

INSTITUTO NACIONAL DE SALUD PUBLICA

External evaluation of the impact of the Human Development Program: Oportunidades

The effect of *Oportunidades* on the demographic dynamics of the beneficiary households and the decisions of migration of its members in rural areas

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Note: the points of view expressed by the authors of this document do not reflect the institutional position of the Instituto Nacional de Salud Pública.

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EXECUTIVE SUMMARY

The present document analyzes the impact of the Human Development Program *Oportunidades* on the change of the demographic composition of households and the decisions of migration of the beneficiary family members in rural areas. It is important to evaluate this impact because the living arrangements are an essential part of the welfare. The forms of cohabitation within a household are closely related to the decisions of consumption and auto-consumption, production and savings and the decisions of investing in human capital for its members.

The form in which *Oportunidades* influences the dynamics of living arrangements in beneficiary households has important implications in interpreting the Program impact in other dimensions and in terms of its present targeting design.

In first place, living arrangements are closely related to the decisions on emigration and immigration of former and new members and with the partition of the household and the formation of new families. The effect of *Oportunidades* over these decisions can create through time and on the basis of the longitudinal evaluation, rates of differential desertion among beneficiary and non beneficiary individuals. If this scenario is presented, the estimates that come from the evaluation sample on the effect of the Program – for example in education and health – can draw conclusions that disagree with reality.

In second place, intuition tells us that the decisions of cohabitation of a household are not independent from the relationship that its members have with non resident relatives that are part of the extended family. Therefore, it is possible that the effect of *Oportunidades* on the demographic dynamics of beneficiary households alters at the same time the welfare of some members of the extended family. This has important implications on the present concept of the Program targeting that uses the criteria of incorporation and separation, based exclusively on the characteristics of the eligible households.

The members of the extended family, like parents or grandparents whose households are not eligible for the benefits of *Oportunidades* – according to the present rules of operation – may however be indirectly benefited.

Oportunidades is a Program that gives important cash transfers to eligible households so that these are able to send their children to school and to attend regularly their community health clinics. The amount of monetary aid in rural areas represents an average of 22% of the total income of beneficiary households. Consequently, the flow of public resources is very important and can alter the decisions about living arrangements taken within the beneficiary households.

There are several reasons why a significant increase in the income of a household impacts the decisions of cohabitation: first because it helps to attract new school age family members in order to guarantee or extend the government aid; second, because it provides a place to live and food to members of the extended family and this in turn expands the economic scales of consumption and production within the household; third, because the additional resources facilitate the independence of some of the household members so that they separate from it in order to form their own families and fourth, because it helps the members of the household or of the extended family to take a decision on whether to emigrate or go back to their original communities according to the *Oportunidades* rules of operation.

The present study provides new evidence on these matters, analyzing the impact of *Oportunidades* – Mexico's most ambitious cash transfers anti-poverty Program – on the dynamics of beneficiary households' living arrangements and the decisions of migration of its members.

The available information about the demographic composition of beneficiary households compared to the non beneficiary ones, both before and after almost six years of the implementation of *Oportunidades*, allows us to study the impact of the Program. The data comes from the baseline of the evaluation

sample in rural areas (Encaseh 1997) and from the last survey of longitudinal data (Encel 2003).

The analysis of the impact of *Oportunidades* on the demographic dynamics of beneficiary households is based on the 1997-2003 socio-demographic information of eligible households in treatment communities of the sample evaluation. The demographic information of households eligible to receive government aid and that by 2003 lived in rural areas that were not yet incorporated to the Program, is used as the group of comparison.

The 151 new control localities were chosen through a "matching" process between the localities of the original sample evaluation and a large number of potential rural areas that were not incorporated in 2003. The demographic situation that these households had in 1997, was reconstructed through retrospective information provided at Encel 2003. The information of the situation in 2003, comes directly from the field work reports of that survey.

The information concerning treatment households and the new control group, allows the reconstruction of a longitudinal study with data on: a) individuals that stayed in the household between 1997 and 2003; b) household members that left from it during the same period; c) individuals that in 2003 were new members of the household and d) household members that emigrated from the original locality between 1997 and 2003. The empiric strategy used by *Oportunidades* to measure its effect on the dynamics of cohabitation, is based on considering the household as the unit for decisions.

The households of the control group do not come from a random selection process, as did the treatment ones that have received the Program for more than five years, therefore the simple comparison made in 2003 of the cohabitation situation in both groups can misinterpret the real effect of *Oportunidades* due to a non observed heterogeneity such as local conditions of job opportunities, number of migrants in the localities and the degree of tolerance and different tastes of the household members a regards cohabitation.

Considering this situation and in order to study the medium term effect of Oportunidades on the demographic dynamics of beneficiary households, we use the non parametric method of matching in double differences and compare it to the change in demographic composition before the start of the Program (1997) and six years later (2003), between treatment households and new control ones.

The results show an important redistributive impact of *Oportunidades* in the dynamics of beneficiary households' living arrangements, which reveal a higher rotation rate of the men and women that belong to them. This rotation happens more frequently among men and it varies according to their age and kinship with the head of the household.

Oportunidades, outlined the exodus of adults who by 1997 were above the minimum required age to attend primary or secondary school. The rate of males in this category that decided to leave, in relationship to the females in the same category, is 0.33% higher in treatment households than in control ones.

Youngsters between 7 and 21 years old, that are the sons or daughters of the head of the household are in an average of 2%, more prone to leave their home when they receive government aid. *Oportunidades* does not have any influence on the decision of other members of the household that have another kind of relationship with the head of the family, as can be the case of nephews and nieces.

The 0.16% of children between 0 and 7 years old that lived with their grandparents in 1997, did not live there anymore after five years of receiving the benefits of the Program, compared to their peers of the control group. The absence of grandchildren of between 0 and 7 years old, coincides with the number of sons and daughters and sons and daughters in law of 16 to 30 and 22 to 40 years old respectively that separated from the household.

The evidence suggests that beneficiary households have a greater amount of members separating from them to form their own families because the government aid provides them with greater financial independence.

At the same time, the households incorporated to *Oportunidades* that have been receiving financial aid for five years have a greater number on new members, mostly men and women that in 1997 were in a age to attend primary or secondary school (7 – 15 years old) and adults older than 21 years old. The sons and

daughters of the head of the household were 0.5% more likely to return to their home in 2003 than were other members that had a different relationship with the head of the household.

Also due to the government aid, by 1997, the treatment households increased their size in 0.25% compared to the control ones because they were able to offer a place to live to the members of the extended family. The parents and grandparents of the head of the household who lived in other places before the implementation of *Oportunidades*, were sharing the same house after five years of the establishment of the Program. The same thing happened to a lesser extent with the rest of new members that are not part of the nuclear family like nephews and nieces between 22 and 30 years old and other individuals who have no kinship with the head of the household and that were absent in 1997. The presence of new friends and house workers increased the household size in an additional 0.06% compared to the trend observed in the control group.

The results show that the greater rotation of household members has an important effect on the living arrangements, even when the government aid does not have a significant net effect on the size of the beneficiary households.

Encel 2003 provides retrospective information of the treatment group and the new control group about the emigration of household members between 1997 and 2003. The final stage of the analysis, uses this information to better understand the sense of the demographic change that derives from government aid.

The matched analysis of primary differences shows that women who get benefits from *Oportunidades* are 8% more likely to leave their communities to form a new family, while men do the same only in an additional rate of 3%. However, when the decision to leave is because they want to find new job opportunities, the rate of beneficiary men that emigrate is 5.5% higher than that of women. Thanks to *Oportunidades*, the migration of the heads of the families is 6.5% less than that of the other household members. The most important reason for moving to other areas of the individuals between 7 and 12 years old is the continuation of school. This last result agrees with the analysis of living arrangements and could reflect the

need of youngsters in secondary school age to live in communities that have schools with this level of education so that they keep on receiving the government aid.

Finally, we analyze the indirect impact of *Oportunidades* on the decisions of migration based on estimators of matching of double differences with fixed household effects with the possibility that the non observed heterogeneity between treatment and control, confuses the effect of the primary differences.

The results of double differences demonstrate an indirect effect of *Oportunidades* in encouraging the decisions of migrating due to marriage, of women whose households have received government aid for more than five years. The result reinforces the suggested interpretation about the dynamics of living arrangements regarding the partition of households incorporated to the Program.

The estimators of double differences show that youngsters between 13 and 21 years old are 2% more likely to emigrate to other areas of the country or even to the United States (0.57%) due to *Oportunidades*, compared to the observed effect on the average probability of the rest of the household members. On the other hand, government aid discourages women to migrate to the United States in a rate of 0.5% compared to that of the male members of the household.

The results of this document suggest that *Oportunidades* has had an important effect in the partition of the incorporated households because some of its members, taking advantage of the government aid, have left their hometowns in search of better job opportunities.

That is why it is important to perform a follow-up of the migrants to be able to know the degree of welfare that this decision has brought to their lives. If they do not have a good quality of life despite the fact that they left in search of better opportunities, then there is still an important lack of social policies to encourage the formation of alternating jobs in the beneficiary communities to retain the economically active population incorporated to *Oportunidades*.

The government is presently offering programs of "micro-credit" in the *Oportunidades* beneficiary communities. It would be important to analyze if the increase in credit supply for the establishment of family businesses in these

communities actually helps *Oportunidades* in directing the resources to subjects other than that of financing the decision to migrate for employment reasons of the young people incorporated to the Program.

The results have not shown yet if children and youngsters who receive scholarships, alter their decision to emigrate once they finish the primary or secondary school. The period that is covered by the sample evaluation is still too short to give any conclusions in this respect. Therefore, it is recommended to extend the program evaluation to a long term scale so that it allows us to know the migration patterns of beneficiary population once they have acquired more human capital when they finish their studies in their local communities. To do this, it would be necessary to create a longitudinal data base that does the following up of the Program's beneficiaries and non beneficiaries regardless of their place of residence.

The results of this document also suggest an important effect of the Program in the partition of beneficiary households, when women take the decision of separating from them to get married. With this, *Oportunidades* not only helps the lives of the members of the beneficiary households but also the ones of a great number of relatives that are not cohabitants, because it encourages the formation of new families.

Therefore, from the social impact analysis point of view, the *Oportunidades* evaluation of results should be extended to cover larger segments of non cohabitant relatives in order to learn if there is an indirect effect of the investment in human capital (health and education) on babies that are borne in the newly formed households.

It is likewise suggested for demographic reasons, to analyze if the early formation of new households brings with it higher birth rates.

The effect of *Oportunidades* in the formation of new families and the fact that the members of the extended family are more welcomed in beneficiary households, indicates the need to review the targeting criteria and the Program's rules of operation. The rules of operation, for example, set limits to the time in which a beneficiary household can stay in the Program, or determine the maximum

total amount of economic aid that a household should get. These rules can however be eluded if for example, the members of a beneficiary household that is going to be soon withdrawn from the Program, decide to form a new household that is registered under the Program's benefits.

The results of this document show that there is a higher rate of rotation of beneficiary household members due in part to the leaving of original sample members of treatment households. The increasing loss of treatment individuals can pose a significant problem in the conclusions that the impact of *Oportunidades* has on health and education, if the lost individuals used for the sample have different health and education indicators than those of the ones that have stayed.

In order to properly analyze the probability and size of this difference, it is necessary to know the state of welfare of the individuals that have gone out of the evaluation sample, so it is strongly recommended to *Oportunidades* to make an additional effort to recover these individuals in order to determine if the differential of desertion represents an important factor in the interpretation of results about health and education.

Also, the bias possibility is closely related to the size of the differential of desertion in the evaluation sample, therefore a study should be conducted to indicate with precision the pattern of differential of desertion not only between the treatment individuals and the new control group, but also between the treatment individuals and the original control group.

Finally, the results of the document create a discussion on whether the public expense has been efficient in the amount that they have spent in social actions directed to populations that live in remote and isolated areas of the country. If programs like *Oportunidades* encourage the migration to areas of development and important changes of residence, maybe it would be interesting to use their design for the creation of other anti-poverty programs that are trying to reach populations that are traditionally excluded.

I.INTRODUCTION

The present document analyzes the impact of the Human Development Program *Oportunidades* on the change of the demographic composition of households and the decisions of migration of the beneficiary family members in rural areas. It is important to evaluate this impact because the living arrangements are an essential part of the welfare. The forms of cohabitation within a household are closely related to the decisions of consumption and auto-consumption, production and savings and the decisions of investing in human capital for its members.

The form in which *Oportunidades* influences the dynamics of living arrangements in beneficiary households has important implications in interpreting the Program impact in other dimensions and in terms of its present targeting design.

In first place, living arrangements are closely related to the decisions on emigration and immigration of former and new members and with the partition of the household and the formation of new families. The effect of *Oportunidades* over these decisions can create through time and on the basis of the longitudinal evaluation, rates of differential desertion among beneficiary and non beneficiary individuals. If this scenario is presented, the estimates that come from the evaluation sample on the effect of the Program – for example in education and health – can draw conclusions that disagree with reality.

In second place, intuition tells us that the decisions of cohabitation of a household are not independent from the relationship that its members have with non resident relatives that are part of the extended family. Therefore, it is possible that the effect of *Oportunidades* on the demographic dynamics of beneficiary households alters at the same time the welfare of some members of the extended family. This has important implications on the present concept of the Program targeting that uses the criteria of incorporation and separation, based exclusively on the characteristics of the eligible households.

The members of the extended family, like parents and grandparents whose households are not eligible for the benefits of *Oportunidades* – according to the present rules of operation – may however be indirectly benefited.

Oportunidades is a program that gives important cash transfers to eligible households so that these are able to send their children to school and attend regularly their community health clinics. The amount of monetary aid in rural areas represents an average of 22% of the total income of beneficiary households. Consequently, the flow of public resources is very important and can alter the decisions about living arrangements taken within the beneficiary households.

There are several reasons why a significant increase in the income of a household impacts the decisions of cohabitation: first because it helps to attract new school age family members in order to guarantee or extend the government aid; second, because it provides a place to live and food to members of the extended family and this in turn expands the economic scales of consumption and production within the household; third, because the additional resources facilitate the independence of some of the household members so that they separate from it to form their own families and fourth, because it helps the members of the household or of the extended family to take a decision on whether to emigrate or go back to their original communities, according to the *Oportunidades* rules of operation.

There are several studies about the formation and partition of households in developed countries. However and due mainly to the lack of data of longitudinal design, the knowledge that we have about the dynamics of living arrangements and its relationship to the decision of migration in households of developing countries, is very limited. The causes that have been associated to the disintegration of households are economic problems, disputes among the family members or the death of the head of the family.

In the literature about living arrangements, it has been emphasized the importance to study the changes in cohabitation arrangements of a household with elderly people. The results directly associate the changes in cohabitation with the changes in the levels of care and help received by the elderly members of the

household. This literature concludes that income is one of the most important factors that determines the cohabitation arrangements. Nevertheless, because the relationship between the decision of cohabitation and the earned or received income is so close, we do not know for certain how an increase in the household income would affect its demographic composition.

The knowledge is even more limited in how the cash transfer programs impact the demographic composition, the living arrangements and the decision to migrate in households of developing countries. (a)

The present study gives new evidence about these matters by analyzing the impact of Oportunidades – Mexico's most ambitious cash transfer anti –poverty program – on the dynamics of beneficiary households' living arrangements and its members decisions to migrate.

The results of this analysis contribute to the progress of the study related to the effect that an increase in financial resources has on the cohabitation decisions of households in developing countries, and also provides strong evidence about the way in which a cash transfer anti-poverty program impacts the decisions of cohabitation of beneficiary families. This analysis becomes important in the present international arena because the design of Oportunidades has been widely recommended by international agencies and has been implemented in various developing countries as an efficient method to combat poverty.

The available information about the demographic composition of beneficiary households compared to the non beneficiary ones, both before and after almost six years of the implementation of *Oportunidades*, allows us to study the impact of the Program. The data comes from the baseline of the evaluation sample in rural areas (Encaseh 1997) and from the last survey of longitudinal data (Encel 2003)

⁽a) A great part of existing studies analyze the impact of public assistance by measuring the investments in infrastructure in relation to demographic indicators such as fertility.

The analysis of the impact of *Oportunidades* on the demographic dynamics of beneficiary households is based on the 1997-2003 socio-demographic information of eligible households in treatment communities of the sample evaluation. The demographic information of households eligible to receive government aid and that by 2003 lived in rural areas that were not yet incorporated to the Program, is used as the group of comparison.

The 151 new control localities were chosen through a "matching" process between the localities of the original sample evaluation and a large number of potential rural areas that were not incorporated in 2003. The demographic situation that these households had in 1997, was reconstructed through retrospective information provided at Encel 2003. The information of the situation in 2003, comes directly from the field work reports of that survey.

The information concerning treatment households and the new control group, allows the reconstruction of a longitudinal study with data on: a) individuals that stayed in the household between 1997 and 2003; b) household members that left from it during the same period; c) individuals that in 2003 were new members of the household and d) household members that emigrated from the original locality between 1997 and 2003. The empiric strategy used by *Oportunidades* to measure its effect on the dynamics of cohabitation, is based on considering the household as the unit for decisions.

The households of the control group do not come from a random selection process, compared to the treatment households that have received the Program for more than five years, therefore the simple comparison made in 2003 of the cohabitation situation in both groups can misinterpret the real effect of *Oportunidades* due to a non observed heterogeneity such as local conditions of job opportunities, number of migrants in the localities and the degree of tolerance and different tastes of the household members a regards cohabitation.

Considering this situation, we use the non parametric method of matching in double differences and compare it to the change in demographic composition before the start of the Program (1997) and six years later (2003), between treatment households and new control households to be able to study the medium

term effect of *Oportunidades* on the demographic dynamics of beneficiary households.

The results show an important redistributive impact of *Oportunidades* in the dynamics of beneficiary households' living arrangements, which reveal a greater rotation rate of men and women belonging to the household. This rotation happens more frequently among men and it varies according to the age and kinship with the head of the household.

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Youngsters between 7 and 21 years old, that are the sons or daughters of the head of the household are in an average of 2%, more prone to leave the home when they receive government aid. *Oportunidades* does not have any influence on the decision of other members of the household that have another kind of relationship with the head of the family, as can be the case of nephews and nieces.

The 0.16% of children between 0 and 7 years old that lived with their grandparents in 1997, do not live there anymore after five years of receiving the benefits of the Program, compared to their peers of the control group. The greater absence of grandchildren of between 0 and 7 years old, coincides with the greater number of separation from the household of sons and daughters and sons in law and daughters in law of 16 to 30 and 22 to 40 years old respectively.

The evidence suggests that *Oportunidades* beneficiary households have a greater amount of members separating from them to form their own families because the government aid provides them with greater financial independence.

At the same time, the households incorporated to *Oportunidades* that have been receiving financial aid for five years have a greater number on new members, mostly men and women that in 1997 were in a age to attend primary or secondary school (7 - 15 years old) and adults older than 21 years old that where not cohabitating in 1997. The sons and daughters of the head of the household were

0.5% more likely to return to their home in 2003 than were other members that have a different relationship with the head of the household.

Also due to the government aid, by 1997 the treatment households increased their size in 0.25% compared to the control ones because they were able to offer a place to live to the members of the extended family. The parents and grandparents of the head of the household who lived in other places before the implementation of *Oportunidades*, share the same house after five years of the establishment of the Program. The same thing happens to a lesser extent with the rest of new members that are not part of the nuclear family like nephews and nieces between 22 and 30 years old and other individuals who have no kinship with the head of the household and that were absent in 1997. The presence of new friends and house workers increase their size in an additional 0.06% compared to the trend observed in the control group.

The results show that the greater rotation of household members has an important effect on the living arrangements, even when the government aid does not have a significant net effect on the size of the beneficiary households.

Encel 2003 provides retrospective information for the treatment group and the new control group about the household members that emigrated between 1997 and 2003. The final stage of the analysis, uses this information to better understand the sense of the demographic change that derives from government aid.

The matched analysis of primary differences, shows that women who get benefits from *Oportunidades*, are 8% more likely to leave their communities to form a new family, while men do the same only in an additional rate of 3%. However, when the decision to leave is because they want to find new job opportunities, the rate of beneficiary men that emigrate is 5.5% higher than that of women. Thanks to *Oportunidades*, the migration of the heads of the families is 6.5% less than that of the other household members. The most important reason for moving to other areas of the beneficiary individuals between 7 and 12 years old is the continuation of school. This last result agrees with the analysis of living arrangements and could reflect the need of youngsters in secondary school age to live in communities that

have schools with this level of education so that they keep on receiving the government aid.

Finally, we analyze the indirect impact of *Oportunidades* on the decisions of migration based on estimators of matching of double differences with fixed household effects with the possibility that the non observed heterogeneity between treatment and control, confuses the effect of the primary differences.

The results of double differences demonstrate an indirect effect of *Oportunidades* in encouraging the decisions of migration due to marriage of women whose households have received government aid for more than five years. The result reinforces the suggested interpretation about the dynamics of living arrangements regarding the partition of households incorporated to the Program.

The estimates of double differences show that youngsters between 13 and 21 years old are 2% more likely to emigrate to other areas of the country or even to the United States (0.57%) due to *Oportunidades*, compared to the observed effect in the average probability of the rest of the household members. On the other hand, government aid discourages women to migrate to the United States in a rate of 0.5% compared to that of the male members of the household.

The present document is divided in six sections. Section II describes the design and rules of operation of *Oportunidades* in rural areas. Section III examines the sources of information and the procedures used to form the basis of the study of which the present analysis was taken. The empiric methodology and results are summarized in Section IV. Sections V and VI present the conclusions and recommendations.

II. DESCRIPTION OF THE PROGRAM

Oportunidades is the most important anti-poverty program in Mexico and one of the most ambitious one of its kind in the whole world. It currently represents the 37.5% of the federal government budget destined to combat poverty. The governmental intervention was initiated in 1997 in rural areas, but it has recently expanded to urban ones as well. It covers nowadays 2.5 million families in rural areas and a total of around five million beneficiary families around the country. The Program has attracted the international attention, specially in Latin America and the Caribbean where several countries have adopted the *Oportunidades* cash transfer design as a method to combat poverty.

The newest element of the Program is the conjunction of three components – health, nutrition and education – within the same intervention. The reason for putting together all the components in one sole Program was based in the idea that the interaction among components would increase the Program's efficiency in fighting poverty as a whole, instead of what could be achieved by each separate component.

Through its education component, *Oportunidades* is presently granting scholarships to children and youngsters of less than 22 years old that are enrolled in between the third grade of primary school and the third one of superior mid education. The amount of the scholarships increases according to the school grade and it is slightly higher for girls. The monthly amount for children can be of from \$220 pesos (sixth grade primary school) to \$615 (third grade superior mid education); for girls, from \$220 pesos (sixth grade primary school) to \$700 (third grade superior mid education).

The health component provides basic health care services to all household members with special emphasis on prevention care. They are provided by the public health institutions.

The third component, that of nutrition includes a fixed monthly cash transfer of \$165 pesos to improve the food intake as well as food supplements aimed particularly at children of between 4 months and 2 years old, and to pregnant or

breastfeeding women. These food supplements are also given to children between 2 and 4 years old if they are undernourished.

The benefit is conditioned to the fulfillment of obligations of beneficiary households. The scholarships are given provided that children actually attend school, if for example, a child does not go to school for three days in a month (without any reasonable justification), the household does not receive the scholarship that corresponds to that month. In the nutrition component, on the other hand, members of the household are expected to complete a series of visits to the clinics and health centers in order to keep on receiving the monetary help. The mothers in the family have to attend educational sessions regarding health. All these activities, are monitored through registries.

The monetary benefits are given directly to a woman in the household, generally the mother, in order to give more power to women in the household decisions regarding investments in human capital.

The incorporation of households to *Oportunidades* is performed according to pre-established eligibility criteria through a discriminating analysis of the physical characteristics of the dwelling and the demographic and education attributes of the household.

In rural areas, the Program beneficiaries are chosen through a targeting process done in three stages. In the first stage, *Oportunidades* uses geographical information to select regions and communities with high poverty levels. The communities are socially and economically marginated but have access to schools and health services. In the second stage, the Program conducts a census of the socio-economic conditions of households in the selected communities to be able to identify the beneficiary families. Finally, with all the information and through a discriminative analysis, a selection is made between beneficiary and non beneficiary households.

Once the beneficiary households are identified, a community gathering is organized in which they publish the list of the selected families that are to participate in the Program and to reach consensus with the population of the locality.

The cash transfers given by *Oportunidades*, represents the 22% of the household's total income. Presently, that amount varies between \$ 165 pesos per month (households without children) and \$1,710 pesos (households with children attending high school).

III. DATA

For the purposes of the present study, an important aspect of the design of *Oportunidades* in rural areas is the fact that the government decided to perform a comprehensive impact evaluation. In 1997, before the beginning of the Program, 506 localities distributed among seven states of Mexico were selected for the sample of the rural evaluation; approximately 60% of all these were chosen to be beneficiaries (treatment group), while the complement (control group) was to be incorporated three years later (in 2000).

The eligible households in treatment communities were informed that this support was to last at least for three years date in which the household's conditions were going to be reviewed and it would be decided if they stayed or not in the Program (re-certification process). The households in control communities, on the other hand, did not receive any official information about the Program's operation. The original intention of the evaluation design in rural areas was to incorporate the control group until the end of 2001, however, when the operation started to get known among neighboring communities, there was pressure to incorporate it earlier, by the end of 2000.

The first step in the design of the evaluation, consisted on selecting the treatment and control communities from among a set of highly marginated rural localities that presented similar socio-economic conditions. After that and through a process of random selection, it was determined what communities of the 506 selected ones would be part of the treatment group.

In 1997 in the context of the evaluation, an economic census was performed in all households of the treatment and control localities forming a baseline of 24,077 original households. Since March 1998, longitudinal evaluation surveys (Encel) were conducted every six months during three years until 2000. In 2003, a seventh longitudinal survey was conducted (Encel 2003) in which an additional 6,768 households in 151 rural localities were incorporated to the original evaluation sample. These had similar poverty conditions as the treatment ones but

were not incorporated to *Oportunidades* at the time when the information was collected. The aim was to have a new group of comparison that facilitated the evaluation of the impact of the Program in the medium term because the original control communities had been incorporated to the Program in 2000.

This time though, the control communities were not selected by a random process but rather by a "matching" process that was supported by the socio-economic and demographic information taken from the 2000 National Population Census of the localities. The matching was done taking into account the similarity of conditions in each locality, by comparing the 506 of the original evaluation sample to a total of 14 000 potential matching of localities that by 2003 were not incorporated to *Oportunidades*.

The non random process of selection of new control households, compelled the use of non experimental techniques to analyze the Program's medium term effect, as it is described in the following section. The Encel 2003 field work collected the detailed socio-economic and demographic information of the treatment and new control households at that time. In the new control households, there was also used retrospective information of their economic and demographic situation in 1997, to reconstruct the longitudinal information at two different points, 1997 and 2003. This information was compared to the demographic one of treatment households (1997 and 2003) to analyze the medium term effect of the Program on the living arrangement dynamics within the beneficiary households.

In Table 1, panel A summarizes the distribution of treatment, control and new control households that form the total sample of evaluation. Twenty fifth percent are households eligible for incorporation to *Oportunidades'* treatment communities and 15.2% are eligible ones for control communities. (b)

⁽b) The households eligible to be incorporated to *Oportunidades* in control communities, started to receive government aid since 2000 when the program started its operations in such localities.

The new comparison group was formed by 6,768 households in the new control communities, representing the 22% of the total 1997-2003 sample of evaluation.

FORMATION OF THE STUDY PANEL: TREATMENT GROUP

The information about the demographic structure of households is available in each of the evaluation rounds, which together form a longitudinal data base for the 1997 – 2003 period.

To be able to investigate the impact of *Oportunidades* on the dynamics of the demographic composition in beneficiary households, it was necessary to conduct a careful handling of the information by identifying the members of the household through all the duration of the evaluation survey. This allowed the knowledge of their permanence; the date of incorporation, or the time when they left in case they were members of the household that were not registered in the evaluation baseline of 1997.

In order to do the follow-up of household members, it was necessary to conduct through several verification stages, a very detailed process of the baseline analysis that forms the evaluation panel.

To be able to study the changes in the demographic composition of a household and the presence or absence of individuals in treatment households along the panel, it was required to place the individuals of the evaluation baseline Encaseh-1997 in each and every one of the following Encel surveys (1998, 1999, 2000, 2003).

At the beginning, the form to identify an individual through all the evaluation panel, was to put together the number of line that was assigned to them in the questionnaire with the number of file of the household. However, because of the many exits, entrances and absences of the different household members along the duration of the study, it was not longer possible to keep the original order in the number of line that was to be assigned to a great amount of the household members of the evaluation sample. In practice, it made impossible to have one unique identifier for placing people using the file-line criteria and made necessary

to have information about additional characteristics of each individual to do the follow-up and determine their presence in the household.

The identification of treatment household individuals of each following Encel (1998-2003) was done by observing their demographic coincidences in each survey. The first step was to identify the presence of the 1997 original 24 077 households all the way through the duration of the Encel panels. (c). Section B of Table 1 shows the presence of eligible households in treatment localities during the seven surveys.

Once the presence of the household was identified in Encel, we then situated the individuals within it, using the information of their demographic characteristics. The information gathered from an individual for a period of one year, was compared with the information of the members of his/her household in a different year. This meant that if by 1997 there was m members in each household and by 1999 there were n individuals, it was necessary to analyze all the m*n cases to be able to identify with the least margin of error, the individual that among all the present ones in 1999, was present in 1997, and successively until 2003.

In this process, nine different criteria were used that were excluding among themselves, to be able to maximize the location of individuals along the panel. If the individual satisfied criterion 1, he was considered as a located person; otherwise the search would continue under criterion 2 and so on, until all the location possibilities were used up.

The combination of processes permitted to identify in the baseline of treatment households (1997) the individuals that were absent but who became new members along the period from 1997 to 2003. A process similar to the one just mentioned was used in the subsequent rounds to identify the new members in their respective households, taking in consideration the date in which their presence was first registered in the evaluation panel.

⁽c) There are households that do not appear in all the surveys of the longitudinal evaluation sample.

In order to insure the most reliable information about the changes in the demographic structure of treatment households between 1997 and 2003, we needed to verify what was the location of new members according to surveys that were done later than the ones in which they appeared for the first time. Panel C of Table 1 shows the distribution of the new members incorporated to the eligible households in treatment localities along the seven surveys. The process was used in the 1997 treatment households that were part of the 506 original localities of the evaluation sample.

Finally, we created a balanced longitudinal panel that allowed the validity and consistency of individual information from 1997 to 2003, based on the social and demographic variables, which produced an identifier on the residence condition of the individual within the household during the panel, with the help of the migration unit established at the Encel 2003.

The creation of the balanced panel permitted also to solve the problem of the lack of individual demographic information in any of the given years, that was due maybe to the fact that it was not reported or because the individual was absent form the household in that particular year, allowing thus to reconstruct the relevant demographic information such as age and kinship to the head of the household. This information was also compared to the retrospective one of the migration unit.

Table 1

Panel A: distribution of original treatment and control households (1998) and of new control (2003) in the rural evaluation sample

Treatment (Treatment 1998)	Eligible 7 837 (25.41%)	Non eligible 7 019 (22.76%)	Total 14 856 (48.16%)
Control	4 682	4 539	9 221
(Treatment 2000)	(15.18%)	(14.72%)	(29.9%)
New control 2003	6 218*	531	6 768
	(20.16%)	(1.72%)	(21.94%)
Total of observation	18 737	12 089	30 845
	(60.75%)	(39.2%)	(100%)

Note: percentage in respect to the total observed, in parenthesis

Panel B. Presence of eligible households in treatment localities 1998 during a given period of time

	Households in 1997 and	Households in year t and in all
Year t	in the round of year t	the previous rounds
1997	7 837	7 837
1998o	7 418	7 418
1999m	6 942	6 782
1999n	6 777	6 224
2000m	6 685	5 729
2000n	6 736	5 430
2003	6 695	5 088

Panel C. Identification and follow up of new members in eligible households of treatment localities since the year of their incorporation

11040011010	ao oi ti oatiii	one localities	55 511155 ti1	o your or an	on moorpy	Ji atioii
	1998o	1999m	1999n	2000m	2000n	2003
19980	1 259	1 050	1 023	785	866	783
1999m	_	672	574	422	499	522
1999n	_	_	600	376	424	447
2000m	_	_	_	826	713	652
2000n	_	_	_	_	434	326
2003		_	_	_	_	2 467

Note: total of incorporated individuals per year in the original 1997 households, in diagonal.

Sources:: Encaseh 1997; Encel 1998°; Encel 1999m; Encel 1999n;

Encel 2000m; Encel 2000n, and rural Encel 2003.

^{*} Includes the eligible households according to the criterion present in 2003.

FORMATION OF THE STUDY PANEL: NEW CONTROL GROUP

New control group

The Encel 2003 is the only source of data that provides information on the demographic characteristics of the new control households. The information obtained during the interview (2003) and the one obtained through the retrospective study of the demographic situation of the household in 1997, formed a panel of the members of new control households that were present and absent in the period between 1997 and 2003. The panel information was compared to the one of the migration unit (Encel 2003) that was also applied to the new control group.

The analysis of the impact of *Oportunidades* on the dynamics of living arrangements in beneficiary households (1997-2003) used the information gathered in both panels about the presence and absence of individuals in the Program's eligible households in treatment and new control communities.

Database on migration

The Encel 2003 retrospective study on migration provides important information about the reason and destination of the individuals that emigrated between 1997 and 2003, which permits to further extend the analysis on the effect of *Oportunidades* over the decisions of cohabitation. This information of treatment and new control households is used in the final part of the present analysis to estimate the effect of conditional cash transfers on the decisions of migration of the members of beneficiary households.

The analysis of the decisions of migration, considers a "migrant", the person who leaves the household and the original community and an "individual absent from the household", as any of its members that was not located in the subsequent rounds and it was known that had left the household either temporally or permanently.

Finally, in order to identify the destination of the emigrant, we compared the information of Encel 2003 about the contact re-establishment to that of the migration unit of the absent member.

IV. METHODOLOGY AND RESULTS

Methodology

The empiric estimation of the impact of Oportunidades about the demographic composition of the household, is widely covered in the literature that studies the effect of income on cohabitation arrangements, particularly in the one that refers to the impact of social programs on family living arrangements.

Oportunidades can alter in several ways the decisions of family living arrangements in households that have been beneficiary since 1998:

- First, because the cash transfers that the Program offers can help the
 members of the incorporated household to become more independent to
 either form their own families or leave their community to continue their
 studies or in search of better job opportunities.
- Second, because the increase in income offered by Oportunidades permits
 the joining of new members to the household, who in turn help to increase
 the benefit associated to scale economies in the consumption and
 production within the household.

The potential impact of Oportunidades on the decisions of separation or adherence of new members of the household, and the effect on the decisions of the household partition, affect the welfare of all the members of the family. That is why the empiric strategy of the present study is based in the household (d) as the decision unit for the analysis. (e)

⁽d) The definition of household being: a group of individuals that share the same roof and food, regardless of the family ties they have.

⁽e) Ideally the analysis unit should be that of the extended family, because the decisions on living arrangements are the result of the inter-relationship between cohabitant and non cohabitant family members. However, the basis for the evaluation has very limited information in that respect.

At the same time, because the present aim is to analyze the changes in the demographic composition due to the decisions of cohabitation of the people related to Oportunidades, we decided to leave for a future investigation the study of the effect that the Program would have on the demographic composition of a household if it considered the births and deaths that occur within it.

Due to the fact that the sample of new control households does not come from a random selection, the analysis that was made of the effect of the program on living arrangements did not use a direct comparison between the demographic characteristics that the treatment group and the new control group had in 2003. Also due to the non observed heterogeneity between both groups, this procedure will most probably give slanting results.

The method of "matching" by double differences allows to control the non observed differences that were present before the start of the Program between both groups and that are related to the demographic dynamics of the households. This non observed heterogeneity is characterized by the differences in local conditions due to: the labor market, the number of emigrants in the community, the degree of tolerance and different tastes that household members have in respect to cohabitation and/or a different initial demographic composition of both members of the household and non cohabitant relatives, in the treatment and new control groups.

With the use of this method, we were able to compare the changes in the demographic composition before the start of the Program (1997) and the ones observed six years later (2003) between treatment and new control households and thus be able to study the medium term effect of *Oportunidades* on the demographic dynamics of the beneficiary households.

The first step of the "matching by double differences" method, is to calculate the conditional probability of a household to become a treatment one, by having observed its most relevant characteristics before the start of the Program (1997).

The information for treatment households was obtained from the baseline and from the first follow-up of the evaluation sample (Encaseh 1997 and Encel of March 1998). The information for new control households was obtained from the retrospective study as of before 1997 and from the demographic condition that the household had during the Encel 2003 survey.

For treatment communities, the analysis was focused on the households that were initially eligible to receive the benefits of *Oportunidades* according to the eligibility criteria used by the Program at that time. These households are the only ones that may have received the benefits of the Program for a period longer than five years and therefore represent the most relevant group to calculate the medium term effect of the Program on their demographic dynamics.

For the new control communities, on the other hand, the analysis was focused only on the households that were considered eligible according to the eligibility criteria that *Oportunidades* had in 2003 (f).

Table 2 presents the results of the *probit* model about the conditional probability of a household of becoming a treatment one according to the demographic characteristics that the head of the household and his spouse had in 1997, its number of members, the features of the dwelling and availability of public services in the same year and the level of wealth (measured by the possession of different assets) that the household had before the start of the Program. The model presents a satisfactory predictive power with a value of pseudo square-R of 0.63.

The calculation of the *probit* model provides an index of probability for a household to be eligible, by considering the selected characteristics of the treatment and new control groups.

⁽f) Unfortunately, due to the lack of information it was not possible to use in the households of the new control communities, the 1997 eligibility criterion applied to the ones of treatment communities. This would have permitted us to have more similar samples of treatment and new control households before performing the "matching".

The estimate of the effects of *Oportunidades* on the dynamics of living arrangements of eligible households before (1997) and after the Program (2003), is the result of the analysis of "matching" of differences in the demographic change observed between 1997 and 2003 in both treatment and new control households with the closest index of probability.

The method of "matching" is done through a non parametric process. The calculations of this work in particular are based on the non parametric method of the "closest reference point".

The strategy is based in the construction of the next two definitions in order to analyze separately the effect of Oportunidades on the dynamics of living arrangements by considering: a) the decision to leave of members that were present in the household in the baseline of 1997, and b) the decision of admitting new members in the household after almost six years of the implementation of the Program (2003).

The change in the household demographic composition due to the leaving of its members between 1997 and 2003 is defined as:

(1)
$$\Delta_{97}^{9703} \equiv (N_{ji}^{97,2003} - N_{ij}^{97}) / N_i^{1997}$$

where $N_{ji}^{97,2003}$ is the number of household members i, with age, gender or kinship j, present in the household in 1997 as well as in 2003; N_{ji}^{97} is the number of household members i in the demographic category j in 1997 and N_i^{1997} represents the total of household members i – independent of j – before the introduction of the Program.

A negative value of -0.03 en (1) represents a reduction of 3% in the size of the household in relation to the one observed in 1997, due to the separation of members of the demographic category j after six years of the introduction of the program (2003). By its construction, Δ_{97}^{9703} can only have non positive values.

The change in the demographic composition of a household due to the adherence of new members between 1997 and 2003 is defined as:

(2)
$$\Delta_{9703}^{03} \equiv (N_{ji}^{2003} - N_{ij}^{9703}) / N_i^{1997},$$

where N_{ji}^{2003} is the number of household members i, with demographic characteristics j present in 2003; N_{ji}^{9703} is the number of household members i with characteristics j present in the household in 1997 as well as in 2003. A positive value of 0.05 en (2) corresponds to an increase of 5% in the size of the household in relation to the one observed in 1997. as a result of the adherence of new members of the demographic category j, six years later (2003). By its construction, Δ_{9703}^{03} can only have non negative values.

In this way, the estimator of double differences, calculate the effect of *Oportunidades* on the demographic dynamics resulting from the decisions of either separation or adherence of members, by comparing the differences in (1) and (2) between treatment and new control households, respectively.

The construction of the identity (1) excludes the members that separated from the household because they died. Also, the calculation of identity (2) excludes the members that were born after 1997 (g).

⁽g) The age range was established according to the connected age distribution of members of both treatment and new control households, and to the age pattern dictated by the formal education system corresponding to primary, secondary, mid superior and superior education, that is to say: 0 to 6 years, 7 to 12, 13 to 15, 16 to 21, 22 to 30, 31 to 40, 41 to 70 and older than 70.

Table 2. Probit model of the probability of participating in rural Oportunidades

D =1, eligible household in the treatment communities of 1997

D =0, eligible household under the 2003 criterion in new control communities

Variable	Coefficient	Est.error	[,] Variable	Coefficient	Est.error.
Characteristics of the head of the					
household.			Characteristics of the household		
presence in the household	-0.19	(0.10)	running water in the household	-0.12	(0.04)*
man	0.15	(0.04)*	electricity in the household	-0.04	(0.05)
with employment	-0.13	$(0.05)^*$	bare floor	-0.02	(0.03)
age	0.00	(0.00)	cardboard,plastic,wood roof	0.08	(0.04)*
incomplete primary school	-0.40	$(0.05)^*$	cardboard,plastic,wood walls	0.01	(0.04)
completed primary school	-0.28	$(0.04)^*$	number of rooms	0.03	(0.01)*
secondary school		$(0.04)^*$	Household assets		
more than 10 years of school education	-0.27	$(0.03)^*$	blender	0.01	(0.03)
Characteristics of the spouse			refrigerator	-0.13	(0.06)*
presence in the household	-0.36	(0.27)	gas stove	-0.13	(0.04)*
age	-0.00	(0.00)	water heater	0.00	(80.0)
incomplete primary school	-0.39	$(0.05)^*$	radio	-0.03	(0.03)
completed primary school	-0.26	$(0.04)^*$	television	0.02	(0.03)
secondary school	-0.23	$(0.04)^*$	washing machine	0.23	(0.09)*
more than 10 years of school education	-0.30	(0.04)*	automobile	-0.03	(0.07)
Demographic composition of the househ			number of oxen		
Number of men of 0-6 years old	0.07	$(0.02)^*$	1-3	-0.23	(0.03)*
7-12	0.07	(0.01)*	4-9	-0.22	(0.06)*
13-15	0.12	$(0.02)^*$	number of cows		
16-21	-0.01	(0.02)	1-5	0.03	(0.03)
22-30	-0.03	(0.03)	6 or more	-0.10	(0.04)*
31-40	-0.04	(0.03)	number of pigs/sheep/goats		
41-70	-0.12	$(0.03)^*$	1-5	0.04	(0.03)
More than 70 years	-0.10	$(0.05)^*$	6-10	0.05	(0.04)
Number of women of 0-6 years old	0.04	(0.01)*	11 or more	-0.10	(0.05)*
7-12	0.08	(0.02)*	number of horses/mules/donkeys		
13-15	0.04	(0.03)	1-3	-0.38	(0.04)*
16-21	0.04	(0.02)	4 or more	-0.26	(0.03)*
22-30	0.07	(0.03)*	number of chicken/hens/turkeys		` ,
31-40	0.04	(0.03)	1-5	0.23	(0.04)*
41-70	0.05	(0.03)	6-20	0.04	(0.03)
More than 70 years	0.04	(0.04)	21-30	0.04	(0.03)
ŕ		. ,	31 or more	-0.17	(0.05)*
Number of observed households	11 473				, ,

Note: the values of the explanatory variables used in the model, correspond to the year 1997 (before the start of the Program). The coefficients show a change in the probability of being a treatment household according to the marginal change of the corresponding variable. The model includes dummy variables for each locality. Robust standard errors

^{*} Significance <= 5% of committing error type 1.

RESULTS

Table A1 of the appendix shows the analysis of "matching" by simple differences in the demographic composition between treatment and new control households, before the start of the Program (1997). The substantial differences between both groups in 1997, made evident the use of the estimator by double differences to control the heterogeneity that existed between them before the Program.

Oportunidades and the demographic dynamics of the household according to age and gender

Table 3 shows the effect of *Oportunidades* on the demographic dynamics of beneficiary households taking into consideration the age and gender of the members that left and entered to it during the period of the analysis.

Panel A shows the dynamics on living arrangements that resulted from the decision of members who were present in the baseline and left between 1997 and 2003, according to the percentage of the household size before the introduction of the Program (1997). Panel B shows the effect of *Oportunidades* on the dynamics of living arrangements that resulted from the adherence of new members after 1997.

The results of double differences of panel A show that men and women that have lived for more than five years in the Program's incorporated households, are more prone to separate from their families, than those who live in non incorporated communities (see columns 1 and 2). *Oportunidades* has a significant impact particularly in the decisions of male members who by 1997 had more age than the required one to attend primary school (13 years). (h)

The Program has the greatest effect on the groups of age of men between 16 and 21 years or older than 70. For example, the size of the household of beneficiary families was smaller by 1.20% in the 1997-2003 period compared to that of their control peers (i) due to the decision of leaving of men between 16 and

⁽h) In order to keep the comparison between results in all the document, the definition of age is that of the individual in 1997.

⁽i) To simplify, in the section of results the terms "control", "new control" and "group of comparison", will be used indistinctively.

21 years old. On the other hand, the difference in the reduction of the size of the household is only 0.30% higher than that of the control group, when is due to the separation of male members of between 31 and 40 years old (see column 1).

Column 2 shows that the size of the beneficiary households was also reduced because women in the same age range decided to separate from them.

The estimator by double differences can be however inconsistent, in the case for example that the demographic change in the new control group was erroneously measured because of the "memory bias". The demographic changes that occurred in the control households (1997-2003) were taken from the retrospective information that Encel 2003 provided after six years. This was not the same for treatment households because their demographic information comes from the baseline (Encaseh 1997), so the possibility of error by "memory bias" is only present in the households of the comparison group.

If the control households had systematically reported a minor exodus of people between 1997 and 2003, the estimator of difference in difference would present a higher reduction in the size of beneficiary households, as shown in the results of table 3. (j). Unfortunately, to be able to know which was the demographic situation in control households in 1997 we only counted on the retrospective information. It might be possible however to neutralize the measurement error in the analysis if the bias magnitude of the members that were present in 1997, remains the same between individuals with different demographic characteristics (for example, men vs women).

⁽j)The "memory bias" affects the estimator of double differences in respect to the effect of *Oportunidades* on the demographic dynamics of beneficiary households, because of the decisions of leaving (table 3, columns 1 and 2) and the decisions of adhering of members (columns 4 and 5).

Under this assumption, it is possible to calculate in a consistent way if *Oportunidades* affects the demographic dynamics of beneficiary households through differentiating the cohabitation decisions between men and women and between treatment and new control households. The previous hypothesis, - which requires a third degree impact of the Program – is analyzed through the matching estimator of difference in difference in difference in columns 3 and 6.

The estimator by third differences of panel A, suggest an important medium term effect of the Program on the beneficiaries´ decisions of cohabitation, through encouraging the exodus of adults – mainly men- whose age in 1997 was above the minimum required to attend primary or secondary school and therefore were not candidates for receiving the government aid. The results show that male members between 31 and 40 years old were more likely to leave than female members in the same age range. The decision to leave of beneficiary households´male members in that age range was 0.33% higher than that of women, compared to the differences that occurred in control households.

Panel B of Table 3 shows the effects of *Oportunidades* on the willingness of incorporated households of sharing food and a place to live with new members, after more than five years of receiving government aid. The matched analysis is shown in column 2.

The estimator of matching by double differences (columns 4 and 5) show that beneficiary households had a greater number of men and women in 2003 than they did in 1997 –before receiving the government aid – and also in comparison with the control households during the same period. The new members of the household are particularly men and women in primary or secondary school age (7 to 15 years) so they are candidates to benefit from the scholarships offered by the Program.

At the same time, the incorporated households provide more lodging to adults older than 21 years old that were not cohabitant in 1997, in this sense, elderly women of more that 70 years old, were the most favored demographic group.

In consequence, the wealth effect that *Oportunidades* provides apparently also helps the beneficiary households to take advantage of greater scale economies that derive from a greater number of people living there and that are not eligible to obtain a scholarship.

The results based on the estimator by third differences, (column 6 panel B) show that beneficiary households had a higher preference by a rate of 0.25% to accept men than to accept women of between 22 and 30 years old, compared to the differences observed in control households.

The bottom part of Table 3, shows the evolution in the size of a household of treatment and control group and was determined by the decisions of separation or adhesion of its members. The estimator by matching, on the changes of the size of a household between both groups is not significant in a p value of 0.001.

The results of the impact of the Program on the rotation of beneficiary members (panels A and B) instead of on the size of the household, allow to observe the medium term important impact that it will have in the redistribution of cohabitation within the households but not on the size of it.

Table 3. The effect of *Oportunidades* in the demographic dynamics of rural households eligible between 1997 and 2003 according to its size and to the age and gender of its members.

Panel A
Percentage of members that left the household

Panel B
Percentage of members that arrived to the household

		Second differences: ΔT - ΔC		Third differences: ∆ Cols. (1)-(2)	Second da ∆T	Third differences: ∆Cols. (4)-(5)	
		Men	Women		Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)
By age							
	0-6	-0.17	-0.23	0.05	-0.02	0.08	-0.10
		(0.22)	(0.23)	(0.10)	(0.29)	(0.16)	(0.29)
	7-12	-0.50	-1.04	0.54	0.09	0.19	-0.10
		(0.38)	(0.20)*	(0.37)	(0.04)*	(0.05)*	(0.06)
1	13-15	-0.12	-1.09	0.96	0.12	0.02	0.10
		(1.08)	(0.26)*	(1.03)	(0.04)*	(0.25)	(0.24)
1	16-21	-1.25	-1.02	-0.23	0.23	0.20	0.04
		(0.25)*	(0.24)*	(0.21)	(0.20)	(0.14)	(0.24)
2	22-30	-0.46	0.66	-1.13	0.34	0.11	0.25
		(0.20)*	(0.75)	(0.79)	(0.07)*	(0.04)*	(0.08)*
3	31-40	-0.34	-0.01	-0.33	0.18	0.08	0.10
		(0.06)*	(80.0)	(0.09)*	(0.04)*	(0.04)*	(0.05)
4	41-70	-0.33	-0.21	-0.12	0.17	0.11	0.06
		(0.16)*	(0.17)	(0.10)	(0.05)*	(0.03)*	(0.06)
	<i>70</i> +	-1.72	-1.46	-0.26	1.87	1.70	0.16
		(0.12)*	(0.26)*	(0.26)	(0.20)*	(0.16)*	(0.24)

By size of the household

1st diff. ₉₇ -0.98 (0.50) 1st. diff.₀₃ -1.41 (0.57) 2nd. diff. ₀₃₋₉₇ -3.58 (3.94) Nbr.of observed households 11,473

Notes: results of the effect of *Oportunidades* in the demographic dynamics based on the analysis of matching by double differences through the method of the closest reference between original treatment households and those eligible in new control communities, corresponding to the sample of rural evaluation (Encaseh-1997, Encel 1998-2003. The results are presented by age and gender (according to the individual's age in 1997) on the decisions of leaving or arriving of members between 1997 and 2003. The coefficients reflect the differences in the demographic change between treatment and new control households as a percentage of the size that the household had before the implementation of the Program (1997) The results given by the size of the household show differences between both groups. The average size of a treatment household was 5.97 members in 1997. Standard errors by bootstrapping in parenthesis.

* Significance <= 5% of committing error type 1.

³⁹

Oportunidades and the demographic dynamics according to kinship with the head of the household

It is possible that *Oportunidades* influences the cohabitation arrangements within the household taking into consideration the degree of closeness or kinship that members have among themselves and in a more ample context, the positions that they occupy within the extended family. The previous analysis for example, shows an important impact of the Program as regards the decisions of leaving of adolescent members and the ones of adhering of elderly ones.

However, what was not shown was if the effect that the Program had was distributed evenly among all adolescents or if it was greater on those that were closer relatives of the head of the household. At the same time it would be ideal to study if the positive effects of *Oportunidades* were limited to beneficiary households or they reached also parents and grandparents of the extended family.

To answer these questions, table 4 presents the effect of the Program on the dynamics of living arrangements according to the kinship that the cohabitant had with the head of the household.

The evaluation sample provides only information of kinship between individuals with the head of the family at the time of the interview, so if this last one was substituted by another member at any time during the period of the analysis, then the relationship that the other members had among themselves, would also change in the evaluation sample.

In order to separate the effect that the Program had on the dynamics of living arrangements related to the decisions of cohabitation of the household members from that of the decision of cohabitation of the head of the household, the analysis was restricted to a sample of households in which the head of them remained constant between 1997 and 2003. The effect that the Program had on the decisions of cohabitation of the heads of the households is thoroughly analyzed in the migration section of the document.

The estimators by double differences were calculated in the age group according to the degree of kinship, with enough density in the study sample to perform the analysis. The estimators by triple differences according to kinship (sons vs daughters, etc) are not significant and therefore not shown in table 4.

Columns 1 and 2 of Table 4 confirm the former results in the sense that it is the youngsters between 7 and 21 years old the ones that are more prone to separate from the household when this receives government aid. The results show that in this age category the effect of *Oportunidades* is greater on the sons and daughters of the head of the household and not significant on other members in the same age group, like nephews or nieces (see column 5).

The government aid on the other hand, tends to affect the living arrangements of grandchildren between 0 and 7 years old that were present in the household in 1997 but were not there anymore after six years of the start of the Program in a rate that was higher by 0.16% compared to that of their peers of the control group (columns 3 and 4). This was not the case for children of 0-7 years old that were the sons and daughters of the head of the household. The greater absence of grandchildren (and not children) in this age group, together with a higher rate of separation of sons and daughters and in laws of 16 and 30 and 22 and 40 years old respectively (columns 1, 2 and 6) demonstrates the partition effect of the households incorporated to *Oportunidades* for the formation of new families and households, because the government aid helps the members to become more financially independent. This result is confirmed in the analysis of migration.

After almost six years of the implementation of the Program in rural areas, it was shown that beneficiary households were more capable of attracting the arrival of new members to it (results shown in panel B). The sons and daughters that were absent in 1997 were more likely to return to their households in 2003 than any other member.

It was at the same time interesting to observe the decisions that the heads of the beneficiary households made of providing a place to live and food to the members of their extended family that were not resident in 1997. This increased the size of the treatment households by 0.25% compared to that of the control ones (see column 8).

This same trend was also observed regarding to the adherence of new members that do not belong to the nuclear family as are nephews and nieces of between 22 and 30 years old who were provided with food and lodging (column 5) and even to that of individuals that did not have any family relationship with the head of the family (like employees, friends, etc) and that were absent in 1997. (column 9).

The results shown of the dynamics of living arrangements within the beneficiary households allow to confirm the important effect that *Oportunidades* had on the re-distribution of the welfare and to consider the household as the targeting unit of the Program. Unfortunately, the lack of information in the evaluation sample about the standards of living of the members of the extended families, prevented the further analysis of the influence of the Program on the welfare of non resident families.

Table 4. The effect of *Oportunidades* in the demographic dynamics of rural eligible households between 1997 and 2003, according to the age and kinship with the head of the household.

Panel A. Percentage of members that left the household . Second differences (ΔT - ΔC)

	-					Sons/daughters		Parents/grand	
	Sons	Daughters	Grandsons	Grandaughters	Nephews/nieces	In law	Siblings/in laws	parents	Non kinship
Age	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
All	-1.58	-2.98	-0.32	-0.30	-0.12	-0.02	0.97	-0.05	-0.02
	(1.26)	(0.65)*	(0.09)*	(0.09)*	(80.0)	(0.16)	(0.75)	(0.36)	(0.09)
0-6	0.07	0.02	-0.16	-0.16	-0.02	_	_	_	_
	(0.20)	0.24	(0.03)*	(0.03)*	(0.01)*	_	_	_	_
7-12	-0.49	-0.88	-0.1Ó	-0.11	-0.06	_	_	_	_
	(0.24)*	(0.19)*	(0.02)*	(0.03)*	(0.02)*	_	_	_	_
13-15	0.02	-1.00	· — '	· — ´	-0.04	_	_	_	_
	(1.07)	(0.28)*	_	_	(0.04)	_	_	_	_
16-21	-1.01	-0.93	_	_	0.02	_	_	_	_
	(0.25)*	(0.22)*	_	_	(0.03)	_	_	_	_
22-30	-0.14	-0.19	_	_	-0.02	-0.08	_	_	_
	(0.20)	(0.05)*	_	_	(0.03)	(0.02)*	_	_	_
31-40	-0.02	-0.03	_	_	0.00	-0.03	_	_	_
	(0.02)	(0.02)	_	_	(0.02)	(0.01)*	_	_	_

Panel B. Percentage of members that adhered to the household. Second differences (ΔT - ΔC)

Age	Sons (1)	Daughters (2)	Grandsons (3)	Grandaughters (4)	Nephews/nieces (5)	Sons/daughters In law (6)	Siblings/in laws (7)	Parents/grand parents (8)	Non kinship (9)
All	0.46 (0.26)	0.41 (0.19)*	-0.04 (0.18)	0.08 (0.05)	0.01 (0.16)	-0.13 (0.37)	0.07 (0.03)*	0.24 (0.05)*	0.06 (0.02)*
0-6	0.09 (0.14)	0.04 (0.16)	-0.06 (0.19)	0.04 (0.03)	-0.06 (0.22)	_		_	_
7-12	0.08 (0.04)*	0.06 (0.03)*	0.01 (0.03)	0.02 (0.03)	0.01 (0.01)	_	_	_	
13-15	0.05 (0.02)*	0.10 (0.04)*			0.02 (0.01)*	_	<u> </u>		_
16-21	0.09 (0.20)	0.15 (0.05)*	_	_	0.01 (0.01)	_	<u> </u>		_
22-30	0.13 (0.04)*	0.05 (0.02)*	_	_	0.03 (0.01)*	0.02 (0.02)	_	_	_
31-40	0.02 (0.01)*	0.02 (0.01)*	_	_	0.00 (0.0001)	0.00 (0.0001)			_

Note:see table 3. The results are presented according to age and kinship with the head of the household in 1997 considering the decisions of leaving or adhering of members between 1997 and 2003. All the results are based on a restricted sample of households (10 706 households of a total of 11 473) in which the head of it remained constant in 1997-2003. "Non kinship" refers to the category of individuals that do not have any family relationship with the head of the household (for example, employees, friends, etc.)

Oportunidades and the decisions on migration

This section uses the retrospective information on migration provided by Encel 2003 to analyze the direction of demographic changes within beneficiary households that resulted from the effect of more than five years of the Program's implementation.

The first stage of the analysis was to identify the members that decided to leave their household during the afore mentioned period and compare the number to that of the originally registered members. (k) The second stage, was to identify the reasons for the decision of migrating: marriage or cohabitating couples, work or studies and the third one was to determine whether the individuals emigrated to another community, state or country.

This process permitted the integration of a database with information of the individuals from treatment and control groups that emigrated from their original communities during the 1997-2003 period. The members that stayed, were classified as non emigrants. The members that were absent during the period of the analysis of living arrangements and that were not registered in the unit on migration, were also classified as non emigrants because the partition or separation from the household does not necessarily imply that they emigrated.

In order to establish a secure link between the effect of *Oportunidades* on the dynamics of living arrangements and the decisions of emigration, the information about migration was restricted to the treatment and new control households of the previous analysis.

The calculation by "matching" of the effect of the Program on individual migration decisions used the same rate of propensity of the household that is shown in the analysis of table 2. However, the matching was made on an individual basis according to age, gender and kinship with the head of the household.

(k)Not all the individual decisions of separating from the household necessarily mean that they are going to emigrate from their original communities.

In this way, the females of treatment households were only matched with females in the new control ones that showed similar rates of propensity.

Table 5 presents the results of reason of migration (panel A) and destination of the migrant (panel B). Columns 1,3 and 5 show the results of first differences on the propensity of migrating between individuals of treatment and new control households in the period 1997-2003.

Column 1 of panel A shows that during the last five years, women in beneficiary households emigrated by 8% more often from their communities because of the decision of getting married compared to their peers in households with non government aid. The Program also encouraged men to leave their household because of the decision of getting married, although in this case the percentage was of only 3% higher than that reported in the comparison group.

If on the other hand the decision for migrating was to look for better job opportunities, the rate shown for men in beneficiary households was 5.5% higher than that of women of the same household in relation to the differences observed in the control group (see column 3).

The Program had a positive influence in the decisions of members of beneficiary households to leave their communities in search of better job opportunities regardless of their position as heads of the family (column 3) although in this case, the rate shown was 6.5% lower than that of the individuals that had other positions in the household.

Moving to another locality for the reason of continuing the studies was more important to treatment individuals of between 7 and 12 years old (i). The group of age of these members agrees with the one observed in the dynamics of cohabitation due to separation. This can reflect the need of children of 7-12 years old to live in communities with secondary schools and thus keep on receiving the government aid.

⁽I) To maintain the comparability with the analysis of living arrangements, the variable relating to age in table 5, corresponds to the age of the individual in 1997.

Considering the age criterion, it can be observed that the beneficiary members of the Program that had the most impact were those of the group of between 13 and 21 years old. It is probable however that the estimators of matching by first differences confuse the direct impact of *Oportunidades* on the decisions of migration, because of the non observed heterogeneity of the individuals and the households between treatment and new control groups due to the non random process of selection of this latest one.

Since the beginning (1998), the incorporation of *Oportunidades* to rural communities occurred in a gradual and programmed form, incorporating first those with the highest degree of poverty and later the less marginated ones. That is maybe the reason why the new control communities that by 2003 still did not belong to the incorporated rural communities, had since the beginning more developed labor markets than those found in treatment localities in 1997 that were the first ones in receiving government aid.

The calculation of the propensity rate for the matching analysis does not include this example of non observed heterogeneity or any other possible ones, so it is probable that the estimators by first differences overestimate the direct effect of *Oportunidades* on the decisions of migration of the members of treatment households compared to those of the control communities.

The last direction and magnitude of the bias is unknown. For example, the estimators by first differences could underestimate the impact of the Program on the decisions of migration if the presence of local emigrant networks were negatively correlated with a lower level of poverty in the locality due to the cash transfers. (m)

⁽m) The result can produce an overestimate of the effect of *Oportunidades* on the decisions of migration when the correlation between level of poverty and the presence of emigrant networks is positive.

However, it is possible to consistently estimate the indirect effect of the Program on the decision to migrate through a matching analysis of double differences that incorporates the fixed effects in the household. This type of estimators are free of bias provided that the non observed heterogeneity - related to the decisions of migration and *Oportunidades* – is essentially characterized by differences in the initial endowments granted to treatment and control households.

The columns with the even numbers in table 5 show the indirect effect of the Program on the decisions of migration. The calculation was made through a matching analysis by double differences considering the *change* in the individual probability of migrating in relation to the average probability of the household members in both treatment and control groups.

The results with fixed effects on households prove the important impact of the Program in encouraging the decisions of women to migrate in order to get married and form their own families in those households that received government aid for more that five years (see panel A, column 2). This result corroborates the same tendency observed in the dynamics of living arrangements towards a partition of households incorporated to the Program. The government aid of more than five years, apparently provides the household with enough resources that give women a greater independence to form their own families even outside of their original communities.

The presence of fixed effects on households reduces the estimated effect of the Program on the probability of migrating due to work or studies to a value in which the statistical significance is not different from zero (panel A, columns 4 and 6). However if the analysis is focused on the destination in the decision to migrate, the estimators with fixed effects on households are statistically significant.

According to the results of panel B, columns 2, 4 and 6, the government transfers discourage by a 0.5 probability the decision to migrate of treatment individuals between 31 and 40 years old, regardless of the distance to their destination in relation to the average probability of the household members (n). Nevertheless, *Oportunidades* maintains a positive and significant effect on the migration patterns of youngsters. In adolescents of 13 to 21 years old, the probability of migrating to another locality or even to the United States is higher by 2 and 0.5% respectively compared to that of the other members of the households when they are recipients of the government aid (columns 4 and 6). On the other hand, this same aid discourages by 0.5% the migration to the United States of the females of beneficiary households.

⁽n) Ninety nine percent of the people who migrated abroad went to the United States. Only two individuals were reported to have chosen Argentina as their destination.

Table 5. The effect of *Oportunidades* on the individual probability of household members of having emigrated between 1997 and 2003, according to migration and destination.

Panel A. According to the reason for leaving

3	Marriage (or cohabitation	l	Vork	Studies		
		2nd. differences	1st. differences	2nd. differences	1st. differences	2nd. differences	
	(1)	(2)	(3)	(4)	(5)	(6)	
By gender						_	
Men	3.11	-1.79	10.81	2.00	0.29	-0.39	
	(0.57)*	(0.45)*	(1.59)*	(1.23)	(0.62)	(0.47)	
Women	8.05	1.94	6.29	-1.17	0.75	0.14	
	(1.02)*	(0.87)*	(0.66)*	(0.60)	(0.14)*	(0.17)	
By kinship							
Head of the household	_	_	2.63	-0.35	_	_	
	_	_	(0.45)*	(1.30)	_	_	
Other relationship	_	_	9.48	0.33	_	_	
·	_	_	(0.97)*	(0.83)	_	_	
By age group							
All	5.68	0.05	8.36	0.12	0.49	-0.05	
	(0.40)*	(0.35)	(0.72)*	(0.65)	(0.36)	(0.34)	
7-12	_	_	_	_	1.59	0.46	
	_	_	_	_	(0.28)*	(0.26)	
13-21	10.68	2.15	16.82	4.42	0.72	0.09	
	(4.06)*	(3.76)	(6.57)*	(5.68)	(0.62)	(0.50)	
22-30	4.17	0.66	3.51	-0.77		_	
	(0.79)*	(0.47)	(0.80)*	(0.62)	_	_	
31-40	.	-	2.16	-3.45	_	_	
		_	(0.46)	(1.92)	_	_	

Panel B. According to destination

3		r community		her state	To the United States		
	1st. differences	2nd. differences			1st. differences		
	(1)	(2)	(3)	(4)	(5)	(6)	
By gender							
	0.18	-0.33	1.51	-0.17	1.23	0.24	
Men							
	(0.68)	(0.35)	(0.22)*	(0.17)	(0.19)	(0.12)*	
Women	1.07	0.27	2.47	0.18	0.52	-0.25	
	(0.18)*	(0.26)	(0.26)*	(0.21)	(0.11)	(0.08)*	
By kinship	, ,	. ,	, ,	, ,	, ,	, ,	
Head of the household	0.06	-0.11	0.06	-0.57	0.06	-0.06	
	(0.08)	(0.07)	(0.07)	(0.14)	(0.07)	(0.07)	
Other relationship	0.73	0.18	2.50	0.16	1.08	0.02	
Cure resulting	(0.47)	(0.34)	(0.21)*	(0.15)	(0.13)	(0.09)	
By age group	(0.11)	(0.0.1)	(0.2.)	(0110)	(0.10)	(0.00)	
All	0.56	0.16	2.05	0.03	0.89	-0.003	
7-111	(0.46)	(0.31)	(0.18)*	(0.13)	(0.10)*	(0.07)	
13-21	1.22	0.30	5.65	1.88	2.65	0.57	
13-21							
00.00	(0.93)	(0.55)	(0.70)*	(0.46)*	(0.42)*	(0.26)*	
22-30	0.23	-0.05	0.44	-0.23	0.22	-0.07	
	(0.13)	(0.09)	(0.18)*	(0.14)	(0.12)	(0.07)	
31-40	0.12	-0.36	0.17	-0.93	_	-0.24	
	(0.14)	(0.12)*	(0.10)	(0.24)*	_	(0.11)*	
Nbr of observed individuals	34 052		34 052		34 052		

Source: retrospective unit (Encel 2003). Non emigrants are those who stayed in the household and the absent ones whose registration was not found in the migration unit. Estimates by matching of each individual (gender,age and kinship with the head of the family)using the propensity rate on whether being an eligible household between treatment and control. The columns of uneven numbers present results by first differences on the probability of migrating among individuals. The columns with even numbers present the estimators by double differences with fixed effects on the households on the *change* of the individual probability of migrating in relation to the average probability of all household members. Group age, according to age in 1997. Standard errors by *bootstrapping* in parenthesis.

^{*} Significance <= 5% of committing error type 1.

V. CONCLUSIONS

The results of this study indicate that the Program *Oportunidades* has had a significant impact in the cohabitation arrangements of households in rural communities during more than five years. The government cash transfers influence the partition of rural households and the formation of new ones by giving them the possibility of providing a place to live and food to new members in school age or to elder relatives of the extended family who under different circumstances would live in separate places and also to the absent children that decide to come back home.

The results show that the programs of conditional aid that are implemented in places with high levels of poverty (like *Oportunidades*) can significantly influence the rotation of members of beneficiary households, even when the aid does not have a significant net effect on the size of them in the medium term. This effect in rotation produces at the same time higher rates of migration out of the original community for some household members who decide to form their own families and for those who choose another community or even the United States as their new place of residence.

VI. RECOMMENDATIONS

The results of this document suggest that *Oportunidades* has had an important impact in the partition of households that receive its support. Taking advantage of the government aid, many members of beneficiary households have left their places of origin in search of better job opportunities.

It is therefore important to conduct a follow-up of the emigrants to know the level of welfare that resulted from their decision of emigrating. If that level is still precarious despite the search of better opportunities out of their local communities, there is an important gap to be filled as regards social policies to encourage the formation of alternating job resources in the beneficiary communities in order to retain the economically active population of the households incorporated to the Program.

The government has presently programs of micro-credit in beneficiary communities. It is recommended though, to analyze if the rise in the credit supply to help establish family businesses in these communities will actually help to reduce the use of *Oportunidades* resources to finance the migration of members looking for better job opportunities.

The results do not allow to conclude if the children and adolescents that receive scholarships form the Program alter in any way their decisions to migrate once they finish their primary or secondary education. The period that the evaluation sample covers is still too short to have conclusions in this respect. Therefore, it is recommended to extend the evaluation of the program to the long term, so that we are able to know the patterns of migration of the beneficiary population after they have acquired more human capital when they finish their studies in their original communities. To do that it will be necessary to design a longitudinal database that performs an effective follow-up of the Program's beneficiaries and non beneficiaries during time, regardless of their place of residence.

The results of this document also suggest an important effect of Oportunidades on the partition of beneficiary households because it affects the decisions of separating of women in order to get married or live with a partner. With this, the Program not only alters the life style of the members of the beneficiary households but also the welfare of an important number of non cohabitant relatives through the formation of new households.

Therefore, considering the analysis of the impact form the social point of view it would be recommended that the analysis of the effects of *Oportunidades* was extended to cover a greater number of non cohabitant relatives, particularly to be able to know if there is an indirect effect of the investment in human capital (health and education) of children born in the new formed households. At the same time, from the demographic point of view it is recommended to analyze if the anticipated formation of new households brings with it higher rates of birth.

The effect of *Oportunidades* on the formation of new families and the fact that relatives of the extended family are increasingly received in beneficiary households, suggest the revision of the targeting criterion and the Program's rules of operation. The rules of operation set limits as regards the time that a beneficiary household can stay in the Program and also they establish the maximum amount of monetary aid that a household is to receive. However, these procedures can be easily eluded when for example the members of a household that is soon going to be removed from the Program, separate from it to form new households and register them under the Program.

The results of this document show a higher rate of rotation of beneficiary households members due in part to the leaving of original members of treatment households that was shown in the evaluation sample. The greater loss of treatment individuals can pose an important problem for the conclusions about the impact of *Oportunidades* on health and education if these ones show different indicators on these matters than the individuals that stayed in the sample.

In order to properly analyze the possibility and magnitude of the bias it is required to know the state of welfare of the individuals that left the evaluation panel so it is highly recommended that *Oportunidades* makes additional efforts to recuperate them to verify if the differential in desertion represents an important factor in the interpretation of results about health and education.

The possibility of bias is closely related to the magnitude of differential desertion in the evaluation sample, so it is likewise recommended to perform a study that indicates with precision the pattern of differential desertion not only among treatment and new control individuals, but also among treatment and original control ones.

Finally, the results of the document provide elements that contribute to the debate on the efficiency of public expense directed to social actions that help populations in remote and isolated communities. If programs like Oportunidades, encourage the migration to more developed areas and important changes of places of residence, it is perhaps attractive to use part of their design to implement other anti-poverty programs that reach areas that are traditionally excluded.

APPENDIX

Table A1. Simple differences in the demographic composition of treatment and control households before the start of the Program (1997), by age according to gender and kinship with the head of the household.

				_		Grand-		Sons/daughter		Parents/grand-	
	Men	Women	Sons	Ū	Grandsons	_	Nephews/nieces		Siblings/in laws	parents	Other
	(1)	(2)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
All	_	_	-1.75	-14.83	0.68	0.27	-0.89	-0.02	-2.83	-1.33	-0.02
	_	_	(3.13)	$(3.28)^*$	$(0.22)^*$	(0.32)	(0.75)	(0.24)	(2.08)	(1.05)	(0.17)
By age group											
0-6	-1.86	-12.02	-2.10	-11.91	0.34	0.03	0.02	-0.04	_	_	0.01
	(2.18)	(4.41)*	(2.39)	(4.36)*	$(0.09)^*$	(0.24)	(0.04)	(0.09)	_	_	(0.03)
7-12	-0.22	-1.57	0.58	-1.82	0.24	0.21	-0.90	-0.08	_	_	-0.03
	(1.75)	(2.04)	(1.75)	(2.11)	(0.08)*	(0.08)*	(0.77)	(0.16)	_	_	(0.06)
13-15	-0.38	-0.57	0.38	-0.80	0.09	0.06	0.05	0.09	_	_	-0.01
	(1.28)	(1.03)	(1.09)	(1.08)	$(0.04)^*$	(0.05)	(0.04)	(0.05)	_	_	(0.03)
16-21	0.66	2.20	0.96	1.20	0.01	-0.03	-0.05	0.01	_	_	-0.01
	(0.91)	(0.41)*	(0.56)	(0.33)*	(0.06)	(0.06)	(0.06)	(0.05)	_	_	(0.06)
22-30	-3.37	-3.74	-1.49	0.17	· —	· —	0.04	· — ·	_	_	· — ·
	(2.42)	(2.35)	(1.67)	(0.14)	_		(0.03)	_	_	_	_
31-40	-1.83	-2.12	-0.08	-1.67	_		-0.05	_	_	_	_
	(1.72)	(1.81)	(0.16)	(1.73)	_		(0.05)	_	_	_	_
41-70	0.47	-1.93	` <u> </u>	· — ´	_		<u> </u>	_	_	_	_
	(1.86)	(1.89)	_	_	_	_	_	_	_	_	_
70 +	12.12	14.12	_	_	_	_	_	_	_	_	_
	(0.35)*	(0.37)*	_	_	_	_	_	_	_	_	_
Nbr. of observed households	11 473	11 473	10 706	10 706	10 706	10 706	10 706	10 706	10 706	10 706	10 706
nousenous	114/3	114/3	10 / 06								

Note: simple differences in the demographic composition before the start of the Program (1997)by matching of the closest referent point between original treatment households and eligible ones of new control communities. The simple differences by age group and kinship are presented as percentages of the size of the household. The results shown according to kinship are based on the sample of households in which their head remained constant between 1997-2003. "Other" refers to the group of household members that have no family relationship with the head of the household (for example, employees, friends, etc). For the results shown according to gender, the sample is not restricted. Standard errors by *bootstrapping* in parenthesis.

* Significance <= 5% of committing error type 1.

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External Evaluation of the Impact of the Human Development Program Oportunidades

Mid-term Qualitative Evaluation of the Oportunidades Program in rural areas

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Note: The points of view expressed in this document are the sole responsibility of the authors and do not reflect the institutional opinion of the Instituto Nacional de Salud Pública (National Institute for Public Health)

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Executive Summary Introduction

The fundamental purpose of the qualitative midterm evaluation in rural areas of the Human Development Program *Oportunidades* was to know its impact on communities and households in its first phase, that is, those that were incorporated in 1997. A second purpose was to gather information regarding the implementation of two new interventions: the Differentiated Support Scheme (DSS) and the *Oportunidades* Youth Platform (OYP). The substitution of promoters with Committees for Community Promotion was also explored.

Of particular interest was the question of the impact of the Program in communities and households six or seven years after its implementation to see if the results in terms of improvements in latter years were stronger than the short term impact and to see if there had been an impact with regards to the occupations which the initial scholarship recipients had chosen. The design of the Program emphasized the creation of human capital in new generations. In these communities and households, the first cohort of scholarship recipients incorporated during their sixth year of elementary school in 1997 could have finished their postsecondary education and entered an occupation.

However, since 1981, the creation of formal job opportunities in the middle income and high-income ranges has been in decline in the country. The probabilities of entering these levels of employment at a national level have been greatly reduced. This "pioneer" cohort of scholarship recipients must face on the one hand a labor market with decreased opportunities for formal non-manual employment and on the

other hand, a lack of social capital geared towards this market, coupled with the fact their origins will most likely make them the victims of discrimination.

Methodology

In order to fulfill the two objectives (the midterm impact evaluation and the evaluation of the implementation of two new components), we selected six communities, each in a different state, and with different characteristics in terms of marginalization, ethnicities represented and economic basis. Four were chosen from a selection of communities previously studied by our team in 1999 and 2000. The communities include a range of populations from those with extreme poverty, high marginalization and a high proportion of monolingual individuals in an indigenous language to those with only moderate marginalization where Spanish is the native language and educational levels are similar to the national average. The selection allowed us to follow up with these communities and households (rather than do a purely retrospective study). The two remaining communities were chosen utilizing an Oportunidades database which offered data regarding the number of cases and dates in which they had been transferred to the DSS or when youth had entered the OYP. The community with most cases of DSS was also one of the most prosperous communities studied and had highest income per household. Eight households in each community were studied (those who benefit from the Program, those removed, those on DSS and those not incorporated into the Program) so as to be able to distinguish the impacts of each intervention within the Program. Additionally life histories for the six or seven years since incorporation into the Program were collected (130 histories, 770 years of life), focus groups were organized with fathers, mothers and youth in post secondary education and interviews were conducted with key actors in the Program and the community (in schools, clinics, county social development offices and other sites). As a result of the increase in the number of case studies, the inclusion of new actors and the utilization of new instruments, the amount of time spent in each community increased as did the quantity and quality of the materials gathered.

Findings

Impact on households

The goal of the analysis undertaken was to discover the factors directly related with Oportunidades that were associated with wellbeing for the families who benefit from the Program. At the same time we looked for other factors that have had an impact on the wellbeing of the families, even those not directly related to the Program. This analysis allowed us to recognize the factors which inhibit these favorable effects. Finally the study allowed us to analyze elements which are central to the condition of vulnerability.

Among the various dimensions in the study of poverty and vulnerability, this analysis prioritized looking at issues related to consumption and housing. According to our earlier research, it is in these two areas where one begins to see evidence of the transformations that *Oportunidades* can produce in the wellbeing of those enrolled in the Program.

Families' levels of consumption, in general, depend on their economic expenditures and to a lesser degree on their ability to provide for themselves and of the gifts received. Given the scarcity which is characteristic of the economy of these families, their consumption (both in broad terms and more specifically their nutritional consumption) is restricted. Furthermore their nutritional consumption or intake is subject to modification in response to the socioeconomic conditions in the household; that is to say it changes according to income and the needs to be covered. The analysis proved that the impact of the support provided by Oportunidades in the field of nutritional consumption is clearly positive.

We have evidence that the money which regularly arrived over the course of various years into the household budget has allowed the families to expand their purchasing power. Two factors have enabled this to happen: 1) the support offered by *Oportunidades* has freed up part of the household budget to be used in expenditures not related to food (payment of services for example) and 2) *Oportunidades* has expanded the ability for the individual and the family members to have debt and in that sense have made these women and their households credit worthy (allowing families to buy furniture, electronic household goods through credit, clothing and food on payment plans) thanks to these women's (and the business owners') ability to depend on a stable income. Therefore the beneficiaries' ability to count on an expanded and dependable income source —*Oportunidades* support- has increased their consumption by revitalizing the debt economy. The importance of the support provided by *Oportunidades* in the families' consumption patterns can also be measured when these are discontinued (in households no longer enrolled in the Program).

The positive impact of the Oportunidades cash transfers were mitigated by the high housing related costs (especially electricity) and other direct and indirect costs caused by their children's school attendance (particular at the secondary and post secondary levels).* Mothers see these expenses as unavoidable and they refrain from buying certain food products or reducing the amount they buy.

Investments in housing are a clear example of the interrelationship of factors. On the one hand, improvements in housing are the product of women's salaried work, and female led processes of negotiation (with their husbands) with respect to the control of income and a clear direct contribution of men's work. However various other factors have made these improvements possible. There is evidence of a direct impact, in the sense, that in some cases part of the money from the Program is used directly to make improvements in the home; however the bulk of the ethnographic material points to a combination of factors: the support of *Oportunidades*, secure employment of the men in the household, access to family lots, access to funds from various housing development agencies, presence of adult males with experience in construction and home improvements, remittances from migrant sons, and gifts from children, all of which are positively linked.

*

^{*} Direct costs related to enrollment and tuition increase dramatically in secondary and post secondary education. Indirect costs grow even more. In order to attend secondary school it is usually necessary to pay transport. Post secondary school means even higher transportation costs because the schools are farther away. The costs of materials and school related activities (school projects that need to be typed and have spreadsheets) increase as the school level rises. Given these conditions many families have decided to have their children live with other families in larger towns with upper level school facilities. When family members can take them in the costs of moving the children can be quite low. In other cases they pay room and board and if they are not family members the children perform domestic duties in order to pay for their room and board.

The analysis exposed two factors which seem to be directly linked to the wellbeing of households: domestic cycles and head of household. The information collected in the field indicated that the domestic cycle is a determining factor in the household's capacity to generate income and that the stage of consolidation or equilibrium is related to increasing wellbeing. In this sense, one can propose that the support given by Oportunidades is most important – more necessary- during the difficult expansion stage, when the household needs to shoulder more expenses and economic pressures. The results of this research uncovered a phenomenon of growing importance: the presence of households of three generations (parents, children and grandchildren) or two generations (grandchildren and grandparents) in which grandmothers' play a crucial role in the care and socialization of a new generation of children, the children of national and international migrants. Women are engaging in tasks related to social reproduction well beyond their reproductive years as increasingly older women are becoming primary caretakers for their grandchildren. The presence of grandchildren often coincides with the marriage of working children which makes the economic supports provided by Oportunidades increasingly necessary. Given the age groups represented (senior citizens and children) these households with many consumers but few income generators, are particularly vulnerable to the lack of continuity of remittances sent by the intermediary generation.

One must also consider the transition in head of household from men to women as a result of separations and the dissolution of unions. These changes are neither

positive nor negative and they do not increase or inhibit the impact of *Oportunidades* in and of themselves. Separations can be interpreted as improvements in the home when the decision is the woman's and the husband or partner was no longer providing significant income to the household. However they can have a negative impact on the household income when the husband was the significant provider and left of his family. *In both cases, however the economic and other support provided by the Program can be important in overcoming this domestic crisis.*

Among the factors associated with increased vulnerability we find in the first place the lack of local employment opportunities and the precarious nature of those opportunities which exist as well as illness of any member of the household, particularly when the sick member is —or was- an active generator of income.

Feminized domestic economies, given the meager salaries women obtain in exchange for their work, are also associated with vulnerability. One of the most dramatic results of this research is the inability of men (not in all cases but in most cases) to participate effectively in income generation for their homes. In the overwhelming majority of cases women are the ones who insure household economies and because their salaries are so low, unstable and informal, feminized domestic economies are fragile. We believe an analysis of the Oportunidades databases which weighs the principal factors at work in determining low or null educational attainment and its impact on the population enrolled in the Program of utmost importance. We suggest to pay special attention to female headed households, either economic or without a male partner.

The analysis of households transferred to the DSS showed they have in fact improved their economic situations. The principal factors which explain this improvement are better employment situations for the household members and the domestic cycle (concretely the move from the expansion stage to the consolidation stage). Few cases of DSS exist among the entire group of enrollees in the Program and we had to consult the databases in order to find communities were more than one household was in this situation. This selection method has two important implications: our perceptions of these household must be perforce quite preliminary and these communities are particularly prosperous and hence have much higher income than the mean of households transferred to DSS. Nevertheless it is worrisome that a minority of households that are no longer enrolled or transferred to DSS decided to interrupt their children's education despite the fact that the decrease in the amounts transferred were relatively small and that those households had on the whole improved their autonomous capacity to generate income. In other words their total income, despite the decrease in the cash subsidy, was greater than other households who benefit from the Program however they were removing their children from secondary and post secondary education. These households received with some frequency vague or contradictory information regarding their transfer into the DSS.

Impact on education

While the impact on education could be directly observed in the households, our study also looks at what happened from the perspective of the educational institutions and their actors and the analysis of the life histories.¹ All the evidence gathered points

clearly to permanence in the Program as an important factor in reaching higher levels of educational attainment. According to the life histories, the presence of both parents in the home and their level of education are factors which have a greater impact in the continuity of their children's formal education but while they differentiate the population according to their accomplishments they are not a factor in producing changes. In other words, even though there are factors which can better explain the variation in educational attainment among diverse families, the factor which produces a change is Oportunidades. In the second place we found that a significant number of the parents in these households expected their children to continue studying as compared with 2000. One could perceive that the Program's cash transfers made it possible or facilitated the process considerably. The reasons for this change have to do with both the households and community. On the one hand households are willing to invest their own resources in education (the investment in education is greater than the scholarship amount received) and on the other hand a significant number of the households that are not enrolled in the Program are also making notable efforts to increase the educational attainment of their children. In elementary school, the coverage of the population in the corresponding age group is almost total. Exceptions occur in households that in our judgment have an accumulation of disadvantages. These are households were various negative factors coincide or where the gravity of one of these is particularly marked. They have few income generators (and those they have are particularly low and erratic); many children, elderly people or chronically ill members (including alcoholics) incapable of contributing a salary or other work to the household. In these households despite efforts to the contrary there are still children

who do not attend school. These mechanisms are mutually reinforcing and constitute a "spiral of disadvantages". We suggest coordination with other agencies and programs to insure these households can close the gap with other households in the Program. The school population at this level is stable or decreasing due to demographic changes

According to our life history studies, approximately 70% of the students graduate from primary school and enter secondary school although some drop out later. Enrollment in secondary school increased rapidly until 2002 since then it has remained stable for the last two years. Although the proportion of youth which attend has grown noticeably since 1997 its important to ask whether the current structure of the Program will allow this percentage to significantly increase in the coming years or if a plateau has been reached which will be difficult to overcome. The stability of the last two years may be evidence of the latter. Poverty, on the one hand (that is the inability to defray costs) and on the other hand skepticism about the labor market seems to affect decisions (and household efforts) so children can complete this level.

According to our the life histories, household case studies and the numbers reported by the school officials of the post secondary schools studied, today 30 to 40% of the scholarship recipients who graduate from the secondary level go on to post secondary education.[†] This actually represents a significant gain in the proportion attending as compared to 2000 when going to preparatory school was an impossible dream in these communities. If one takes into account the increase at the secondary level than it is understood that the increases in post secondary education observed

[†] This average is probably affected by the high proportion of less poor communities in this evaluation since two of the communities incorporated to study DSS have household income levels well above the mean.

are among the largest in these recent evaluations. In various communities, the growth in enrollment between 2002 and 2004 has been of 100% and approximately three quarters of the students receive a scholarship.[‡] Household investment at this level far supersedes the scholarship, because all the costs have increased: transport over a greater distance and/or payment of room and board, direct and indirect costs.

Enrollment costs at the post secondary level continue to increase and it is not clear when this will stop. However, the majority of primary students who graduated three years ago do not reach this level.

We observed that the student residences sponsored by the counties and the universities are in high demand and it would be convenient to think about expanding or replicating this support system. The same can be said of the hostels for indigenous peoples, which extend coverage of the Program to communities that do not have services.

At the same time enrollment in post secondary schools has created a transportation market that reaches the communities and has reinforced the businesses that depend on secondary and post secondary education. The work of the assistants and social workers in these post secondary schools seem to be fruitful and supports those students who are poor. In summary: if in our earlier evaluations the most important impact in terms of education was seen in the primary and secondary level at this time it is clearly in the post secondary level. But the magnitude of the impact on this level and the level of access the poorest households can attain will be known in 2006 o 2007, when the cohorts that benefited from the Program since the

[‡] Since *Oportunidades* scholarship recipients attend post secondary institutions in urban areas, la proportion varies according to the socioeconomic situation of each area. In more prosperous cities the proportion of scholarship recipients enrolled is smaller.

beginning reach the appropriate age for post secondary education and the families which have benefited from the various densification processes have sent most of their children to primary and secondary schools.§

The discussion regarding the educational performance of the *Oportunidades* scholarship recipients is ongoing. We found that the teachers who can convince parents that it is their real commitment to learning (and not just attendance) that will define the future success of the students and are the ones who see increases in the educational performance in their classrooms. This happens in the second poorest community in the evaluation: the parent-teacher relationship is more important than the socioeconomic conditions of the community.

The impact on the labor market and on decisions following post secondary education is minor since most of the scholarship recipients that began the Program have not completed their post secondary education and those scholarship recipients that have graduated have only recently done so and are only beginning to seek employment. The life histories register a small improvement in the occupational status of all the members 15 years old or older in the households enrolled in the Program as compared with a stable level in the households not enrolled. The impact of the Program will be more clearly observed in subsequent stages of the employment records of these former scholarship recipients. However, we believe that policies which can allow these individuals to construct their occupational success should be explored.

[§] Although we studied communities enrolled in 1997, in all of them the Program was expanded and densification strategies which led to more coverage in latter years were utilized.

The individuals and households decide to invest in higher education when: 1) they know some labor market where they know someone who has non manual employment with earnings higher than those in the community although these are rarely jobs which entail professional responsibility; 2) when this individual or someone else they know is willing to assist this young person with housing, advice, etc. 3) when youth can alternate between their studies and part-time work and/or 4) when the household can support them and make do without their work and income.

The Program seeks to stimulate either educational continuity onto university or the creation of small business through the OYP, which offers scholarship recipients that have graduated from post secondary education conditional access to a fund proportional to the number of years in post secondary schools during which they received the scholarship. Few youth have taken advantage of the OYP. At this time, not all the potential candidates were able to take full advantage of the platform, in many cases they did not receive the information in time or they faced resistance or ignorance regarding the OYP in the Bansefi offices. As the correct information is disseminated in a timely manner and the OYP becomes institutionalized, it will have a greater impact.

Health Impact

The communities have experienced important changes both collectively and at the individual household level in terms of their health. The campaigns, community volunteer work details and talks have all led to improve hygiene in the community. Water sources are more closely monitored. The communities are cleaner.

These changes and those at the level of households and individuals have had a growing positive impact. In communities where health service personnel have remained over the course of the program, they perceive that malnutrition, and respiratory and intestinal diseases have decreased. Our study is not experimental and we do not have control communities that would allow us to test whether *Oportunidades* can be credited with being responsible for this improvement. However, the health service personnel believe and we agree that there is a relationship between the improvements and the actions of the Program with individuals, households and communities that train mothers to systematically supervise members of the family and organize Program enrollees into community campaigns.

This can be observed in the performance of each of the health and nutrition components in the Program. The families and clinic supervisors report "satisfactory use" of the food supplement however all the families recognize that they distribute the supplement among several children, which reduces its impact on those who are undernourished. The doctors also report the supplements are not always available and there are no leftovers to distribute among the undernourished not enrolled in the Program.

Coverage has improved in terms of the response time for and number of request for cervical cancer exam and family planning services (this is most evident during the first years of primary education.) There is a demographic stability or decline which may be related to improved family planning coverage or immigration. Two towns have seen a significant increase in international immigration however internal

migration continues. Alcoholism continues being a problem were it existed prior to the Program.

Program operation

Between 2000 and 2004 various processes of recertification, densification and losses due to inclusion errors have occurred. In general terms, these three processes have together improved the coverage among the poor and eliminate from the Program households that were not poor. This is a Program success story. However, in two communities we did find some of the poorest households were not in the Program for a variety of reasons including: 1) being recently formed; 2) no longer enrolled due to failure to comply with Program requirements; 3) other problems (conflicts with members of the community promotion committees or the absence of the mother from the household due to immigration.) Among the few cases of poor households not incorporated in the Program two have already been interviewed and selected through survey or interviews in the modules but were not finally incorporated because the women were unavailable to receive Program documentation and formally incorporated into the Program because they are working outside their community.

The transition from having one promoter as the only representative of the Program and mediator between the beneficiary families and the Program officials to community promotion committees formed by three members was one of the other innovations we found during our work in 2004 in these rural communities. The committees exist in the communities. In some cases, however the influence of the former promoter can still be felt either formally (as a member of the committee) or

informally (as a knowledgeable authority on the Program who both families enrolled in the Program and liaisons go to). In the majority of cases, the workload, decision making capacity and level of commitment to the Program is unevenly distributed among the members. The committee member responsible for health has the most concretely defined activities however the other two committee members (the one responsible for education and the other for control) have not fully developed their functions. We believe it is extremely important that each committee member have clear identified functions and the committee member charged with control must receive additionally training. With regards to the member charged with education, many of the teachers complain they do not have adequate information and have not been trained on Program procedures these tasks could be easily taken on by the member charged with education if they were appropriately trained. The committee member in charge of control could have an extremely positive role in the future of the Program if they were knowledgeable about Program operations so that they could follow through on difficult cases (those involving apparent inability to comply with the co-responsibilities or biased interventions by agents who should certify coresponsibilities) or by requesting the intervention of Program authorities when needed. However they currently are unable to take on these tasks because they lack adequate training. We believe that changing from one responsible person to a committee which divides up the work of the Program is a positive step. However, each committee member needs training specific to their area of work and we believe the current and future duties of the committee member in charge of control could be particularly

beneficial if they included the capacity to interact in a well informed manner with Program authorities.

Conclusions and recommendations

To summarize:

 We observed a very important cumulative effect over time in the educational level of the children in the *Oportunidades* families. Despite the increases in costs that accompany each educational level, the situation we observed in 2004 is substantially improved from when we first visited the four highly marginalized communities in 1999 and 2000. At that time the transition between primary and secondary school was rare. Now it happens in the majority of cases. But most of the young people old enough to enroll in postsecondary education do not attend school which means that we will need to continue observing this dynamic. It is possible that part of this effect is lost when making comparisons between beneficiary and non beneficiary households in these Oportunidades communities because a demonstration effect has been generated in the rest of the population which means there is increased interest in education in most families. There is some dissonance between the change that has occurred and the perceptions about that change. Families do not remember clearly that in 2000 their educational aspirations were far inferior although they insist that without *Oportunidades* they would have never reach the educational levels achieved.

- 2. In the health field there have also been positive impacts which we have divided into collective and household level or individual. The first have to do with improvements, sometimes quiet obvious ones in terms of health and public health in the communities. These are often linked to voluntary community work details and to some aspects of the health talks. The second set of improvements has to do with the Program's focused actions. They include decreases in undernourishment, improved care for chronic illness, improvements in the acceptance and timeliness of cervical cancer exams. We also observed an improvement in the provision of medications.
- 3. Finally the impact on the labor market, as far as we were able to ascertain with our dual purpose qualitative sample, are positive but very modest. In our opinion this is related to two phenomena: a) the stagnation in the national labor market in particular the weakness in formal non manual occupations which are the final goal in terms of employment type of the Program and b) the fact the Program has not reached its full human capital potential since there are few families with more than six years of enrollment in the Program and during the first two years of implementation of the post secondary scholarships few took full advantage of the Program.

In general, we found positive impacts at the household level. Despite the hostile economic environment in which these households are immersed we have found positive processes in terms of consumption patterns and housing. In terms of factors which can be directly related to *Oportunidades* we found that the cash transfers have increased the buying capacity and the debt economy.

The almost universal coverage in terms of primary education has made evident the existence of communities and households with accumulated disadvantages. We believe that with the exception of alcoholism, the Program has the information necessary to deliver specialized attention to these households in coordination with county DIF (National System for Integrated Family Development) or other programs. In our detailed reports^{2,3} we have described various elements of these households with accumulated disadvantages. Here we will limit our discussion to some of their more salient characteristics: *1)* reduced number of income generators; *2)* dependency relationships weighted by a high number of children and elderly family members; *3)* presence in the household of chronically ill individuals; *4)* feminization of household economies; *5)* households in expansion stage, and *6)* households in advanced stage of dispersion (the elderly frequently ill).

With respect to those households removed from the Program, this occurs in two ways: 1) the definition of so called errors of inclusion and 2) failure to comply with coresponsibility requirements. In the first case, it is generally true that those no longer enrolled do correspond to the household with better economic conditions than others in the Program. However, some households that have incomes above what is allowed continue to be enrolled in the Program because members of the household are influential and people fear persecution if they denounce these cases.

Our findings lead to two types of recommendations: 1) those regarding the design and content of *Oportunidades* and 2) those related to operations. The first set of recommendations has implications for SEDESOL (Secretariat of Social

Development) and for the coordination of *Oportunidades* with other agencies and organizations.

In terms of design and content:

- 1. Education. A follow up study of the educational attainment of youth between 14 and 17 years of age in communities incorporate into the Program in 1997 and 1998 must be undertaken to see whether the levels attained thus far are the highest which can be ascribed to the Program or if on the contrary these levels will continue to grow. If the educational attainment levels of the families enrolled in the Program have reached their upper limit than at least secondary graduation must be assured for all participants. The convenience of creating student housing in communities with a high concentration of families enrolled in the Program. The work of the assistants or social workers that resolve many of the problems faced by the scholarship recipients must be multiplied and reinforced. Computer training must be systematically increased in coordination with the SEP (Secretariat of Public Education) and the state governments or through coordination with philanthropic and social organization that maybe interested in better targeting their strategies. Finally businesses which market services to the scholarship recipients (transportation, school supplies stores, and cybercafés) should receive incentives for operating as long as the businesses offer quality services at a reasonable price and part time employment opportunities.
- 2. Employment of former scholarship recipients. The operation and evaluation surveys must include monitoring of the employment records of former scholarship recipients. We believe their ability to perform in the labor market will improve as their occupational history advances, but we do not know for certain because of the poor

performance of the market in the past decade. It would be useful to think about ways of utilizing and increasing their capacities through productive projects with SEDESOL (Secretariat of Social Development), alphabetization campaigns and training for adults, or joint programs with SAGARPA (Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food of the United Mexican States) encourage small-scale agricultural productivity. It would also be useful to explore how electronic employment opportunities notifications are working and then inform those who graduate about their usage.

- 3. Incorporation and retention of certain types of households. Households where women work, those which are female-headed, those with multiple small children, those headed by elderly men or men who are widowed and those were women migrate for short periods and leave their children all have problems in being enrolled in the Program and staying enrolled. There have been improvements because originally they were not even interviewed and now they are visited, but our studies show that difficulties persist in getting them enrolled and maintaining them enrolled in the Program. A strategy that addresses these difficulties must be developed.
- 4. Households transferred to DSS. It is necessary to ascertain if the improvements in per capita income observed in households transferred into DSS is sustainable and if the new rules they are subject to provide a real incentive to accomplishing the Programs' objectives.
- 5. Male co-responsibility. We recommend designing a strategy that promotes community voluntary work for the men who benefit from the Program at strategic times during the agricultural cycle, as well as having workshops or talks about crop

management, management of yard animals, micro-credits and financing schemes and access to agricultural support programs.

As relates to Program Operations:

- 1. Households transferred into the DSS. In this first instance, households transferred into DSS in general did not receive sufficient or clear information about the moment in which they were transferred or the reasons behind the transfer. The information must reach these families efficiently and complete before they are reassigned. The differences between those transferred to DSS and those removed from the Program must be clarified because some households received both notifications at the same time.
- 2. Oportunidades Youth Platform. The information needs to reach beneficiaries and BANSEFI in a clear and timely manner and this information should include all the options available under the corresponding rules. We also believe those who graduate from baccalaureate post secondary education should receive the total number of points (and the corresponding money).
- 3. Removal from the Program. The information regarding the reasons for removal from the Program should be absolutely transparent for example "failure to attend a talk given February 2004 and failure to attend a check up appointment for Andres Martinez". The procedures for clarification and registering complaints should be explained in each notification. Even when the removal is for just cause the participants need to have access to the information regarding how to re-enroll according to the Operational Rules. Finally some discrete system for registering complaints and providing information regarding the inclusion of prosperous households should also be

included. These removals should coincide with the enrollment of poorer households in the same communities.

- 4. Community Promotion Committees. The representatives need to have their tasks clearly delineated and the tools with which to carry them out successfully. The tasks need to be distributed in a precise and clear manner. We believe the representative for control can play a key role in the near future when the majority of the changes in the Program will occur due to changes in the population (unions, migration, changes in household composition) and to a lesser degree due to densification and recertification.
- 5. Committee representative and densification. In one community bias occurred when the interviewers utilized a list of petitioners which had been developed by one of the representatives. Although we are not opposed to the use of lists, this does not exclude the need for sweeps and the dissemination of Program information regarding enrollment in the Program through the operation modules where they exist.

I. Introduction

The midterm qualitative evaluation of *Oportunidades* undertaken in 2004 in rural areas has special significance. Until 2003 the qualitative evaluations of the Program had been short term ones. The impacts they searched for and evaluated were related to 1) increases in enrollment rates into educational levels above the average ones and improved school attendance; 2) decreases in the incidence of diseases and undernourishment and 3) improvements in income, consumption and assets in the households enrolled in the Program. To a lesser degree those studies also explored the effects of the households' social organization and particularly women's decision making capacity with regards to decisions about consumption and the distribution of that consumption within the household; the quality of communal social relationships and therefore the capacity for social organization in each community; migration patterns and other subjects.

During this evaluation our team for the first time tests the midterm objective of the Program. The Progresa Program in its original formulation in 1997 was seeking an end to the cycle of rural poverty. This cycle of rural poverty included: 1) low work yield levels linked to 2) a reproduction strategy based on increasing the number of potential workers in the household (high fecundity) and 3) early abandonment of the educational system in order to engage in activities that could generate income for the household. The global effect was that many poor families in rural areas had numerous children, that consumption went through a critical stage when these children were young, which led to a decrease in their educational attainment and later

in their occupational levels, early abandonment of school, early incorporation into activities that generate income and early creation of families with the same profile.

In order to break the cycle of rural poverty, the original design of the Program proposed: 1) improving nutritional levels in small children acting on both mother and child; 2) lengthening children's education; 3) providing treatment and effective follow up in the health arena by training families to improve their reproductive behavior and to prevent or treat diseases as possible. These activities carried out together should result in an improvement in the ability of the generation which benefit from this Program from infancy into their highest level of schooling (which should be higher that attained by families not benefiting from the Program) to enter the labor market. In that second generation the increased income and diminished household size should lead to significant reductions in poverty levels. While some of the impacts we searched for and evaluated in our previous short term studies can be considered to lead to these impacts in the long term, they are not direct indicators of these achievements.

This is therefore the first evaluation by our team which explores these impacts in the second generation. Our proposal is to evaluate the educational achievements of the beneficiaries of the Program and the impact of these achievements on their employment opportunities. We believe the time which has transpired since the implementation of the Program in the so called "first phase" communities that were incorporated into the Program in September 1997** does not allow us to ascertain the impact on the patterns of unions and fecundity of the former scholarship recipients although some of them (those who were attending secondary school seven years ago)

^{**} Throughout the text we refer to the seven year period as the time which has transpired since the incorporation of these first phase families into the Program until the time of our evaluation in the summer of 2004. It is worth noting however that these families were previously interviewed and incorporated into the Program in fall of 1997 and received their first economic transfer in early 1998. A small fraction of the families studied were incorporated into the Program in later phases.

have now gone through the life stages that would allows to see such an impact. However they received the benefits of the Program for only a short period of time. Although the scholarship Program was extended to the post secondary level in 2001, our previous studies showed that there were problems in terms of operations and information dissemination^{††} during that year which could have reduced the impact of the Program among those at the appropriate educational level. For this reason we believe the educational impact at this level can be more clearly observed among those who entered that education level in 2002.

However the Program has evolved unevenly, which means that we can not expect impacts to be of the same type or within the same time period for all its components. In 2001, the post secondary education scholarships were added under the same logic as the scholarships in the lower grades, with an amount which increases as the educational level increases and with a gender gap which benefits women.^{‡‡} That same year, predetermined areas in medium sized cities with a specific methodology utilized, just this once, were incorporated into the Program. In 2002, households in larger cities were incorporated using a new methodology. Starting in 2002 as part of a larger citizenship development effort of the National Coordination, the Program has emphasized two aspects: 1) promote the capacity of the families enrolled in the Program to negotiate pertinent changes and to place complaints and obtain responses; 2) the substitution of the promoter, that is to say of a

^{††} Both among families potentially benefiting and among the corresponding educational institutions ^{‡‡} In July-August 2004, the list of active scholarships recipients for *Oportunidades* included a total of 477 021 scholarship recipients in the post-secondary educational level. The Program supported 159 007 scholarship at this educational level on annual basis in comparison with 551 097 scholarship recipients in the primary and secondary levels.

Program participant chosen by the other beneficiaries to represent them and serve as intermediary with other county and state functionaries, by committees. The Community Promotion Committees are also elected by the other beneficiaries and have three representatives one for education, one for health and one for "control".

Possibly the most significant changes were planned in 2003 and enacted in 2004. The Differentiated Support Scheme began functioning in 2004 (known among functionaries and other officials in the Program as EDA for its initials in Spanish, or DSS in English). The Oportunidades Platform for Youth (OPY) which is known in the communities as "the points for *Oportunidades*" began operating in communities for the first time in 2003. At the same time the seven year mark is a benchmark of another sort for some families because many of these families now have assets superior to those they possessed when they entered the Program. To evaluate poverty levels the Program has two types of surveys: the Encaseh (Survey of the Socioeconomic Characteristics of Households) and the Ecreceh (Survey for the Recertification of Households). The DSS is applied to families which have participated in the Program during six or seven years and who during the recertification survey normally applied during the third year were found ineligible to remain in the Program because they had both surpassed the eligibility line and the confidence interval. The DSS suppresses both the amount for so called "food support" and the scholarships for those in primary school. The families which are transferred into this new scheme however receive the same nutritional supports, secondary and post secondary scholarships and health supports and must abide by the co-responsibilities just like other

^{§§} For the July –December semester in 2004, the food support amount was \$165 monthly per beneficiary family.

beneficiaries. Although their children in primary school no longer receive scholarships, they must maintain their levels of Program compliance. The co-responsibilities related to health must also be maintained. In this case the Program authorities determine which families are transferred into this scheme, on the basis of the aforementioned surveys.

The OYP can be seen as an extension of the *Oportunidades* benefits for post secondary school graduates. Utilizing a system whereby points are given in proportion to the amount of time spent as a scholarship recipient with a maximum of 3,000 points possible, the value of these points is actualized on a yearly basis [during the 2003-2004 academic year, each point was worth 1.035 pesos.] so that those who graduate from post secondary school have access to economic support which is paid gradually and which can be used to pay registration and other university payments, to open or consolidate a small business, to acquire housing, or to pay for Popular Health Insurance. The fund created in this manner is available to the former scholarship recipient upon request and provided they have the appropriate corresponding proof of eligibility will be paid out over time.

At the same time that the mid term impacts of the Program can first be evaluated the authorities begin to put into practice new components and schemes which modify or shorten their interaction with some families. When we speak about modifications we are referring to DSS and PYO, schemes under which many of the supports from the Program subsist. The system for removing beneficiaries from the Program has shorten the interaction with families which in theory should have never been in the Program or which did to comply with their co-responsibilities. Altogether

these changes when they happen in one community make it difficult to implement a pseudo experimental design since the independent variables linked to the Program were changing. One can also expect that the new schemes and the process for removing some households from the Program have led to changes in the expectations and behaviors of the families which remain in the Program. Additionally, this evaluation began with the proviso that given the processes of densification*** of beneficiaries it was possible that there would be no poor households not incorporated into the Program, which implies a challenge in terms of evaluating the success of the poor households which are enrolled in the Program.

The new schemes become convenient precisely because "cohorts" of beneficiaries are begin to leave the Program. In the first place, it is clear that some of the scholarship recipients are completing their post secondary education. In the second place, it is a good time to ask if at the same time a number of the households incorporated into the Program have overcome their initial conditions of poverty and should also exit the Program.

All of the above would indicate that the evaluation could study solely the educational and workplace achievements of the former scholarship recipients.

However the Dirección General de Planeación y Evaluación (Office of Planning and Evaluation) of the Program requested that the directors of this evaluation explore the implementation of DSS, of the youth platform and the change from promoters to committees. The addition of these areas of study led to methodological changes in

(Reglas de Operación/Operational Rules, *Oportunidades*, pg. 8) or to incorporate others which through some mistake had not been included. Densification is subject to availability of funds.

Densification is the process of incorporation of poor families in communities which are already a part of the Program (who were not included in the first stage of incorporation in these communities) to cover "... the demographic growth in these communities..."

terms of the quantity and the emphasis of the topics to be explored as well as the selection of the communities to be studied.

The text which follows has twelve sections. Section II explains the methodological decisions which guided the development of the research and Section III includes an explanation of the changes in the structures of opportunities which we believe are crucial to understanding the employment possibilities of the graduates of post secondary scholarship recipients. The reader will then find a section dedicated to a description of the communities studied. An effort was made to contextualize the actions of Oportunidades within the framework of local changes and to a certain extent regional changes. The results of the analysis of the households, related to the impact of the Program on consumption and expenditures and the capacity of households to improve their housing and their physical surroundings can be found in Section V. The analysis showed factors directly linked to the Program and factors which though not linked to Oportunidades, have influenced the observed impact. Section VI addresses at a different level of abstraction the main findings of the analysis of households by discussing the factors which increase vulnerability and those associated with decreasing it. We carried out a preliminary but very detailed and nuanced analysis of households transferred to DSS and those households which were removed from the Program. The results of this analysis make up Sections VII and VIII. Various critical elements arise from this analysis among those worth mentioning are the importance of the domestic cycle for the wellbeing of the household, the decrease in household size and or the increase in the number of workers and the conflicts that exist between Oportunidades and women's work both salaried work and reproductive labor.

Sections IX and X contain the results of the analysis of the impact on education and health respectively and of the new *Oportunidades* components discussed in Section XI. The Community Promotion Committees, the PYO and the DSS and the removal of participants from the Program are all of interest in our analysis. Finally the reader will find in section XII, our main recommendations and conclusions.

II. Methodology

The fieldwork for this research was undertaken in six rural communities in two periods during 2004. The three communities of Costa Azul, Angostura, Sinaloa; Cuechod, San Antonio, San Luis Potosí and Emiliano Zapata, Tenabo, Campeche were studied from May 17 to June 8 and the remaining communities of El Capricho, Ometepec, Guerrero; La Coruña, Francisco I. Madero, Coahuila, and Xonocuautla, Tlatlauquitepec, Puebla from June 23 to July 16.

We believe that the ideal method to understand the social impact of a program like *Oportunidades* is the detailed and wide reaching study of the areas upon which the Program seeks to have an impact before and after the application of the same. During our first evaluations in 1998-1999 and 2000 looking at rural communities with high and middle marginalization levels, we did not foresee returning to these communities for a midterm evaluation. Furthermore those first evaluations consisted of either four day visits of a six person team, as was done in Capula in 1999 or field visits of nine days with a two person team in the cases of all the communities studied in 2000. During those visits we include both households enrolled in the Program (between 12 to 36 months from their incorporation) and those not enrolled in the Program so as to compare their educational and health levels but we did not visit households before they were enrolled.^{†††} We visited a total of 17 communities in both years, six in 1998-1991 and 12 in 2003 of which we repeated one (Cuechod).

^{†††} The visits of the households selected but which had not received any cash transfers were included for the first time in our evaluations in 2001, as part of a pseudo experimental model for pre and post incorporation.

communities and their economic activities as well as about households incorporated in the Program and those not incorporated.

However a midterm study was not the only objective of this evaluation. As has been mentioned before, we were also seeking information about the transfer of households to the DSS, the creation of OYP and the change from promoters to Community Promotion Committees.

Based on the conditions and needs outlined we developed the criteria for the selection of the communities. Given the budget ceiling, we decided to choose six communities, with longer field visits to cover the depth of information necessary for the research topics. Of these six, four were taken from the list of the first 17 communities' studied in 1999 and 2000. Two criteria were used. Since the evaluation was a midterm evaluation, we chose communities that had households which had been incorporated in the first phase of the Program and therefore had seven years of enrollment at the time of the visit in 2004. In the second place, we chose communities were there was the most detailed information on the households. This would allow us to restudy households, so as to obtain more precise knowledge of their evolution over the four or five years which had transpired between the two studies and to look retrospectively at their situation before incorporation into the Program.

In order to select the two remaining communities we analyzed the database provided by the Program authorities, which include information on the date households were transferred to DSS and were removed from the Program (due to inclusion errors) and the number of households as well as information about the number of youth who had formalized their OYP accounts (points) to evaluate their

plans for utilizing the money. We selected two communities where the number of households and youth in these situations were greatest and the dates where such that we could insure that the changes had already been seen in the households; that is that they would have noticed the decrease or elimination of the cash transfers as well as the results of joining the OYP.

In order to develop this research four communities which had already been visited between 1999 and 2000 were selected, Cuechod, San Antonio, San Luis Potosí; Costa Azul, Angostura, Sinaloa; Emiliano Zapata, Tenabo, Campeche y El Capricho, Ometepec, Guerrero. The other two communities (Xonocuautla, Tlatlauquitepec, Puebla y La Coruña, Francisco I. Madero, Coahuila) were chosen from the *Oportunidades* incorporation lists because these sites had families which had moved to DSS (Table 1).

The selection of households in these communities should, when taken as whole, reflect what had happened with regards to: 1) households with seven years in the Program i.e. inclusion from the beginning of the Program, 2) households which had been removed from the Program after being enrolled in the Program, 3) if they were available, poor households never enrolled in the Program, 4) households in DSS. Few communities had households in each of the categories, which is why we looked for a sample which when taken as whole includes all the categories.

The cases in the OYP were known through the case studies in the households in the communities where they were available. Aside from all the instruments and information collection techniques used in previous evaluations, for this evaluation we add a fixed module called "Austin type life history module" to collect the migratory,

family, educational and occupational trajectories of the heads of household and youth over 15 years old for the period 1996 to 2004. The purpose of this document is to know if there are differences between those remain in the Program and other groups. The length of time required to apply the instrument varies, according to the number of events reported by the interviewee and their ability to remember and relate past events. We faced difficulties in terms of individual's capacity to understand the "before" which correspond to the time before they entered the Program and their capacity to express past events in sequence with precision. This was particularly true in indigenous communities. In each household we attempted to gather information about the members who were not present, particularly with regard to their level of education, final destination and occupation and this was possible in almost all cases. In total 131 trajectories were captured.

Table 1. Communities studied, Year of incorporation into Progresa/Oportunidades, and Reason for selection

Community	Year of incorporation into the Program	Reasons for selection	Date of evaluation visit
Cuechod, San Antonio, San Luis Potosí	1997	Visited in prior evaluations	May 17 to June 8 2004
Costa Azul, Angostura, Sinaloa	1998	Visited in prior evaluations	May 17 to June 8 2004
Emiliano Zapata, Tenabo, Campeche	1998	Visited in prior evaluations	May 17 to June 8 2004
La Coruña, Francisco I. Madero, Coahuila	1997	Families in DSS	June 23 to July 16 2004
El Capricho, Ometepec, Guerrero	1997	Visited in prior evaluations	June 23 to July 16 2004
Xonocuautla, Tlatlauquitepec, Puebla	1997	Families in DSS	June 23 to July 16 2004

Another addition to the data collection instruments was the structured interview with the "leader" or other influential person in the community different from those somehow connected to the Program. The purpose of this interview was to obtain an external view of the sense and importance of Oportunidades in the community. Political leaders, county delegates, or community elders and if none of these could be contacted the largest small business owner in the community who employed people and could have perceived an impact in terms of the attitude and capacity of the workers in the community were interviewed.

One of the three focus groups (the one called youth or adolescents) was replaced. This instrument was previously directed at collecting information regarding the interests, positions and aspirations of adolescent men and women, scholarship recipients and non-recipients from ages 12 to 15, instead we replaced it with one which focuses on older youth (17 to 20). This instrument collected information from scholarship recipients and non-recipients regarding their process of incorporation into the workplace, their knowledge and use of OYP and if applicable their position and experience with regard to conjugal unions, that is to say the midterm and long term impacts of the Program.

The interviews with the promoters were also replaced with interviews with the three representatives on the Committee when they were present in the community.

The topic of the replacement of promoters by committees was also explored in the case studies in the households and with the focus groups for women.

All the instruments were piloted in a first phase community in the state of Coahuila where according to the date bases all the possible situations of interest and

new Program components were present. A revision of the instruments conducted after the pilot test included decreasing the detailed nature in which some of the structured instruments dealt with each topic, so that researchers in the field could delve into those topics that were relevant in each community.

Following the pilot test it became evident that a special orientation and training session with researchers involved in the evaluation was necessary in order to present the new components and modification to the Program. This meeting was conducted with Program authorities in Guadalajara.

The arrival of a British anthropologist volunteer, who joined the team in July allow for another locality to be added to those in the study, albeit with a more limited thematic focus (Colonia Aréchiga). We had not included this community in the original study because of a limited budget and because these households had not been incorporated during the first phase of Progresa. The main objective of her 12 days visit to this community was to explore two relationships: the relationship between *Oportunidades* and conjugal relationships and *Oportunidades* and migration to the United States (USA).

In summary the number and depth of topics, interviews and case studies increased. The length of stay in each community was extended from 17 days in 2003 to 23 days in the current evaluation. As was done previously, the field diaries were entered directly into laptop computers and these were used to write the household case studies (one by one) and the electronic thematic cards for each subject and for each topic covered with fieldwork data. The average number of fieldwork cards,

containing thematically organized information, per community went from approximately 550 in 2003 to 800 in this evaluation.

The amount of material gathered meant that the post field study cleanup, the case study write ups, the community reports and the preparation of materials took approximately 12 weeks, much longer than we had initially foreseen because of the additional material and the new data collection instruments.

It is important to mention that it was difficult to keep the poor households who were beneficiaries paired up with those who were not. This difficulty is actually a positive finding. The pairing of course is intended to allow us to approximate a pseudo experimental design. All prior evaluations had easily found households with similar conditions in terms of poverty in and outside the Program. While this was clearly an indication that the processes of census/selection/incorporation were leaving out some poor households (according to our own criteria) it enabled us to study the Program's impact.

The communities studied in 2004 however had undergone a recertification and at least one densification. Some had also been visited to specifically weed out any inclusion errors. These processes taken together reduced the number of homes that can be considered inclusion errors that is poor households not enrolled in the Program, which made it harder to find poor households never enrolled in the Program that could be used for comparison purpose with those enrolled in the Program since 1997. In four communities the average income of the homes not included in the Program were greater than those of the households in the Program, which supports the idea that the selection and incorporation of households into the Program has

improved significantly in these communities. However this forces us to compare households that are clearly not comparable. For this reason our impact analysis, which separates the processes detected in enrolled and not enrolled households is much more cautious in this text should be read with this precaution in mind: the increased income in households not incorporated into the Program in these four communities is not evidence of an improvement in the households not enrolled in the Program but rather evidence of better selection of those that are enrolled in the Program.

However we must point out that we still found some deficiencies in the incorporation process, mainly in Cuechod which allowed us to study poor households not enrolled in the Program.

III. The *Oportunidades* Human Development Program and the Structure of Opportunities in Mexico

As was stated earlier this is the first evaluation that really tests the Program's goals. For this reason it is important to explore the meaning of these goals in terms of the context in which they must occur.

Mexico went from an agrarian society in 1930 to an urban industrial society in 1970. During that time the percentage of rural population fell from 65% to 29%. Since then the change has continued though at much slower rate, such that in 2002 the percentage of the economically active population in rural areas in Mexico was 23%.⁵

An interesting feature of the Mexican urban growth period is that the proportion of persons employed in the informal urban sector actually decreased. At the same time, economic growth, the diversification and specialization of professional and technical service functions in all sectors and the expansion of the State apparatus, provoked substantial changes in the urban occupational structure. While Mexico did not become a "middle income" society, the majority of the public and private sector employees in technical and professional occupations, along with the workers in private enterprise and the private sector reached standards of living previous unheard of. And while, during certain periods (1946-1952) real industrial salaries were stagnant, the standards of living of almost all workers improved significantly, due mostly to the success of within sectors mobility, which moved them from primary sector employment to others with better remuneration. Nevertheless the primary sector lost relative importance. Even though up until the 60s the agricultural GNP increased productivity, the income level of those in the lowest 10%, made up of poor farm laborers and small

farmers, went from 2.3 of all household income in 1953 to only 1.1 in 1977.⁶ Although this reduction did not reflect real income loss among this group, it did clearly signal their stagnation and distance from the rest of the Mexican economy.

The improvements in income in the urban technical and professional classes also decreased their rhythm in the 60s and the income gap between public officials and professional and office employees grew. Despite this phenomenon, the occupational openings in the economy as a whole but particularly in the large urban areas meant that the rural exodus was mostly successful and in the course of one or two generations could take people from subsistence agriculture and occasional farm labor to technical or professional employment in the private or public sector.

The classical analyst of social mobility in this period^{7,8} pointed out that while there were clear differences in terms of occupational success according to the initial occupation of rural migrants as their period of "exposure" to the urban setting grew they tended to surpass the achievements of those who were natives by birth or socialization. Further analysis later undertaken explained in greater detail the processes involved and pointed out that while the levels of structural mobility (that due to changes in the occupational structure) were very high, circular mobility (that related to fluidity and equality of opportunities) was rare, which meant Mexico still possessed fairly rigid class structures associate with assignment in the determination of social achievements. This rigidity, and the weight of these assignment mechanisms would decrease it was thought as social institutions became modernized and the country came closer to providing equal opportunities to all classes, as well as gradually erasing the mechanisms for discrimination and segregation in employment.

However that moment never came.^{‡‡‡} Starting in 1981, Mexico stopped generating formal employment and stratum of non-manual workers, functionaries and formal business owners stopped expanding.^{§§§} Until recently it was not clear if aside from the gross possibility of reaching higher strata had diminished, if the *inequality of opportunities* had stayed the same or increased.

The question is raised in these terms for two reasons. In the first place because it is of particular interest to know the conditions under which those in poorest stratum compete and in the second place because the social mobility analyses shifted their emphasis. While the calculation of the circular or "underlying" mobility requires a rather simple arithmetic procedure (it is equal to the difference between the total observed mobility and the structural mobility), it has been gradually banished from the literature and replaced by the study of structural fluidity, which is done through an odds ratio logarithm of the achievements of each class or stratum in a transition matrix or mobility table.

Using this procedure Escobar⁹ estimated that the inequality in achievement opportunities both inter and intra generations had grown in Mexico. This was specifically the case for women, with the exception of the daughters of the highest stratum.**** The analysis was refined by Cortés and Escobar.¹⁰ This latter study analyzed the achievement inequality between men and women in six Mexican cities (the three main metropolitan areas and three mid size cities) in three periods defined by three cohorts' entry into the labor market. The first period corresponds to those

^{†††} This never occurred in Mexico or in the vast majority of western countries studied. What has occurred in the world is a generalized set back.

^{\$\$\$} While this observation is generally correct, in the 90s there is a re-composition of the non manual workers which emphasis more complex functions and greater training needs normally university level training.

[&]quot;" Class inequality increases when you study women separately. Gender inequality decreases in the two highest strata and is maintained throughout the rest of the structure. Women from the highest strata are on practically equal footing with the men from their own strata.

who entered the labor market until 1982, the second those who entered between 1983 and 1987 and the third between 1988 and 1994. These three periods are defined both by their economic performance and moments of great institutional reforms. The decrease in gross achievement probability and the increase in inequality of this probability are not linear relationships. For example, the intergenerational achievement inequality odds of having being employed as a professional or public official or being a business ownership decreases when you compare the odds of the children of this privileged strata to those of the children of office and technical employees. However, the case of inequality between the children of these upper strata and the children of poor farm laborers and peasants (the population of interest for this evaluation) is very clear. While in the first period the intergenerational inequality during their first employment is 20:1 (for each child of a farm laborer o farmer 20 children of professionals, public officials and business owners enter the highest strata) in the last period (after 1987) the inequality is 40:1. In other words inequality doubles or increased by 100%. This number takes into account the decrease in absolute probability of entering the highest strata caused by crisis and restructuring. Given that this happened in the context of decreased absolute probabilities for occupational achievement, the decrease in absolute achievement probabilities of those from the rural poor strata decreased even more. In other words: for the population which is the target for Oportunidades, the opportunities structure became considerable more adverse beginning in approximately 1987. The Does this mean the children of the rural

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This is the cut off date for the analysis of the cohorts. The analysis could be done on a yearly basis to demonstrate the evolution of inequality, however the number of cases from the rural poor are so few in the sample of 16,000 persons with occupational histories (two jobs or more) upon which the analysis is based that yearly variations would not be reliable.

poor stopped studying? No this is not what happened. But it is true that the educational gap between them and the rest of society widened, at least until Progresa
Oportunidades was launched.

At the same time, other studies^{11,12} pointed out that the structure was indeed more rigid (in the sociological terminology of the 1960's the class assignment has become stronger) but education is still key in terms of improving occupational insertion, particularly in Monterrey. An analysis of the EDER (Encuesta Demográfica Retrospectiva/ Retrospective Demographic Survey) shows greater average financial returns per year of education in Mexico in 2000 than in other countries. The average return is 7%. However the *average* return is not reliable because it is not linear. As a matter of fact the analysis of the younger cohorts makes the return less linear. There is tendency towards stagnation in the first 12 years of education and a rapid rise upon entering university studies. Lustig and Székely¹³ show that the income differential by education grew in the 90s, that this is particularly true at the university level and that it is probably due to business restructuring and modernizing which occurred at an accelerated pace in that decade.

In other words: 1) in some cities education is better rewarded than in others and 2) in order to overcome the invisible barrier of unequal opportunities it is necessary to study more, certainly one must reach the university level.

The connection between education and employment opportunities presents an additional problem. Beginning during the 80s crisis, one of the mechanisms that led to the increase in structural rigidity was the way in which urban natives cornered the vast majority of urban employment opportunities. Many ethnographies and other studies

have pointed out that for those living in rural areas it became more difficult to find those employment opportunities that provided either additional income (or which allowed them to finance agriculture) or which served as their *doorway* into the urban opportunities structure.¹⁴ Given the stagnation in the middle employment strata in income distribution (formal laborer, non manual worker) these jobs were taken up by urban youth.

The "doorway" metaphor is not happenstance. Although it is tempting to think about employment stratification in terms of a ladder that one gradually ascends through merit or education, the truth is that some occupations lead to other opportunities and others do not. If these "doorways" are blocked, the rest of ascending structure can be as well. Of course there are alternatives. One can think of the small informal business owner who begins as a street vendor and then becomes a permanent shopkeeper and later a medium scale or even large-scale merchant. But in a context defined by recession it is also true it is more difficult for this to occur. There is much more competition among the informal agents. In other words, the construction of human capital worthy of that name must pass through openings in some of the lower but key position in the structure.

Finally there is the issue of social capital. If from the 80s on, the majority of the rural poor stop having access to these "doorways" and therefore to the subsequent employment opportunities and on the contrary they begin building social networks in order to secure manual labor in the United States (the rate of international migration continues to be much higher in rural communities), then what occurs is a

^{*****} This explanation is a simplification of what happened. Until 1990 the doors did work as mentioned, however following the restructuring and increased flexibility of formal corporate employment, which decreased the value of each step on the ladder, it has been noted repeatedly that it does not behave as it did before. (see Escobar 1999, 2003)

"desertification" of opportunities, which leads those belonging to this strata to lack the contacts necessary to open these doors, the informal transmission of information and capacities that open them and the incorporation of these possibilities into their life prospects. This process described by Massey and Denton¹⁵ in the United States, where the large cities have become increasingly segregated by economic, ethnic and racial differences and these differences have led those living in poor neighborhoods to increasingly lack the social capital which along with appropriate education would open up these opportunities. However this is rather oversimplifying what happens. In multiple evaluations including this one, we have found poor communities and poor families that do have real opportunities at non-manual employment in various sectors. However it is important to look at where and why these opportunities arise and if the Program is generating an impact that actually affects the chances of obtaining these opportunities.

To summarize the capacity of higher strata to absorb those who come from lower strata has decreased more than is proportional to the decrease in opportunities in general. Reestablishing real opportunities for access to these strata requires: 1) improving the educational achievements of the poor and their non manual labor competencies; 2) revitalizing the demand in these non manual strata; 3) opening the doorway into these jobs; and 4) reincorporating these opportunities into the life perspectives of the educated poor, through the development of contacts that can allow them to have the information needed and the reconstruction of the "rules of the game" in such a way as to make this possible. During the 40s and up until the 60s the labor

unions and the public sector consciously recruited (although in a corporate fashion) from these strata. Certainly today we need new strategies.

IV. The communities and how they changed

The detailed evaluation reports^{2, 3} discuss the characteristics of each community in the study. In this section we will highlight some outstanding features which are relevant in terms of understanding this document and important changes which could have affected the behaviors that *Oportunidades* attempts to foster. In other words, we will explore community change factors alien to the Program but which could have interacted in a significant manner with the impacts sought by the Program.

El Capricho, in Ometepec, in the state of Guerrero was visited a third time during this evaluation. SSSS The population is 472 inhabitants in 102 households. There have been few changes from 2000 to 2004.**** The inhabitants are ethnically afromuzgos: in the mountain range the majority is amuzgos and in the coast (towards Cuajincuilapa) the "morenos" or brown ones as they call themselves predominate. In 2000 the area was fairly isolated. The "cabecera municipal" (county seat) was an hour and half away. Now there are a few scheduled bus routes through the town. The economy in 2000 was precarious but diversified. Its base was subsistence corn agriculture. Some had attempted to grow other crops such as tomatoes but with insufficient knowledge of the inherent technical problems or of commercialization techniques, the results were mixed. The population drank water from the river. Cholera was quite common. They fished for their own consumption and they exploited in a small scale the gravel deposits that same river accumulates. One part was used for their own constructions (a notable activity in 2000, since they were reconstructing post hurricane Paulina) and the other was sold to supplement their income. The

The first visit happened during the qualitative evaluation in 2000 and the second was conducted to study international migration with financing from another research study.

²⁰ families have been removed from the Oportunidades Program. One of the reasons is migration.

community had attempted to fill in what was left of a partially dry out lagoon (La Poza) with domestic garbage in order to make ground for new constructions. The town looked dirty and aside from cholera there were multiple respiratory and intestinal infections.

There are two notable changes in the economy in 2004. The first is that corn as a crop is being abandoned. The coastal soil is not very deep and much of land is no longer fertile due to over use. The only solution is to use hybrid corn (that does not produce seeds) and fertilizers, something which is done in a smaller scale because of the associated costs. Another change is there is now more livestock and much of the land is used to provide pastures. The population is aware of the (bacterial) contamination in the river. No one drinks directly from the river and few fish there except when necessary to serve as a complementary food source. La Poza has been cleaned and the population has given up attempts to build on it. They burn their garbage and as a consequence cholera outbreaks have decreased noticeably, along with other diseases brought on by lack of hygiene. The town looks cleaner. The voluntary community work details which are associated with Oportunidades while defined by other actors (doctors or teachers) have much to do with the changes as do the health talks which are part of Oportunidades. There is a small water purification plant that fills demijohns (large glass or plastic bottles used for transport or storage of liquids) for two pesos and almost everyone gets their water there.

Migration levels have increased in response to a diminish capacity to subsist with corn or other commercial crops. The majority of the older adolescents have left for the United States and Acapulco between 2001 and 2004. We had noticed certain

attempts by families to send their children to study high school in Ometepec and higher education in Acapulco and Chilpancingo. Those efforts had some success: some of these graduates had obtained work as teachers or in public administration. This is just beginning. Although international migration predominates, youth are still sent to these Mexican cities. There is talk of a caprichense neighborhood in Acapulco^{†††††} and the mutual assistance between the two communities is abundant and constant. In the port city they are employed in construction, butcher shops and the service industry.

The quality of the constructions has improved noticeably. World Vision offered substantial support for the reconstruction of housing with more solid materials and community members have also invested an important part of the international and national remittances in this sector.

Emilano Zapata (Tenabo, Campeche) is a small town (approximately 900 inhabitants) whose principal activity is agriculture. In 2000 there was reasonable good subsistence farming (the lands are fertile) complemented by income from commercial agriculture, their own or through employment with others. A reasonable distance from town there are other jobs in poultry farming and other commercial crops. The town is notable because of its urbanization and its relatively extensive network of basic services (well constructed and furnished central plaza, street lighting in the central zone, water supply, and electricity in practically all households). Of these services we saw notable improvements in the public lightning but no improvements in the water supply system. The public works that would have supplied more water to the community was concluded except for a small amount of tubing, which has meant that

^{†††††} On one side of the old town of La Venta.

its benefits have not been realized. We also noted in 2000 that the majority of the households have sanitary services connected to a sewage system and that others had latrines but that few lacked either; their marginalization level was three, the levels and quality of the nutritional consumption was good and the town seem well organized.

The town is temperate. In 2000 no alcohol beverages were available. In 2004 only one store sells beer and only when there is a football game (the beer company was able to enter this town when it decided to sponsor the team). However there are no sanctions for those who do drink, they are known in town and they get their alcohol in nearby towns. Perhaps because the town is well organized and lacking in any marked conflicts and because there was a leader (who was the promoter) who attracted projects and organized and controlled those who participated in 2000 a significant number of productive projects were underway. Although the community felt and continues to feel isolated (there are acute problems of commercialization of certain goods, especially mango), the road to Timún while not great, now has bus routes that for five pesos take groups of students to secondary school. These routes did not exist before and the fact that the market for them is mostly students is significant.

Despite all of this there is a certain pessimistic feeling in the community and some negative economic changes while not significant have had an impact on income. To summarize the tomato crops have been abandoned and corn does not yield what it used to, due to the irregularity of the rains. The first was a cash crop that provided employment and the second provided subsistence. The irregularity and intensity of the rains and the less than optimal conditions of the road, have forced the mango buyers

to make Emiliano Zapata the last stop on their circuit which means that when they arrive the market price has dropped because they have already received sufficient produce. It is worth noting that there have been some interesting innovations such as chili cultivation. Many families obtain significant income although for a brief period, from the promotion of beehives during our previous visit (in one case more than 100,000 pesos). During some years the honey harvest can be double if there are two flowering seasons. The poultry farms continue to need laborers. There is also demand for workers in the nearby ranches and the ex-hacienda which grows papaya trees. Livestock has decreased in absolute numbers since the groups that obtained the initial financing to start the breeding process have disbanded, but a significant number of families have one to three cows and this complements their nutritional intake and their income.

It is not surprising that the families think that the Program cash transfers are essential to the education of their children, and they keep close accounts of the expenditures required to send their children to secondary and post secondary schools and that they point out that the scholarships only cover half the costs. Some students were forced to drop out of post secondary education when they were unable to get the *Oportunidades* scholarship for this level. Secondary and primary school teachers insist that no children work for money. One exception however maybe the new pattern whereby young girls who in the opinion of some parents should not have to bicycle 10 km alone to go to secondary school, receive room and board in the town were the secondary school is located in exchange for helping out with domestic chores. This arrangement means the family does not have additional costs but works against the

educational achievement of young men who have found no similar arrangement. In 2000 we found that while there was no marked discrimination against women and they seemed fairly independent in comparison with other communities, they were not allowed to attend secondary school because of the distance and the roads' desolateness. This new mechanisms seems to be overcoming this obstacle. The older women insist that these younger women are much better off than they were at their age; they had to labor as farm hands for others or work in the field with their own families and now these young women are "taken care of" and sent to school.

Cuechod (San Antonio, San Luis Potosí) is an ethnic T'enek community (also know as Huasteca) and is the poorest among those we studied. This is our third visit. The community was visited in 1999 and 2000 for evaluation. It is the only town in the evaluation where it is obvious that a significant portion of the families do not cover their nutritional needs. The households are traditionally made of reeds and palm leaves. The majority have electricity and there is some public lighting but no water supply or sewer system. Most adults speak little Spanish (in 2000 we used an interpreter but not in 2004). Youth and children speak better Spanish but less well than other Mexicans. In 2000 there were 67 families 44 of which were beneficiaries of the Program. In 2004 there were 60 families and 56 of them were in the Program for a total of 225 persons. Since 2000 teachers report a decrease in the number of enrollments in primary school explained by immigration and family planning. But there is also immigration due to marriage outside the tribe: men seek wives in other towns in the T'enek region and bring them to Cuechod to live.

^{******} This immigration may replace the loss of young women who move to other Mexican cities.

The town is governed by "usos y costumbres" (usage and custom) and the system of officials is still in place. Committees abound. The leaders of the settlement bought the land in the 30s. The land tenancy is communal but in the last ten years there are families without land. The economical basis is seasonal agriculture complemented by internal remittances. Mostly women migrate to Guadalajara, Monterrey, Ciudad Valles, Reynosa, Ciudad Acuña and Matamoros. In terms of income the best places to move to are Monterrey and Guadalajara but few families have contacts in those cities. In the families where the women migrate, the men take on the responsibilities for organizing the household, though sometimes the daughters take on these responsibilities and in some families they all migrate eventually. But there are also women who without migrating have left their children with their husbands and live with other families in town. In any case the general perception is that women economically provide for their families and that the children would not attend school if not for the Oportunidades cash transfers. Another reason for women having to economically support their households is the alcoholism among the men. Until 1994 there was coffee and sugar cane. But these were abandoned due to problems with the price and climate. These days there is more subsistence corn and bean farming and orange groves. The year of our visit was particularly good for agriculture and one could see there was a surplus.

There is a market for day laborers in the region but the pay is extremely low: 10 to 15 pesos per day for women in domestic work and 40 to 50 pesos for the men working in the fields. There is a slight improvement in the salaries and employment

during the last four years which accounts for the levels reached above, but if there has been any improvement it is due to women's internal migration.

Educational attainment is clearly on the rise. In the words of one teacher "with Oportunidades they finish secondary and with CONAFE§§§§§ (because of the high number of scholarships that this institution has given to the youth in their community) preparatory school. Without Oportunidades they barely finish elementary school." There was a student shelter whose future was uncertain in 2000 because of the incompatibility between the INI (National Indigenous Institute)-Progresa subsidies. Today families are allowed to benefit from both subsidies, there are many more students in the shelter and a secondary level has been opened within the shelter, children from this and many other communities live there Monday through Friday. The shelter has a good reputation. There is only one graduated engineer native to the community, he is working in SEDESOL (Secretariat of Social Development) but thinks he might migrate to the United States. There are some students in university however the perception is that the young women even those who finish secondary school and preparatory school will migrate to do domestic work or will return home to their parents. The community believes however that those who study do better.

There have been no drastic changes in the town's economy except for the growth in internal labor migration and some improvement in the crops in 2004.

Costa Azul was visited a second time. This is a fishing community in the county of Angostura in Sinaloa, with 330 families of which 281 benefit from the Program.

There is no *ejido* (communal land) It is surrounded by larger fishing areas like Reforma. The community has a large level of marginalization because the community

^{\$\$\$\$\$} Consejo Nacional de Fomento Educativo/ National Council for Fostering Education

refuses to have a sewer system, because this contaminates the fishing, and the seafood in Costa Azul has a good reputation because of the cleanliness of the sea. Of the four communities re-studied this was the only one were it was not easy to revisit the same households in 2000, because the changes and new components in the Program generate a great deal of distrust of our researchers. In 2000 it was one of the communities with a higher economic level, although there was a clear difference between the townspeople who were stable and more prosperous and the migrants who came in from other towns for seasonal work of seafood collection in Costa Azul and other islands close by. These migrants were much poorer and their housing conditions were terrible and had no services, they had difficulties keeping their children in school given their itinerant pattern and the use of the entire household workforce in the harvest. This year we also noticed that a good number of these migrant households had not been part of the Encaseh (Survey of the Socioeconomic Characteristics of Households) and that the population complained of the existence of poor families that had not been enrolled in the Program. In 2004, communication with the country seat has improved slightly, the total number of families in the Program had increased as of 2003, post secondary education enrollment is abundant and some youth are in university.

Economic development is running in a clearly negative trend. The shrimp farms extract the shrimp larvae from the bay to grow them and free fishing is decreasing. The number of pangas (small motor boats) has increased and the amount each is able to fish has decreased. The agreements regarding the number of pangas and the fishing days per panga have been broken. Fuel costs have risen.

Finally, fishing for deep sea***** shrimp had been prohibited. Consequently the amount of shrimp that can be caught has decreased substantially and this has meant that other species of crustaceans and mollusks are being caught in nearby islands with no controls which risks using up the supply. Some families have sent young workers to work on nearby communal farms where there is an irrigation system and the crops include tomato, corn, wheat and others. The shrimp farms and packing companies need laborers (to take off the head and clean the shrimp) but those which offer steady employment pay less than those who hire seasonal workers. More women are being hired by these companies. The family response is very interesting. Firstly now "everyone in the family works" that is to say all the adults (the packing companies will not hire children but they do hire young women). Secondly, perhaps in part because there have always been professionals in the community, the push is to educate the children as the preferred family option and there is evidence that these students or rather those who preceded them a few years ago are having success getting professional and technical employment.

La Coruña in Francisco Madero, Coahuila has 730 inhabitants in 336 households, making it the smallest community in our study. It was visited for the first time in this study because it was one of the first that transferred families into DSS. In April 2004 there 164 enrolled families. The community is five by five square blocks very clearly delineated, with all or almost all basic services in the streets and the homes (except sewage). The community runs an ejido (in this case one related to comercial agriculture) which has been quite prosperous and specializes in sorghum

Rumor has it that a high ranking state official is a partner in a large deep sea shrimp collection business. In any case, panga owners in Costa Azul have been shot at from helicopters that guard the deep sea shrimp areas, to dissuade other from fishing there.

†††††† The quality of the water supply is deficient.

and wheat (cotton has all but disappeared). A short distance from the community, opportunities for manual employment are abundant in maquilas and other companies (in the county seat, Torreón and Durango). The Lala diary company creates another significant pattern in the community. Some of the jobs are permanent positions and almost all have social security benefits, some even offer a Christmas bonus (something we had never seen in an *Oportunidades* community). Primary school graduates can access stable employment in the farming and livestock sector. There is also short and long-term migration to Ciudad Juárez and Ciudad Acuña. Communal land laborers were affiliated to the social security system through their crops so it is not unusual to find retirees who receive pensions of between 1,200 to 1,400 pesos a month. The minimum household income is 600 pesos a week but there are families with incomes of more than 1,000 pesos.

The town's perception is that those who graduated from secondary school can obtain employment in the maquiladoras and other companies in the region and that those with post secondary education get better positions (non manual). However they lack reference or role models for obtaining professional employment.

As is the case in other prosperous communal farms, some of the farmers but above all large private owners (small owners until recently), are buying plots. Their objective is to insure the right to water since the abundance of this needed resource has diminished.

Finally, Xonocuautla in Puebla is an indigenous community selected because of the number of families on DSS according to the Program's listings. The majority of the inhabitants speak náhuatl, but they themselves consider it "impure". In general there was no problem conducting the interviews in Spanish. In 2002 the health census found 2686 inhabitants, all dispersed; the community is built according to a pattern of houses with large yard, which makes the town quite extensive and presents difficulties in terms of delineating town limits. This extension can make distances "within" the town quite far. Some children travel an hour on foot to attend the primary school in town. Therefore the political subdivision into colonias or neighborhoods is functional. The community is divided by a toll road, to which the town does not have access. This toll road makes distances in cars quite far; it can take a half hour to go from one point to another. The large yards in the households are the basis of their subsistence economy; they grow corn, lima bean and potatoes (the potatoes are also grown outside of town). There is farm work in potatoes, plums, apples and decreasingly in maguey, which is no longer exploited (the community is near the traditional pulgue, fermented beverage made with maguey and other fruits, center of Mexico). The community receives must of its income from migration. The country seat has various banks, money exchange house and businesses. Migration is both internal and external in the United Stated to New York and in Mexico to Puebla and Mexico City. Other kinds of employment are scarce in town but there is a cinder block producing company and a factory that makes fruit boxes. Children do work in the fields, which is not difficult since they live on the lot. School vacations they dedicate wholly to agriculture (substituting for migrant adult) and there are negotiations with the schools to allow them to be excused within certain limits during crucial times in the agricultural cycle.

This is not a poor community. Houses are built with modern and solid materials. Weekly expenses run between 300 and 500 pesos. Total income for households studies in the community run between 180 pesos per week (the poorest) to 250 dollars a week (for those with the highest income). The majority, however make somewhere between 250 and 500 pesos a week.

Although not openly governed by "usos y costumbres" (usage and custom), the ceremonial calendar is profuse and the majority of the celebrations are community wide. Part of the ceremonial calendar has been "secularized" and the communities (that is to say the families) invest a great deal of money in dresses, music and food for school and other festivals were there is always an abundance of food.

There is talk, particularly among teachers, that the idea of migration reduces interest in education. However, the families affirm that education helps migrants do better particularly in the United States. There is a visible improvement in educational achievement. The director of the post secondary/preparatory school claims that of those who graduated from this institution in June 2004, one third filled out university applications (between 8 and 10 of the 24 graduates). It seems that in this community there is an important turn of events which is decreasing migration to the United States; a pattern among some youth is to *prefer* migration to Mexico City where they can combine their university studies with part time work, something they can not do in the United States.

OYP is well known and many hope to benefit from it. Scholarship recipients have made good use of their scholarship money and along with other income have started businesses. The liaison has turned the co-responsibilities certification process

into a series of burdensome bureaucratic transactions which means women are forced to spend several days a month getting signatures from various local authorities, aside from those required by the Program. In her/his opinion, the women were receiving something in return for nothing so she added transactions (not voluntary community work details or community actions but bureaucratic transactions which take away time from teachers, doctors and other authorities in the neighborhoods and the town.

V. Impact on the households

In this section we will discuss the factors associated with the Program's impact on the wellbeing of the beneficiary families. We have included both factors directly related to the Program and others unrelated but which have improved the lives of the *Oportunidades* beneficiaries. At the same time, discussing the factors associate with positive Program impact forces us to take into account the factors which on the other hand inhibit these favorable effects.

While there are various possible dimensions to analyze in terms of the Program impact at the household level, we have decided to privilege two areas: the impact that can be observed in consumption and expenditures in the households and the improvements in housing (although dealing with these two areas necessarily leads us to look at topics like educational level, household capacity to generate income, among other factors). Later on we will look at some factors for change –from a different level of analysis- in terms of vulnerability and poverty in the households.

Changes in consumption and expenses in the households

Consumption is a socio-cultural practice which is molded by the household's economic conditions and in particular the financial resources at their disposal. Despite the fact that we agree with Hernandez and Perez¹⁶ when they state that expenditures in urban and rural households in Mexico is eminently financial, the families in our study have achieved some level of self-provisioning, especially by growing corn for family consumption and fruits from family gardens or vegetables gathered from the field. However the corn lasts only a few months and almost always has to be supplemented

with corn bought in the market. In many occasions, men who before use to grow corn have left the fields and are employed in salaried jobs in other sectors, in response to the decrease in agricultural productivity and the rising cost of fertilizers and herbicides. Furthermore the fruits and vegetables they grow in their gardens or family plots or gather in the fields are all seasonal and their availability depends on favorable climatic conditions. At the same time we observed that a significant number of the electrical appliances and clothes that our informants and their families obtain come in the form of gifts in informal exchange systems. Frequently the married children (or single children who work for a salary) give their parents clothes, a radio o washing machine, especially to celebrate Father's Day and Mother's Day, but some times without it being a holiday. Nevertheless, the consumption of most of the families studied still depends on income.

Given the conditions of scarcity (scarce income) that characterize the majority of the families from the communities studied, consumption is a restricted practice. In almost all cases, the women interviewed stated that they have approximately half the income they need to cover their <<desired>> food costs. Patterns of consumption are molded by history and culture, so these women's calculation responds to an ideal of consumption that they believe would be adequate to the needs and desires of the family. Our informants, in almost all cases, made reference to ideal quantities which were at least twice the amount they had to buy food. So our starting point is marked by restrictions in the area of consumption. Although these restrictions are more acute in some items in the consumption list than in others and in general the women (especially when they are mothers) tend to protect food above other practices, we can

talk about a situation were people consume much less than they would like or believe is necessary.

Food is the most privileged consumption item. According to a recent analysis ¹⁶ of households in the country, taken as a whole, the greatest part of their income is spent on food, education and recreation. In rural households, one third of their expenditures go to food, while in urban households it is close to one quarter. The proportion of expenditures dedicated to food and drinks is inversely proportional to the income percentile: as the family resources increases the proportion of the expenditures assigned to cover food costs decreases. According to this study, rural households in the poorest ten percent, the poorest group, spend 52.2 percent of their income on food costs while those households in the richest decile only spend 15.8 percent of their income on food. ¹⁶

Despite the privileged position of food in the patterns of expenditures in the household, our analysis suggests that food consumption undergoes important changes in response to the economic conditions of the household. That is to say, food consumption is malleable and subject to substitutions and restrictions which are put in place in order to free up these resource for other ends. The testimonies we gathered speak to the transformations that housewives make in food expenditures in order to cover other expenses they can not modify or postpone. One example is the expenditure for certain services such as electricity, drinking water, or school related costs. Although many of the women interviewed stated that the support given by *Oportunidades* "allows them to buy more beans, more flour" or "it runs out quickly, but you can buy a little meat the day the money arrives", the impact of these cash

transfers is mitigated by the high cost of housing services and school attendance. The increase costs of school attendance particularly when children enter preparatory school, has caused some mothers to reduce the amount of their budget assigned to buying food so they can cover the costs of transportation to school (usually located in another community), computer usage, photocopies, etc. One of our informants in Costa Azul stopped buying fruits and reduced her vegetable consumption when one of her children entered post secondary education. She limits herself to buying only onions, potatoes, tomatoes, chili and tortillas because she can not afford a more varied food basket. This woman chooses like many others, the cheapest foods and buys in small quantities so that she can cover the school costs of her son in preparatory school.

Despite these restrictions, we have evidence that the money which regularly arrived throughout the years to the household budget has allowed families to increase their buying power despite the women's complaints regarding the <<scarcity>> of the support from *Oportunidades*.

Despite the fact that some of the women interviewed observe no significant changes in the types or quantities of foods that are included in their daily diet, there is generalized recognition that the cash transfers from *Oportunidades* have provided them and their families with a positive inducement to their economies through many avenues. On the one hand the support from *Oportunidades* "freed up" some of the household budget, allowing for other expenditures such as buying furniture or electrical appliances on credit or payment of services (water, electricity and gas). On the other hand it has also widened the margin available for incurring debt, especially

through buying on the credit system. This is due to the fact that now both housewives and shop owners are certain that buyers will have cash at least at one time during the month and they can then pay their bills in full or make a payment on the debt acquired with certain regularity. This way the consumption of food and some clothes and shoes has been facilitated by the certainty of having a regular income. The *Oportunidades* supports have made the women credit worthy. Therefore, both the increase in and regularity of the income –provided by *Oportunidades*- are factors which have increased the consumption (both in terms of types of items and the number of items in one same category) of the beneficiaries by revitalizing the debt economy, through credits and the buy on credit system.

The importance of *Oportunidades* economic supports on the feeding and nutrition of the beneficiary population can be seen both by observing the consumption patterns of that population over time or by looking at the deterioration in consumption in the cases no longer in the Program – those who are eliminated from the Program. We have evidence of the deterioration in consumption when the *Oportunidades* supports stop flowing. This speaks to us of a social policy problem which is intimately linked to a conceptual problem which needs to be resolved: the matrix or nucleus of vulnerability, its causes, effects and the ways – if they exist- for insuring that a household that was once vulnerable is capable of doing without the supports of a social Program without falling once again into uncertainty and the risks of poverty.

Related to consumption and expenditures, but also directly to children's education, the support from *Oportunidades* has had an impact in the education achievement of the youth and children and on the conditions under which they study.

They attend school better equipped, with all the educational materials they need, better dressed and better fed. More importantly we have evidence that the Program has delayed the children's entry into the work force (be it agriculture on their own or on a salaried basis in other economic sectors) and prolonged their exposure to school (this is the case of many youth in El Capricho, in Cuechod and in other communities studied). However as noted above, school related expenditures compete with other areas of consumption, such as food or health care. In some cases these other services and food expenditures must be severely restricted. Well known barter systems of the poor do not disappear they simply get transferred to other levels so as to fulfill other commitment or co-responsibilities with the Program. Many testimonies lead us to think that the supports in the form of education scholarships have less of an impact in primary school (although money is always needed), than in secondary school and preparatory school when families have to make large cash outlays in terms of school transportation (because in most cases the secondary and post secondary or preparatory schools are in the county seat). Many believe the primary schooling is easily attained even without scholarships, but without the support from Oportunidades youth would have serious difficulty attaining higher educational levels. However as the case studies in El Capricho illustrate some households are in such a precarious situation that even with educational scholarships youth have to leave school before completing their secondary education in order to find salaried work.

Changes in housing

In contrast with the results of past research, which showed a general trend to invest in housing upon incorporation into the *Oportunidades* Program, during this current research we found communities and cases where there noticeable improvements in housing, while others are have remained the same during the last six and half years. Furthermore investments in housing are sometimes related to other factors or happen due to a combination of factors where the *Oportunidades* supports is only one of those factors. In Costa Azul for example investments in home improvements made by beneficiary families are explained in terms of the hard work of the women in the household in the <<behreading>> of the shrimp. Families, who before their incorporation into the Program lived in one room, now have two bedrooms. Other investments in home improvements are the result of households strategies devised by women that have nothing to do with *Oportunidades* (like the woman from Costa Azul who state that the improvements in her house came from money she took from her husband before he was able to spend it all on alcohol). We believe, however, that it is necessary to take into account that the families have learned a discourse and a posture with regards to those who come from the outside to investigate their life style. In this discourse, there is a clear intention to explain that the money from the Program is used exclusively (or almost exclusively) for the children's education. As one of our informants phrased it: "only for education, the houses get uglier by the day...there isn't enough money to make small repairs" speaking to the norms that guide "the appropriate use of Oportunidades money" and not about the patterns of consumption (especially if you consider that in Costa Azul there is a rumor that if the money from

Oportunidades is used for other things in the house anything that is not the children's education then they will "take away the money from the masses").

The information gathered in other communities supports the idea that the economic support provided by *Oportunidades* have made possible investment in home improvements (like families that now live in their own homes, or those who have built additional rooms, or those that have changed the building materials or who have replaced old, useless roofs for new ones, etc.). In Emiliano Zapata (Tenabo, Campeche) and other communities (like El Capricho), there are clearly housing investment processes related to the *Oportunidades* cash transfers but also associated to the following factors:

Secure male employment. One of the most obvious cases of investment in housing in Campeche was a household were the male head of the household left day labor work in the field- irregular and unreliable, as well as badly remunerated- for salaried work in a poultry farm. In this job not only does he have a salary he can count on but he also has access to FONACOT (Fondo de Fomento y Garantia para los Trabajadores /Development and Guarantee Fund for the Consumption of the Workers) loans which have enabled him to acquire a color television, and a new refrigerator. However even in this case there is interplay of factors since they admit that the money from *Oportunidades* have freed up other income to buy a tricycle and to make payments on outstanding debts.

Access to family patrimony. In many cases housing is built on lots and land which once belonged to parents or in laws or in other cases to an uncle or a grandmother. In any case having access to this patrimony has been extremely important for some

families in their quest to have a home. Many individuals and families while being exposed to *Oportunidades* were able to have their own home, precisely because a parent, uncle or other relative gave them a home as inheritance or allowed them to build a room on their property.

Access to housing development funds from agencies. This is the case of the inhabitants of El Capricho, who obtained assistance from World Vision to build their homes. This organization provided building materials to families who had a lot to build on. So those who benefited from this opportunity were able to combine various factors we highlight here: access to family patrimony (having inherited a lot) and having workers and construction experience (see below).

Men with home building experience. This is one of the factors most clearly associated with the household ability to have access to housing. In practically all the communities studied we saw the important role that adult males play in the process of building a house. One man with knowledge and experience can build a house and take charge of its maintenance. In many cases the deterioration of houses can be linked to the lack of participation of the men in tasks of building and maintenance of these houses.

Rosa, one of our informants in Cuechod, spoke about her husband ability and responsibility in the wellbeing of the family which manifests itself in a functional household, well maintained with roofs that do not leak and without rats.

Remittances from children working in Mexican cities or in the United States. In many

Remittances from children working in Mexican cities or in the United States. In many cases the role of the children's contribution in the form of remittances for the construction, improvement and maintenance of housing is critical.

Difficulty in accessing housing in the case of female-headed households. The women who during their exposure to Oportunidades have made the change to female-headed households (as a result of being separated from their husbands) have had to face important changes including access to housing. In one case in Cuechod, the authorities in the community gave the women authorization to leave her husband, but they made the decision that, because he is the comunero (member of the group of communal land owners), , he kept the house they lived in as a couple. Women who head their household face a complicated situation because the lack the member of the household who as we have seen places a key role in the construction and maintenance of the home: the men. Their absence means they have to pay construction workers and few women can afford to pay.

The precariousness of housing services. Here we are referring concretely to the lack of a drinkable water supply in many of the households studied. In these cases the women mostly (though sometimes their husband and children help) have to carry water throughout the day. This is not only exhausting work (we have observed cases in which the women feel sick after hauling buckets filled with water) but it consumes a considerable part of the women's time. Furthermore since the water is stored in pots, pails and remains uncovered until it is used, how potable it stays is questionable. More women are now boiling the water before they drink it.

Precariousness and fragility of housing materials. In the cases analyzed in the document on households² it is possible to observe that many of the families live in high risk situations. Although palm leaves maybe "adequate" as roofing material in warm climates because they are much cooler than other materials, there are very

fragile (they have to be changed regularly). Furthermore since cooking is done over a wood stove in most of these houses, they burn down easily. In general the houses have dirt floors with no drainage system which makes tasks involving cleaning and hygiene difficult to accomplish. However we have notices that slowly the beneficiaries of the Program are improving the conditions of their dwellings by building latrines, changing the palm leaves that serve as a roof, etc.

Children's gifts. In almost all cases we found that a significant portion of the furniture and the household appliances (refrigerator, stove, radios, sofas, televisions) in the households are received as gifts that married and single working children make to their parents. Therefore while many families have acquired these items in the last six and half years, we can not conclude that this is the result of *Oportunidades*. In the majority of the cases the gifts come from children who live and work outside the community. The *Oportunidades* cash transfers have widened the margin for indebtedness and have made payments on loans and credits possible. While less important than children's gifts, some families have relied on the *Oportunidades* cash transfers as a support for acquiring household objects. As we have seen *Oportunidades* has help some families gain creditworthiness, and some they have acquired certain appliances and furniture on credit.

Housing and the stage in the domestic cycle. Many of the households studied are transitioning into stages of consolidation or dispersion in the domestic cycle. In theory the domestic groups should have reached better conditions than those that currently exist in their homes. Due to the perishable nature of the building materials, the current conditions of the homes do not show improvements and the small investment they do

make (for example, placing new palm leaves on the roof) are quickly outdated and ruined. There are some changes in the homes that are longer lasting such as access to electricity (although very expensive), building latrines, or assess to water by having a well or chain pump inside their lot.

What is true is that as time goes on, families move out of their in-laws or their parents' homes, to establish their own household, although sometimes these dwellings are quite precarious. The comparative prosperity of the equilibrium or consolidation stage in the domestic cycle is often reflected in housing conditions (own home, firmer building materials, appliances, etc.).

It is clear that factors exists-which are not directly linked to *Oportunidades*-which are part of the processes analyzed during our research. On the one hand we have the domestic cycle and its influences on the household conditions which in turn facilitate the well-being of the family. It is extremely important to highlight the consolidation stage of the domestic cycle -characterized by a decrease in the economic pressures and an increase in the number of members capable of generating income – which many of the households incorporated into the Program in 1997 have experienced in the last few years. On the other hand, it is necessary to take into account the movement towards female-headed households, *de jure* o *de facto*, which we have observed in some homes as a recently occurring event or throughout the last seven years, because of separation and divorces.

The domestic cycle

The ways in which *Oportunidades* is operating- supporting families with small school age children and moving on to "exit doors" (DSS and OYP) a few years later – seems

to respond appropriately to at least one of the principal stages in the cycle which is most critical (with more economic pressures) than others. As has been discussed in other texts, the domestic cycle is a useful and relevant analytical tool for studying households and families in a dynamic manner where changes over time in the organization and the composition of these social units are privileged as an object of study. Others have stated that the stages are different among themselves due to the different domestic arrangements which have important consequences in terms of the wellbeing of the members. According to these ideas, there are two critical stages characterized by greater vulnerability and poverty among the household members: the expansion stage, when the descendants increase and the dependency relationship is quite high, and the advanced dispersion stage, when the children have left and the older members (or one of the parents) is left alone with greatly diminished capacity to generate income. In between these two extremes we find the consolidation stage where the members of the domestic group can enjoy greater wellbeing by virtue of their ability to generate income with the participation of their children in the workplace.17

The information gathered in the field suggests that the domestic cycle is a determining factor in the capacity of households to generate income and that the consolidation or equilibrium stage is still a determining factor for greater wellbeing. Therefore one could make a case that the support that *Oportunidades* offers is more important –more necessary- during the difficult expansion stage when the domestic group has to confront more economic pressures and expenditures. However, we recognize that the domestic cycle does not always imply an automatic change from

one stage to the next and that they are certain domestic arrangements which prevent us from being able to speak about these stages clearly and distinctly. Our research results shed light on a phenomenon which we had observed in other research but which is more clearly present in this research: domestic groups formed by three generations (parents, children and grandchildren) or two generations (grandparents and grandchildren) where the grandmothers play a crucial role in the care and socialization of the new generation of children of international and national migrants. Therefore we can no longer associate older women reaching a certain age with the end of their duties in the field of social reproduction. The presence of children coincides, in many instances, with the beginning or the deepening of the difficulties inherent to the dispersion stage, which is also associated with increased vulnerability making the Oportunidades support truly necessary. In other words, the presence of children who do not generate income but do increase expenditures is a factor associated with greater vulnerability which when you take into account the presence of senior citizens makes the situation in these households particularly suited to the accumulation of disadvantages.

Female-headed households

Over the course of seven years a household can undergo important transformations. The structure and composition of the domestic group changes, as the result of new births, deaths, the incorporation of some members, other members leaving, and the passage from one stage in the domestic cycle to another. One of the most important changes we found was the transition from male to female-headed households. Some male-headed households at the time they were incorporated into the *Oportunidades*

Program have transitioned into female-headed households where the husband and father is no longer present. We are not referring here to cases where male heads of households migrated (to the US or to some part of Mexico) in search of better job opportunities than those that were available in their own communities. In those cases, those who have migrated are still part of the domestic group although their absence generates some different dynamics their incomes is still feeding the economy in the households and their belonging to the household is not questioned. Rather, here we are speaking about changes in male to female headers households as a result of separations and breaking off unions, which in their majority are unrelated to the Oportunidades Program, although some women may decide to leave an abusive husband when they have the certainty of some secure income. The change from male to female-headed households is not intrinsically positive or negative and is not in and of itself a factor that increases or inhibits the impact that Oportunidades can have. Whether this shift is a positive or inhibiting factor depends on the types of social relationships within the household and the degree to which the men play a role as economic providers (before and after the break up).

There are domestic scenes where the shift to a female headed is seen as "progress" and others where the opposite is true, it is seen as "deterioration" both processes have occurred throughout Program exposure. That is to say, we are dealing here with cases of beneficiary families who throughout the six and half years of the Program, have shifted from male to female headers households and at the same time have experienced processes related to the *deterioration or increase of wellbeing* which is more dependent on the social, economic and affective relationships

within which the conjugal separation occurred than the support *Oportunidades* provides, although the Program cash transfers can sometimes help women decide to separate from their husbands. The cases of women who decide of their volition to abandon their abusive husbands (who aside from being violent were often irresponsible provides and tended to control the families' meager earnings) stand out. In these cases the progress during the last six or seven years which these families have experienced is the result not only of their incorporation into Oportunidades but also of the fact that these women now control their income since leaving their husbands and can favor certain consumption areas (such as nutrition and their children's education) while enjoying domestic environments which are generally much more relaxed and relatively harmonious. During the interviews when they were asked to give examples of their past and present wellbeing (since joining the Program) they made reference to very positive changes always linked to their situation as single women with their children (or grandchildren). These women perceive important changes in their lives: better diets, looser budgets, and in general greater wellbeing associated with the fact that -as a personal achievement- these women made the right decision when they left their husbands.

The shift to female-headed household is not always a positive change. One of the households studied in Costa Azul is precisely one of those cases where male abandonment left the woman and her children in a far worse economic situation characterized by lack of income and severe restrictions in terms of consumption. In this case although its is not reflected in the perceptions of the women entitled to the Program, the support offered by *Oportunidades* which started to flow shortly after the

male head of household abandoned the home, made the transition to a female-headed household and the loss of an income and good provider less difficult. The man in this case was a good economic provider and he would bring home "arrimaba" (gathered) a whole host of consumer products for his family. The abandoned wife perhaps does not see any drastic changes in the family diet because the money from *Oportunidades*—in practice- substitutes some of the contributions that were lost.

In any case even in the domestic situations were the transition from male to female headed household is seen to have positive implications for the wellbeing of the women and their children (because they experience less violence and have a greater role to play in decision making in particular controlling the household income) it is a fact that these separations (due to a decision on the part of the woman or abandonment by the man) are associated to the loss of an income earner. In this sense the separation can be interpreted as family crisis factor in which all of a sudden part of your income is missing (although the contribution by men can often be erratic, meager or "costly" for the women), This why we believe the shift to female headed households is an event that must be taken into consideration, not because they are pathological cases that deviate from some traditional ideal but because when the shift is the women's decision (and the husband was in fact not much of a provider) and the shift results in her having greater control of the resources, less stress and no more domestic violence, then the process is highly beneficial and can increase the positive impact of Oportunidades. When the shift from male to female-headed household is the result of male abandonment (the husband was the economic provider or indispensable co-provider) the impact of *Oportunidades* –although extremely

important in bringing some sense of security and substituting lost income- is mitigated. In both cases however the support offered by *Oportunidades* is very important in overcoming this domestic crisis.

VI. Vulnerability and poverty

In this section we will first look at the factors that increase the vulnerability of households and then go on to look at the factors that decrease risks and inhibit or decrease the vulnerability of certain households. We believe the vulnerability matrix proposed by Moser²⁰ and widely used in previous evaluations continues to be a useful conceptual tool to guide our analysis. The vulnerability matrix is composed of the changes that occur within the household resources portfolio.²¹ The most important resources which we have included in this matrix are: *a)* workforce: *b)* housing; *c)* domestic relationships; and *d)* social relationships outside the domestic groups. In this text we will address only two of these resources (workforce and housing) leaving the others for later analyses.

Factors associated with increased vulnerability

With respect to workforce (the capacity of individuals and domestic groups to generate resources both monetary and non monetary) we have detected the following factors which increase conditions of risk and precariousness:

Scarcity of local employment and the precarious nature of those which exist.

The labor context are impoverished and deteriorate therefore few alternatives exist for individuals to generate the income they need to feed their economies (consumption, activities undertaken on their own, social exchange). The communities studied have undergone processes (clearly seen in the case of Costa Azul with its crisis in the fishing activities) of erosion of salaried employment and a deterioration of subsistence crops. In these situations the people living in these communities increasingly have

fewer work options. They have two options: migrate to other parts of the country or of the United States or make do with irregular, seasonal, and badly paid jobs (day labor work in the farms is badly paid and to make matter worse not much work is available). The capacity for domestic groups to generate income by selling their workforce varies depending on their domestic cycle stage and the different familial structures.

Therefore it is still valid to affirm that nuclear households in the expansion stage are less able to generate monetary and non monetary resources because they have fewer bodies to dedicate to economic activities. One of the women interviewed spoke clearly to this: *Oportunidades* she said, "...has helped us to get out of some jams and to be somewhat calmer, but we are still poor because the jobs available in the community will not allow us to overcome our condition."

Illness. Although obviously illness is not some male characteristic that women escape, it is noteworthy the many men who are – or say they are- incapacitated to work due to illness. We include here some older men whose health is in a serious deterioration process but also many relatively young men who are unable to function as economic providers because of their health status. In these domestic scenes, the support from *Oportunidades* is not supplementary to the male (and other) income, but rather in many cases the initial influx of support from the Program coincides with the sick men leaving work and no longer being able to provide economic support. The illness also decreases the family income. In many cases the money used to buy medicines for those who are sick diverts the already scarce funds that under other circumstances would be used for food or other necessities. The women who are married to those who are chronically ill have to take over the economic responsibilities

and care of the household. As we have mentioned these illnesses inhibit the positive impact of the Program cash transfers and is a factor in the household's vulnerability.

Feminization of the household economy. As a result of the two factors previously mentioned we have found an increasing number of households which survive thanks to the income of the women. This would not be necessarily increase vulnerability were not for the fact that the women have lower and irregular earnings since many times their income depends on the number of pieces sewn or the number of food products sold in their homes. Even when women work outside the home, they do so in labor markets that offer lower salaries and no benefits to the workers. In these cases the feminization of the household economy is a factor associated with vulnerability. This does mean we deny the importance of the women's income. Thousands of families survive thanks to those meager incomes and without them the problems of poverty would be even deeper. However the fact that this –precarious and irregular- income is the only or most important income in an increasing number of households weakens the domestic groups capacity to satisfy collective needs and to face risks.

Housing. As has been noted in previous studies, housing can be an important resource for income generation both monetary and non-monetary. Households which have functional and well equipped houses, have more space and better conditions in which to carry out productive activities such as making food for sale (which requires water, electricity-refrigeration, gas-stove etc.). Also space is needed to grow the fruit trees and herbs people use as dressing on their food and to diversify their diets at a low cost. Inside these houses children and youth can complete their homework

because they have electricity and minimal conditions of "comfort" which are without a doubt important. Finally we must insist on the time and energy women waste in carrying water to their homes. Time these women could use for other activities (productive or reproductive) or even to rest or to visit friends and family.

Factors associated with decreased vulnerability

Households with diverse sources of income thanks to the participation of their members in local or international employment structures (as migrants to the United States) are better prepared to face risks (such as a bad crop yields, the loss of employment of one of its members, an illness etc.) Their ability to have diversified sources of income depends on the local and regional labor market conditions and where they are in the domestic cycle. Female labor when it coexists with male participation in income generation is a factor that contributed to the wellbeing of the family through the investment of this income earned by women into what they consider necessities (food, medicines, school supplies). Having a solid, secure household with basic services can also increase the families' capacities by providing better conditions in which to study, work and rest. Oportunidades' positive impact, has without a doubt been helpful in the struggle of families and individuals to overcome the poverty in which they have lived for generations, but it is not sufficient and it is unclear if the Program will be able to graduate there families from the Program with the certainty that they will be able to maintain their current level of wellbeing in the medium and long term.

Oportunidades' impacts as we have documented in other evaluation, has demanded a great time commitment from the women. In this current research we once again observed that women were unable to go to their paid employment because they had to attend the Program meetings, which means they do not receive salaries which are of the utmost importance to the fragile balance of their economies. This means that the women in the Program have to undertake a series of activities which are incompatible. On the one hand, their role as economic providers (or essential coproviders) is increasingly important. They also have all these co-responsibilities which Oportunidades requires them to fulfill. On top of all this, depending on their social context they have a number of obligations imposed by the community (volunteer work, assistance at assemblies) and they are often forced to leave their communities to find work and have to leave their children in the care of their husbands (when that is possible) or with their own mothers. What is interesting is that women are willing to continue in this situation in order to fulfill their dream of their children having better opportunities in the future. There is a clear association, more evident in some cases than in others, between educational attainment and the quality of employment. Women work to fulfill the co-responsibilities so that their children can have an education which will in turn allow them (the children) to find jobs which are better than those that they and their husbands have had. In fact we have some evidence of young people who have finished preparatory school and have recently found employment in the tertiary or service sector, working with computers in warehouses or in other services (<<cyber cafes>>). Some cases however are disheartening, like that of a young man with a degrees in agronomy, in Campeche who despite his academic

title is working as a farm day laborer receiving 500 pesos a week, making les then his father in law who can barely read and write. As we pointed out in the section on the structure of occupational opportunities, the youth with scholarships who are graduating from postsecondary education are beginning their careers and some were seeking employment when we were carrying out the evaluation. Their achievements will be clearer once they have been employed for a while and when those who have been in the Program since third grade graduate from post secondary school. Aside from fighting the difficulties inherent in the scarce creation of non manual employment in Mexico, some time must pass before those "pioneering" graduates can build social networks that will allow them to be incorporated into these types of employment which are more likely located to be in urban settings.

VII. Differentiated support schemes (DSS)^{‡‡‡‡‡‡}

Oportunidades includes Differentiated Supports Scheme (DSS) for households that have become ineligible for the Program (that is they are no longer poor). The existence of a certain number of these households may indicate that the Program has been successful in helping certain beneficiaries to overcome their precarious initial situation. If this improvement can be ascribed to the Program and it is sustainable, they would no longer need to receive financial support and this support could be given to some other poorer household. This discuss is at the crux of the decision regarding the future of the Program, because if this impact is real even for a fraction of the beneficiaries then the support Program can be seen a temporary aid for households. As we have mentioned before a household that is transferred into the DSS no longer receives the primary education scholarships or the nutritional support but continues to receive the secondary and post secondary school scholarships. The coresponsibilities for the household remain the same; that is they are required to have perfect or near perfect attendance they have to abide by the revisions calendar and attend all health talks. These means that if the households has no children in grades 3-6 of primary school, the family loses 165 pesos a month for food support (if the family has children in those grades the loss in income is greater).

The secondary and post secondary school scholarships are far greater than those for primary school. In this section we have conducted preliminary inquiry or poll of: 1) the characteristics of the households transferred to DSS when compared to those that were not transferred; and 2) their response to this change. In a later

^{††††††} The analysis of the DSS households and those of the households removed from the Program were carried out by Alice Wilson (Trinity College, Cambridge University), under the supervision of the authors.

section (XI) we will take on the operational aspects of this change. Our study of this subject is very preliminary because we undertook it as an additional topic within the principal subject of this investigation. As we explain in section XI, the majority of the households transferred to DSS which we studied in this occasion were located in the least poor communities which were integrated into the Program in 1997 which where not as poor.

With respect to the first point: the households transferred into DSS do have higher income levels than the majority of the beneficiary households. The two principal factors associated with these higher earnings in the DSS households studied are the reduction in the intensity of the dependency relationship (number of income generators/number of members of the household) and an increase in the household income. These two phenomenons can happen at the same time or separately. The reduction in the dependency relationship occurs is related to the changes in the household's family structure and the domestic cycle (the participation of members in income generating activities who had not participated before). Our analysis has revealed the importance of both family structure and domestic cycle in the wellbeing of families. This has consequences for the conceptualization of and the efforts to influence vulnerability and sustainability of the economic wellbeing of the household. The domestic cycle as we have mentioned before produces fluctuations in wellbeing. The households that improved "because of the cycle" did so because they went from the expansion stage to the equilibrium stage characterized by the older children's entrance into the labor market, and consequently a reduction in the dependency ratio. The next stage which we call the dispersion state, happens when the older children

who were contributing to the household form new families. Whether or not this household will then return to poverty, and may again become candidates for Program support, will depend on the number of non-able members remaining in the household.

The second phenomenon, the increase in income unrelated to factors mentioned above (structure and domestic cycle), depends on changes to better paying jobs which in turn depends on the labor and economic markets in the region/community (and is therefore outside of sphere where *Oportunidades* operates). However we have some indications that the educational scholarships given to youth in beneficiary families allows them to access in the medium to long term employment which offers better salaries than those of their parents.

The analysis undertaken attempted to highlight the specific characteristics of the DSS households in order to formulate hypotheses about the relevant factors in terms of vulnerability and sustainable development of the households in *Oportunidades*. Therefore a crucial question that arises from this exercise and which we can only hope to answer hypothetically is: What should be the criteria for "graduating" households from *Oportunidades*? We know these criteria will be different according to the region, community, household and individual. However we would like to lay out here the common aspects of these candidates for "graduation" from the Program.

Our universe of households in DSS is made up of five cases from total of 48 case studies studied in this evaluation, which means that our sample is very restricted. The richness of the qualitative data is also its limitation. In some instances we find certain data that comes up in one interview is not reproduced in the other interviews,

which limits our ability to make comparative analyses. However in all cases we observed that between the time of incorporation into the Program and the current time (ethnographic time corresponding to the 2004 evaluation) the number of dependents over income generators has decreased and/or the earnings in the household have increase. With the respect to the first point (the reduction in the number of dependents over the income generators) we can say based on the cases analyzed that this phenomenon is always linked to the domestic cycle and changes in the family structure.

Leaving or relief from the pressures of the expansion stage

The step from the expansion to the consolidation stage can result in a simple reduction in the expenses related to the care of young children. In these households the mothers feel calmer and rested because their children are older and their needs have decreased. During their exposure to the Program, many women decide to invest their time in paid activities, although the scarcity of income derived from these activities sometimes drives them to abandon their employment. So we see cases where the household is again dependent on the income of one person. Despite the low level of participation in the workforce, these households prosper because the economic pressures they faced in the past do not exist anymore. As we mentioned before the domestic cycle continues to affect the wellbeing of domestic groups.

New members (previously too young) join the labor market

Another effect of the changes in the domestic cycle or structure can be an increase in the number of active workers in the households when children/grandchildren join the labor market after reaching appropriate ages for doing so. One case of this phenomenon is household 45 (ejido La Coruña, Coahuila). When they were incorporated into the Program there was only one income earner in the family, the grandmother who worked to take care of her two grandchildren ages 16 and 12 both students. Three years later, the household composition was the same in terms of numbers but the granddaughter (the youngest) had left the household to get married at 15. Her older brother now 23 had gotten married and his wife lived with him.

Despite being an *Oportunidades* scholarship recipient this support was unable to keep the young man in school. Economic pressures forced him to leave school and begin working. In this case the grandson's access to the labor market in effect moved the family to the equilibrium/consolidation stage of the domestic cycle.

Effect of the extended family structure

In some cases we observed the effects of having an extended family structure which frequently consists of the commingling of two or three generations with income earners in at least two of these generations. In these cases we observe a combination of factors among them the extension of the domestic group which creates a situation where multiple workers can produce income for the household. This in turn decreases the dependency relationship.

Effect of the dispersion stage

The dispersion stage can free the household of members not integrated into the labor market who previously depended on the income of those who worked. The exit of members who were not productive and only consumers has several advantages (having less consumers decreases the pressures on the household income). However the economic wellbeing of these households is uncertain. These households can with the passage of time become quite vulnerable as their members age (and their capacity to generate income deteriorates).

Increase in household income

An increase in household income can happen simply because one of the members obtained a better paying job without there being any changes in the dependency relationship. Under other circumstances the increase in household income is directly related to an increase in the number of persons contributing. The changes to better paying employment depend not only on the worker's human capital but also on the labor and economic environment in the community or region. We have examples of two households were workers got better salaries, both come from the community of Xonocuautla, Puebla. In one of these households the dependency relationship has increased instead of decreasing, because when the community was incorporated into the Program both the husband and wife worked in Mexico City, however a year later only the husband was working and he would not allow his wife to work. The increase in household income came despite a reduction in work force participation and as a

result of the husband/father migrating to the United States where he makes far more money than he ever would in Xonocuautla. However the economic wellbeing of the family was subject for years to the payment of debts 90,500 pesos in total related to the trip to the United States. Currently the mother and child –who is in primary school-continue to have modest consumption levels because the remittances are invested in the construction and upkeep of a new house for the family. In this case, aside from the priority given to the new home we have noticed an increase in household income despite a reduction in the workforce participation because of the husband's (illegal) employment in the United States. This we believe is not a household development model that is sustainable.

Consequences of factors associated with DSS

It is evident from the analysis that the domestic cycle and the family structure are quite important in terms of the vulnerability and the sustainability of the economic wellbeing of the domestic groups. However we must face some of the consequences that arise from these findings. The domestic cycle produces fluctuations between moments of increased or decreased economic security. This means that with the passage of time nothing is stopping the DSS households which in some moment of their exposure to *Oportunidades* had more security from falling once again into poverty when new changes in the family structure and the domestic cycle invert the direction of the household's economic evolution. The domestic cycle can result not only in new workers joining the labor market but in other workers leaving that same market.

The evaluation of the household's vulnerability during recertification must take on this timing problem, the temporal nature of changes beyond any short-term considerations. The changes in the family structure and domestic cycle are difficult to reproduce artificially. *Oportunidades*' ability to transform the conditions of poverty can seem secondary in light of these dominating factors of the domestic cycle and the family structure.

The other major factor associated with improvement in the household's economic condition, that is the possibility of obtaining greater income through workplace participation, is outside *Oportunidades* sphere of influence. If adequate employment is not available in the region or community than the increase in human capital of these youth –through the support provided by *Oportunidades* to insure their passage and permanence in secondary and post secondary schooling- cannot lead to large increases in earnings. Local, regional and even national labor markets are beyond the scope of influence of the Program.

Nevertheless, we have some evidence that the scholarships can have an impact on the youth in beneficiary families in terms of their access in the long run to better paid salaries than their parents had. In the households in this sample we see children in one household who continue to study rather than work because of the scholarship.

Other types of changes

The changes in DSS households are not limited to those of the domestic cycle, family structure or income levels, but we did not find homogeneous patterns in any of the

other factors which influence these changes. In terms of changes in housing we found one case were the household members used *Oportunidades* money to build a latrine. The same household has acquired a dresser/wardrobe and other furniture during their time in the Program, but with money from a corn crop. In other cases a stereo was bought with *Oportunidades* money but some fairly basic things in the house are still missing, like a bathroom and a wardrobe (a broken down fridge is their current wardrobe). In other cases there have not been any substantial changes and the majority of the electrical appliances have been obtained as gifts. One of the DSS households is completely transforming their house but this is thanks to the husbands remittances. The families spent the *Oportunidades* money on food (in two cases) school costs and in one occasion shoes (in one household) and food, meat, school costs, and household goods (in another case).

Reflections about the households

In all these cases we observed economic changes in terms of the families' needs that can explain why these families are now on a DSS. Their economic situation has improved and this is not some error in measurement or in the survey. However we still need to find out how they are different from the other households which are still beneficiaries after recertification. When you compare the DSS households to beneficiary households, we found many similar characteristics (for example the transition to the dispersion stage). The data need to be analyzed more carefully so that we can have the elements with which to justify their continuation in the Program in comparison to the households presented here. Nevertheless, the preliminary data

which has been analyzed suggests that the impact *Oportunidades* can have on the factors associated with significant changes in the economic wellbeing of households transferred to DSS is less than the vicissitudes of the domestic cycle, family structure and labor market.

VIII. Households removed from the Program

The current conditions in those households removed from the Program are heterogeneous and therefore it is difficult to speak about typical characteristics of these households or the effect of the loss of Oportunidades. This heterogeneity is due in part to the diverse reasons for removing these households from the Program, since not all are inclusion errors. Not all the households removed from the Program have overcome poverty. From the available sample (six cases), in three the reasons for the removal are unknown or they pretend they do not know why they were removed. In one case the removal was the result of not complying with the co-responsibilities, in another the wife left the community for work reasons while finishing the last procedures for enrollment and in another the removal resulted (according to the beneficiary) from a personal conflict with one of the nurses in the community health center who reported her as missing from certain activities unjustly (the removal was due to not complying with co-responsibilities). So in at least two of the cases, we know the households were not removed because they were no longer poor. One of the other cases is less clear since the reason for removal that appears on the forms given to the former beneficiary is <<without cause>>. In two cases in Costa Azul, Sinaloa, the beneficiaries received a payment stub indicating they would be moved to DSS and suddenly they were removed from the Program. In one of the cases the removal was the result of an inclusion error but the ex beneficiary and the other members of the family are not aware of this. The other case is in a similar situation but in neither case were there any warnings or clarifications sent to the beneficiaries. Both women wondered why they were not deemed worthy of an explanation.

The heterogeneity of the reasons that lead to these households being removed from the Program reflects the evident heterogeneity in the socioeconomic conditions in these households. One the households removed (in Costa Azul, Sinaloa) shares many of the characteristics of the DSS household. In this household, from the moment they were incorporated into the Program the pressure on the income earners, enforced by the dependency relationship was lightened because two people joined the work force and one of the household members left. In 1997 they had two income earners for a total of 5 members and in 2004 they relationship is 4/4, a sign of the passage to the equilibrium-dispersion stage of the domestic cycle. However this family highlights the need to inquire into the characteristics and changes in labor participation. Of these four, one is the eldest son who is had to quit school due to lack of resources (he left school as a result of the removal). Everything seems to indicate that this household would have been a prime candidate for DSS instead of being removed from the Program. The situation is particularly regrettable because the eldest daughter, who is the one who left the household to get married, reducing the members from five to four, had to quit school precisely so her younger brother could have the opportunity to continue studying something she was unable to do because of lack of resources. History repeats itself in this family. The youngest daughter graduated from a professional postsecondary Program and when she finds work will be able to practice her profession as a technical nurse. This young woman was never a scholarship recipient while her family was enrolled in Oportunidades, so her advanced studies are the result of her families' efforts and not due to the support of the Program. The male head of household works in the field and fishing and his wife cleans shrimp during the

shrimp season. When they received the support, they used the money for the scholarship from their other daughter for school expenditures and the nutritional payment for food except for a few occasions when they bought sandals as needed. As already mention in the other cases (DSS and many of the beneficiary households in the complete scheme) the other cases of households removed from the Program have transformed their domestic structures by incorporating three generations or more. So that one of the households has grown and become more complex since it was incorporated into the Program.

Conflict between *Oportunidades* and the women's salaried employment

One of the households removed from the Program in Cuechod, San Luis Potosí has been characterized by extreme poverty and the intense participation of the woman-wife in paid work since the early years of the union. It was precisely the woman's need for work which prevented her incorporation into the *Oportunidades* Program. In 2002 when she was about to finish all the paperwork so that her family-which at that time included her two children ages two and three- could receive *Oportunidades* support, her husband had to go on disability because of an illness (gastric ulcer) and she was forced to go to Monterrey to work at a maquila. They had to sell their cows in order to pay the costs of her husbands care and part of her trip. During her absence her husband was unable to receive *Oportunidades* support so they lost it. All attempts to rectify this have not been fruitful. Now the couple works in the fields receiving 50 pesos a day for the labor that both undertake. They engage in subsistence farming from which they garner irregular and uncertain income from the wife selling vegetables on the street. The only change in their housing is having placed a new palm leaf roof

on their home. The oldest daughter, who was five in 2004, has missed preschool, apparently pretty frequently so that her mother can take her with her while she works in the field. They need 200 pesos a week to pay their expenses and they do not always have that amount. They buy clothes once a year and recently bought a radio as an exceptional purchase. The future development of this family is in peril, threatening to drown under the weight of the poverty related o the husband's illness. Meanwhile the wife attempts to keep the family afloat.

Conflict between *Oportunidades* and the women's domestic employment

Our analysis has demonstrated that there is incompatibility between the Program's coresponsibilities and women's reproductive functions which induce failure to comply with the first. One of the households studied in Xonocuautla, Puebla was made up of —when they incorporated into the Program- a couple and their children. Currently the couple has another child now three years old. The family is therefore in the difficult expansion stage of the domestic cycle. The woman (mother) because of the responsibilities of having a fourth son was unable to comply with the Program coresponsibilities and was removed from the Program not longer after the youngest one's birth. As a consequence the eldest daughter 11 years old, the second one in the family dropped out of school when her glasses broke and she could no longer see well enough to take advantage of the classes. Instead of going to school she now takes care of her younger siblings. She and her older brother (13 years old), when he is not in school, help their mother with store they have organized in their own home taking advantage of its strategic location. They sell sodas and beer. The father works as a

field hand making 60 pesos a day. He gives 350 pesos to his wife, which she administers along with the money they make from selling beers which is not much. According to their own calculations they need another 100 pesos a week to cover their basic needs. They hope to support their children's education with their work which given their current condition seems more like a dream than a real possibility.

Removed without cause

A couple in Xonocuautla, Puebla lives with two daughters, the only ones who still live their parents out of seven children who survived from a total of eight. These two daughters have plans of completing their secondary education despite the fact that their father doubts that their older brothers reaped any benefits in the Mexico City labor market because they finished their secondary education. The wife, mother who speaks Spanish with difficulty, complained about the *Oportunidades* Program coresponsibilities. The *Oportunidades* list classifies them as removed <<without cause>>. However the townspeople say they are both alcoholics though they deny it. The father works as a field hand making 60 pesos a week. He works seven days a week and his wife works in the fields as well. The family does not have a latrine and lives in precarious economic situation with very modest consumption.

Personal conflict with the health service administrator

One former Program participant complains that because of a personal conflict between her and a nurse in the health center in La Coruña, Coahuila, the nurse made sure she was removed from the Program and thus far she has been unable to change

the situation despite her complaints. In terms of workplace participation this sixmember household (two parents, two children old enough to work, two minor children) includes three participants, the two parents and her older son. The eldest daughter had to drop out of school when they lost the *Oportunidades* support, but she was fired from the maguila because she was a minor. When the household was incorporated into the Program only the father worked, so we see the household has fewer pressures in terms of its dependency relationship. Before incorporation into the Program in 1997, the head of household made 100 pesos a week. From 1996 to 2000 he change employment and began making 300 to 450 pesos a week. For one year, soon after, he made 400 dollars a week in a factory. It is not clear what portion of this money went to the family but they were able move into a new home thanks to the remittances. However the new home lacks a roof in one part. The family actually has fewer needs now and they have the earnings from the father (590 pesos a week from a stable), the mother (500 pesos a week from domestic work) and the eldest son (400 pesos a week from the same stable were his father works.)

Reflections about those removed from the Program

The differences between the criteria for moving on to DSS or for being removed from the Program have to be clarified. Many of the households which were removed from the Program have characteristics typical of the DSS households (less pressure in the terms of the income/members ratio, having left the expansion stage, entering the consolidation stage). The similarities between DSS households and those that have been removed from the Program causes confusion not only among us the evaluators

but also among the beneficiaries, who do not understand why they have been transferred to DSS or removed from the Program. We believe the process for passing on two either one of these two states has to be clear and transparent.

IX. Education

In previous evaluations the authors have discussed in detail the conditions in the educational services. In this evaluation the emphasis is on the diverse factors that do not depend on *Oportunidades* which seem to result in greater or lesser educational achievement. This includes some domestic factors (although these have been dealt with in the previous section) and others of a varied nature. In some cases however this factors are inherent in the educational institutions and therefore are pertinent.

General impact: vicissitudes of memory

In comparing the family and community ethnographies from 2000 and 2004 it becomes evident that incorporation and permanence in Oportunidades has a significant positive impact on educational achievement. Using the ethnographic work the best way to weigh the impact is to compare these ethnographies because we find that the individuals' judgments can be highly contingent on the present state of affairs and lacks an appreciation of their own past attitudes. In other words, some who now experience their children's educational achievements as natural \$\\$\\$\\$\\$\\$\\$\\$\$ think their attitudes about education were the same in 2000. Since we are visiting the same households we know that back then they were skeptical about their children possibilities for higher education. In the focus groups conducted back in 2000 many stated that even with the support of what was then Progresa it would be difficult for their children to completed secondary school. Today the youth that have dropped out from secondary school are the minority and have done so mostly because of economic reasons (including being removed from the Program); the advances in secondary and post secondary education are notable.

^{\$\$\$\$\$\$} This statement is not meant to undermine the efforts of the families in any way.

Despite what we mentioned before during group discussions generally and during case studies in a more complex and profound manner, the parents mentioned that the Program had been instrumental in extending their children's education. The youth in their own discussion groups agreed in general terms although they pointed out the support given is not enough to guarantee educational achievements in secondary and postsecondary school.

This study also included an analysis of the life trajectories of individuals older than fifteen in 48 households. Based on this analysis we found that for every year one is a scholarship recipient there is a significant influence on school permanence. The same analysis finds that the presence of both parents in the household and their educational levels can be great influences in educational continuity. However these two independent variables are not really subject to the influence of social policy: the first of these (parent's educational achievement) because it is a past event and the other because its arguable if these types of programs and supports can favor the permanence of the nuclear domestic unit.

With regards to educational performance, in previous evaluations the teachers tended to point out that there had been no changes because of the Program. In the course of this evaluation there was a greater diversity of opinions. There were a few teachers who stated that the Program has made the school population less selective and the level of performance in general in the classes has decreased. This effect would be the result of the permanence of the poorest or less apt children. Other teachers continue to say that there are no appreciable changes or that children's

Except if the parents are in the adult education Program (*Oportunidades* is promoting adult education in collaboration with INEA-Conevyt), but we are unaware if this type of education has an impact on children's schooling.

assistance has improved but that the economic incentive only makes parents seek education for the scholarship without insisting that their children try harder. Some of these teachers want the Program to impose minimum grade requirements for staying in the Program. Finally some (and one of the Cuechod teachers among them), point out that that the performance has improved because the children receive more attention when they become scholarship recipients and because of the talks that parents attend in an effort to instruct them that the resources of the Program should be destined to everything which will help their children do better in school. For other reasons one of the El Capricho teachers is in agreement. Although he places emphasizes on his own merits (and legitimately so) he also seem to think the parents' desire that their children must reach higher education levels has driven them to demand that their children try and study harder so that they do not have problems reaching them. This actually improves the relationships among teachers and parents. We believe these last opinions contain elements that could be generalized, in terms of what the teachers can ask parents in order to insure more collaboration.

Impact on the communities

Another way to approach this is from the community level. While in some of the less poor communities the option of post secondary education (and in fewer cases university) were thought to be possible if obviously difficult, in some of the poorer communities particularly in Cuechod, those interviewed almost unanimously agreed that without *Oportunidades* the youth would never finish secondary school

^{†††††††} In this case we are referring not only to the case studies and focus groups but to teachers, representatives, the municipal liaison and other crucial actors.

and in some cases even primary school. In other words while *Oportunidades* is in some communities *a prerequisite* to prolonging the educational career in others it becomes another incentive among many. This also suggests that the recently observed widening of the educational gap between the poorer and richer states in Mexico would be even worse if *Oportunidades* did not exist.

Our study highlights a demonstration effect impact on both households and the community. In other words we observe that once they receive the support from the Program, the households are willing to invest their own resources in their children's education. The economic transfers or supports are insufficient to cover all educational costs starting in secondary school and even more so in post secondary school. However when households have other incomes they will apply the sums necessary to complete these costs. In general terms we believe this a positive impact of the Program. In other words, the domestic priorities do change to include an interest in educational achievement. However in some cases it can be extreme as when a household decides to decrease the amount or quality of foods so that the costs of post secondary education can be covered.

We believe the "demonstration" impact at the community level can be observed when one interviews households never included or removed from the Program.

Although in an important number of these households they have had to take their children out of school, we also find among them notable efforts to keep them there, these were far less frequent a few years ago. Of course this change could indicate a

general modification in the country's mentality and in the orientation of these households rather than a Program effect.

The indication of a "demonstration effect" on households not benefiting from the Program in the educational arena, as well as the community impacts of the voluntary community work details which have significantly improved the public health conditions in the communities makes one think that at least in some cases the Program has gone well beyond its own focalized strategy. Another way to look at the impact on schooling is to see the greater or lesser emphasis in households as variable instances of autonomous decisions in the educational realm. In Costa Azul, which in 2000 was the most prosperous community studied, the new preference for formal schooling appears as decision of the households themselves, when faced with decreasing employment opportunities for their children in fishing. One can suppose that without the Program it would be more difficult to exercise this option. However in La Coruña were formal employment exists for those who graduate from secondary school no such reorientation of priorities has occurred within the community or the households and the Program works there more as an additional incentive. In Xonocuautla, the families' real and perceived opportunities for manual and non manual employment in Mexico City are also an influence, aside from the Program, in the decision of some households to maximize their studies. It is also useful that in this community many young people have found part time employment which allows them to continue studying. In other words, cultural pressures and learning things like how to manage

^{*********} This modification could be for example due to the worsening employment possibilities and the decrease in income among less trained workers.

social and economic resources can play a role in the greater or lesser reorientation of households' efforts to insure education which go beyond the Program itself.

Primary level: residual cases, specific reasons for being left behind

In terms of primary schooling, coverage is close to 100% (97% in the generation of children older than 15 according to the study of the trajectories and the Austin type life history module). As has been stated in other evaluations of the Program, at this level the impact is increasingly less visible because coverage is almost universal. However this does not mean that improvement towards this level of coverage is independent of the Program.

Once coverage has reached this level there are two phenomenon of interest: in the first place the characteristics of the "residual" (because they are scarce) households and individuals that did not make it to this level. In the second place, one could study the characteristics of the communities where this happens more often.

In general we found that households where the children do not reach this level are: 1) particularly poor or 2) single parent or 3) include chronically ill or alcoholic members or 4) the children have a personal or physical problem that makes school attendance difficult. Of course although we studied extremely poor and marginalized communities we will not make reference to the isolation in itself which continues to be a problem at the national level.

The economic factor is obvious. The single parent issue has an independent impact because although the mother maybe able to obtain income from her work, work requirements and the resulting domestic arrangements may mean that children

do not attend school sometimes because they require that their children work in the home or in the labor force. The same thing happens in terms of the third factor although this last one may also call into play the role of family stigma particularly when the alcoholism is publicly recognized. In terms of the fourth factor, in some case children (or today youth) have learning difficulties. But there are also other cases which seem almost absurd such as when a shortsighted child loses their glasses and the parents refuse to replace them or the child refuses to use them.

In the first two cases it is possible that a more generous scholarship and/or weighing these factors more when you reach a certain threshold could have a greater impact. The rest are a little more complex. Nevertheless when the coverage is this high, the excluded cases are so few that with some specialized attention one could reverse this disadvantage. It is possible that the time has come to develop a focalized Program to tend to these cases. This would not have been possible before Oportunidades because there were millions of households whose children had not completed primary school, but we believe it would be possible today. Collaboration with the county DIF would be natural in this topic.

The same happens at the community level, the educational gains are smaller in the poorer communities and in those with more health problems or larger numbers of households headed by women (ironically Cuechod has all these disadvantages). In other words at the community level there are no other factors at work different from those at the household level. These communities could benefit from the household level interventions outlined above. Aside from the general judgment about the usefulness of education, which varies among communities, a factor that does

contribute to the differences at the community level is the opinion of the parents, of the teachers and the school which can serve to encourage or discourage their children from studying. At the primary level there are important variations.

A primary school was given computers and software a couple of years ago.

However today none of the equipment works and the room is used for other things which has caused the equipment to deteriorate even more. Evidently this investment was almost entirely lost.

We also found in various cases that a reduction in the number of births and migration have caused a drop in the primary school population and in turn a reduction in the number of teachers. This is a logical process and makes sense economically. However sometimes it leads to deterioration in the school conditions and the quality of the education (above all because of the multiple responsibilities of the director/teachers) which can discourage some students.

Moving on to secondary school

In the evaluation in 2000 we pointed out that the passage to secondary school was difficult and infrequent and that it implied all types of costs (direct, indirect, in terms of time, and income opportunities) which made the impacts at this level modest. Direct costs have to do with the multiple school fees in secondary school. Indirect costs have to do with the increase cost of materials, transportation, clothes and food expenditures. The costs in terms of time are related to the greater distance traveled to secondary school almost without exception. The opportunity cost refers to the fact

that at this age they would be able to get employment which pays almost as much as untrained adult employment.

However the change we have observed in the last four years is notable.

According to our analysis of the trajectories the passage to secondary school among the primary school scholarship recipients and non recipients (removed and never beneficiaries) happens in more than 70% of all cases. (In terms of the goals of this document it would be important to know the difference between beneficiaries and non beneficiaries and how *Oportunidades* affected transition to secondary schooling).

We do not have equivalent information for 2000 but in that year a minority of cases went on to secondary education. This does not mean that the cost or total sacrifice of having a child go on to secondary school has decreased. The cost is high and when transportation costs are included the secondary school scholarship covers approximately half of the monetary costs direct and indirect.

The passage on to secondary school leads parents and students to evaluate their primary education because some of the graduates have a very difficult time complying with what is required of them in secondary school. As a consequence today parents differentiate clearly between one primary school and another. If they can they send their children to the best primary schools available. This is possible because the primary schools in effect compete for students because of the decrease in birth rates and increase migration.

The increase which we can expect to see in the secondary school level justifies some national planning and retraining of primary school personnel which will need to be transferred to this level. Although we noticed some recent increases in personnel,

we believe the reduction observed in primary schools (and the increase in secondary school) justifies either transferring more personnel or using one or two of the primary school rooms as first year of secondary school, with the respective training for teachers.

However the increase in secondary school enrollment happened quickly between 2000 and 2002 and has been slower in the last two years. Although the demographic transition is somewhat felt at this level, the under-coverage that still exists makes us believe there is a high proportion who are not going on to this level. An extra effort will be need to overcome the 70% mentioned before, which actually corresponds to a percentage smaller than the age group since not everyone finishes primary school. In terms of secondary education it is important to point out that the perception of *telesecundarias* (schools were satellite programming airs on video monitors and forty minutes of on-air instruction is followed by 20 minutes of discussion led by a docent) is quite negative and those parents who can, prefer to send their children to traditional secondary schools.

Advances and variety in post secondary education

At this level the impact of *Oportunidades* in 2003-2004 is surprising. There are a number of post secondary schools where the increases in alumni in the last two years is of 100%. The offerings are quite varied. There are preparatory schools, technical school, and attendance at schools part of the federal and state systems.

One can expect this spectacular growth to continue, although if coverage in secondary schooling does not improve, in a couple of years the post secondary school

population will be relatively stable due to the combination of demographic transition, migration and the families' poverty.

In general we believe the *Oportunidades* scholarship is essential even in the towns that are not as poor, without them only a small portion of the youth currently enrolled in postsecondary education would attend. In only one community did we find another important scholarship system (Conafe in Cuechod). The costs of education at this level is general much more expensive than secondary school and the indirect costs are even higher. This means that in general and despite the fact that the scholarships amounts are greater, assistance to any kind of postsecondary educational institution means more expenses for the family in order to pay for costs beyond those cover by the scholarship.

The families face these elevated costs in a variety of ways. The direct costs are very diverse. But there are two great common items: transportation/lodging and school materials. Remember that the distances to post secondary schools are even greater than those to secondary schools. In terms of lodging, students use guest houses or (in only a few cases) special student residences. For transportation students make do by combining hitchhiking, cooperating with car owners, or direct payment (paying an average of 30 pesos a day). Where they exist, the student residences are of substantial assistance in insuring these students continue their studies. The ones we found were financed one by the state university and another by the city council.

Computers become a requirement at this level. Many students have problems because they never learned to use them in secondary school. The amount spent by

families in hourly rental of computers is quite high. The school supplies are much more expensive and more frequently needed.

In two schools we found and interviewed the social assistances. We believe they have a crucial role in resolving on an individual basis some of the problems of poorer students from the communities studied. They find them part time work and cheap lodging. Without them poorer students would have to abandon their studies.

Looking towards the labor market

In our small study of trajectories we classified occupations according to an international index which stratifies them in two digits. According to this index the occupation of the beneficiary families have risen one point (on a 99 point scale), while those of non beneficiary families have remained stable in the past six and half years. This is a descriptive index which rises or falls according your occupation. When we said that the occupations of the beneficiary had risen one point, we are talking about a situation that has been practically stable where despite there being an improvement, it is minimal. The impact could be greater if we only analyze the school achievement of youth of a certain age but the small number of cases does not allow us to disaggregate this analysis. There are reasons to think about this support as being incipient. The support at this level began flowing only two years ago. The employment situation in the country is quite adverse. However what determines the level of this impact is having job information and parents' and friends' social networks which can give access and information to the employment market. SSSSSSSS It is clear that the two communities whose inhabitants have better and greater access to

^{§§§§§§§§} Naturally however many of these social networks are now transnational.

sources of income have advantages with respect to the other communities and in these populations they have close practical examples of persons getting better jobs with a post secondary school degree which is why we believe the push for greater educational growth will continue. We see these same networks and these same perceptions in Xonocuautla and El Capricho (the third and fourth community in terms of family income) although the impact is greater in Xonocuautla.

The poorest communities are also in regions with the most difficult labor markets. In these communities the opportunities for non manual labor are extremely scarce and the families are skeptical about their children's' possibilities for employment. This is true even though these communities have long distance, national and international migration. We believe it will be difficult for the families' appraisal of the situation to change without changes in their migration networks or in the regional labor market.

It would be useful to revisit these communities in a couple of years when a greater number of students have graduated from post secondary education and a few have graduated from university (they will surely no longer live there but will be former scholarship recipients).

Nevertheless, we believe, while insisting in the need for a salaried employment market, there is a need to look at the communities themselves. If the cities have a limited capacity to absorb the educated rural workforce then these communities have to create alternatives that use that workforce be it through salaried or self employment. In many of the communities there have been reductions in the number of subsistence crops and the majority of the beneficiaries do not have commercial crops

because of lack of resources, market information and training. When they have attempted commercial crops their deficiencies in these three areas have caused them to fail. We believe that regardless of what happens in terms of the labor market whether it improves or not, we need policies in place that insure that some of those who graduate from post secondary education (agriculture student or not) can improve the production in this agriculture communities. During many years we social scientists have observed that small farmers are having net losses in their agricultural production. These losses are so obvious today that they are reducing as much as possible their effort and expenses in this arena. In other words, the principal investment in small farmers' production has been the contributions made by the small farmer and he is withdrawing that support.

This is important because if at the same time that social programs are finally reaching the poorest communities in the country, the situation of the inhabitants is worsening in terms of their own capacity to produce wellbeing in terms of income, the dependency on public cash transfers will be irreversible.

X. Health

In this evaluation it is possible to speak about a whole host of phenomenon associated with the impact on health some of which result, in our opinion and that of the doctors, nurses, representatives and beneficiaries from the work of the Program. However we realize that some of these should be measured with techniques which are more in the realm of the health sciences.

We believe it is possible to evaluate the impact by looking at the medical records of the primary care health centers in these communities. In general the quality of the medical records has improved (there are exceptions). In part these improvements are the direct result of the densification programs which have been carried out in these communities by *Oportunidades*. In all four communities we studied the Program covers a greater quantity and proportion of the poor than it did in 2000. In other words the records include a greater part of the population and they have much better coverage among the poor population. This also means that in 2004 these records show more health problems than they did in 2000. In general this contradicts the opinions of the key informants in the communities both those who criticize as well as those who support the Program.

In the majority of the communities the doctor has changed and there is limited continuity in terms of the nurse. This also means there are changes in terms of the styles in the medical record and the ways in which the clinics are administered.

Collective improvements

The women who benefit from *Oportunidades* under the direction of the doctor, the nurse, the health promoter or health representative have completed substantial cleaning and sanitation of the communities. There have been noticeable improvements in cleanliness, elimination of waste, water drainage and others. The most notable changes occurred in El Capricho. The concomitant reduction in respiratory and intestinal illnesses are clear according to the doctors, nurses and some of the beneficiaries but also according to the researchers who were visiting these communities for a second time.

The problems with these improvements are social in nature. On the one hand some of the beneficiaries are tired of these tasks which can be repetitive and heavy and the differences between the volunteer work details for those who are beneficiaries and those who are not. When you add to the quite useful voluntary community work details obligations which have been invented by county social development officials, the weight can become too heavy to bear. We found some cases where those removed from the Program sighed in relief and it is possible some intentionally stopped complying with the work details in order to be removed from the Program.

We have insisted before that: 1) the work details should not be obligatory; 2) the load in cases where there is a female head of household should be adapted or in some cases eliminated and 3) they should attempt to incorporate the men more. We do not renounce these recommendations. However given the obvious utility of these voluntary community work details in some places we are moved to affirm in this

^{********}These community work details are not part of *Oportunidades* they are launched by local actors many times doctors, nurses or teachers. The beneficiaries however associate these work details in practical terms with the Program.

evaluation: 1) that it may be useful to optimize the voluntary community work details in terms of lessons learned in some cases and 2) that all voluntary community work details that are not patently useful should be eliminated. There are cases in which in order to have the women do "something" they are asked to do silly things. They know it and they resent it

There are some improvements not related to the Program which could possibly be promoted by the Program or by other health service providers. We are specifically thinking of the small water purification plants to produce potable drinking water which sell demijohns very cheaply (2 pesos versus 10 for commercial demijohns).

Individual improvements

In general, the teachers report that the students eat better and are more awake in school although some say that at the end of the bimester the improvement disappears. Some criticize the use of scholarship money to consume junk food. All the mothers on the other hand have the same favorable opinion. Only one teacher in Cuechod reported the misuse of Program resources to buy alcohol. However in that same community we have found an improvement in the women's capacity to administer and decide, which is why we take the comment with a grain of salt although it is the community with the largest degree of alcoholism.

In general the use of the nutritional supplement has improved. There are very few reports of misuse. Although in some cases it is consumed by more children than had been foreseen but generally it goes to who it was intended. However it is important to mention that in 2000 and 2001, doctors or nurses reported that there was

an excess supply of the supplement and that they would use it by giving it to poor families not in the Program. Some of it was wasted. Today on the other hand the supplement is scarce. It may be useful to allow nurses to request surplus supplement particularly in the poorer communities, supervising that it not be sold. In some cases the representatives report that some families do not use clean water to prepare the supplement.

As a consequence of all that has been mentioned earlier malnourishment has decreased. The records as we state must be treated with some precaution, but in all the communities where there is some continuity of health personnel the belief is that this is true. In one community a special malnutrition Program was closed because it was no longer needed.

The cervical cancer exam is practiced on almost the entire beneficiary population and the response times have decreased. In 2000 it did not cover all beneficiaries. We believe that the designation of a health representative, the authority of the doctor and the coordination with the Program have all led to this improvement. As was mentioned in other evaluations, the response time is crucial in terms of the emotional wellbeing of the women (aside from the obvious medical necessity). However in some communities problems persist in terms of: 1) slowness and 2) losing or confusing with the samples. Aside from the improvements in coverage it is worth mentioning that in one community the exam is given and the response is almost immediate. This should be the case in all communities.

The same thing is true for family planning. Approximately three quarters of the women beneficiaries are covered. Sometimes the doctors and nurses can pressure

the beneficiaries. In 2000 there was strong opposition to family planning in the indigenous communities. This has now decreased. The most visible opposition now is to the sexual education talks for adolescents. Some of the mothers think they promote promiscuity. Certainly there are some teenage mothers but we have no evidence that would allow us to affirm that they were there more or less numerous than before or that this is in any way related to the Program.

The women who are around 30 years old in these communities have more then two children. We believe the average is between three and four and there are also some unions of adolescents and evidence of early childbearing. It is highly probable that recent increases in coverage will modify these situations.

In 2000 we did not look for those who were chronically ill. The phenomenon came to our attention in 2001. In the communities they began to keep records of these cases because of the special care they required and because of the medications they need. But we are unable to make any evaluations about changes in this respect. What is clear is that the presence of a chronically ill person in the household increases their vulnerability because of the increase in expenditures (doctors visits and medicines) and because it means less possibilities for generating income (if the person who is sick is old enough to work and those who provide for their daily care are unable to work).

There is a noticeable improvement in the availability and distribution of medications between 2000 and 2004 although the doctors do not see this because almost all of them have been in the communities for less time. However coverage never reaches 100%. Our impression based in part on the doctors' appreciation is

that coverage of basic medications reaches 70% and 50% for those who have chronic needs. Some cases that have been removed from the Program due to unknown reasons or failure to comply complain that they do not have access to medication which they are sorely in need of.

Finally as regards alcoholism, our sensibility has also increased. There is one community that is formally temperate has remained that way almost 100%. The problem is of epidemic proportion in only one community. However this disease is clearly related to other family problems and to dropping out of school. We have no way to point out the changes only that in the community where it was a problem in 2000 it continues to be a problem.

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XI. Oportunidades: changes and new components

Differentiated Support Scheme

In section VII we addressed the characteristics of the households transferred to DSS and some of the responses to this change. In this section we will analyze how this Program component operates. In the original design of the evaluation we did not foresee analyzing this new scheme. However it was later included so as to have a preliminary survey of the characteristics of the household in this situation and the way in which they were transferred to this new scheme.

In order to have a large number of households in this situation in the final sample we worked with the Program authorities to search for communities where this was the case. We found two such communities incorporated in 1997 which had a large number of cases transferred. We thus purposefully chose one extreme of the spectrum of DSS impact. As one can imagine because of the characteristics of the households that are transferred to DSS we are dealing here with particularly prosperous communities. The accumulation of cases in these communities also means that they generated collective movements of transferred households which wanted to know more in depth what were the reasons for their transfer and did all they could to stop it.

Our previous evaluations pointed out that *Oportunidades* reduced vulnerability in households, which would perhaps mean that after some predetermined exposure time the households would no longer need the Program. It is important to revisit the reasons that led to the reduction in vulnerability. In the first place, the Program guaranteed a modest outside income which could reduce the gravity of some of the

worst moments of scarcity in these households. In the second place the beneficiary households could accumulate more goods or assets than non beneficiaries. Finally the impact of the Program in education and health in our opinion could have an impact in terms of reducing illnesses and improving workplace performance all of which has the same effect. However these evaluations never explored what would happen if the cash transfers were decreased in these households with reduced vulnerability. One could imagine that the first two improvements would no longer exist but the third one would.

Out of this analysis one preliminary operational suggestions arises which must be validated by an analysis which incorporates all the substantial variable in these households' situation: it is necessary to create a clear, succinct and easily understood distinction between the causes for removal from the Program because of an inclusion error, those for being transferred to DSS and those for remaining in the Program. The population needs to understand these differences. Currently there are households transferred to DSS which are so similar to those which were removed from the Program that the transfer is difficult to justify.

Some families received correct information regarding their passage onto DSS (and the reduction in their cash transfers) with two months warning. But the majority did not know. At the moment in which the cash transfer was reduced (or eliminated) it was not easy to obtain information. Some families received contradictory information: notification of their eminent transfer on to DSS, followed by notification that the exclusion from the Program would begin in two months because of an "inclusion error", a notion which was foreign to them and to their representatives at least at that

moment. In other cases when there are no children in secondary or post secondary school the DSS is a complete elimination from the cash transfers without any change in the co-responsibilities. In these cases the previous logic of the Program is unsustainable because the population understands that co-responsibilities are their *response* to something real and tangible.

The notion of "guilt" rises quite easily when you lack information. Some of the beneficiaries questioned how they had failed and in that community (Xonocuautla) the county liaison takes advantage of any problem to blame the beneficiaries and impose additionally tasks often ones that make no sense.

This does not mean there was no information campaign, only that we believe it was not sufficiently timely or successful. We visited teachers who complained that they just got some brochures while the representatives traveled and that no one informed them about anything. We saw that the brochures had rather precise explanations about DSS and OYP but that no one had read them. In the absence of *effective* information they also blamed their students and their families for having lost the scholarships and would use them as "examples" of why you had to do what the Program said, which generated a great deal of confusion.

In summary we observed that DSS had serious implementation problems in first outing but it is also worth mentioning that at least in this preliminary look we could not assure that these households are in a situation where the improvements will be sustainable above the eligibility line. At least from the perspective of the communities their logic is unclear. There are some successful cases or at least some that are not the source of conflict. However this is the most conflict ridden component in

Oportunidades in part because of the difficulties in understanding why some households go onto to DSS and others do not and in part because of the way in which it is being implemented. We also believe it is potential explosive in the context of the presidential campaign visits in 2006.

Inclusion errors and surveys to recertify and densification

Some households received notification that they were being removed from the Program due to inclusion errors. As we already mentioned they do not understand the concept. When our researchers explained the meaning of the phrase some would recognize they were not the poorest in town and others needed the support more than they did, but others complained that other "inclusion errors" much wealthier than they were still in the Program. In the two most prosperous communities there were various cases of households excluded by for this reason. In general these households were better off than was typical in their communities. Excluding non poor households is correct and justifiable. Among those exclude was a well off shopkeeper and this encouraged others who were excluded. However in both communities there were some notorious mistakes among the inclusion errors cases which brought forth justified complaints.

We were unable to study these notorious cases for two reasons. In the first place, one of them which we had already studied in 2000 had been quite friendly to our researchers at the beginning of the field work, but gradually drew away from them. The others had no interest in cooperating with the study. In the second place we selected household cases (included and those not incorporated which in our opinion were poor) so as to evaluate the impact of the Program and these households were

not poor. We did learn that one of these households was interviewed in the recertification process, one is an influential politician and another is a leader the population is afraid to question. Their permanence in the Program is neither accidental nor a processing error. These families did what was necessary to portray a false economic situation.

The permanence of certain inclusion errors, which effective does decrease proportionally with each recertification survey, maybe not be costly in economic terms for the Program. The intensity and quality (and therefore cost) of the survey would have to increase in order to exclude the few households that lie. But their remaining in the Program does have a significant effect on the way the Program is perceived. The "almost poor" or the just barely not poor who were not incorporated or were removed from the Program perceive this as an injustice and are tempted to lie in the next go around.

It is possible to place the responsibility for excluding certain "rich" households in the hands of the community. However we have seen how difficult this is since the creation of the Program. The beneficiaries have a difficult time and are conflicted in terms of "accusing" their neighbors, especially if they believe them to be influential and this is obviously the case among the well off households that are still included: these are households which have political resources which the other beneficiaries need.

And during this visit we saw certain behavior by nurses and representatives that indicated that exercising the beneficiaries rights to present claims through the complaints box or other methods could indeed revert back on to the complainer. One example of this is the complaints box at the Health Ministry (*Oportunidades* only uses

fixed boxes in the country seats, in part because they recognize the problems inherent in this system.) Some nurses and county liaison officers sincerely believe the beneficiaries are receiving a gift from the government and their duty is to obey and behave, and that complaining is evidence of ingratitude. Our researchers were witness to a strong collective scolding when a nurse observed one of the beneficiaries place a paper inside the complaints box at the Ministry of Health. The nurse open the box by force read the message and became enraged. She thought she had every right to do this. It was a complaint about the quality of her services, but as she explained to the researchers "this people are ungrateful" and in the collective scolding she expected the support of the research team. Although the box belonged to the Ministry of Health, the majority of those who got scolded and the complainer who was identified were all beneficiaries of *Oportunidades*.

On the other hand, the Program should closely monitor the use and effectiveness of the telephone complaint line because it is more private. Obviously procedures must be instituted to carefully follow up on complaints but at least with this channel there can be no reprisals or retaliation if it is managed appropriately. The few cases where we found the system had been used by households either of their own accord or at our suggestion those who used it were satisfied with the results.

To summarize: the removal from the Program because of inclusion errors affects those households which in our opinion were less poor than the average of those included. But some households which remained were notoriously well off and this generates some discomfort. The strategy for the gradual exclusion of these cases

will surely require a private complaint process followed by a special verification visit by a specially trained interviewer.

All of this leads us to the parallel process of densification. The operational rules of the Program state, those eligible, potential beneficiaries in households, identified by modules or by conducting a neighborhood sweep, must have the opportunity to be interviewed. If it is a neighborhood sweep, as the name indicated, all the streets which have been selected through some prior technical procedure must be visited. In three of the communities the list developed by the representatives (or before they were named) were used as the basis for the densification process. In two cases there was wide dissemination of the process which allowed potential candidates to come forth and be sure to be interviewed even if they were not on the list. In the third cases the information is contradictory. One group of non beneficiaries which had requested inclusion and were on the list of the representative or promoter, claimed they were not informed about the visit nor did they find out about any densification process. The representative assures us they were informed. We found out that this same group had a short while before refused to collaborate with the representative in a communal kitchen and that there had been some confrontation. Others felt that the representative had taken the interviewers to their homes.

On that occasion the interviews for the densification operation were conducted in a central point in the community and potential beneficiaries in a list developed by the representative were call on to attend. Those incorporated in this operation state that they were not interviewed in their homes.

This one case illustrates something that happens more frequently: some representatives are gaining control over the lists and the process of densification. This makes the process more economical but obviously can lead to favoritism and discrimination. Although the lists need to be taken into account (these by the way are not prepared in all communities), the neighborhood sweeps should be reinstalled and activated in the communities. For two reasons: one the one hand possible influences need to be counteracted and on the other hand there are modifications in the population including migration in and out of the community, marriages and other important changes in the families and the local economies, particularly when one or more members migrates to the United States and the list on which the densification process is bases are old.

Oportunidades Youth Platform

This innovation has been generally well received. In the words of one mother "if it is support it is welcomed". There have been some serious problems in terms of information and orientation but slowly the informal and formal knowledge needed to negotiate the system is reaching the users.

There have been two methods for communicating information: a letter that can be distributed to households or to the place where they receive their payment or in the form of an inscription on their payment stub. There are communities were the beneficiaries, with children in the fifth and sixth semesters of post secondary education, have not received any notification. In one community the families, teachers

and youth did not have any information. In an interview the liaison did have sufficient knowledge of the Program but had not shared this information with anyone.

Once the beneficiary mothers find out they want to carry out the transaction themselves. One might think they are after the money, but we need to remember that the mothers have been responsible for the support throughout the life of the program so it is understandable that they continue to think so. The first ones to find out went alone to Bansefi (National Bank for Savings and Financial Services, SNC) where they were told that they had to bring their adolescent children. Once they did so they were asked for proof of enrollment in university. One mother who did not receive sufficient information from her liaison went to the Bansefi state offices were she was not seen and she lost the possibility of entering the procedure in time. In general we estimate that of the scholarship recipients in university in the communities studied less then 60% put in their application and receive the support. However, we have seen similar things every time there is a change in the Program and we are confident the process will improve in the same way that the extension of the scholarships for the post secondary education worked and where we now see spectacular results. The dissemination of clear information about the nature and rules of this component need to be reinforced to insure this transition.

Bansefi, according to testimonies gathered during field work does not give people the option of creating their own business. They state that the support is to be used "to continue studying". They also pressure recipients to open a savings account and not withdraw the amount available (one third of the total in the first payment). The saving account seems like a bad idea to the scholarship recipients because Bansefi is

no more than a "desk" in a public office and could close at any moment and where they do not see the type of infrastructure that give one security in a bank. They think they can lose their money.

The majority of the OYP recipients had only accumulated the points for one year, because the majority had begun accumulating points as they were finishing prep school due to the novelty of the component. They general have between 1200 and 2000 points which means that first transfer is quite small (between 400 and 660 pesos). The logic of the accumulation of points should be revisited: if the student has reached this educational level and their family qualifies to be in the Program —that is to say they are poor—and the students are committed to their university studies or with the creation of a small business then they should be able to count on receiving the total number of "points" and pesos.

Finally one candidate was denied support because he was older than 22. We only know about the one case however we question the need for this limit. Our previous studies found 14 and 15 year olds in sixth year of primary school in the most marginalized communities, which means there are likely to be other cases of 22 year olds graduating from post secondary education. If the Program has gone out of its way to "rescue" students who had dropped out of school it is reasonable to suppose that some of them will finish post secondary education when they are 22. It is possible it may be necessary to open the age range slightly.

The post secondary school scholarship recipients who received the scholarship for the first time in 2002 accumulated two years and received \$2,000.00. Those who registered in 2003 and graduated in 2004 only accumulated one year and they received \$1,200.00.

To summarize the OYP has begun to function. There have been some problems regarding the dissemination of information (in terms of its availability, clarity and precision), from the Program and Bansefi to the Program beneficiaries and the scholarship recipients. Both need to improve in this regard. We need to find out why Bansefi does not offer other options and why they refuse to withdraw the money. But overall the OYP is beginning to operate. Finally the issue of amounts needs to be revisited. Is the points system the way to go? Given the high cost of university education (both direct and indirect costs of food and lodging in cities far away from their homes) should the support be more substantial?

The change from a promoter to a committee

In 2001 the idea of replacing the promoters with representatives, that is to move from a system whereby one person was elected to be in charge of the all the community affairs of *Oportunidades* to a new system where a committee of three people each with responsibility for education, health and control and monitoring. The idea was implemented and the committees established in 2003. The implementation process has been uneven.

In the community in Tabasco the committee does not function because the ex promoter has a good relationship with the liaison and she is the one who resolves problems successfully. Only the health representative has specific tasks and some participation in the Program. In El Capricho the election was forced and the members of the committee do not know how to read or write. One of them does all that is asked but she has little knowledge of the Program rules. In Xonocuautla there are various committees because of the number of beneficiaries. In each committee there is a

hierarchy with one "lead" representative, who is assisted by the others. But the municipal or county liaison controls practically everything and is the one who started the system by which each of the beneficiaries has to obtain signatures from the county delegate, the teachers and doctors which means they have to dedicate various day a month to collecting or giving signatures. During those days these officials are unable to take care of their own work.

In Cuechod, the community traditions are such that there was always a committee. A new committee was elected but in reality only one of the representatives is working and she states she is very tired. In the Coruña, the former promoter is the "lead" representative, despite the fact that the state coordination has direct communication with each representative to avoid the liaison's intermediation. This representative charges fees consistently in two ways. First of all there is a fixed fee that is extracted by applying pressure on those in the line on pay days. Secondly she charges 50 pesos for each negotiation on behalf of the beneficiaries. The beneficiaries however point out that she does know what she is doing and she does carry out the necessary negotiations and transactions on their behalf. Costa Azul had a promoter. A new committee was elected but two of the members migrated although they continued to charge their time and surely this is why the Program did not know they had disappeared. All those who affirmed this mentioned that the representatives paid off the Telecomm payers to collect their checks and many said they also collect the payment for other missing and dead beneficiaries. Finally a second committee was elected.

This summary can be disheartening. In general the committees studied do not function as such and they have not shown leadership in other spheres. The functionality of these communities has depended on their having a good relationship with the liaisons and that these contacts are useful either to create solidarity savings accounts or to attract productive projects. In one case this subordination to a county liaison whose paternalistic absurd ideology is counterproductive in terms of the families' performance (Xonocuautla). Two important lessons emerge: the tasks of the promoters and the representatives are difficult and they need more information and capacity to act. Over time they will develop contacts which will be useful in other ways which is why the ex promoters are so powerful in many communities. This leadership (which is in political terms a form of brokerage) many need to be monitored but it is functional for the community and the beneficiaries. The leadership can be linked to a specific political party but is not always. Although some ex promoters and representatives take advantage of their position for example to "guide" the recertification and densification processes in only a small number of cases is it clearly driven by partisanship.

XII. Conclusions and recommendations

In summary:

- 1. We observed a very important cumulative effect over time in the educational level of the children in the Oportunidades families. Despite the increases in costs that accompany each educational level, the situation we observed in 2004 is substantially improved from when we first visited the four highly marginalized communities in 1999 and 2000. At that time the transition between primary and secondary school was rare. Now it happens in the majority of cases. But most of the young people old enough to enroll in postsecondary education do not attend school which means that we will need to continue observing this dynamic. It is possible that part of this effect is lost when making comparisons between beneficiary and non beneficiary households in these Oportunidades communities because a demonstration effect has been generated in the rest of the population which means there is increased interest in education in most families. There is some dissonance between the change that has occurred and the perceptions about that change. Families do not remember clearly that in 2000 their educational aspirations were far inferior although they insist that without Oportunidades they would have never reach the educational levels achieved.
 - 4. 2. In the health field there have also been positive impacts which we have divided into collective and household level or individual. The first have to do with improvements, sometimes quiet obvious ones in terms of health and public health in the communities. These are often linked to voluntary community work details and to some aspects of the health talks. The second set of

- improvements has to do with the Program's focused actions. They include decreases in undernourishment, improved care for chronic illness, improvements in the acceptance and timeliness of cervical cancer exams. We also observed an improvement in the provision of medications.
- 5. Finally the impact on the labor market, as far as we were able to ascertain with our dual purpose qualitative sample, are positive but very modest. In our opinion this is related to two phenomena: a) the stagnation in the national labor market in particular the weakness in formal non manual occupations which are the final goal in terms of employment type of the Program and b) the fact the Program has not reached its full human capital potential since there are few families with more than six years of enrollment in the Program and during the first two years of implementation of the post secondary scholarships few took full advantage of the Program.

In general, we found positive impacts at the household level. Despite the hostile economic environment in which these households are immersed we have found positive processes in terms of consumption patterns and housing. In terms of factors which can be directly related to *Oportunidades* we found that the cash transfers have increased the buying capacity and the debt economy. Among the factors not related to the Program, we found that the domestic cycle continues to be associated with the families' wellbeing. The transition from male to female headed household is positive when the decision is the women's and it is accompanied by greater female control of the resources and when the domestic scene is less violent and conflict ridden.

The almost universal coverage of primary education highlighted the existence of communities and households with accumulated disadvantages. We believe that with the exception of alcoholism, this Program has the information that would allow it to give special attention to these households in coordination with the county DIF and other programs. In our detailed reports^{2, 3} we have offered many of the elements of the households with accumulated disadvantages. Here we will limit ourselves to briefly pointing out some of their characteristics: 1) reduced number of income generators; 2) elevated dependency relationship; 3) presence of children and elderly family members; 4) presence in the household of chronically ill members; 5) feminization of the domestic economies; 6) households in the expansion stage, and 7) households in advance stage of dispersion (with the elderly frequently ill).

As far as the households removed from the Program are concerned we see this happens in two ways: 1) the definition of inclusion errors, and 2) failure to comply with their co-responsibilities. In the first case in general terms the removals do correspond to households that are better off. Some of the richest households have been removed as inclusion errors. However the Program still has some households of people who are well off and influential but whom no one wants to accuse because of fear.

Our findings lead to two types of recommendations: 1) those corresponding to the design ad content of *Oportunidades*, and 2) those related to its operation. The first include recommendations which involve Sedesol and *Oportunidades* coordination with other agencies and organizations.

Regarding design and content

- 1. Education. A follow up study of the educational attainment of youth between 14 and 17 years of age in communities incorporate into the Program in 1997 and 1998 must be undertaken to see whether the levels attained thus far are the highest which can be ascribed to the Program or if on the contrary these levels will continue to grow. If the educational attainment levels of the families enrolled in the Program have reached their upper limit than at least secondary graduation must be assured for all participants. The convenience of creating student housing in communities with a high concentration of families enrolled in the Program. The work of the assistants or social workers that resolve many of the problems faced by the scholarship recipients must be multiplied and reinforced. Computer training must be systematically increased in coordination with the SEP (Secretariat of Public Education) and the state governments or through coordination with philanthropic and social organization that maybe interested in better targeting their strategies. Finally businesses which market services to the scholarship recipients (transportation, school supplies stores, and cybercafés) should receive incentives for operating as long as the businesses offer quality services at a reasonable price and part time employment opportunities.
- 2. Employment of former scholarship recipients. The operation and evaluation surveys must include monitoring of the employment records of former scholarship recipients. We believe their ability to perform in the labor market will improve as their occupational history advances, but we do not know for certain because of the poor performance of the market in the past decade. It would be useful to think about ways of utilizing and increasing their capacities through productive projects with SEDESOL

(Secretariat of Social Development), alphabetization campaigns and training for adults, or joint programs with SAGARPA (Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food of the United Mexican States) encourage small scale agricultural productivity. It would also be useful to explore how electronic employment opportunities notifications are working and then inform those who graduate about their usage.

- 3. Incorporation and retention of certain types of households. Households where women work, those which are female headed, those with multiple small children, those headed by elderly men or men who are widowed and those were women migrate for short periods and leave their children all have problems in being enrolled in the Program and staying enrolled. There have been improvements because originally they were not even interviewed and now they are visited, but our studies show that difficulties persist in getting them enrolled and maintaining them enrolled in the Program. A strategy that addresses these difficulties must be developed.
- 4. Households transferred to DSS. It is necessary to ascertain if the improvements in per capita income observed in households transferred into DSS is sustainable and if the new rules they are subject to provide a real incentive to accomplishing the Programs' objectives.
- 5. Male co-responsibility. We recommend designing a strategy that promotes community voluntary work for the men who benefit from the Program at strategic times during the agricultural cycle, as well as having workshops or talks about crop management, management of yard animals, micro-credits and financing schemes and access to agricultural support programs.

Regarding Program Operations:

- 1. Households transferred into the DSS. In this first instance, households transferred into DSS in general did not receive sufficient or clear information about the moment in which they were transferred or the reasons behind the transfer. The information must reach these families efficiently and complete before they are reassigned. The differences between those transferred to DSS and those removed from the Program must be clarified because some households received both notifications at the same time.
- 2. Oportunidades Youth Platform. The information needs to reach beneficiaries and BANSEFI in a clear and timely manner and this information should include all the options available under the corresponding rules. We also believe those who graduate from baccalaureate post secondary education should receive the total number of points (and the corresponding money).
- 3. Removal from the Program. The information regarding the reasons for removal from the Program should be absolutely transparent for example "failure to attend a talk given February 2004 and failure to attend a check up appointment for Andres Martinez". The procedures for clarification and registering complaints should be explained in each notification. Even when the removal is for just cause the participants need to have access to the information regarding how to re-enroll according to the Operational Rules. Finally some discrete system for registering complaints and providing information regarding the inclusion of prosperous households should also be

included. These removals should coincide with the enrollment of poorer households in the same communities.

- 4. Community Promotion Committees. The representatives need to have their tasks clearly delineated and the tools with which to carry them out successfully. The tasks need to be distributed in a precise and clear manner. We believe the representative for control can play a key role in the near future when the majority of the changes in the Program will occur due to changes in the population (unions, migration, changes in household composition) and to a lesser degree due to densification and recertification.
- 5. Committee representative and densification. In one community bias occurred when the interviewers utilized a list of petitioners which had been developed by one of the representatives. Although we are not opposed to the use of lists, this does not exclude the need for sweeps and the dissemination of Program information regarding enrollment in the Program through the operation modules where they exist.

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