	
MZ										
Region I	998.0 (27.2)	204.0 (5.6)	444.0 (12.1)	350.0 (9.5)	334.0 (9.1)	664.0 (18.1)	-	-	-	998.0 (27.2)
Region II	7,812.9 (29.0)	845.0 (3.1)	6607.6 (24.5)	360.3 (1.3)	4,756.8 (17.6)	3,056.1 (11.3)	147.0 (.5)	1488.1 (5.5)	-	6,177.8 (22.9)
Region III	2,151.0 (20.7)	220.0 (2.1)	1931.0 (18.5)	-	1,617.0 (15.5)	534.0 (5.1)	-	-	-	2,151.0 (20.7)
Region IV	2,115.3 (13.9)	465.0 (3.1)	852.8 (5.6)	797.5 (5.2)	1,257.0 (8.3)	858.3 (5.6)	87.5 (.6)	210.0 (1.4)	-	1,817.8 (11.9)
Total	13,077.2 (23.2)	1,734.0 (3.1)	9,835.4 (17.5)	1,507.8 (2.7)	7,964.8 (14.2)	5,112.4 (9.1)	234.5 (.4)	1,698.1 (3.0)	-	11,144.6 (19.8)

* Regional percentages are given in parentheses.

LAND AVAILABILITY BY SIZE OF HOLDING

The survey sample was stratified to obtain information on land ownership by size of area owned as well as location. Total land holdings by size category and the proportion of those lands that are currently for sale are given in Table 8. By far the largest proportion of agricultural land falls in the smallest category of land holding, 100-245 ha. Remaining lands are approximately evenly divided among the other three size categories.

It would be expected that landowners holding more than 245 ha. would be most likely to have lands currently for sale, and it is apparent from this study that a significant proportion of these lands are on the market. Previously it was estimated that about 24,000 Mz are in danger of expropriation under Phase II of the agrarian reform. From Table 8 the amount of land for sale by owners of properties of 245 ha. and greater can be calculated. Multiplying total lands in these categories by the percentages for sale gives 39,962.0 mz. that are currently on the market. In comparison to the total amount of land for sale, this is not strikingly larger than the amount subject to expropriation. For the country as a whole, the percentages of lands in each size group that are for sale are approximately equal, in the range of 20 to 30 percent. By region the percentages of lands for sale are highest in Region III for all size categories and they are lowest in Region I for

TABLE 8. LAND HOLDINGS AND LANDS FOR SALE BY SIZE CATEGORY AND BY REGION

Region	TOTAL LAND					LAND FOR SALE (% OF TOTAL)				
	I	II	III	IV	Total	I	II	III	IV	Total
Mz										
Size of land holding:										
100-245 Ha *	46,954.4	125,699.2	32,604.0	78,006.4	283,264.0	9.7	24.8	32.3	24.3	23.0
245-300 Ha	9,041.9	25,616.3	6,581.9	12,654.5	57,640.3	2.5	27.9	41.3	29.6	24.0
300-400 Ha	10,678.6	29,189.0	6,585.0	13,476.2	59,928.8	19.5	18.0	38.7	26.7	22.5
400-500 Ha	7,459.1	21,168.6	5,517.0	8,572.6	42,717.3	2.9	32.0	45.5	36.6	29.6

* Sample values are expanded by a factor of four to give estimates of total values for the 100-2. Ha stratum.

all but the 300-400 ha group. Regions II and IV are about the same in terms of proportion of lands for sale by size group. Apparently the size of holding is not a significant factor affecting the availability of agricultural lands at this time.

AGRICULTURAL LANDS HELD BY BANKS 5/

Banks holding unpaid mortgages are potentially important sources of lands for agricultural purposes. Information obtained from banks was sketchy but an appreciation for the amounts of lands potentially available through banks can be derived. Area of lands with mortgages that are unlikely to be paid, by region and by bank, is given in Table 9. Comparing amounts of land for sale from Table I to unpaid bank mortgages in Table 9 reveals that banks hold what potentially constitutes a significant proportion of the total land market in the form of unpaid liens on property.'

It is also important to note that the information in Table 9 represents only a part of total bank involvement in agricultural land. Though the Banco Hipotecario is the most important agricultural land bank, several other banks not represented here are involved in the land market on a smaller scale.

5/ Information on lands held by banks holding mortgages on individual land holdings (i.e not cooperatives) is likely to be double counted with information from the PERA survey. Thus, lands referred to in this section should not necessarily be considered as additional to those discussed in previous sections of this report.

TABLE 9. AREA OF UNPAID MORTGAGED LAND, BY BANK AND BY REGION

	Banco Hipotecario	Banco de Fomento Agropecuario *	Banco Cuscatlán	Banco de Comercio
	Mz			
Region I	3,460.3	2,674.7	111.5	550.6
Region II	5,539.7	3,444.9	351.8	125.8
Region III	6,377.9	1,299.6	215.9	310.3
Region IV	9,417.3	2,150.9	141.6	-
Total	24,795.2	9,570.1	820.8	986.7

* These are all cooperatives. Information from BFA on individual land holdings was not available at the time of this writing.

CONCLUSIONS AND RECOMMENDATIONS

The foregoing implies that there is a large quantity of agricultural land available to be sold in El Salvador. Extrapolating according to the percentages of individuals interviewed in each size group and region to a population total, it could be inferred that about 25 percent of agricultural land held by individuals with more than 100 ha is available for sale. This percentage should be considered as a minimum figure since a large proportion of those interviewed could not give definitive information on land availability. Clearly, some part of those could be included in the market. Furthermore, nothing is said here about land holdings smaller than 100 ha (though many in the survey claimed ownership of smaller parcels). It is likely that the results given here would generally pertain also to these smaller holdings.

The current status of land financing also offers some important insights into the current land market. Less than half the total area of lands for sale represented in the sample and little more than half the total value of those lands is currently under financial obligation. Thus, there exists a large amount of asset value that is potentially financiable. A financial institution willing to confront the political, economic and biological risks involved with Salvadoran agriculture should be able to acquire a large clientele with little difficulty.

Estimates of land value are imprecise at best. Values given in Table 2 are inflated for several reasons; mainly that they represent seller offers. A viable financial institution should base land financing on potential cash flow rather than estimated asset value. Asset markets, particularly in El Salvador, are likely to be highly volatile, and they do not necessarily reflect potential ability of the agricultural enterprise using the asset (land) to repay debt. Cash flow financing based on reasonable estimates of costs of production and expected performance of commodity markets is much more likely to lead to satisfactory debt service.

From Table 4 it is clear that there is a large potential for growth in agricultural production. Limits to that growth are most apparent from Table 6. The military conflict is a particularly important variable affecting Salvadoran agriculture. However, even with the political impediments to efficient market activity, the survey results indicate that a large land market exists in areas where the political conflict is relatively nondisruptive.

Much additional information could be derived from the data obtained from the PERA survey. A better appreciation for the variability of agricultural enterprises within the sample could be achieved through a more detailed analysis. The type of information presented in this report could be obtained for

various enterprise types, and other more detailed aspects of the market could be made much more clear. A computer analysis of these data could be designed and carried out with little difficulty and the information to be derived could be very revealing.

APPENDIX I SAMPLE DESIGN AND SURVEY RESULTS.

A detailed breakdown of the sample design and general results of the survey is given in Appendix Table I. To compensate for the likelihood that a relatively large part of the selected sample would be unreachable, an unusually large sample was chosen. From stratum I, about 25 percent of the population was selected for the survey sample. Total populations of strata II-IV were included.

The survey results were sufficient for statistically reliable inferences, since only a small proportion of the sample was not included in the results. Of the sample of 754, 433 gave usable information on the land market. Another 123 were interviewed but could not give information because they no longer owned the land. Thirty four refused to cooperate. Eighty five could not be located and 35 were not interviewed because they live in conflict zones.

All regions are adequately represented in the sample. Region IV had the highest incidence of interviews missed because of the conflict, but the proportion of missing

information is small. Similarly, all size strata are well represented in the sample. Nearly 60 percent of individuals in all size groups gave useful information. Thus the data given in this report represent information from 14.5 percent of stratum III, and 58.0 percent of stratum IV landowners. These percentages are quite adequate for reliable statistical confidence.

APPENDIX TABLE 1. PERSONAS VISITADAS POR CATEGORIA, ESTRATO Y REGION EN LA ENCUESTA/MERCADO POTENCIAL DE TIERRAS AGRICOLAS EN EL SALVADOR

CATEGORIAS	TOTAL POR ESTRATO *				REGION I POR ESTRATO					REGION II POR ESTRATO					REGION III POR ESTRATO					REGION IV POR ESTRATO					TOTAL PAIS
	I	II	III	IV	I	II	III	IV	Subtotal	I	II	III	IV	Subtotal	I	II	III	IV	Subtotal	I	II	III	IV	Subtotal	
Personas que venden	88	52	46	27	8	1	10	1	20	39	26	16	16	97	16	9	8	5	38	25	16	12	5	58	213
Personas que no venden	125	38	37	20	29	10	3	3	45	50	14	23	8	95	14	4	4	1	23	32	10	7	8	57	220
Personas que han transferido tierra	50	29	27	17	13	4	5	5	27	19	16	15	8	58	1	2	-	1	4	17	7	7	3	34	123
Personas que negaron información	19	9	2	4	1	3	1	3	8	14	5	1	1	21	1	1	-	-	2	3	-	-	-	3	34
Personas sin ubicar dirección	42	15	19	9	10	4	6	-	20	18	8	11	7	44	9	3	1	2	15	5	-	1	-	6	85
Personas repetidas en listado	2	2	5	1	-	-	3	-	3	2	1	1	1	5	-	-	-	-	-	-	1	1	-	2	10
Personas no visitadas por vivir en zona conflictiva	24	4	7	-	-	-	-	-	-	2	-	-	-	2	7	-	3	-	10	15	4	4	-	23	35
Otras	15	6	10	3	2	3	-	1	6	11	2	9	1	23	-	-	-	1	1	2	1	1	-	4	34
TOTAL	365	155	153	81	63	25	28	13	129	155	73	75	42	345	48	19	16	10	93	99	37	32	19	187	754

* Strata refer to size categories.