I. RESIDENT ATTRITION

The major questions addressed in this section are (1) how many of the original residents in the three CEDEN Projects continue to reside there after three years (1975-1978) and (2) how do they differ from those residents who have moved. With clear and accurate records and maps the former task would have been relatively simple, but we found records and maps were either incomplete or incorrect. Since our first survey of residents was approximately a year after the houses were first occupied we had to rely upon the information we collected and the responses to our questionnaires. This reconstruction of occupancy patterns was further complicated by a number of other difficulties.

The first problem (1), the trading of houses among occupants, was quite common for some time (this undoubtedly accounts for some of the inadequacies of the CEDEN records). By itself this was not an insurmountable obstacle, but it was complicated by the additional problems of (2) "free union" or common law marriages and (3) the inconsistent reporting of names (due to number two and the inconsistent dropping of the last or mother's name) and (4) the disregard for house numbers. Some houses were numbered two or three times and often the numbers were painted over and the occupants were not certain what the number should be. In addition to these problems which led to identification difficulties, was the task of locating the actual owners. Approximately ten percent of the houses had been rented to other parties or were being taken care of by friends or relatives; other houses were periodically or temporarily abandoned by their owners. This may be part of a cyclical migratory pattern and very functional for the owners, but it has complicated our task of determining the amount of attrition.

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Table 1

STATUS OF HOUSE OCCUPANTS

	San Jose	Flores	Sta. Rita	Total
Non-movers	76	90	59	225
Movers	9	3	11	23
Renters/caretakers	7	5	11	23
Purportedly Original Owners	8	10	10	28
Total	100	108	91	299
Actual Number of Houses	121	127	92	340
Number of Occupants Unidentified	21	19	1	41

Table I presents a breakdown of residents in the three Projects. "Non-movers" refers to all households we have included in our study under that title. They are families that we interviewed during our first survey in 1976 and identified again in 1978. These non-movers are compared to households that we know have moved ("Movers") and whose houses have been purchased by subsequent occupants. The information we are using for comparison is from the 1976 interview schedule.

The other categories of households in Table I are not included in this study. "Renters/caretakers" refers to residents who do not own the houses they occupy. The "Unidentified" category refers to occupants who were interviewed only one time (either 1976 or 1977) or to those we have never been able to locate during our surveys. The number in this latter category is extremely small. The category "Purportedly Original Owners" refers to occupants interviewed in 1978 who said they were the original occupants, but whose names did not match earlier interviewees. This

confusion can be accounted for by the five problems of identification

mentioned earlier. The "Actual Number of Houses" simply lists the number

of structures at each of the three projects. Although it should be easy

to determine this we have found that six houses were moved from Flores,

the CEDEN maps included houses that were not built, and a few houses have

been turned into storage buildings at Flores by the National Agrarian

Institute (INA) since they assumed responsibility for the Project.

Due to the above mentioned problems of identification we cannot say

with certainty what the actual rate of continuous occupancy is after three

years. We feel it would be justifiable to add the Non-movers and the

Purportedly Original Occupants and have a valid count, but even this would

exclude some for whom we have only one interview, those we could not

locate during our three surveys, and the Renters/caretakers category that

may represent continuous ownership by non-residents. By combining these

two groups we find that occupancy has continued for 69.4% in San Jose,

78.7% in Flores, and 71.7% in Santa Rita. Using the more strict choice

(Non-movers only) we see that continuous occupancy is 62.8% in San Jose,

70.9% in Flores, and 64.1% in Santa Rita. For this attrition study we

have used the Non-movers only since we have the 1976 base data available

for them.

With this strictness of sample choice we have a rather small number of

occupants classified as Movers. Because of this we have combined the

three Projects for the sake of analysis and treat Movers as one group

and Non-movers as another group. To determine if the differences between

these two groups is significant we have used the chi-square (X^2). This

statistic is utilized simply to determine if the results of comparison

between Movers and Non-movers is statistically significant or if the results

can or cannot be accounted for by mere chance. This is indicated at the bottom of each Table. Where there are less than five in any category we have used the Yates Correction.

We have compared Movers and Non-movers on seven variables to determine if the two groups are significantly different. Each variable was chosen because it was deemed by the authors to be potentially related to the decision to remain or not remain in the Projects. The variables included are: (1) number of persons per household, (2) distance from previous residence, (3) religious affiliation, (4) distance to work, (5) employment by non-household heads, (6) type of occupation, and, (7) participation by the residents in the construction of the projects. With the exception of "Type of Occupation," all of the variables are presented in Tables. The totals for each variable are also presented in percentages to assist in understanding them.

Table II

ATTRITION AND PERSONS PER HOUSEHOLD

	Movers			Non-movers			Total
	1-4	5-6	7+	1-4	5-6	7+	
San Jose	4	1	4	18	27	31	85
Flores	2	0	1	36	34	20	93
Sta. Rita	7	2	2	12	21	22	66
Total	13 (56.5%)	3 (13.0%)	7 (30.4%)	66 (29.9%)	82 (37.1%)	73 (33.0%)	244

$$x^2 - 9.2500, \text{ 2 d.f., } p\ .01$$

Table II presents the relationship between attrition and the number of persons in each household as reported in 1976. Household size is divided into three categories, nearly equal in size. The differences

between Movers and Non-movers with reference to these three categories is significant. This is due to the large ratio of movers in the smallest occupant category and the small number of movers in the medium category. This is not an unanticipated finding since small family size makes mobility more possible.

Table III

ATTRITION AND DISTANCE FROM PREVIOUS RESIDENCE

	Movers			Non-movers			Total
	0-4 Km.	5-39 Km.	40+ Km.	0-4 Km.	5-39 Km.	40+ Km.	
San Jose	5	2	1	68	1	5	82
Flores	2	0	0	58	23	5	88
Sta. Rita	0	10	1	0	50	5	66
Total	7 (33.3%	12 (57.1%)	2 (9.5%)	126 (58.6%)	74 (34.4%)	15 (7.0%)	236

$X^2 - 3.8662$, 2 d.f., p .20

It was deemed possible that residents who had moved greater distances to the CEDEN Projects would be prone to move again since they had possibly not established strong social ties. To test this we have divided Movers and Non-movers into three groups based on the number of kilometers from their previous residence. These differences do not prove to be significant. Fewer of those that resided near their present residences have moved, but the differences are not strong enough to be statistically significant.

The question of religious affiliation and attrition is particularly interesting in light of the fact that these projects are sponsored by Protestant organizations. As is clear from Table IV, Catholics outnumber Protestants by nearly four to one. When we look at the rate of movement by these two groups, however, it is evident that the two groups have not

Table IV

ATTRITION AND RELIGIOUS AFFILIATION

	Movers		Non-movers		Total
	Catholics	Protestants	Catholics	Protestants	
San José	6	3	50	17	76
Flores	3	0	80	7	90
Sta. Rita	4	6	36	14	60
Totals	13 (59.1%)	9 (40.9%)	166 (81.4%)	38 (18.6%)	226

$$X^2 - 4.7092, \ 1 \ d.f., \ p \ .05$$

moved in proportion to their size. Of the Movers 40.9% were Protestant while they constitute only 19% of the Non-movers. This difference is statistically significant. Just why Protestants are moving from the Projects at a disproportionate rate is not known, but we are finding evidence that they may be replaced by equal number of other Protestants.

Table V

ATTRITION AND DISTANCE TO WORK

	Movers			Non-movers			Total
	0-4 Km.	5-39 Km.	40/ Km.	0-4 Km.	5-39 Km.	40/ Km.	
San José	6	3	0	40	30	1	80
Flores	0	0	0	57	10	5	72
Sta. Rita	6	0	3	40	2	11	62
Total	12 (66.7%)	3 (16.7%)	3 (16.7%)	137 (69.9%)	42 (21.4%)	17 (8.4%)	214

$$X^2 - 0.4575, \ 2 \ d.f., \ p \ .50$$

Presuming that traveling great distances to work would impel persons to move we categorized distance to work into three groups for Movers and

Non-movers. More of those living forty or more kilometers from their work
did move, but the differences are very weak. Thus, we can only conclude
that this is not an important factor influencing residents to move from
the Projects.

Table VI

ATTRITION AND EMPLOYMENT BY NON-HOUSEHOLD HEADS

	Movers		Non-movers		Total
	Employed	Not Employed	Employed	Not Employed	
San José	1	7	7	61	76
Flores	0	0	9	49	58
Sta. Rita	1	9	5	44	59
Total	2 (11.1%)	16 (88.9%)	21 (12.1%)	154 (87.9%)	193

$x^2 - .0687$, 1 d.f., p .80

Table VI presents the differences between Movers and Non-movers on
the basis of employment by non-household heads. This variable was included
since we have found that employment is a major reason for residential
change. This form of work, however, is not associated with the decision
by these residents to move. There is virtually no difference between
Movers and Non-movers on this issue.

Participation in the construction of housing by future residents is
often encouraged to promote more commitment to the houses. This principle
was applied in this case and with a great deal of success. Of the Movers,
43.5% had not participated in the construction of the houses while only
4.5% of the Non-movers had not worked in the construction. The Chi-square
indicates a very strong relationship between these two variables.

Table VII

ATTRITION AND PARTICIPATION IN CONSTRUCTION

| | Movers | | Non-movers | | Total |
	Part.	Non-part.	Part.	Non-part.	
San Jose	2	7	76	0	85
Flores	3	0	82	7	92
Sta. Rita	8	3	52	3	66
Totals	13	10	210	10	243
	(56.5%)	(43.5%)	(95.5%)	(4.5%)	

X^2 – 36.1793, 1 d.f., p .001

The differences between occupational groups (agricultural, skilled, and unskilled workers) of Movers and Non-movers were also analyzed individually and collectively. Since this resulted in numerous tables and often very small numbers we have not included the tables. In each case, however, there was no significant difference between the Movers and the Non-movers.