Ten Years of Intervention

External Evaluation of *Oportunidades* 2008

in Rural Areas (1997-2007)

Volume III

The Quality Challenge:
Educational Outcomes of *Oportunidades*

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Chapter II

Explaining the Educational Impact of *Oportunidades*: Stakeholders, Factors & Processes

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Executive summary

The objective of evaluating the impact and results gathered in this document is two-fold: a) to discern the possible differential impact of Oportunidades on indigenous and non-indigenous households exposed to the Program over a period of ten years, and b) to analyze the role of educational service providers as points of intersection between the Program and long-term beneficiaries. In addition, said services will be analyzed in terms of conversion factors needed for the human capacities that the Program stimulates in the beneficiaries to become reality.

Thus, several databases were used to identify localities and beneficiaries, both indigenous and non-indigenous, whose situations after a decade of exposure to Oportunidades could be contrasted with others who were never incorporated into the Program. For the purpose of maximizing the differences among intervention variables in the study, an analytical sample was designed with very precise criteria for the households participating in the case studies: indigenous or non-indigenous and long-term beneficiaries or non-beneficiaries whose characteristics in 1998-1999 were as similar as possible. In particular, the households must have had children (first- or last-born) who were between second and fourth grade during 1998-1999. These youths constitute the interest group whose educational and work trajectories will be analyzed to detect the possible impact of or weaknesses in the differential activities and capacities of beneficiaries and former beneficiaries of Oportunidades.

Instruments were used to obtain the most precise "snapshot" possible of the situation in each household in 1998 and 1999. The techniques used included guides for interviewing different members of the households; these guides were designed to obtain clear and detailed information about domestic and individual trajectories in the areas of education and work/employment. Other instruments consisted of guides for interviewing educational services providers. Finally, a specially developed cartography was used to detect gaps and strengths in the coverage of Oportunidades and educational services in the regions studied.

The results of the study underscore possible differential impacts among not only indigenous and non-indigenous beneficiaries of the Program, but also among very heterogeneous rural populations with contrasting capacities for meeting the requirements to take advantage of the support from Oportunidades by matching those requirements with external conversion factors such as those services whose use is fostered by the Program.

The information presented in the present document is supported, in part, by the human capacities approach to substantiate the statement that different persons with contrasting capacities need different types and quantities of support to reach similar levels of well-being.[1-3] Thus, the way in which the diversity of the country influences the possibilities for Oportunidades to make an impact is underscored, thereby identifying the need to adapt the Program to such diversity.

The results of this study are summarized below. First, the principal conclusions of the evaluation of the Oportunidades Program's educational impact are presented, followed by a SWOT analysis (summarizing strengths, weaknesses, opportunities and threats) of that evaluation:

- Differentiated results are reported for Chiapas and Oaxaca on one hand and Chihuahua and Sonora on the other. The increase in and densification of educational coverage in the southern states has produced significant benefits and has even resulted in a loss of importance for boarding schools. In contrast, the educational effects of the Program in Sonora and Chihuahua are less robust, and its advantages are evident in broader offerings of boarding schools as an educational alternative for populations from very disperse localities.

- These findings uncovered an encouraging result related to the central objectives of the evaluation (the differential impact of the Program and the role of educational services): in Oaxaca and Chiapas, the Program has contributed to prolonging the educational trajectories of children and youth, and that impact is greater –not less– for indigenous individuals than for non-indigenous individuals. Furthermore, among both indigenous and non-indigenous individuals, the positive impact is greater for females than for males. Therefore, the Program has contributed to narrowing two gaps in education in the southern region –ethnic and gender. Where Oportunidades coverage and educational services were less dense, the interethnic and gender gaps remained (albeit decreased) in Chihuahua and Sonora, especially in the case of indigenous females, rather than reversing themselves as in the regions studied in the south. Therefore, the hypothesis about the differential impact of the Program can be refined or reformulated as follows: The positive impact of prolonged educational trajectories for indigenous females is reduced where educational coverage and coverage of Oportunidades are less dense.
- Many localities exist in the northern regions where there are more schools (especially at the elementary education level) than health centers, and thus fall within the radius of action of the former, but outside that of the latter. This means that the criterion requiring a locality to have both services in order to be incorporated into the Oportunidades Program so that its components function in a comprehensive manner could be problematic, especially in Chihuahua; that is, many indigenous students from rural localities without nearby health centers do not have the support of the Program in spite of their need for it and the fact that they live close or relatively close to elementary schools.
- In bilingual elementary schools and tele-secondary schools in indigenous localities in the southern states, we found that more than 90% (and on occasion nearly all) of the students are beneficiaries of the Program. Furthermore, in elementary and secondary schools, especially in Chiapas, we found a greater number of girls (who in some cases constituted more than 60% of the school population) than boys. However, the percentage of beneficiaries is less in northern schools (ranging from 30 to 47%); in the case of the elementary schools studied in the Pima region of Yepachi-Maycoba, no Oportunidades beneficiaries were found.
- Nevertheless, the presence of inter-institutional collaboration was identified, which involved private and public entities at the municipal, state and federal levels focused on various aspects such as the provision of scholarships and boarding schools and the capacity-building of students at various educational levels. Such strategies are directed at the decrease in educational disadvantages experienced by indigenous students in rural areas, and some strategies can mitigate the problems stemming from low educational coverage and lack of academic scholarships from Oportunidades (especially in the Sierra Tarahumara).
- Even where educational offerings are sufficient, infrastructure and maintenance are found to be lagging and schools lack resources. In the four states considered, important factors were identified in the existing educational gap between urban and rural areas–particularly those affecting the indigenous population since this population is, in many cases, found to be in rural areas. Elementary schools, which are usually the oldest, are more poorly equipped, maintained and renovated; because of their characteristics and missions, tele-secondary schools in rural areas depend to a great extent on certain audiovisual resources and an adequate electricity supply, as well as ventilation and air conditioning in hot regions–but such resources are usually deficient or non-existent. Thus, the establishment of tele-secondary schools and their relative abundance in Chiapas and Oaxaca would, in principle, decrease the inequalities between rural and urban areas in terms of coverage and educational offerings, but deficient infrastructures perpetuate or increase such inequalities when compared to technical high schools in urban centers and municipal capitals.
- School dropout is due, in part, to problems with educational coverage more than coverage by the Oportunidades Program itself, as the students with scholarships who drop out of school are usually those who must travel long distances from small localities where there are no schools to reach the school they attend. When such traveling becomes problematic (for example, due to transportation costs or the need for children to help with farm work), Program scholarships are not a sufficient incentive to stay in school.

- On the other hand, factors that cause (and justify) school absenteeism have less weight where Oportunidades Program scholarships exist in combination with the presence of schools, since in such cases absenteeism does not lead to desertion but rather is combined with periods of attending school.
- Not completing study programs and school activities and obligations reduces the opportunities for the Oportunidades Program to make an impact with respect to the creation of capacities though the prolongation of educational trajectories since scholarships are maintained primarily through certification of attendance.
- Nevertheless, thanks to higher levels of schooling attained by female youths (including higher education), females acquire new life aspirations and expectations that lead them to create informal alliances, conceiving of strategies and showing initiative to obtain diverse sources of support for and opinions favorable to the prolongation of educational trajectories. Therefore, academic progress should be measured not only in terms of better performance on nationally standardized tests, but also through a broader world vision that results in increased school attendance, especially with respect to high school education.
- The Oportunidades Program decreases the differences between indigenous and non-indigenous students with regard to attendance and staying in school. Nevertheless, the educational lag among indigenous students, which originates in elementary schools with severe deficiencies and inadequate teaching methods, tends to perpetuate itself in secondary schools, where resources are scarce and educators show little willingness to work toward decreasing the disadvantages that indigenous students have compared to non-indigenous students. Remaining in school does not decrease the disadvantages for students who are lagging at the secondary and high school level; rather, it prolongs these disadvantages and reproduces them as a result, in part, of the low educational level that also affects these schools.
- The problematic dynamic between segregation and the homogenization that characterizes elementary schools that are part of the "indigenous education system" or "bilingual education" is the source of one relevant finding. Very often, what distinguishes an indigenous school from one that is not indigenous is the school population itself; in practice, the study programs corresponding to the bilingual or bicultural system are abandoned. Classes in indigenous schools are taught in Spanish beginning in the first year of elementary school (sometimes under the premise of improved Spanish fluency) and satisfy homogenous educational programs that do not entirely assure the educational continuity of the students, an incentive now provided by Oportunidades scholarships. However, the disadvantages in education and language with which indigenous students enter secondary school raise questions about the effectiveness of this method, as well as that of the traditional bilingual method in schools where it is still used.
- Evidence was obtained about social relationships between teachers and the students' parents, as well as community strategies aimed at reducing teacher absenteeism (especially in rural and indigenous communities) or taking advantage of the presence of teachers for extracurricular tasks (helping with administrative paperwork, helping students after class hours, etc.). Nevertheless, such relationships and strategies are not homogenous, nor are they free from the differences and tensions that exist in the heart of the communities themselves.
- A lack of communication between staff in the rural schools and the local and regional representatives of the Oportunidades Program was identified. There is little or no contact with educational liaisons, and all of the information about the Program that is available to educational staff comes indirectly from radio and television or through contacts and activities related to very detailed administrative tasks involving contact with regional educational supervision centers. Therefore, the experience that teachers have with Oportunidades is usually limited to reporting absences and sending forms to the authorities in the supervision centers. The lack of dissemination of information among the diverse actors in the educational sector negatively influences knowledge about the Plataforma de Jóvenes (youth program) component of Oportunidades, as well as the general objectives of the Program.
- Greater coverage and more offerings on the part of elementary schools and the recent creation of schools at higher levels of education (from secondary to university level) contribute to explaining generational differences among members of the same domestic nucleus with respect to the amount of schooling attained. Students from

younger generations have more opportunities for instruction than their parents and even their older siblings thanks to the presence of educational institutions in their own locality.

- Particularly in scenarios where there is an accumulation of advantages, the average schooling attained by beneficiaries of Oportunidades increases the later they begin to receive the scholarships. Such advantages consist of resources derived from additional domestic income (money from family members who emigrated, monetary contributions from first-born siblings, etc.) as well as the presence, abundance and proximity of elementary and secondary schools. In other words, youths who begin to receive scholarships later (for example, who had begun secondary school before the household was admitted to the Program) have in some way already been "selected–they have overcome the difficult obstacles typical of moments when students from the most vulnerable population groups drop out of school, leading to what is referred to as an "accumulation of advantages."
- The Program achieves the postponement of age at first union and first pregnancy in most cases (for more than 60% of youth beneficiaries, according to data from various regions), which constitutes a significant change with respect to the previous generation.
- The Oportunidades Program does not directly influence the quality of education or the professional capacity-building of the beneficiaries; the increase in school attendance and the prolonged educational trajectories do not mean that the student learns more. Nevertheless, as a result of this prolongation of educational trajectories, former beneficiaries end up with relatively more skills (and degrees) that enable them to obtain jobs with slightly better conditions.

The evaluation identifies the following actions to help the Program achieve a greater impact in the educational sector:

RESPONSIBILITIES OF THE OPORTUNIDADES PROGRAM

- Establish a differentiated system of scholarships for those youths who have to travel out of their localities of origin in order to study. Including an additional financial sum in the Oportunidades scholarships in these cases is very complex, but would without doubt introduce greater equality in terms of support by being consistent with the human capacities approach and the heterogeneity that requires different types and amounts of support and resources for certain individuals and groups. In the event that the administrative difficulty is unmanageable, there should at least be clarity about the challenge presented by the disadvantage.
- Reconsider the conditions under which it is possible to grant an Oportunidades scholarship to families that require one so as to incorporate into the Program beneficiaries residing in localities covered by educational services but not health services. Although that would break with the objective of contributing to the comprehensive creation of human capacities, it is more just to contribute to the creation of capacities in education alone than not to contribute to the creation of any capacities at all.
- Build the capacities of youths who are former Oportunidades beneficiaries to be RECCOS (Responsables de Capacitación a Comités de Promoción Comunitaria [Responsible for the Capacity-building of Committees for the Promotion of Communities]) or educational promoters who become part of the Program staff rather than the existing educational liaisons; these former beneficiaries could serve as points of contact and disseminate information about the Program's educational activities and the opportunities offered by prolonging education.
- Obtain a true intersectoral collaboration between the Program and other strategies and levels of government in educational services. Oportunidades should be systematically linked with not only other scholarship programs and the creation of educational infrastructure, but also with strategies that work in conjunction with schools to improve teaching quality and academic achievement.

RESPONSIBILITIES OF EDUCATIONAL AUTHORITIES AND SERVICES

- Increase the offerings of boarding schools at every level of education in regions where coverage of educational services is reduced in order to prolong educational trajectories for those who must leave their communities and regions of origin to attend school.
- Encourage authorities at the Consejo Nacional de Fomento Educativo (CONAFE, National Committee for Fostering Education) to open new schools for promoting education and new schools in small population centers located in more remote places.
- Replace the subsystem of indigenous/bilingual education as a curriculum that is segregated from the rest of the Secretaría de Educación Pública (SEP, Secretary of Public Education) with a truly intercultural and heterogeneous system, beginning with basic education; adapt the regular school system itself to really address the diversity of users of educational services.

SWOT Analysis

Before discussing the SWOT analysis and the recommendations derived from that analysis, the following should be clarified: the strengths and weaknesses will be considered here to be internal or attributable to the Oportunidades Program itself, while the opportunities and threats will be considered to be external to the Program. Therefore, the recommendations suggested with respect to the latter relate to social policy or educational services in the broadest sense rather than to the Program itself. In the table below, reference is also made to the page numbers and paragraphs in the body of the document where the corresponding strengths, opportunities, weaknesses and threats are found.

TOPIC	STRENGTHS AND WEAKNESSES/OPPORTUNITIES AND THREATS	RECOMMENDATIONS
Educational coverage	**Weakness:** Many indigenous rural communities, especially in Chihuahua, do not have health services and therefore have not to date been able to be considered as candidates for the *Oportunidades* Program's educational scholarships, in spite of having schools nearby or relatively nearby.	Reconsider criteria for eligibility by separating the shared responsibilities of health and education; increase coverage of the Program to poor indigenous households whose children and youths can attend schools (at least elementary schools), even if there are no health services.
Educational offerings	**Threat**: The scarcity of elementary schools still persists in many regions (especially in Sierra Tarahumara, Chihuahua).	Encourage the CONAFE authorities to open new schools for promoting education and new schools in small population centers located in more remote places. In indigenous regions, CONAFE's community courses themselves could adopt the bilingual intercultural version offered by PAEPI.
Educational offerings	**Weakness:** Though within the action radius of elementary and secondary education schools, youths from many localities must migrate or travel regularly to said schools, which involves additional costs (transportation, housing, food).	Introduce within *Oportunidades* a differentiated system of scholarships that provides additional amounts for those who must travel to study.
Educational offerings	**Threat:** Few secondary and high schools have residential facilities, and those that do have no state or federal support.	Create the boarding school model for secondary and high school level education.
Educational offerings and coverage	**Opportunity:** Educational institutions and programs exist at federal and state levels that compensate for poor coverage of education and of the Program in northern regions (Sierra Tarahumara, Chihuahua) or support the prolongation of educational trajectories for beneficiaries of *Oportunidades* and non-beneficiaries.	Increase coverage of the *Oportunidades* Program in these regions since, for example, in the Pima region of Yepachi-Maycoba (the states of Chihuahua and Sonora), there are elementary schools with precarious infrastructure and resources whose students do not have *Oportunidades* scholarships.

Educational offerings and coverage	**Threat:** The widespread presence of elementary schools in southern states has led to the abandonment of boarding schools, although there are still not enough in northern states to support prolonged educational trajectories for those who have to leave their regions and communities of origin to study.	Convert boarding schools into secondary education schools in southern regions (where the number of schools at that level is still insufficient) and increase the offerings of boarding schools at all levels in the northern states.
Educational quality	**Threat:** Poor teaching quality (especially in rural and indigenous elementary schools) results in students lagging behind at higher educational levels and, for the few who obtain work as service providers in equally deficient schools, in work performance. This results in no real positive or sufficient effect of prolonging educational trajectories.	Certify schools to achieve quality in overall performance according to various indicators. Nevertheless, it is necessary to first work in a truly intersectoral manner with the schools, linking educational processes and content to improvement programs (such as those found in Sierra Tarahumara). This would strengthen subject matter such as mathematics and Spanish and provide capacity-building at the high school level for taking university admissions tests.
Educational quality	**Threat:** Poor or non-existent methods in "indigenous/ bilingual education," Segregation of indigenous students in schools where Spanish is taught and \ methods are the same as regular schools. The combination of segregation and homogenization does not guarantee performance and continuity of indigenous students in secondary schools, where they are found to be at a disadvantage compared to non-indigenous students.	Replace the indigenous/bilingual subsystem (as a program segregated from the rest of the public education system) with a truly intercultural and heterogeneous system, beginning with basic education; adapt the regular school system to truly address this diversity.
Educational quality; internal school processes	**Weakness:** Intersectoral collaboration does not exist; instead, there is sectorization in the educational actions of the *Oportunidades* Program. These are directed exclusively toward school assistance and permanence, but the gap continues as far as quality and resources between rural and urban and indigenous and non-indigenous schools. Therefore, prolongation of educational trajectories exists, but there is not enough creation of or improvement in capacities.	The Program should be systematically linked not only other scholarship to programs and the creation of an educational infrastructure, but also to strategies that work in conjunction with school to improve teaching quality and academic achievement. Convert *Oportunidades* into part of a broader and truly intersectoral model.
Internal school processes; school-community relations	**Weakness:** In light of the extensive practice of not reporting absences so as to not damage relationships with students' parents and avoid the loss of *Oportunidades* scholarships, there is the possibility of weakening elements pertaining to shared responsibilities, in particular, certification of school attendance. In addition, the apparent impact of *Oportunidades* on decreasing indices for failure in elementary and secondary schools reflects an inclination of schools to fail *Oportunidades* beneficiaries less often. Together, this can result in diluting the impact of *Oportunidades* and converting the Program into solely a mechanism to transfer income.	Grant a component of educational scholarships based on academic performance, not only on assistance, as long as the evaluation criteria are adapted to the social and cultural diversity of the students and avoid homogenization and unvarying use of Spanish. This could be done by providing a base amount as the scholarship and increasing it according to academic performance or achievement beginning in high school. Alternatively: Certify schools. This recommendation affects the educational sector as well as the Program. Achieve quality in overall performance for various indicators and provide *Oportunidades* scholarships to all students once they achieve a certain level.
School-community relations	**Threat:** Various factors that contribute to school absenteeism external to the school exist, as do factors not pertaining to the *Oportunidades* Program: adverse weather conditions, student health problems, need for children and youths to do housework and agricultural work, emigration, etc.	The impact that the *Oportunidades* Program may already have on increased student attendance in school can be strengthened if, with the agreement of the local secretaries of education, the academic calendar and school hours are adjusted. In the colder regions of the Sierra Tarahumara, for example, extend winter vacation and delay starting time.
School-community relations	**Strength:** Factors that cause and justify school absenteeism have less weight where there are *Oportunidades* Program scholarships, since in those cases absenteeism does not result in desertion, but rather is combined with periods of school attendance.	Not applicable

Educational trajectories of children and youths	**Threat:** Various domestic factors persist in making continuity and academic achievement difficult for youth, such as traditional gender and role divisions within the household. The parents' decision has weight (need for youths to do domestic and agricultural work and generate monetary income), and there may be little help from parents in providing a space to do homework. **Weakness:** The Program does not affect the capacities and needs of older generations directly, resulting in a diminished possibility for youths to break the cycle of intergenerational reproduction of poverty.	Consider the possibility of the Program working in a more intersectoral way with other strategies to stimulate more directly the capacities of the parents, educational components for adults, strategies directed toward literacy and job-related capacity-building for parents, and credit for productive activities by parents (microbusinesses, agricultural production, etc.).
Educational trajectories of children and youth	**Strength:** The Program has contributed to closing two important educational gaps: ethnic and gender. Thus, the prolongation of educational trajectories is greater among indigenous than non-indigenous individuals and among females than males. These positive impacts are relatively greater in regions and localities where Program coverage is broader due to the broader coverage of educational and health services (Chiapas and Oaxaca).	Not applicable
Educational trajectories of children and youth	**Opportunity:** In scenarios where there is an accumulation of advantages, the average schooling reached by *Oportunidades* beneficiaries increases the later they begin to receive scholarships (for example, during secondary education instead of elementary). Such advantages consist of resources derived from additional domestic incomes (money received from family who emigrated, monetary contributions from first-born siblings, etc.), as well as the presence, abundance and nearness of elementary and secondary schools.	Eliminate scholarships in elementary education when such advantageous scenarios exist (but not when the population is dispersed and there is a scarcity of schools) and concentrate resources at the secondary and high school level and the *Oportunidades* Plataforma de Jóvenes (youth program).
Educational trajectories of children and youth	**Opportunity:** The prolongation of educational trajectories and the increase in average schooling to which *Oportunidades* contributes take place especially in situations where there are sufficient educational offerings (for example, nearby secondary schools or in the locality itself).	Include an additional amount for secondary education scholarships in situations where students have to travel to municipal capitals or other localities to attend school.
Educational trajectories of children and youth	**Opportunity:** There are youths who are interested in high school or higher education whose initiative for attaining said levels enable them to play an effective role in education as liaisons who serve as points of contact for the dissemination of information about the educational support and components of the Program (for example, the *Oportunidades* Plataforma de Jóvenes, youth program).	Substitute existing educational liaisons (whose experience with secondary and high school education is limited) with youths who are former *Oportunidades* beneficiaries who could be trained as RECCOS or promoters and, thus, be incorporated into the Program to strengthen the link between different actors and dissemination of information related to the educational components of the Program.
Educational trajectories of children and youth	**Strength:** Through academic scholarships and prolongation of educational trajectories, the Program has contributed to postponing or weakening the reproduction of the traditional pattern (in terms of age at first union and job placement) via younger beneficiaries and former beneficiaries. These youths exercise their new skills primarily through emigration, in jobs in sectors similar to traditional sectors (construction, services) but in positions and with salaries that are slightly more advantageous.	Not applicable
Educational trajectories of children and youth	**Threat:** The emigration of former beneficiaries with better capacities presumes a decrease in human resources in their rural areas of origin. This tends to reproduce the cycle of marginalization and poverty at a regional level.	Consider the possibility of stimulating the capacities of the parents themselves more directly; educational components for adults, strategies directed at literacy and job-related capacity-building for parents; credit for productive activities by parents (microbusinesses, agricultural production, etc.)

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Explaining the Educational Impact of *Oportunidades*: Stakeholders, Factors & Processes

I. Introduction

The research on which this document is based was conducted according to the Evaluación Cualitativa de Impacto del Programa Oportunidades, Largo Plazo, Zonas Rurales (Qualitative Evaluation of the Impact of the Oportunidades Program, Long-term, Rural Areas). This evaluation, as a step prior to the present technical document about education, generated analytical reports based on ethnographic research in four states: two in northeastern Mexico (Sonora and Chihuahua) and two in the southern region of the country (Chiapas and Oaxaca). This research was conducted for the purpose of identifying the long-term impact of the Oportunidades Program with respect to the distinct ethnic groups that live in the regions studied as well as the contrasting socio-economic environments. The four ethnic studies began with the same questions, were guided by the same hypotheses and implemented the same methodological strategy[1] (see appendices A1 and A2 of the present document).

Nevertheless, in the first presentation of results, each ethnographic study is discussed separately. The second presentation of results applies a different level of analysis and reflection, presenting comparative documents on distinct topics of interest in this research: the coverage and operations of the Oportunidades Program (Juan Luis Sariego); health (Gabriela Sánchez López); work and jobs (Mercedes González de la Rocha); and the present document, which compares data obtained from the four studies mentioned previously and arrives at conclusions about educational services and quality, as well as the factors that influence the educational trajectories of children and youths and the impact of the Oportunidades Program on said trajectories.

"Impact of the Program" should be understood to mean any modification in the living conditions of beneficiary domestic groups that is directly or indirectly associated with Oportunidades and oriented toward its objective of contributing to breaking the intergenerational cycle of extreme

poverty (in this case, through preventing children and youths from abandoning school in order to become adults with sufficient credentials and capacities so that their work satisfies their needs and they build lives that are distinct from those of their parents and grandparents). As the Rules of Operations for the Oportunidades Program specifies, said objective requires fostering the development of capacities of beneficiary families in education, health and nutrition.[2]

The point of departure for the present research is not only the impact of the Program, but also, and significantly, the possibility of its differential, or non-homogeneous, impact. The idea of differential impact has been constructed in light of research conducted on changes observed in domestic groups that are Oportunidades beneficiaries; such research was conducted throughout a long cycle of ethnographic studies to weigh the effects of the Program through external evaluations.[3] More specifically, the cited work suggested a need to consider the various possibilities related to a gradient impact. The greatest impact for said gradient is, in theory, the attainment of the primary objective of the program–breaking the intergenerational cycle of the transmission of poverty. This situation contrasts with the extreme opposite of the gradient, in which the transfers are used to support immediate survival strategies, and children and youths live at risk of abandoning school, entering productive work early and, at one point or another, being withdrawn from the Program along with their families.

Nevertheless, the originality of the study described in the present document lies in the suggestion of the possibility that such differential impact could be associated in part with the ethnic ascription of beneficiary households. Given evidence of poor educational results and deficient education quality among indigenous groups.[4] what is suggested here is the need to identify how the Program interacts with distinct types of poor populations, with particular emphasis on indigenous populations as compared to non-indigenous or mixed-race populations. To talk about a distinct and lesser educational impact for indigenous beneficiaries implies greater poverty, a mutual lack of understanding between indigenous beneficiaries and educational services providers, and discrimination in access to and use of educational services. Together, this can have consequences such as preventing indigenous populations from remaining in school.

In sum, the research gathered in the present document is meant to clarify the ways in which the educational component of the Oportunidades Program operates in heterogeneous contexts of poverty in four distinct regions across the country. It is thus necessary to introduce two variables into the analysis: a) the ethnic ascription of the beneficiaries, and b) long-term exposure to the Program (see appendix A1 for an explanation of the analytical sample used). The objective of this research is to discover whether the Oportunidades Program has a similar impact on indigenous and non-indigenous populations or, if it does not, whether we can identify a differential impact. This is the first time that a qualitative evaluation of the impact of Oportunidades has formulated this question, and the responses and recommendations in the present document –based on rigorous analysis–will serve as important input for the design and instrumentation of better practices for serving the neediest populations in the country.

As for the variable of long-term exposure to Oportunidades, it is necessary to add that it was not possible to do an analysis of the results of the Program's operations on the generation of children-youths over the relatively long-term because the generation of beneficiaries was still too young. Instead, we are in a position to know whether the children who were in the third grade when their families entered the Program in 1998, who are now youths between the ages of 18 and 22 and may have already finished high school, are participating in activities distinct from those of their parents and peers who were not exposed to the Program. It is possible to know, in addition, if the members of this generation are postponing age at first union and first pregnancy and whether they are creating households that have the same profile as their parents.

As a primary hypothesis, it was suggested at the beginning of the present evaluation that the Oportunidades Program has differential impacts between beneficiary households according to their ethnic ascription. As part of this hypothesis, it is also suggested that beneficiary indigenous groups have different, less favorable effects than beneficiary non-indigenous households,[1,]* which involves the risk that significant inequalities are reinforced or perpetuated.

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* Qualitative evaluation of the impact of the Oportunidades Program developed by González de la Rocha is the primary source for the general hypothesis and objectives presented in this section. Nevertheless, in the results section, empirical material from the four regions studied will be discussed in reference to a more specific hypothesis described, based particularly on the diagnosis of education by Sylvia Schmelkes, Guadalupe Águila, Jorge Rodríguez and Rolando E. Magaña.[4]

Any study intended to test the quality of education received by Oportunidades beneficiaries should take into account the conditions in which these youths live. Therefore, after the methods section of this document, the educational offerings and infrastructure in the regions studied will be described, taking into account problems such as distance and the dispersion of the localities that affect the daily school attendance of teachers and students.

Nevertheless, analyzing educational offerings and infrastructure is not the only objective of this document; internal school processes used by children and processes between children and teaching staff will also be studied. The latter is important for discovering differences between indigenous and non-indigenous populations, with or without the Oportunidades Program, in terms of the results, quality and linguistic/cultural relevance of schools. All of this will be studied with respect to school and community relationships in the broadest sense.

In summary, this document addresses detection of the factors that obstruct educational processes. Thus, the practices by the children and youths selected for the study in the four regions will be described from a process-oriented and diachronical perspective, based on the analysis of familiar and educational trajectories. This is important so as to explore:

a) The role of children (elementary school students) and youths (secondary and high school students) with and without Oportunidades scholarships in the domestic economy;
b) Educational processes and processes related to these children and youths entering the workforce; and
c) Factors that obstruct the schooling of children and youths in distinct regions.

The following is offered as a primary hypothesis for this document:

a) The Oportunidades Program contributes to prolonged educational trajectories for beneficiary youths and/or a decrease in educational discrimination against female youths (for example, females complete their secondary education instead stopping at the elementary level); and
b) This positive impact is reduced in indigenous households because of poor linguistic and cultural relevance in the schools and deficient quality of educational services in general. Nevertheless, the differential impact of schooling should be examined in light of the goals, trajectories and achievements of the Program's beneficiaries and former beneficiaries.

This report was authored by Alejandro Agudo Sanchíz, with the exception of section Educational offerings and infrastructure in the regions studied, which was written by Daniela Jiménez Rodríguez. The latter participated in the systematization of the ethnographic materials for the development of the present document and provided valuable help in the development of some of the tables contained in this document.

II. Method

RESEARCH SCENARIOS IN CHIAPAS, OAXACA, CHIHUAHUA AND SONORA

The criteria and steps used in this study for the selection of microregions and localities in each of the states mentioned above have been described in detail in the corresponding analytical documents for the ethnographic studies.[5-8,*] Therefore, this section only summarizes the selection and presents a brief profile of the regions and localities chosen; in addition, some general aspects of educational assistance and services in those regions are discussed.

* In general terms, selection was conducted according to the need to cover distinct types in the analytical sample (indigenous and mixed-race households, beneficiaries and non-beneficiaries); see p. 97 and appendix A1 in this document. Nevertheless, localities in each microregion that had distinct degrees of distance from health and educational services were also sought for inclusion in the research scenario to contrast remote localities that have poor communication with others that have better access to said services (whether these were municipal capitals or localities near capitals).

Chiapas[5]

In the state of Chiapas, most of the mixed municipalities (ethno-linguistically) as well as those that are indigenous with a high percentage of monolinguism are found in the two sociocultural regions in Chiapas where 80% of the indigenous people in the state live–the Montañas Mayas and La Selva Lacandona; in these areas, indigenous people constitute 85% and 72% of the total population, respectively. In addition, it is within precisely these two sociocultural regions where the greatest percentage of the population with income poverty and a high degree of social lag is concentrated.[9] These regions are located along the entire central and northeastern part of the state.

Thus, the three municipalities chosen for the study in Chiapas are within that strip and have populations that are at least somewhat ethno-linguistically "mixed" (between 30 and 60% of people older than five speak a Meso-American language) and/or have a high level of monolinguism among the indigenous populations (40% or more of the total population older than five speak a Meso-American language). The more clearly mixed of the chosen municipalities were San Cristóbal de la Casas and Las Margaritas, with 37.1% and 52.5% indigenous language speakers, respectively. While monolinguism is not very significant in San Cristóbal de las Casas, one-third of the population in Las Magaritas that speaks an indigenous language is monolingual. To obtain greater possibilities for contrast, the third municipality had to present a greater percentage of indigenous residents as well as a greater proportion of monolinguism; that municipality was Tumbalá, with a total population of over 20,489 persons older than five, with 18,815 speaking an indigenous language and roughly half of those (8,711) unable to speak Spanish (see the location of these three municipalities in the map in appendix D1).

Even before the first exploratory trips in 2007, problems locating mixed-race localities and households in the municipality of Tumbalá were foreseen, but it was included in the study to have a greater majority of indigenous people in the scenario for the Chiapas study set. This provided possibilities for contrast with the other two municipalities that were more ethno-linguistically differentiated and had lower indices of social lag. In fact, it can be clearly seen that as indigenous population increases, social lag also increases. San Cristóbal de las Casas, the municipality in the study with fewer indigenous people, has a medium degree of social lag and is 109 on the state level (that is, only 9 of the 118 municipalities in Chiapas are lagging less than San Cristóbal); Las Margaritas, with roughly more than 50% of the population speakers of an indigenous language, is in the 28th place statewide in terms of lag. Finally, Tumbalá, the municipality with the most indigenous persons of the three chosen municipalities, has a high degree of lag and is in 17th place.[9]

The next step consisted of identifying rural localities for study in each of the three municipalities chosen:

1. Municipality of San Cristóbal de las Casas in Los Altos Centrales (central highlands) in Chiapas. Although they have mostly the same degree of marginalization ("high" according to data from CONAPO)* and are located near the municipal capital (an important urban center that provides educational and health services), the localities studied in the municipality of San Cristóbal de las Casas present, in reality, significant differences with regard to ethnic ascription and infrastructure as well as availability of services/basic resources. Studies of households in El Aguaje and Corazón de María (both Tzotzile indigenous localities), for example, find that the presence of tele-secondary schools coincides with a greater incidence of female secondary education as compared than that observed in San Isidro, a mixed-race locality in the study with only one elementary school (many of its inhabitants understand Tzotzil to a certain degree, although they do not self-identify as "indigenous"). In addition, Corazón de María is the headquarters for the health district, and El Aguaje is well-connected with the municipal capital at only 10 kilometers away.

* See the report Indices of Marginalization 2005 developed by CONAPO based on the definitive results of the II Conteo de Población y Vivienda 2005 (2nd Population and Housing Census 2005) and the Encuesta Nacional de Ocupación y Empleo (National Survey of Occupations and Employment) from the fourth trimester of 2005.

In fact, El Aguaje turns out to be very accessible, since it is situated on the edge of International Highway 192, which connects Comitán with San Cristóbal de Las Casas. A variety of public transportation vehicles travel along this highway every day, although service stops at around five in the afternoon and is less frequent on weekends. The locality of San Isidro Las Huertas, on the other hand, is 19 kilometers from San Cristóbal, although the problem in this case is not the distance, but the accessibility and communication infrastructure. The inhabitants of San Isidro travel four kilometers along a rough dirt road to Corazón de María, from which vehicles leave to go to the municipal capital. Nevertheless, public transportation between San Isidro and Corazón de María is sporadic and expensive for residents of the former, who often prefer to travel on a dirt road to the paved route that leads to secondary road 186; this, in turn, joins the Comitán-San Cristóbal highway, where one can get public transportation to the municipal capital. In general, the residents of San Isidro rarely go to San Cristóbal, especially since the administrative offices where women in beneficiary households from this locality go to pick up the scholarship money are in Corazón de María.*

El Aguaje and Corazón de María, with 97% and 93.75% of households incorporated into the Oportunidades Program, respectively, have access to elementary schools (with two teachers and a principal who is also part of the teaching staff) and a tele-secondary school (since 2004) as well as to their own health centers. That is not the case in San Isidro Las Huertas (where 60% of households are beneficiaries of Oportunidades, 31% less than in El Aguaje), where there is only one elementary school with 21 students and one teacher. Youths from San Isidro have to study in the tele-secondary school in Corazón de María.

As mentioned previously, the absence of a secondary school in San Isidro coincides with lower levels of schooling in the locality. Thus, at the time of the study, for example, there were a total of eight beneficiaries of Oportunidades in high school in El Aguaje, but none in San Isidro. Of course, this comparison should be clarified, since there are 132 Oportunidades beneficiaries in El Aguaje, whereas there are only 18 in San Isidro–which has a total population of 115 inhabitants versus 549 in El Aguaje. Even so, in both communities, more than half of the households that are beneficiaries of Oportunidades (61 of 104 in El Aguaje and eight of 14 in San Isidro) were incorporated into the Program in 1998; therefore, the absence of beneficiaries in high school in San Isidro is not significant.

El Aguaje–which has an irrigation system and higher quality soil for cultivation and sheep herds–is named after three nearby springs from which most of the households in the locality get their water (and also have latrines). The infrastructure needed for this was built thanks to local manual labor, while the resources were provided by the municipal government. Electricity is another recent service in El Aguaje (having become available roughly four years ago) that has not replaced the use of firewood for cooking. The latrine system and electricity are also present in San Isidro where water is a serious problem–its scarcity is mitigated, in part, by free supplies from the municipality, but this is not sufficient during the dry season (March to May), when families in San Isidro have to take turns with transportation costs in order to go to El Aguaje once or twice a week for water. During the rainy season (June to September), residents collect water in troughs through canals installed in the roofs of their houses. Another option is provided by a local well; however, this well is barely sufficient to provide water for even a very limited time. Three years ago, the municipal government began work to install pipes to provide potable water to the locality; however, this work was never completed.

Although the microregion of Corazón de María has some localities that are clearly indigenous and others that are clearly mixed-race, case studies were necessary in order to complete the sample of 16 households for the municipality of San Cristóbal. These additional localities further from the municipal capital were Pedernal (majority mixed-race with an indigenous population of 40.46%) and El Escalon (indigenous locality). The former presents a high degree of marginalization and has elementary and tele-secondary schools; it does not have a clinic, but it does have a house where healthcare is provided by an assistant healthcare worker who transfers

* Women in beneficiary households in El Aguaje, on the other hand, travel to the municipal capital on days when Oportunidades makes payments to receive their cash transfers.

seriously ill patients to the IMSS-Oportunidades clinic in the nearby indigenous locality of Yashtinin. El Escalon has an elementary school, but no secondary school or health center; nevertheless, this locality presents less marginalization, though the overall level of marginalization is still high.

2. Municipality of Las Margaritas, in the Tojolabal region. Various services are concentrated in the municipal capital of Las Margaritas, including a technical secondary school, a high school and a hospital. Every Sunday, there is a large number of visitors from Tojolabal, in the region of Las Cañadas (northeast of Las Margaritas, bordering the region of the Selva Lacandona), who come to the central market to sell, buy or exchange products. Buses leaving from this market go to different communities, but service stops around four in the afternoon and the hours are generally restricted and erratic, which makes travel difficult. An asphalt highway extends from Las Margaritas to the localities of El Encanto and Bello Paisaje (both entirely mixed-race) and La Libertad (indigenous Tojolabal), and ends a few kilometers before the Tojolabal communities of Saltillo and Chacala (the remainder consists of a rough dirt road).* These five localities were chosen for studying the Las Margaritas municipality because they are in close proximity and offer important differentiated scenarios for the study. Thus, Bello Paisaje and El Encanto, mixed-race localities that are less marginalized than their Tojolabal neighbors, both provide excellent opportunities for comparative analysis (guided by the hypothesis of differential impact of Oportunidades) within a particularly ethno-linguistically mixed microregion. In fact, this is the only microregion that could completely satisfy the requirements of the analytical sample (that is, that studies be conducted with eight indigenous households and eight non-indigenous households).

   As in the municipality of San Cristóbal de Las Casas, specific combinations of diverse ethnic factors (including language and religion) and services were found in the microregion and localities selected for the municipality of Las Margaritas. The Tojolabal locality of Saltillo is clearly divided in two according to the religious affiliations of its inhabitants; next to Saltillo is Chacala, a "barrio" or neighborhood created by those families who were expelled from Saltillo in 1997 after converting to Protestantism. The inhabitants of Chacala use Saltillo's IMSS-Oportunidades clinic (founded in 1991) and its schools–a bilingual elementary school and technical secondary school–although they have to pay a number of monetary fees for access to this locality.

   Tojolabal is the predominant language in Saltillo; Spanish is rarely used in local households, although many men are able to speak it fluently. In Saltillo, there is electricity and potable water,‡ and the presence of educational and health centers makes this locality a relatively important center for not only inhabitants of Chacala, but also residents of Bello Paisaje, which is situated 20 kilometers from Saltillo.§ Bello Paisaje is connected with the municipal capital by an 11-kilometer asphalt road, along which El Encanto is located; the majority in Bello Paisaje is mixed-race and Spanish-speaking–although some of the men understand Tojolabal. According to the inhabitants, the locality was founded by various families from Las Margaritas who bought land from the ranch owners in the region and were also employed as foremen and cowboys at El Retiro.

   Bello Paisaje has potable water and electricity, as well as a federal rural elementary school under the unitary school system, with a majority of the children coming being from the ranches. The locality lacks health centers and its inhabitants are members of the Saltillo IMSS-Oportunidades clinic, although they prefer to go to the municipal capital or the city of Comitán in the event of significant medical emergencies. Las Margaritas is also preferred by the inhabitants of Bello Paisaje for sending their children to secondary school, although some youths from the locality attend the Saltillo technical secondary school, paying a "rural land fee" of $100 pesos per month required by the Saltillo authorities. We found here a certain resistance on the part of the mixed-race residents to

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* The history of the majority of these communities is linked to El Retiro ranch, a property owned by the family of the former governor of the state (Absalón Castellanos Domínguez), where the indigenous inhabitants work primarily as manual laborers. During the neo-Zapatista uprising in 1994, the land and cattle at El Retiro were taken over by the farmers in the region; some of these lands were distributed among the inhabitants of Saltillo.

‡ This water pump was not functioning when this research was conducted, apparently because the money used to pay the electricity had "disappeared." The women in the area were beginning to organize to take over supervision of the proper functioning of this service.

§ The Saltillo IMSS-*Oportunidades* clinic serves a total of six contiguous communities.

the idea of sending their children to an "indigenous school" (in addition to having to pay a "tax to walk" that is not demanded of youths who reside in Saltillo); therefore, those parents register their children at a school in the municipal capital of Las Margaritas, which the inhabitants of Bello Paisaje consider to be a better choice since it is in an important and mostly mixed-race population center. In addition, the relationship the inhabitants of Bello Paisaje have with the Trojolabales from La Libertad (nearly contiguous communities) is relatively limited, in most cases involving only commercial exchange. It is worth noting that the majority of households in Bello Paisaje that are beneficiaries do not correspond to the long-term criterion since they were incorporated into the Oportunidades Program in 2001-2002 after many women from the locality sought information about getting into the program so as to have the same benefits as the beneficiaries in La Libertad, who were incorporated into the Program in 1998. Therefore, the majority of the mixed-race households that are long-term beneficiaries had to be sought out in El Encanto.

On the other hand, the different ethnic identities we found in the Saltillo region have significant implications for the demand for services and coverage of the Oportunidades Program. Religion is an important variable in this sense. The reason indigenous Protestants from Chacala have been in the Program for only four years is because they rejected it during a prior incorporation attempt. This reaction seems to have been linked, in part, to an interpretation made by potential Protestant beneficiaries of a passage in the Apocalypse that led them to associate receiving economic help from the government with the risk of "straying from God." This resistance finally gave way to acceptance of the Program when comparing the (unfavorable) situation of the women from Chacala to that of their Catholic Saltillo neighbors who had been beneficiaries since 1999.

3. The municipality of Tumbalá, in the Chol region. Unlike the two previous municipalities, it is practically impossible to find mixed-race populations in this municipality.* Therefore, all of the localities selected for the study in Tumbalá– Álvaro Obregón Loma, Álvaro Obregón Planada, El Porvenir and Emiliano Zapata–are Chol, although they present distinct degrees of marginalization and monolinguism. Álvaro Obregón (with two sections contiguous to Loma and Planada) and El Porvenir are better connected with the municipal capital. El Porvenrir is also home to an IMSS clinic that serves the two sections of Álvaro Obregón. To get to Emiliano Zapata, one must take a cattle truck that leaves from the capital of Tumbalá relatively infrequently and erratically and travels down the road along which Álvaro Obregón is located; from there, the vehicle makes its way down a steep dirt road that descends until it reaches the lowlands of Tumbalá, where Zapata is located.

   When paying close attention to the diverse aspects of these localities, it is possible to better understand the important contrasts that exist among them. For example, Emiliano Zapata and Álvaro Obregón Loma present a much greater degree of monolingualism than Álvaro Obregón Planada–53.82%, 42.3% and 5.94%, respectively; in addition, the two former localities have a very high degree of marginalization and are among those in the study with the most lag. In spite of having elementary and tele-secondary schools and an IMSS-Oportunidades health center, Emiliano Zapta is worse in terms of education and health,‡ in part because it is far away from and poorly connected to the municipal capital.

   Even so, in a very important instance of educational migration, the beneficiaries of Oportunidades attend Colegio de Bachilleres de Chiapas high school (COBACH) in the municipal capital of Tumbalá; afterwards, they are expected to return to their land and household or, in many cases, to emigrate to work in Cancun (Quintana Roo), Campeche, Tabasco or Yucatan, where the young men are employed in construction or services connected to tourism.

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* In Tumbalá, it was impossible to find non-indigenous non-beneficiary cases. This demonstrates that coverage by the Oportunidades program in the municipality is very broad, which in itself is a very relevant piece of information.

‡ There is no drainage, septic systems or latrines in Zapata, although the locality has water and electricity. The tele-secondary school in Zapata is actually situated in a locality called La Revolución, just one kilometer before entering Zapata. The land where the school was built was acquired by the residents of Zapata en conjunction with those from La Revolución.

In Zapata, there are two Protestant churches in addition to a Catholic church, although religion seems to be less important than political allegiances when it comes to local social fractures. The principal of the bilingual elementary school in the locality reported frequent cases of conflict and violence that affect their 200 students, who are often divided according to their parents' allegiance to one political party or another. This, in turn, is an inheritance of the intense factionalism experienced in the region between 1995 and 2001. Even though the worst years of violence among the members of different political parties have passed, there are still reports of attacks on children, causing children from surrounding ranches to attend school less and less and, according to the principal, contributing to a good deal of school desertion between first and fourth grade.

The situation in Álvaro Obregón Planada, which is better connected with the capital (where youths attend secondary and high school), is markedly different. The Chol population is mostly bilingual, and the locality includes a good number of Tzeltal speakers who emigrated from the Bachajon municipality when Obregón was founded approximately 30 years ago. This has resulted in many inhabitants being trilingual.

Another type of local fracture exists in Planada; while religious and political allegiances do not seem to create a problem, the population has been divided into two groups (each one with their own authorities) for the past two years, since a disagreement occurred regarding an assistance program to recoat the cement floors in the houses. Nevertheless, the local liaison for control and monitoring of Oportunidades––who is sympathetic and has influence with women in both groups–– reports that this does not constitute a major problem since everyone participates in the community meetings and in the benefits and shared responsibilities of the Oportunidades Program. The inhabitants of Álvaro Obregón Planada benefit not only from said program, but also from a SEDESOL housing program and a nutrition program.

Oaxaca[6]

As in Chiapas, the steps prior to the selection of regions and localities for the Oaxaca study show a clear relationship between the presence of a majority indigenous and monolingual population, on the one hand, and high social lag on the other.6 Municipalities with a larger monolingual indigenous population also met two important requirements for the selection of research scenarios: a rural population and a population of Oportunidades beneficiaries since at least 1998-1999. Nevertheless, it was difficult to find ethnically and linguistically mixed regions that guaranteed case studies of non-indigenous households. In an exploratory trip, the municipality of Jamiltepec in Costa Chica, Oaxaca was chosen as a study microregion given the coexistence of localities with populations that are majority indigenous (Mixteca), such as Santa Elena Comaltepec, and localities inhabited by a mixed-race population, such as El Charco Nduayoo. The municipality of Mazatlán Villa de Flores was selected in Sierra Mazateca, and the municipality of San Juan Cotzocón was selected in the Mixe region. These municipalities (see the map in appendix D2), according to information provided by the II Conteo de Población y Vivienda 2005 (2nd Population and Housing Census of 2005), are characterized by a variable proportion of indigenous people that ranges from very high (in Mazatlán Villa de Flores) to relatively low (in Jamiltepec).

Although problems locating non-indigenous households were foreseen for the municipality of Mazatlán Villa de Flores, the decision was made to include it in order to have a more purely indigenous scenario in the Oaxaca study set and thus allow for this microregion to be contrasted with the other two (the municipalities of San Juan Cotzocón and Santiago Jamiltepec), which are more ethnically differentiated.

1. Municipality of Mazatlán Villa de Flores, in Sierra Mazateca or the region of Las Cañadas. Nestled in the Sierra Madres of Oaxaca,* Mazatlán is one of the 100 municipalities with of the highest marginalization nationally (in the 57th place); it is also ranked in the top 100 in terms of degree of social lag (76th, nationally) and has

* The Mazatecos are an ethnic group that lives in two large territories in the state of Oaxaca: the Papaloapan-Tuxtepec region and the Cañada region. The Cañada region is, in turn, divided in two districts: Cuicatlán and Teotitlán. The municipality of Mazatlán Villa de Flores is located in the Teotitlán district.

a very low Human Development Index (0.5504), particularly with respect to infant mortality level, at 43.66.* Of the 12,934 individuals who reside in the municipality, nearly all (10,577) are speakers of an indigenous language (mostly Mazateco); a minority of those–especially older adults–are monolingual speakers of an indigenous language (1,295). The scarce monolingual Spanish-speaking population is composed of non-Mazatec teachers, women from other regions who come to Mazatlán Villa de Flores as a result of marrying local men, and individual youths who may or may not be children of Mazatec parents who speak the language. This is a mostly Catholic population, although there are followers of the Christian Israelite Church, the Pentecostal Church and the Jehovah's Witnesses Church.

The municipality is composed of 52 communities, most of which are semi-dispersed localities due to orographic conditions (terrain irregularity). Four of those localities were initially selected for the study: Mazatlán Villa de Flores (the municipal capital), San Simón Coyoltepec, El Progreso and El Corral. Two others were identified and added through the search for non-indigenous households: Almolonga and Piedra Ancha. Of all of these localities, San Simón is the furthest from the capital and Piedra Ancha is the closest.‡

Microbuses make two trips daily between the municipal capital and Huautla, from which you can get to Teotitlan del Valle via highway (Huautla and Teotitlán are the urban centers nearest the municipality of Mazatlán). One bus also covers the Mazatlán Villa de Flores-Teotitlan del Valle route. Given the frequency with which the local population travels to Mexico City, there are two buses that take passengers from the municipal capital to the capital of the country and back again, two days a week. There is also a pick-up that transports passengers to the city of Oaxaca, albeit less frequently. There exists a possibility of contracting "special trips" to any of these destinations (except the furthest, Mexico City), which cost between 200 and 500 pesos. People use this type of transport when they have a medical emergency. When people do not have an urgent need to go to one of these locations, it is common to ask a driver passing by for a ride; drivers usually charge five or ten pesos per person, depending on the length of the trip and the route traveled.

With regard to educational assistance and services, there are 48 elementary schools in the municipality according to records provided by Oportunidades; two are indigenous community elementary schools, 16 are federal indigenous elementary schools and 30 are federal regular elementary schools. With regard to the coverage of secondary education, there are 11 tele-secondary schools located in the communities of La Toma, Nogaltepec, Pochotepec, La Raya, La Igualeja, San Pedro, Agua Mosquito, Soyaltitla, Aguacatitla and San Simón Coyoltepec and an industrial technical secondary school in Mazatlán Villa de Flores. High schools are scarce. There is only one community college, Nguh Niya Yanu Zacu Kjuabitsin, which is located in El Corral (accreditation number 20PBH53K) and a tele-high school in the La Igualeja community.

2. Municipality of San Juan Cotzocón, in the Mixe Region.§ San Juan is located in the lower zone of this region (in the north of the region) and is composed of 22 localities inhabited by a total of 22,478 people. Of these, 68% (15,276) live in indigenous households, although only 7.34% of this population is monolingual according to data from the II Conteo de Población y Vivienda 2005 (2nd Population and Housing Census of 2005). The infant mortality rate is 33.68, and the municipality has a high degree of social lag.[9]

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* PNUD, 2004 Human Development Index, municipal level indicators of human development in Mexico; CONAPO, Municipal Marginalization Index; CONEVAL 2007,9 tables on social lag.

‡ Due to its close proximity to the capital, Piedra Ancha could be considered a neighborhood of Mazatlán. We can therefore state that the living conditions of the households in Mazatlán and Piedra Ancha are very similar in terms of communication and services. El Progreso and El Corral are two communities well-connected with and located near the capital. El Progreso has the oldest clinic in the municipality. Almolonga, despite being near the capital, shares similar characteristics with San Simón since it does not have a clinic (though it has a healthcare house) and communication routes with the capital and other localities are very precarious and new. Almolonga and San Simón have the same problems with access and lack of medical care by trained personnel. Most of the case studies conducted are concentrated in Mazatlán Villa de Flores (the capital) and San Simón Coyoltepec.

§ Situated in the northeastern part of the state of Oaxaca, this region includes 19 municipalities and around 240 communities. Also known as the "Ayuuk territory," the Mixe region comprises 6.8% of Oaxaca and is divided into high, middle, and lower sub-regions. The lower Mixe sub-region has communities 37 meters above sea level, whereas the high region has localities as much as 2,240 meters above sea level.

The fieldwork in this municipality was conducted in two localities where the indigenous and mixed-race populations coexist: Nuevo Cerro Mojarra and Jaltepec de Candayoc. Whereas the population of the latter is Mixe, Nuevo Cerro Mojarra is a mixed-race population inhabited by Mazatecos and Chinantecos who were displaced from their communities of origin between 1949 and 1960 by the construction of the Miguel Alemán dam.

To get to Jaltepec de Candayoc, one takes federal highway 147, which connects Tuxtepec to Palomares-Matías Romero. This is located 25 kilometers south of María Lombardo de Caso, a locality in the same municipality that is an important destination for the inhabitants of Jaltepec and the entire Mixe region due to its dynamic commercial environment. The first 10 kilometers of the trip, beginning in María Lombardo de Caso, are via the federal highway; a dirt road is taken from the Tres Islas exit to reach Jaltepec. The locality has 406 households with 1,763 inhabitants, of which 1,144 persons older than five years of age speak an indigenous language. Of these, only 46 are monolingual. The languages spoken in this locality are Mixe and Spanish and are spoken virtually bilingually.

The municipal agency, Conasupo store, local jail, Catholic church and a small pavilion where medication, soda and bottled water are sold are located in the town center. The promenade across from the agency and the basketball courts are paved, but the streets are not. Very near the center of town is one of three telephone booths that are available so the inhabitants of the locality can communicate with family members who have emigrated to other parts of the country or to the United States.

Nuevo Cerro Mojarra has 555 inhabitants distributed among 122 households. There are 348 indigenous inhabitants, representing 62.70% of the total population; of these, only seven are monolingual speakers of an indigenous language, according to the II Conteo de Población y Vivienda 2005 (2nd Population and Housing Census of 2005). The locality is part of the group of populations that were moved from the territories in the reservoir area of the President Miguel Alemán dam by presidential decree during President Miguel Alemán's term (1948-1953).

These ethnically diverse communities (primarily Mazatecos and Chinantecos) were relocated to the lower regions of Veracruz and Oaxaca, which explains why Mazateco and Chinanteco languages are spoken in Mojarra and why, in general, the region has a certain diversity of ethnic groups interacting in the different localities. The town was built by the Papaloapan Commission, a group that took on the relocation of the population that was moved from their lands and assured the functioning of the new localities in terms of education, health and housing.

Mojarra is a small, rural locality with dirt roads and a few orderly paved streets. Most of the houses have roofs made of sheet metal; only a few houses made of wood with palm roofs remain. The highway that crosses the locality connects two very important populations in the municipality–María Lombardo de Caso and El Porvenir; the former is the largest population with the most administrative, health and commercial services. Since Nuevo Cerro Mojarra is on the edge of the highway, there are a large number of small grocery stores, video arcades and businesses that sell cooked foods. There is also a tortilla business, a hardware shop and four bars frequented by residents of both Nuevo Cerro Mojarra and Arroyo Encino.

Mojarra has potable water service (for which the residents reported paying 30 pesos a month) and electricity. The latter presents deficiencies due to the variability of voltage in the region. According to records from Oportunidades, the locality has 100 families who are beneficiaries, which represents roughly 80% of the total number families.* Also found in the locality were beneficiaries of the program Apoyos Directos al Campo ((PROCAMPO) Direct Rural Support), whose resources are used for the purpose of buying inputs for agriculture and cattle. The community also gets assistance from two civil associations that grant low-interest credit: "La Esperanza", which grants low-interest credit of up to 5,000 pesos to women,‡ and "Compartamos," whose loans have a 4% interest rate and range from 5,000 to 20,000 pesos, depending on the debtor's credit history has with the association. There are also beneficiaries of Oportunidades who apply for these loans.

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* Calculation by González de la Rocha with Sánchez and Paredes,[6] based on II Conteo de Población y Vivienda 2005 del INEGI (2nd Population and Housing Census 2005).

‡ Many of the women who use this support are beneficiaries of Oportunidades, including a woman who mentioned having used the loans to invest in buying cattle.[6]

With regard to educational infrastructure–one of the two central topics of the present document–Cerro Mojarra has a preschool center, an elementary school and a tele-secondary school. The bilingual elementary school, General Francisco Villa, has existed for several decades, while the tele-secondary was founded between 1998 and 1999. The youths in the locality who want to attend high school must go to María Lombardo de Caso, a locality 12 kilometers away where there is a technical high school (CECYTE). It takes 15 to 20 minutes to get there using public transportation because of road conditions; the road is paved, but it is winding and narrow.

Jaltepec is a privileged locality as far as educational offerings, with schools at all levels (preschool, elementary, secondary, high school and even university), although a minority of youths attend secondary school in the neighboring locality of María Lombardo de Caso. In Jaltepec, there is a Comprehensive Community High School (Bachillerato Integral Comunitario) that serves youths from Jaltepec (92% of its student body) and surrounding communities (8% of the student body), coordinated by the Colegio Superior para la Educación Integral ((CSEIIO) High School for Comprehensive Education) and the Instituto Estatal de la Educación Pública de Oaxaca (State Institute for Public Education in Oaxaca (IEEPO)). Students from outside the area live in a community boarding facility that receives financing from the Comisión Nacional para el Desarrollo de los Pueblos Indígenas (National Commission for the Development of Indigenous Peoples).

In August 2006, the Centro de Estudios Ayuuk de la Universidad Indígena Intercultural (CEA-UIIA) (Ayuuk Center for Studies at the Intercultural Indigenous University) opened its doors with two bachelor degree programs: 1) Administration and Sustainable Development, and 2) Communication for Social Development; both are completed in eight semesters. There are currently 47 students enrolled from Jaltepec and different localities in the region: María Lombardo de Caso, San Felipe Zihualtepec, Constitución Mexicana, San Juan de la Fuente, Santa María Alotepec, San Juan Mazatlán, etc. Some of the students moved to the area; others travel from their hometown. The CEA is an intercultural institution for higher learning made up of volunteer indigenous leaders from the civil association Servicios del Pueblo Mixe (Services for the Mixe People) and teachers and religious leaders in the Jesuit University System; the relationship with the Jesuit University System, composed of the Ibero-American University and the Instituto Tecnológico de Estudios Superiores de Occidente ((ITESO) Technical University for Higher Occidental Studies), offers some possibilities for connection and dialogue with these and other institutions. Based on an intercultural educational model, the objective stated by CEA is to foster in its students a recognition of their own culture and a critical appropriation of other cultures. Therefore, the teaching staff is composed of leaders, professionals and academics of Ayuuk and other ethnic origin, as well as Mexicans and foreigners, willing to engage in an intercultural dialogue.* The Mixe Regional Technological Institute works in addition to the CEA and has its headquarters in Tlahuitolpetec, although it is many hours from Jaltepec, in the Mixe Alta region.

3. Municipality of Santiago Jamiltepec, in Costa Chica de Oaxaca. This municipality, approximately 429 kilometers from the state capital, is part of a narrow strip enclosed by the Pacific Ocean and the Sierra Madre mountain range. The localities studied in this region were Santa Elena Comaltepec and El Charco Nduayoo, which are home to ethnically heterogeneous groups (with an infant mortality of 32. 25 and a low degree of social lag compared to localities in other municipalities). Santa Elena belongs to the cultural region of Mixteca Baja, and its population is primarily indigenous (880 inhabitants, of which 52 are monolingual), whereas El Charco (with 758 inhabitants) consists of a mixed-race and Afro-mixed-race population. The former is 5 kilometers from Jamiltepec, the municipal capital, whereas the latter is located 23 kilometers from the capital. The residents of these localities go to Jamiltepec for work purposes and health services (Santa Elena and El Charco do not have any clinics), as well as to attend secondary schools and high school, receive Oportunidades support and go shopping (although Pinotepa Nacional, where many people go to shop for more significant items, is a more important urban center in terms of the local economy).

   Santa Elena is reached via a dirt road (which has deteriorated and can get impassable during the rainy season) that connects the municipal capital with Santiago Ixtayutla, which is the municipal capital of the mu-

* According to a study conducted by CEA researchers, the establishment of the institute is questioned in the community as well as the region because, in spite of having been developed on the basis of a community project, "it came about because of official entities".[10]

nicipality of the same name. There are passenger pick-ups for 10 pesos that leave every hour from Jamiltepec and take 20 minutes to reach Santa Elena. El Charco, on the other hand, is on coastal highway 200 that connects the Istmo Oaxaca region with the state of Guerrero. There are passenger pick-ups and buses that leave Jamiltepec every hour and take approximately 30 minutes to get to El Charco; there is also a taxi service. As is the case for the other localities in Costa Chica de Oaxaca, El Charco is better connected with Pinotepa Nacional and the state of Guerrero than with the capital of Oaxaca. Actually, El Charco Nduayoo and other neighboring localities have recently been formed by immigrants from Guerrero looking for land to cultivate.

Santa Elena is a concentrated locality with a dirt-packed main road, the same road that connects the capital with Santiago Ixtayutla. There are two dirt roads that parallel the main road, and four narrower roads that are perpendicular to the first ones mentioned. The current municipal government authorized a budget to pave 200 meters of the main road with asphalt; work began a short while before the research was finished. The municipal agency, Catholic church, cemetery and a basketball court make up the public spaces, in addition to schools that include a preschool center, a 30 year-old bilingual elementary school, and a secondary technical school that recently received accreditation from the Secretary of Public Education. Although there is a healthcare house, it is not functioning and is closed at present. The inhabitants of Santa Elena have potable water that runs down from the Ixtayutla mountain, although supply is limited and the women often have to go to the river to wash clothes as well as to bathe. There is public lighting on the main road and all of the houses have electricity. There are at least three small grocery stores, three mills, and three bars, a stationary store with photocopying services and a Diconsa store. Two establishments provide telephone service, and satellite internet was recently installed. There is no garbage collection service or drainage, and not all houses have latrines. Therefore, the ends of the roads are full of garbage, and domestic waste runs along the edges of the properties. Although traditional adobe houses with tile roofs can still be seen, those materials have been replaced mostly by block and sheet metal, initially because of the destruction caused by the September 1999 earthquake, when the majority of the families affected received these materials to help them rebuild their dwellings.

El Charco Nduayoo is also a concentrated locality located along the coastal road mentioned above. The roads in the locality are packed dirt that, during the rainy season, forms grooves in addition to accumulating wastes. As in Santa Elena, the municipal agency, Catholic temple (there is also an Evangelist temple), cemetery and basketball court make up the primary public spaces in Charco. The locality has a continuous supply of potable water, although many properties have wells. There is little public lighting, and all of the houses have electricity. There is no drainage, and not all houses have latrines. There are two establishments that provide telephone services and no garbage collection. There is a healthcare house that is not inhabited and is usually closed. The existing educational institutions include a nursery school, kindergarten, elementary school (the formal General Education Elementary School that belongs to union district 22 where teachers from district 59 also work), and secondary school (a campus of the San Juan Rio Verde (La Boquilla) Technical Secondary school established three years ago).

Chihuahua[8]

The Sierra Tarahumara region was selected for the Chihuahua study. This region includes a vast area of roughly 60,000 km^2 that corresponds to the Chihuahua portion of the Sierra Madre and stretches across the western part of the state, from north to south. This extensive territory, with its marked eco-geographic contrasts,* is divided into 17 municipalities: Balleza, Bocoyna, Caricho, Guachochi, Guerrero, and Nonoava, located at the summit of the

* Three ecological niches are distinguishable: a series of valleys and hills in the east, near the Conchos river basin, a transition zone between the Chihuahua desert and the large mountains favorable to farming and grazing; the cold high central mountain region with forests where the principal North American temperate pine and evergreen forest reserve is concentrated approximately 3,000 meters above sea level; and, finally, the hot ravine terrain to the west, toward which water runs from the Verde, Batopilas, Urique and Oteros rivers tributaries that later transform into the Yaqui, Mayo and Fuerte rivers and feed the fertile basins of the Pacific north. These rivers and streams surround the towns marked with ravines, many of them mining towns, leaving behind small inlets and valleys that are good for warm-climate agriculture and fruits.

Sierra or Alta Tarahumara, and the municipalities of Batopilas, Chínipas, Guadalupe y Calvo, Guazapares, Maguarichi, Morelos, Moris, Ocampo, Temósachi, Urique and Uruachi, in the lower ravine area, or Baja Tarahumara.

These 17 municipalities have a population of 275,461, 37% of which (191,470) belong to one of the four original ethnicities in the state of Chihuahua and all of which have Uto-Aztecan roots and a tradition of hunting, gathering, farming and cattle herding: the Rarámuri or Tarahumaras, the O'oba or Pimas Bajos, the Ódame or Tepehuanes and the Warijó or Guarijíos. These four ethnicities share their territories with a mixed-race population that joined mountain life in successive migratory waves and distinct historical periods from Spanish colonization at the end of the 16th century to the years of rural agrarian land distribution in the 1920s and 1930s. According to data from the II Conteo de Población y Vivienda 2005 (2nd Population and Housing Census of 2005), the mixed-race inhabitants represent 63% of the mountain population (174,171) and usually settle in the municipal capitals, near train stations, in mining towns and near sawmills and communication routes. The indigenous inhabitants, on the other hand, are dispersed throughout the territory in small ranch houses and ranch complexes where they work mainly in cultivating corn and beans, raising sheep and goats, and, to a lesser extent, forestry and the production of crafts; they have to migrate outside the Sierra region in search of work for several months a year and even migrate outside the state of Chihuahua.

The Tarahumaras is the most numerous ethnic group in the Sierra de Chihuahua, with a population in 2005 of somewhat more than 88,000 inhabitants, concentrated mostly in the municipalities of Guachochi, Urique, Guadalupe y Calvo, Bocoyna, Balleza and Batopilas. The Tepehuanos, the second-largest indigenous population in the Tarahumara, consists of more than 10,000 inhabitants and are located mostly in the municipality of Guadalupe y Calvo, while the majority of Guarijíos (population 816) are located in the municipalities of Chinipas and Uruachi. The Pimas (population 239) are located mostly in Temosachi.

If anything characterizes the demography of the Sierra de Chihuahua, it is the low population density* and notable dispersion of its population. There are 6,780 localities in the Sierra de Chihuahua, 48% of which are ranches with no more than 10 inhabitants (6% of the population lives on such ranches, the majority of them indigenous). Another 35% of the population lives in 3,125 ranch houses and complexes (46% of localities) with between 11 and 100 inhabitants each; there are only 408 towns (6% of localities) that are municipal capitals, tourist points, train stations, timber centers, and medium-size localities with more than 100 residents (where 59% of the inhabitants of Tarahumara are concentrated). The dispersion and atomization of the towns is particularly notable among the indigenous population: according to the XII Censo General de Población y Vivienda de 2000 (12th Population and Housing General Census of 2000), 14% of the population over 5 years of age in the 17 municipalities of the Sierra Tarahumara who speak an indigenous language lived on ranches with one or two dwellings; somewhat more than one-third (39%) lived on ranch complexes with three to 10 dwellings, 20% lived in localities with between 11 and 20 dwellings and the remaining 27% lived in middle-sized population centers.

Another distinct characteristic of this region is how the indigenous conceive of the territory: social practices derived from these conceptions are substantially foreign to those in municipal or agrarian territories (which consist mostly of municipal capitals, rural lands and, to a lesser extent, communal and private property). In a large part of Tarahumara, the indigenous population is organized into territorial units presided over by a center or capital town called pobora in Tarahumara. Governed by a church that often has colonial origins, these capital towns are the locations for indigenous gatherings. Celebrations and rituals linked to the Catholic cycle, as well as court proceedings and community sermons led by the governing leaders, are held in the church atrium. This is also where all types of information about the social and economic life of those populations are disseminated. In all respects and from an indigenous perspective, the towns establish a principle of belonging and ascription. Thus, for Tarahumaras, the town is the basic unit of indigenous governance and justice, which is exercised by the governors and a set of authorities

* In 2005, the population density of Tarahumara was 4.6 inhabitants per square kilometer, roughly four times less than the rest of the state of Chihuahua and more than ten times less than the country's population. In six of its 17 municipalities, the density is less than three inhabitants per kilometer squared II Conteo de Población y Vivienda, 2005 (2nd Population and Housing Census, 2005).[8]

that reproduce the organizational model and government of the Spanish city that was imposed during colonial times and later adapted to indigenous needs. In summary, the town is above all a political structure, at the heart of which all types of socialization, exchanges, and reciprocity are practiced.

The selection of microregions and localities in the Sierra Tarahumara study followed the same logic that guided studies in the remaining states, choosing three regions according to four primary criteria: the intercultural character of the regions, their status as indigenous territorial units, the ethnic diversity of Tarahumara and the exposure of the communities in these microregions to the Program over a period of ten years, which necessarily implies the existence of or proximity to educational and health services.

Nevertheless, given the demographic distribution characteristic of the Tarahumara, selection did not turn out to be simple. First, the 17 municipal capitals that make up the Sierra Tarahumara as well as the primary urban or semi-urban centers were left out of the sample because there was no concentration of a mostly or exclusively mixed-race population. This implied excluding a large number of beneficiary families from the sample, since it is in these localities where the greatest percentage of families who use the support of the Oportunidades Program are found; it is, in addition, in these urban or semi-urban centers where the most important and diversified health and educational services are located, such as schools for all educational levels and the main (and few) hospitals that exist in the Tarahumara.

These circumstances led to the selection of two microregions in the high Tarahumara mountain region and a third from the Pimas territory located on the border between the states of Chihuahua and Sonora. The first two towns are Norogachi and Samchique, both of which belong to the municipality of Guachochi, while the third includes a portion of the municipality of Temosachi in Chihuahua and a portion of the Yecora municipality in the state of Sonora (see map D3).

1. Samachique and Norogachi are the two most important capital towns in the municipality of Guachochi; it was possible to find there, or in their satellite ranch complexes, Tarahumara (Raramuri) and mixed-race families who have been beneficiaries of Oportunidades for ten years. In both towns, indigenous and mixed-race populations live together, and there is a significant number of educational and health services, as well as other state and federal development programs; therefore, it is feasible to consider the differential effects of the Program in ethnic terms. Both towns also serve as governing centers for a group of surrounding ranch houses and complexes where the indigenous population is predominant and the level of involvement in Oportunidades is reduced, as is the presence of health and education institutions. This also enables the comparison of effects associated with the presence or absence of services and the coverage of the Program.

   Samachique and Norogachi have the greatest number of inhabitants, second only to the municipal capital. One could object that these two localities are in the same municipality (Guachochi), but in reality, this municipality covers 4,340.35 square kilometers and is therefore larger than several states in the Republic, such as Tlaxcala. Therefore, Samachique and Norogachi are very far away from each other and are located in well-differentiated regions with notable natural and social diversity.
2. With regard to the Pima microregion, this includes the geographic area near the capital towns of Yepachi (in Chihuahua) and Maycoba (in Sonora), territory native to the Pimas Bajos (O'oba) where, however, a mostly mixed-race population is settled. Since the regions are very far from the capitals of their respective states in both cases (and in the case of Yepachi, the municipal capital, as well), this microregion has less governmental support, but it is possible to find families there with ten years of exposure to Oportunidades.

   The locality of Yepachi is in the municipality of Temosachi in Chihuahua, whereas Maycoba belongs to the municipality of Yecora, in Sonora. This indigenous territory operates as a cultural continuum even though it is divided up administratively according to state; that division, however, is rather arbitrary from the point of view of the Pima residents in the microregion.

Sonora[7]

Following the same criteria as those mentioned earlier for the other three states, three microregions in the southern part of Sonora were selected where the greatest portion of the indigenous population in this state is concentrated: the Yoeme (Yaqui) population is in the municipality of Guaymas, the Yoreme (Mayan) population is in Etchojoa and, finally, the Makurawe or Guarijía population is in the municipality of Álamos (see map in appendix D4). These groups represent the majority of the indigenous population in Sonora.

One locality in each municipality was initially selected for the study. However, the small number of such localities made it impossible to find sufficient households for completing the analytical sample; therefore, the fieldwork had to be extended to neighboring localities. In the Yaqui region, the case studies in the locality of Huirivis had to be supplemented by others found in three nearby localities in the same municipality (Guaymas): Estación Oroz, Rahum and Las Guásimas, situated 20, 10 and 60 kilometers from Huirivis, respectively. In the Mayan region, the study began in the locality of La Bocana in the municipality of Etchojoa; the contiguous towns of Los Viejos and El Salitral were visited later (seven and nine kilometers from La Bocana, respectively). Finally, all of the households selected in the Guarijía region were from San Bernardo, the most important rural locality in the Álamos municipality; nevertheless, explorations were conducted in other contiguous locations that revealed relevant data, such as in Los Estrados, Sejaqui, Guajaray, Los Tanques and Mesa Colorada.

The three microregions selected for the study in Sonora are very different because of the economic dynamic, social situations and access to existing public services found in each one of them. Nevertheless, the three situations have factors in common that are relevant to the objectives of the evaluation of the Oportunidades Program: a strong indigenous presence and situations of marked poverty and social lag.

1. Municipality of Guaymas, in the Yaqui region. With 293 inhabitants (according to the 2005 census by INEGI), the Huirivis locality has a majority indigenous population, but is situated in a region where mixed-race families also exist. Huirivis is the headquarters of one of the eight governments that make up the Yaqui Nation and the central point for the Yoeme territory in Sonora.* A small locality with scarce services, Huirivis is nevertheless relatively well-connected due to its proximity to Pótam (another of the eight traditional Yaqui towns 10 kilometers away, with 5,782 inhabitants) and the Pan-American highway that connects the region with Hermosillo and Ciudad Obregón–the two principal cities in the state of Sonora. There are also 10 kilometers between Pótam and Estación Oroz (288 inhabitants) and 10 more in the direction of Obregón to Estación Vicam, where residents from Huirivis commonly go to do certain types of shopping and access services. Vicam is a town with a mixed-race and indigenous population and a total of 8,578 inhabitants. Near there is the traditional town of Vicam (709 inhabitants), another Yoemes capital, and Pithaya, with its traditional jurisdiction belonging to the town of Las Guásimas; many Yaquis who live in Pithaya work as fishermen.

   Although Huirivis belongs to the municipality of Guaymas, the inhabitants of the locality often go to Ciudad Obregón to shop for supplies or get treatment for illness or accidents that cannot be resolved in Pótam or Vicam. They go to the municipal capital of Guaymas exclusively for municipal administrative issues. Thus, public transportation from Huirivis to Ciudad Obregón, which costs 35 pesos and takes two and a half hours, runs only four times daily: at six and nine in the morning and at one and five in the afternoon. This transportation links Huirivis with other Yoeme and mixed-race localities found along the way (Rahum-Pótam-Oroz-Estación Lencho-Lomas de Bacum-Lomas de Guamuchil-Estación Corral-Esperanza).

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* There are currently Yaqui territories in Sonora (Mexico) and Arizona (United States) that are separated by borders that diverge significantly from the territorial logic of these groups, as in the case of the indigenous groups in Chihuahua. In Sonora, the Yaqui territory encompasses approximately 5,500 square kilometres; this includes parts of the municipalities of Guaymas, Empalme, Bácum, San Ignacio Río Muerto and Cajeme, and is distributed among three large regions: the Bacatete mountains, the coast (Guásimas, Bahía de Lobos, among others) and the Valle del Yaqui. Reliable data on the number of members of this ethno-linguistic group does not exist, although a recent study indicated a total of 32,000 persons.[11]

These communities are surrounded by land mostly planted with wheat that can be seen from Oroz to Rahum, a mere 50 meters on both sides of the road. These fields, planted by locals, are not seen from Rahum to Huirivis (because they are further ahead) and the land looks inhospitable, with desert plants. Sand can be seen–humid with salt crystals–characteristic of places near the sea.

Rahum is a locality whose inhabitants have friendships and family relationships with individuals from Huirivism, but such is not the case with Pótam, a town where rivalries and antagonism have existed due to issues related to the land and political organization. Since the 1980s, certain Yaqui towns have had two government structures because of the various antagonisms. The differences that exist with regard to Pótam are also expressed in a certain amount of contempt that the residents of Pótam have toward Huirivis, which is commonly seen as a lesser (and not very relevant) town.

The economic activities of the residents of Huirivis often involve renting parcels of rural land to private Yoris businesspeople. The local owners of the rural lands get barely between 2,500 and 3,000 pesos per hectare per year,* quantities that are usually paid all at once. Besides this solution to the scarcity of revenues in the agricultural zone–which has been in recession even with the signing of the Free Trade Agreement–there is a dependency on, and competition for, federal, state and municipal assistance. Many men and women emigrate looking for work in factories, fields or warehouses in Empalme, Guaymas and other places in the Valle del Yaqui. A few others have herds of cows, goats and sheep or go to nearby beaches in Los Algodones to catch fish or shellfish. Another present, but marginal, activity is the manufacture of artisanry: straw mattresses, baskets made of willow branches and reeds, and some ceramics. Finally, we found some workers dedicated to selling coal and firewood and putting in posts, in addition to others who work in construction and adobe. Some women make wheat tortillas from refined wheat, cook meat and corn tamales to eat and sell, and embroider blouses and skirts; these embroideries are traditional and typical of the region. There are also people who cultivate cacti to sell or care for goats and cows that belong to others by "going in halves"– that is, allowing use of the land in exchange for some of the newborn animals.

The urban landscape in Huirivis consists of two minor avenues that cross and lead to the only church in the town, which was recently built and dedicated to San Rafael. A handful of brick and block households and many built from palms and adobe are spread around in a more or less disorderly way. There are a few public buildings: the church and the blue "guard" house where the traditional authorities meet; the healthcare house, a preschool center, the elementary school and a Yaqui cultural center (Primer Gobernador Jesús Quintero Valencia). A future "guard" house is in construction for the Chapayecas, who play the role of "Pharisees" during the period of Lent. Also, across from the healthcare house (known in the locality as the "dispensario" or "clinic"), is a basketball court that is also used as a soccer field. Children and adolescents usually meet there in the afternoons during the week to play "correteadas" (tag).

2. Municipality of Etchojoa, in the Mayan region. The locality of La Bocana belongs to this region, which was selected for the study and is found a short distance from the coastal plains of the Pacific and mountainous region to the west of the Sierra Madre Occidental, in the southern region of the state of Sonora. With 1,202 inhabitants, La Bocana is located in the Valle del Mayo in the less arid region of Sonora. The land in "El Mayo" is irrigated by the El Mayo River and, in addition to the municipality of Etchojoa they cover Navojoa, Huatabampo and Benito Juárez.

   The principal urban center in El Mayo is the municipal capital of Navojoa, with more than 100,000 inhabitants according to data from the UNEGI's II Conteo de Población y Vivienda 2005 (2nd Population and Housing Census of 2005); this is followed by Huatabampo with roughly 30,000 inhabitants, Villa Juárez (12,691 inhabitants), Etchojoa (8,342 inhabitants), Bacobampo (8,011 inhabitants), La Unión (4,508 inhabitants) and Yavaros (2,682 inhabitants). As is the case in Valle del Yaqui, there is a system of canals throughout the highly

* Renting parcels is common in the rural lands of Valle del Yaqui, granted during the last part of President Luis Echeverría's term. This is a practice brought about by limited access to credit, scant resources resulting from the sale of crops, high prices and lack of water and scarce inputs and machinery for working the land.[11]

populated region of Valle del Mayo that comes out near the Rio Mayo basin in the Gulf of California; there is also a well-traveled network of streets and dirt roads that make this region one of the best connected in Sonora. Most of the cultivated land (109,000 out of 124,000 hectares) is irrigated, and the rest (14,000 hectares) is planted seasonally: 1,069.95 hectares is for fishing and 50.36 hectares is used for forestry.[7] The amount of forest in the valley is scarce, but there are mesquite, poplar and guasima trees, different types of cacti and local vegetation known as "hawthorn forest."

Beginning in the 1950s in the Valle del Mayo with the process of agricultural modernization, the Yoremes indigenous persons changed from a subsistence economy of hunting, fishing, and gathering to a modern agricultural economy oriented toward commerce, although they continue to work in seasonal fishing and/or cattle production on a small scale. The process of modernization also contributed to a significant sector of the Mayan population becoming employed in education (as teachers in elementary and secondary schools), governmental offices (as secretaries, administrators, accountants and professionals), as cashiers in commercial centers and as mechanics, drivers, nurses and workers in factories located in Nogales (Sonora). In addition, the Mayan towns in this farming region have three types of land ownership: rural (ejidal), communal and small private properties. All of these types of land arrangements use irrigation, particularly in the municipalities of Navojoa, Etchojoa and Huatabampo.[12] Among the primary irrigated crops are corn, safflower, wheat, beans and soybeans; the seasonal crops used mostly for subsistence are grown mainly in the municipalities of Álamos and Navojoa and include corn, beans, zucchini, melon and watermelon. Among the problems facing the Mayan rural landowners is the poor quality of the soil, lack of technical assistance and farming machinery and tools, and constant risk of drought; given the lack of resources, these landowners rent their land or end up working as agricultural day-workers–men as well as women, children and adults.

Near the sea and around two kilometers from Rio Mayo, the locality of La Bocana is situated 10 kilometers from the highway that joins Etchojoa with Huatabampo, which one can get to via a dirt road in good condition that first passes by the towns of El Salitral and Los Viejos. Along this road, it is common to see people on bicycles and in carts pulled by mules, as these are the principal means of transportation for getting to the agricultural lands or going shopping and visiting friends and family on the weekends. There is also a bus that goes to Huatabampo, with service approximately every two hours from six in the morning until eight at night.

The urban landscape of La Bocana consists of a main street connected to several alleys. There is also a bypass road that goes around the entire community, and another highly traveled dirt road that connects directly with Etchojoa. There is a variety of vegetation and large mango, poplar and fruit trees, as well as goat and sheep herds, on the cultivated land. Prominent around town are fruit trees, bugambilias and other lush trees in families' yards. Most of the lots have buildings made of adobe or reed plaster with flat roofs. This is the traditional construction and is appropriate for the local climate, but has the drawback of being very vulnerable in hurricane and rainy season. Most of the lots have their original houses, and many of them have a contiguous brick building as a result of a housing project implemented in the 1990s when said buildings were provided free of charge; more recently, the government of the state of Sonora provided support to build housing in two phases, 2004 and 2008, especially to help families affected by hurricane Henry, which lashed the region in 2007. The number of rooms per building varies between one and two; most of the families have two rooms and a tile roof with a traditional kitchen with a clay oven upon it.

The public spaces in La Bocana consist of a police station, an adjacent lot used for dances and a public courtyard where other social events, such as weddings and birthday parties for 15 year-olds, are held. In addition, the locality has a small preschool, an elementary school and a tele-secondary school. Of those, only the preschool center offers any type of bilingual education (in Mayan). There is also an old school not in use and a small park next door, where children play on swings and a slide (built with resources from the la Fundación de Apoyo Infantil (Children's Support Foundation)).

The town has electricity and plumbed water in addition to a public phone booth, which no one uses anymore since cell phone use is available (the line to the public telephone was removed two years ago). As a result

of the initiative of a group of women in the locality with financing from SEDESOL, a cybercafe was opened in January 2008 in the house of the wife of a representative to the traditional authority. There is no public drainage, so the people use very basic and simple latrines consisting only of a hole in the ground that is barely protected by some poles covered with black plastic or covers.

3. Municipality of Álamos, in the Guarijía region.* As was mentioned before, all of the households needed for completing the analytical sample of the study were found in San Bernardo. The town currently has roughly 1,400 inhabitants and is situated 50 kilometers north of Álamos, the municipal capital. A dirt road lined with mesquite, etchos and amapas trees goes by La Higuiera, El Tábelo, Los Tanques, La Vinata and other smaller towns until it reaches San Bernardo–the port to the Guarijío territories in Sonora. Another dirt road travels from San Bernardo to the community of Mesa Colorado, the "Guarijía capital," for a distance of 34 kilometers.

   There is also a lightly traveled road connecting Álamos with Chinipas and Témoris, where one can take the Chihuahua-Pacific train (Chepe) to the capital of Chihuahua as well as to Topolobampo, in the border state of Sinaloa. Even so, it is hard to say that San Bernardo is a well-connected town, maintaining its identity as the last supply post before the Sierra Madre Occidental. San Bernardo continues to be the governing center of a broad hinterland that includes the "refuge region" of the Guarijío or Makurawe town. From 1978-1979, the Instituto Nacional Indigenista (Indigenous National Institute) established the Centros Coordinadores Indigenistas (CCI-Indigenous Coordinating Centers) in San Bernardo, which to-date provides services to Guarijíos and Mayans from the municipalities of Álamos and Quiriego, including some indigenous boarding schools in the neighboring state of Chihuahua. In addition, the affluence of the Guarijíos and their settlement in San Bernardo is due to donation of houses from the "Gochico" mining company, which belonged to the Peñoles Mining Group before it withdrew from the region.

   The primary economic activity in the region is cattle-herding, which is done on small ranches with herds of between 30 and 200 heads of cattle. On these ranches, cattle are raised mainly for exportation to the United States; the herders in the region receive technical and administrative support from Inspection Zone 3 of the industry's Secretary, including checking of the cattle, issuing of transportation permits, and provision of censuses of herds and documents for herds that have to cross the state's borders. The region also receives support from federal programs, including funding on behalf of SEMARNAT, a program to reforest wooded areas with native species. EL PROCAMPO supports those who plant less than six hectares with 1,100 pesos per hectare, while those who plant more receive 900 pesos per hectare.

   Among the services in San Bernardo is non-potable plumbed water (for the past 43 years) directly from a well fed by the Gochico stream, which passes along the northern side of the town. Water is extracted using an electric pump and deposited in two 22,000m^3 water tanks, both of which are seven years old. In addition, almost all of the residents have electricity, and some houses have cable television, satellite telephone; for those who do not have a phone in the house, there is a public phone booth. An official of the general register office provides services to the local population and those from contiguous communities; in addition, there is a State Police Investigators base with police cars in good condition, radio communications equipment, an ambulance for emergency transportation and a small fleet of three buses that, although deteriorated due to use, provide relatively good service with daily trips. Another bus in better condition was recently added to the fleet and goes directly from Álamos to Mesa Colorada three times a week.

   San Bernardo is a community with an acceptable level of educational services. Complete coverage is provided to all segments of the school population (mixed-race as well as indigenous) and ranges from preschool to secondary education. Only high school education is not offered locally; therefore, students needing such education travel to Los Tanques 25 kilometers south of San Bernardo, where a CECYTES campus (Colegio de

* With 24,494 inhabitants and an intermediate degree of social lag, the Álamos municipality nevertheless is one of the poorest in Sonora, with between 60 and 69% of its population living in poverty.[9]

Estudios Científicos y Tecnológicos del Estado, or State High School for Scientific and Technological Studies) was established roughly four years ago using the EMSAD model.*

SAMPLE DESIGN AND SELECTION OF HOUSEHOLDS: FINAL COMPOSITION OF THE STUDY SAMPLE

As mentioned previously, the localities selected in each region/municipality had to contain the households required for the analytical sample used for the case studies. We will briefly present that sample next so as to specify the degree to which the requirements were met with respect to the characteristics of the regions, municipalities and localities described previously.

Four cases were studied in each municipality/microregion for each of the following types of households, defined not only according to the variable "ethnicity", but also according to the variable "incorporation in the Oportunidades Program."

Indigenous beneficiaries (n=4)	Non-indigenous beneficiaries (n=4)
Indigenous non-beneficiaries (n=4)	Non-indigenous non-beneficiaries (n=4)

The above, therefore, results in a total of 16 households studied per municipality/microregion; that is, 48 households total were selected in each of the four states. It was also important to assure that the eight beneficiary households studied in each municipality or microregion had long-term exposure to the Oportunidades Program; that is, that these households were incorporated in 1998 or no later than 1999. Thus, it would be possible to maximize the difference for the variable "incorporation in the Program" when comparing the beneficiary households to those who had never been beneficiaries in order to clearly identify the changes produced by Oportunidades in the beneficiary households. In addition, maximizing the difference with respect to the variable "ethnicity" involved studying Spanish-speaking monolingual households and monolingual households whose members speak an indigenous language in order to address the hypothesis about the differential impact of the Program. In each microregion, at least two monolingual indigenous-speaking households were studied (that is, the head of household and/or his partner were monolingual); the other indigenous households could be bilingual. Appendix A1 of this document contains more information about this first analytical sample of 16 households per municipality or microregion and about the second sample. The latter was done for a complete case study and consists of the selection of youths that correspond to the long-term variable for beneficiary households in the first sample; that is, children who were between second and fourth grade when the household was incorporated into the Program in 1998 or 1999.

The case studies used one guide (never questionnaires) to collect and systematize information about the trajectories of the households and another for employment information on former beneficiaries of the Program. Guides were also used for interviewing the providers of educational and health services, liaisons, and other local actors in the Oportunidades Program (see appendix A2 for a description of these instruments, which were delivered along with the qualitative evaluation).‡

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* "...all of the CECYTES schools are part of the distance-learning high school educational system ((EMSAD) Educación Media Superior A Distancia), there are 23 CECYTES in the state and they are in communities difficult to access, they provide coverage to students in remote areas. Interview with Julio Alfonso Morales, principal of CECYTES in Los Tanques.[7]

‡ Information in the field was obtained through direct observation during Oportunidades Program payments, doctors visits and self-care health workshops as well as activities and classes within the schools. A capacity-building seminar was also given to program liaisons held by the members of the Roundtable for Assisting Committees (Mesa de Atención a Comités (MAC)) in the municipal capital of Tumbalá and Oportunidades personnel –principals, promoters, those responsible for the capacity-building of community promotion committees, etc– were interviewed in Service and Registration Centers. This was necessary in order to examine the social relationships at the points of contact between the Program and the beneficiaries and to obtain information about the coverage and operations of Oportunidades in the regions selected for the study.

Now it is necessary to describe the final composition of the analytical sample (see Table B2 in the appendices) and the reasons why not all of the original requirements were covered in all states. The sample required a total of 48 households in each of the states mentioned (Chiapas, Oaxaca, Chihuahua and Sonora): 24 indigenous (12 beneficiaries and 12 non-beneficiaries) and 24 non-indigenous (with equal proportions of beneficiaries and non-beneficiaries). The latter was always a fundamental factor in the selection of households during fieldwork, although given the broad coverage of the Oportunidades Program in the regions studied in Chiapas and Oaxaca, significant difficulties were faced in locating non-beneficiary households.

These difficulties were able to be resolved relatively successfully in the Chiapas municipalities of San Cristóbal and Las Margaritas, where the search for and selection of localities was in accordance with the location of non-beneficiary households, both indigenous and non-indigenous. This was not difficult because of two significant factors: a) coverage of the Oportunidades Program in San Cristóbal and Las Margaritas since 1998 has been broad, but far from universal; and b) the municipalities are mixed-race, with between 30 and 60% of the population being mixed-race and speaking Spanish. It is also helpful to remember that the methodological strategy for the original analytical sample was aimed at maximizing differences in the intervening variables: ethnicity and long-term exposure to Oportunidades. This was easy for the first variable for the two municipalities since, as we mentioned, they are ethno-linguistically mixed-race populations. However, maximizing differences in the second variable required, on occasion, a search for households that had been beneficiaries for less than 10 years who were withdrawn from the program after a maximum of three years or recently incorporated. Based on these strategies, information was compiled to complete 16 case studies of households in Las Margaritas (eight indigenous and eight mixed-race, with equal proportion of beneficiaries and non-beneficiaries, which satisfies the requirements of the original analytical sample) and 13 case studies of households in San Cristóbal de Las Casas (six indigenous, of which four are beneficiaries and two are non-beneficiaries).

In contrast, it was impossible to find non-beneficiary non-indigenous households in Tumbalá since the mixed-race rural population is practically non-existent and coverage of the Oportunidades Program in rural communities is more extensive (see Table B1 in Appendix B). Maximizing the difference between these two variables in this case followed the following reasoning:

a) Ethnicity. Selected households included those where either all of the members were bilingual or where at least the woman in the beneficiary family and/or her partner were monolingual in Chol.
b) Long-term exposure to Oportunidades. The solution in this case consisted of using the second sample to maximize differences in youth within the same household who were never beneficiaries and those who were former beneficiaries of Oportunidades. That is, even if the household was a long-term beneficiary of the Program, contrasts were sought in the trajectories of the non-beneficiaries and former beneficiaries. Such contrasts would enable consideration of the question of whether Oportunidades contributes to breaking the intergenerational cycle of poverty by helping youths exposed to the Program develop different life patterns than parents, grandparents and siblings not exposed to the Program. This was possible in Tumbalá precisely because two of our primary hypotheses were confirmed. The reproductive cycles of indigenous women are longer than those of non-indigenous women, and these prolonged reproductive trajectories create marked differences between the members of a single household; these inequalities are exacerbated by the incorporation of households into the Oportunidades Program in the relatively advanced stages of their domestic cycle. In addition, first-born children in impoverished rural contexts leave school at a very early age to join the agricultural workforce (albeit a fam-

* La obtención de información en campo se completó con observaciones directas de las jornadas de pago del Programa Oportunidades, de consultas médicas y talleres de autocuidado a la salud y de actividades y clases en el interior de las escuelas. También se presenció una jornada de capacitación a vocales llevada a cabo por los integrantes de la Mesa de Atención a Comités (MAC) en la cabecera municipal de Tumbalá y se entrevistó al personal de *Oportunidades* en los Centros de Atención y Registro: directores, promotores, responsables de capacitación a comités de promoción comunitaria, etc. Todo ello resultaba necesario para los objetivos de examinar las relaciones sociales en los puntos de contacto entre el Programa y los beneficiarios y obtener información sobre la cobertura y operación de *Oportunidades* en las regiones seleccionadas para el estudio.

ily parcel or as day-workers), whereas last-born children can benefit from the monetary or work contributions provided by their older siblings in order to attain more advanced educational levels.[13]

Based on these strategies, information was compiled to complete 16 case studies of households in Tumbalá (all indigenous and beneficiaries, twelve bilingual and four monolingual), resulting in a final composition for the Chiapas study sample of 45 households, 31 indigenous and 14 mixed-race.

The fact that coverage of Oportunidades was practically universal in Tumbalá is in itself relevant data that the inhabitants in the municipality see as related to the intense political conflicts and factions experienced in the region during the second half of the 1990s.* According to different actors in the region and in Chiapas, it would have been very problematic under such circumstances to conduct surveys and use a normal selection process to determine which households would be eligible and which would not (safety concerns for Program staff, risk of exacerbating preexisting local divisions in a generally impoverished rural context, etc.). Thus, in 1998, all of the women in households in Alvaro Obregón Loma, Alvaro Obregón Planada and Emiliano Zapata were considered for incorporation into the Program. These circumstances were described in an analytical document on the ethnographic study in Chiapas;5 other significant facts were also presented with respect to coverage of the Program in the regions studied. For example, the few cases of non-beneficiary households found during field research correspond to young couples where one or both partners were often former beneficiaries of Oportunidades. This provided the possibility for contrasting such households with consolidated, long-term beneficiary households in terms of diverse indicators (reproductive practices and health care, maintaining general hygiene in the household, schooling, etc.).

One solution to the special situation presented by Tumbalá would have been to choose another municipality with an ethnically mixed population for the study, although, as was mentioned previously, the difficulty with this option is that most of the indigenous population in Chiapas is concentrated in particular areas in the state where it is difficult to find mixed-race populations. In addition, it was important to choose a region with a particular concentration of monolingual indigenous inhabitants and significant indices of marginalization and social lag.

As mentioned earlier, there were also difficulties encountered in locating non-beneficiary households in Oaxaca. The nearly total coverage of Oportunidades made it very difficult, in some cases impossible, to get a balanced number of households that met the requirements for the analytical sample (see graphic C1 in appendix C).

As was the case in Tumbalá, problems finding non-indigenous households in the municipality of Mazatlán Villa de Flores (in the Sierra Mazateca) were foreseeable, but the decision was made to include it in order to have a scenario in which the study set in Oaxaca was more purely indigenous. This also allows for the possibility of contrasting this microregion with the other two municipalities, San Juan Cotzocón and Santiago Jamiltepec, which are more ethnically differentiated.[6]

In Mazatlán, a total of 12 case studies of households, eight indigenous and four non-indigenous, were conducted. Of the eight indigenous cases, four were Oportunidades beneficiaries and four were non-beneficiaries; all of the non-indigenous were all beneficiaries. Largely due to the high levels of marginalization that characterize the Sierra Mazateca, the Program has made a considerable effort to increase coverage there in order to operate in nearly all of the localities in the municipalities and include most of the households as beneficiaries. To maximize differences in the variable "Exposure to the Oportunidades Program," it was decided to select households that were very recently incorporated into the Program. Half of the households in each category had a first-born child between second and fourth grade in 1998; the other half had a last-born child in that year in those grades.

In the municipality of San Juan Cotzocón, in the Mixe region, information was completed for 12 case studies, eight indigenous (three beneficiaries and five non-beneficiaries) and four non-indigenous (equal proportions of beneficiaries and non-beneficiaries).‡ Finally, the municipality of Santiago Jamiltepec in Costa Chica de Oaxaca

* For an analysis of the causes and significance of such conflicts, see Agudo Sanchíz.[5]

‡ The problem in this case was not the lack of non-indigenous households, but rather that one of the researchers had a health problem that impeded the pace of the work.

constituted the only region in this state that contained balanced information, since it had localities that were clearly indigenous and others that were clearly mixed-race; 18 households were studied, half of which were indigenous (four beneficiaries and five non-beneficiaries) and the other half non-indigenous (four beneficiaries and five non-beneficiaries).

In total, 42 case studies were completed of households in the state of Oaxaca; 25 of these were indigenous and 17 were non-indigenous (see the final composition of the Oaxaca sample and of the other three states in the table B2 in appendix B). Similar to Chiapas, given the difficulty in finding non-indigenous households that were not beneficiaries, differences in the intervening variables were maximized as follows:

a) Ethnicity. In cases where non-indigenous households were not found (that is, households where all of their members were non-indigenous because they did not speak an indigenous language or were not considered indigenous by themselves or others), differences in this variable were maximized according to the reality of the situation: households were included as non-indigenous when the mother was not indigenous, even if she was married to a man who spoke an indigenous language and was considered by himself and others to be indigenous.
b) Long-term exposure to the Oportunidades Program. Maximizing differences in this variable followed the logic indicated above for Sierra Mazateca, where there were virtually no poor households that were not incorporated; when non-beneficiary households were not found after a long and careful search, households that were beneficiaries for a short period of time (a maximum of two or three years before withdrawing from the Program) or were recently incorporated (between November and December, 2007) were selected.

In studies conducted in Chihuahua and Sonora, however, it was simpler to locate the number of domestic groups of each type according to the sample requirements–in part because Oportunidades had less coverage, especially in Sierra Tarahumara. Some specifics are worth mentioning.

In Chihuahua, there were effectively no problems with obtaining equal proportions of indigenous and non-indigenous households who were beneficiaries and non-beneficiaries of Oportunidades. On the other hand, it was harder to find families who were beneficiaries of Oportunidades and had both first-born and last-born children in 1998. The study localities in Chiapas were selected according to the logic used by the analytical sample and were relatively large and mixed in terms of ethnicity and linguistics. When there were problems with finding some sample types, families were found in neighboring ranch complexes, regardless of whether they were indigenous. Nevertheless, it should be taken into account that in the Pima region (which includes the towns of Yepachi in Chihuahua and Maycoba in Sonora) ethnic identity was not measured according to language, but rather according to self-ascription and heredity. That is, many of those who self-identified as Pima in reality no longer spoke the language (they spoke Spanish instead); nevertheless, in their social life, they feel and act Pima––to the extent that, in a few cases, they have expressed rejection and even contempt toward non-indigenous inhabitants in the region. Thus, indigenous families who are monolingual Spanish-speakers appear in the study sample for Chihuahua. In any case, as Table B2 shows, the criteria for ethnic identity in Chihuahua was respected, and several equivalents for indigenous and non-indigenous households were located since no interviewee indicated doubts when choosing an alternative when answering the question related to ethnic ascription.

In Sonora, where the proportion of indigenous and non-indigenous households was more or less balanced, some difficulties similar to those experienced in Chiapas and Oaxaca were presented with respect to the variable "long-term exposure to the Program." Thus, in the Yaqui microregion (in the municipality of Guaymas), eight cases of indigenous households and eight cases of non-indigenous households were studied; there were five beneficiaries and three non-beneficiaries in each group. Nevertheless, of the three non-beneficiary cases in each group, one corresponded, in reality, to a household incorporated into the Program that had not received any scholarships for their children because of a variety of circumstances. In the Mayan microregion (in the municipality of Etchojoa), seven indigenous households were located for the study (four beneficiaries and three non-beneficiaries), and nine non-indigenous were located (five beneficiaries and four non-beneficiaries); however, of the five non-indigenous

beneficiary households in Etchojoa, one had been in the Esquema Diferenciado de Apoyos ((EDA) Differentiated Support Strategies) since 2004, which means that it had only been receiving secondary and high school scholarships since then. Of the four non-beneficiary, non-indigenous households in the same municipality, one was withdrawn in 2004 after having been incorporated into the program in 1998. Finally, nine indigenous households (four beneficiaries and five non-beneficiaries, one of which was withdrawn from the program in 2002 after having been incorporated in 1998) and seven non-indigenous (four beneficiaries and three non-beneficiaries) were located in the microregion of Guarijía (municipality of Álamos); see the table in appendix B2.

In all, a total of 183 case studies were conducted in the four regional studies: 60 indigenous beneficiary households, 44 indigenous non-beneficiaries, 44 non-indigenous beneficiaries and 35 non-indigenous non-beneficiaries. In part, these figures reflect the invaluable aspect of fieldwork; with the combined circumstances of broad coverage of the Oportunidades Program over extensive regions of the southern states (Chiapas and Oaxaca) and the difficulty of finding regions that were truly mixed in terms of ethnicity and linguistics––at least in Chiapas and Oaxaca––the search for more non-indigenous domestic groups would have implied traveling to regions considerably far from indigenous zones; therefore, the problem would have been reversed. Wherever possible and relevant, information for the sample cases (educational trajectories, coverage of educational services, etc.) will be contrasted with data from the municipal, regional, and state level to assure greater validity of the corresponding conclusions.

III. Results

EDUCATIONAL COVERAGE, OFFERINGS AND INFRASTRUCTURE IN THE REGIONS STUDIED

Before describing and analyzing the educational offerings in the microregions where the ethnographic studies were conducted, it is necessary to place those offerings in a broader context–the coverage of educational services––and relate that to the presence of Oportunidades. Thus, we can elaborate more deeply on two implications, or recommendations, that are important to the Program and are mentioned in this document: a) the importance of separating the shared responsibilities in health from those of education to incorporate into the Program those households from localities that have coverage in educational services but not healthcare services; and b) the advisability of considering grant differentials–that include slightly greater amounts than usual–to support students who have to travel to other localities, especially to study at the secondary and high school levels. These considerations correspond to the logic of the human capacities approach and, in particular, to the fundamental principle that different people with contrasting capacities need different types and quantities of support in order to achieve similar levels of wellbeing.

EDUCATIONAL COVERAGE AND COVERAGE OF THE OPORTUNIDADES PROGRAM

The two suppositions necessary to examine here through a comparative analysis of the diverse regions studied are the following:

a) The coverage of educational and health services in the southern states (Oaxaca and Chiapas) is generally broader in microregions where there is an indigenous presence related to the existence of a greater density and greater concentration of towns in those microregions.
b) Nevertheless, the coverage of educational services (especially the presence of elementary schools) is broader than that of health services, especially in microregions in the states of Chihuahua and Sonora, where many communities have a school but not health centers.[4]
c) In light of these suppositions, it is necessary to examine the last hypothesis, which refers to the coverage of the Oportunidades Program itself. In the exploratory diagnostic of education conducted last year by Sylvia Schmelkes

and colleagues, it was suggested that although the differential impact of the Program is due more to disparities in quality among educational systems (indigenous and non-indigenous) than to the Program itself, there are problems with the Program's coverage (i.e., there are children that should have Oportunidades scholarships and do not) that result in lower school attendance, less permanency and greater failure[4] on the part of indigenous children and youth.

The presence of schools in all of the regions studied will be described in greater detail in p. 109, although it is necessary to summarize that information here, especially for the cases of Chiapas and Chihuahua. This is due to the analytical strategy for comparing and contrasting the results obtained in these two states, considered to be especially extreme with regard to the relationship between educational coverage and the coverage of the Oportunidades Program. Nevertheless, information will be included in this section for other states where it is considered pertinent for comparison purposes.

In Chihuahua, in the case of health as well as education, the Oportunidades Program faces limited and poorly diversified offerings of services that also tend to be concentrated–as is the case for other types of infrastructure and public resources–in the municipal capitals or important, mostly mixed-race towns. Maps D5, D6 and D7 (see appendices) offer a general overview of the implications of the Program's coverage, showing how many small localities with indigenous populations are dispersed; they map the coverage of Oportunidades in relation to the distribution of health centers and schools in the specific case of the municipality of Guachochi, in Tarahumara (where a large part of the fieldwork was conducted), as well as its radius of influence (5 kms) from each one of the institutions.

The maps also show that elementary education has greater coverage. Some of its history dates back to the mid-1950s when, after having tried different educational experiments such as schools for promoting education and unitary schools, the Instituto Nacional Indigenista ((INI) National Indigenous Institute) institutionalized the boarding school model, considering it to be the most adaptable to the disperse conditions of indigenous populations in the mountain region. Around 1979, the indigenous educational system was partially recreated through the adoption of bilingual and bicultural education principles, although in practice many of the schools in Tarahumara continue to emphasize Spanish fluency programs for the indigenous population.[8]

Currently, just over 100 boarding facilities operate in Tarahumara, among which different administrations coexist. Indigenous boarding facilities depend on the CDI, although staff is provided by the Dirección General de Educación Indígena ((DGEI) General Division of Indigenous Education); the adjoining schools likewise depend on the DGEI. Thus, elementary education is taught in the adjoining schools while food and housing is provided in the boarding facilities. The students stay in the housing facility Monday through Friday and travel to their hometown only on the weekends. While providing these children with educational offerings, food and housing has its advantages, it also separates them from their households, creating an educational format in which schooling and family environments are split.

In addition to boarding schools, there are also general elementary schools and unitary, or multigrade, schools in Tarahumara.* As can be seen in Figure A of map D7, in spite of the relative abundance of different types of elementary schools, there is a significant number of localities outside the radius of influence of these educational institutions, indicating that not all of the demand is covered. The possibility could therefore be considered that the Oportunidades Program encourages the authorities at CONAFE (National Committee for Fostering Education) to open additional schools, including those that promote education, in small population nucleuses located in more remote areas of Tarahumara.[8] This option is currently offered in the scarcely populated region of Selva Lacandona in eastern Chiapas and has offered important work possibilities for beneficiaries and former beneficiaries of Oportunidades in the adjacent region of Las Margaritas, as we will see in a moment. Nevertheless, it would be useful in

* Schools where one or more teachers teach several elementary grades. This type of school is found in localities with scarce populations, both indigenous and mixed-race (examples include San Isidro in the municipality of San Cristobal and Bello Paisaje in the municipality of Las Margaritas, both in Chiapas).

these and other indigenous regions in northern and southern Mexico to promote the intercultural bilingual version of community courses–that is, the PAEPI or Programa de Apoyo Educativo a Poblaciones Indígenas (Program for the Educational Support of Indigenous Populations).

In the case of secondary education (Figure B, Map D7), the deficiency is notably greater: in an area of 4,350 kms^2 where 45,881 dispersed inhabitants live in 1,134 localities, there are only 18 secondary schools (of which four are in the capital of Guachochi) and 14 tele-secondary schools. As for high school, the lack of schools is even more striking: there are six high schools–one general, another agricultural and the remaining four tele-high schools; three are located in the capital and the other three are in the localities of Norogachi, Samachique and Rancheria Cienega.*

It is important to mention that, given the low educational offerings and reduced number of schools, especially at the secondary and high school levels, for many indigenous and mixed-race youths from the Sierra de Chihuahua studying implies migrating to the few places where there are schools and, at the same time, resolving the problem of housing and food. Unlike indigenous elementary schools, there are very few secondary and high schools with boarding facilities, since state or federal public education at the secondary and high school level has no way to integrate schools with boarding facilities. Thus, the few boarding schools or housing facilities that exist in Tarahumara have been created by foundations and private institutions (such as in Samachique) or, in some cases, are maintained by the Comisión Nacional para el Desarrollo de los Pueblos Indígenas ((CDI) National Commission for the Development of Indigenous Peoples), such as in Yepachi. The fact that access to education is linked to a series of additional costs (transportation, housing and food) speaks to the strategic importance of educational scholarships granted by the Oportunidades Program.

Educational offerings in the diverse places where fieldwork was done in Chihuahua and the other states will be discussed in more detail in the following section. Nevertheless, it is worth presenting a brief overview of these offerings in three places studied in Chihuahua in order to better substantiate the conclusions and recommendations for educational coverage.

In the Pima microregion of Yepachi-Maycoba, there are six elementary schools–three are indigenous (Yepachi, Maycoba and El Kipor), one is multigrade (Piedras Azules) and another two are general schools (in Yepachi and Maycoba). There are also two tele-secondary schools (in Yepachi and Maycoba) and a single tele-high school based in Guachochi. As for boarding schools, there are only two–one for indigenous children in elementary grades in Yepachi and the other (also in Yepachi) for students at the high school level; these are maintained with alimentary support from the CDI. All are state or federal public schools.

A different educational structure that contrasts with the above is found in Samachique, where the indigenous Rarámuri group makes up most of the student body; this situation is not found in the other two microregions in the Chihuahua study. The educational offerings in Samachique consist of two preschools (one indigenous and one mixed-race), an elementary boarding school supported by the CDI, a state secondary school with a private boarding facility built with help from the Fundación del Empresariado Chihuahuense A. C. ((FECHAC) Chihuahua Business Foundation)‡ and a high school that serves as the Centro de Estudios Científicos y Tecnológicos del Estado de Chihuahua ((CECYTECH) Center for Scientific and Technological Studies for the State of Chihuahua). As a majority indigenous locality with a small mixed-race population, the fact that Samachique has institutions at the four educational levels is notable and makes this locality a destination center for students from adjoining localities, and even from other municipalities.

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* This leads to a better understanding of why Norogachi and Samachique were selected for the sample of localities in the Chihuahua study: these localities are among the few in Tarahumara to offer a complete schooling cycle from elementary to high school; the municipal capital of Guachochi was discarded for being an urban population. Thus, Norogachi and Samachique offered possibilities for measuring the impact of Oportunidades where the educational offering is provided.

‡ FECHA is an organization a large number of Chihuahuan business people participate in; it has a significant amount of financing for the purpose of building schools, including boarding schools, in Sierra Tarahumara. Its support strategy requires that a portion of the total construction costs be paid by the beneficiaries. In the case of Samachique, rural landowners used part of their profits from forest exploitation to build the town's boarding school for secondary students.

Finally, in the microregion of Norogachi, the educational offerings of schools and boarding facilities are as follows: Gabriela Mistral general private elementary school belonging to the religious order of the Servants of Jesus and the Poor, Rafael Ramírez federal general elementary school, the federal technical secondary school and the tele-high school, all of which are in the capital. In Cienega de Norogachi, there is a general elementary and a federal secondary school. In Siquirichi, there is an indigenous elementary and a secondary school. In Mesa de Parehuachi, Santa Cruz and Riqueachi, all inhabited mostly by Rarámuri families, there are CONAFE multigrade elementary schools. Creel and Carichi (towns located two and four hours from Norogachi, respectively) were included in the Chihuahua study because a significant group of students from the region graduated from the Gabriela Mistral elementary school in Norogachi and went to those localities to continue their secondary and high school studies. In Carichi, the religious order of the Servants of the Sacred Heart of Jesus and the Poor runs a private secondary school; the same type of high school is found in Creel.

For the purposes of comparing and discussing the conclusions of this study, it is important to summarize here the information on educational coverage obtained in the state of Chiapas. Figures A, B and C in Map D8 offer a general overview of the coverage of Oportunidades in the areas of influence of health centers and elementary schools.* The first notable finding is that the Program has broad coverage (as mentioned earlier) and includes all or nearly all of the localities in the areas of influence for elementary schools; coverage of health care centers is reduced, as is the case in Chihuahua (although it remains broad in Chiapas and is much more extensive in Chihuahua). It is useful here to note that, as seen in the figures mentioned, there are localities that fall outside of the areas of influence of existing health services in places where the Oportunidades Program is present. As indicated in the analytical document for the ethnographic study in Chiapas,[5] it is necessary to take into account the fact that some of these localities are situated on the outskirts of the municipalities charted; the maps show them outside the area of coverage of health services in their own municipalities, but they may fall within health districts belonging to adjacent municipalities. This may be the case for the three localities in Tumbalá where the Program is present but there are no municipal health services: El Cielo (near the southeastern border of Tumbalá and the municipality of Tila), el Paraiso (right on the northern border of the Salto de Agua municipality) and La Esperanza Morrizon (probably covered by health services from the Yajalon municipality, situated in southern Tumbalá). What is important about these circumstances is that they indicate greater possibilities for coverage of services in Chiapas, where there are more highly populated towns and, therefore, greater possibilities for coverage of the Oportunidades Program itself, unlike in Chihuahua. In Chihuahua, we found broad educational coverage in only a few areas that correspond to larger localities and towns, whereas in Chiapas we found elementary schools in almost all of the rural localities, as well as more secondary schools than in Chihuahua.

The table in appendix B3 describes the educational offerings in the three municipalities in the state of Chiapas in greater detail. The abundance of elementary schools in these municipalities is immediately apparent. In Las Margaritas and Tumbalá, the two most indigenous municipalities, there are more bilingual schools than regular schools, whereas in San Cristóbal there are a total of 53 indigenous and 100 non-indigenous elementary schools of all types.

These figures are lower for secondary schools and especially high schools. We found significantly more tele-secondary schools than other types, and a lower number of trade high schools, liberal arts high schools, tele-high schools and technological high schools. The municipality with the least lag, San Cristóbal, has a total of 18 high schools; there are six in Las Margaritas and in Tumbalá (a municipality with a total population of 28,884) there are only three–a trade high school and two tele-high schools.

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* These types of maps were developed for the qualitative evaluation study using cartography that united several databases in order to have orographic information on water, roads, schools and health centers, along with data provided by the II Conteo de Población y Vivienda 2005 (2nd Population and Housing Census 2005) on localities in distinct regions. Information about Oportunidades enrollments for the last two months of 2006 was added to this large database in order to have a clearer idea of the coverage of the Program in these areas. The cartography was done by Manuel Irigoyen Soto (SEMARNAT) and Carlos Manuel Irigoyen Bitar under the supervision of Juan Luis Sariego (Professor and researcher with ENAH-Chihuahua and member of the qualitative evaluation research team). The costs for developing the cartography were covered by resources left over from a research project conducted by CIESEAS-Occidente, under CONEVAL and directed by Mercedes González de la Rocha. Nearly all of the maps in appendix D were created using this cartography.

While there are schools of one type or another in the localities in the Chiapas study, the smaller number of secondary and high schools as compared with elementary schools is an important factor in the prolongation of educational trajectories for beneficiaries of the Oportunidades Program; however, certain correlations should not be assumed automatically. Thus, for example, while San Cristóbal has many high schools within the existing localities, the total number of beneficiaries at that level does not exceed 17–including those in the five localities studied in this municipality, according to Oportunidades registration data. Nevertheless, as we will see in the corresponding section, the presence or absence of schools in the locality itself is what has the most significant influence on the prolongation of educational trajectories.

All of the five localities studied in the microregion of San Cristóbal have an elementary school, and three have a tele-secondary school. Of the five elementary schools identified, three are bilingual (all indigenous locations), one is a unitary, or multigrade, elementary (in a mixed-race locality) and the other is a federal rural elementary school (also in a mixed-race locality).

As for the microregion selected for the Las Margaritas study, we identified two tele-secondary schools and elementary schools in all of the localities. The elementary schools include a regular federal school and a unitary school (both in mixed-race localities), as well as three bilingual elementary schools (all in indigenous localities).

Lastly, in Tumbalá, which had four communities in the study, we found fewer schools. This does not necessarily mean that the educational coverage is less, since the localities are relatively close to each other. Álvaro Obregón Loma does not have any schools, but children from there attend the bilingual elementary schools in neighboring Álvaro Obregón Planada. Planada does not have a secondary school, but students attend the tele-secondary in Emiliano Zapata (where there is also a bilingual elementary school) or, more often, go to schools in the municipal capital. Finally, in the indigenous locality of El Porvenir, there is a preschool run by CONAFE and a bilingual school that is a partial elementary school;* this school only goes up to the third grade and residents consider it to be of poor quality because it has only one teacher. Therefore, parents prefer to send their children to the locality of Joloniel 15 kilometers away to study in the boarding school there, which was the only boarding school found during the fieldwork that provides students with food and housing Monday through Friday. Alternatively, those youths who have families in the municipal capital often go live with them in order to continue their studies. Some parents decide to send their children to study in Cenobio Aguilar, a larger locality in the Salto de Agua municipality that offers more possibilities for schooling. The schools in Cenobio have mixed-race teachers from cities such as Tuxtla Gutiérrez and Villahermosa (Tabasco).

Elementary education coverage in the localities studied in Oaxaca is also broad, since all of these localities have at least one elementary school. In the case of Mazatlán Villa de Flores (the only locality in the Oaxaca study that is a municipal capital), we found three elementary education schools, one of which was bilingual. In most cases, the presence of elementary schools dates back to the 1970s or even, in the case of Nuevo Cerro Mojarra, to the early 1960s. With regard to secondary schools, all of the localities have at least one tele-secondary or technical secondary school. In Mazatlán and Charco Nduayoo, students have the option takeoff taking secondary courses in a technical industrial school (the technical secondary school in Charco Nduayoo opened this year). The existence of secondary schools dates back to at least the 1990s in all cases, and such schools have been an important factor in the prolongation of educational trajectories of the beneficiaries of Oportunidades.[6] The presence of high schools, however, is recent and these schools are scarcer, although they do exist in two of the rural localities studied, El Corral and Jaltepec.

To summarize, we found broad coverage of elementary and secondary schools in Chiapas and Oaxaca, and these schools are present in rural localities to a greater degree than in Chihuahua. Thus, whereas high coverage of Oportunidades was observed in southern states, the 6,894 localities in the 17 municipalities in the Sierra Tarahumara were found to have limited coverage–the Program is present in only one out of three localities (2,198) and 11 of 17

* Incomplete elementary schools presumably no longer exist in general, but do occur when schools are new and in the process of adding grades through promotional work. Incomplete elementary schools presumably no longer exist in general, but do occur when schools are new and in the process of adding grades through promotional work.

municipalities, with coverage as low as 15% in the localities in the Urique municipality.[8] This low level of coverage exists even though 14 of the 17 municipalities in Tarahumara have a degree of social lag ranging from high to very high; six of them are among the 100 municipalities in the country with the greatest social lag–Batopilas, which has the second highest degree of social lag nationally,[9] in particular.

It is now necessary to examine the implications of these differences in Oportunidades coverage for attendance at the available schools. Thus, we need to return to the hypothesis formulated at the beginning of this section: problems in coverage exist (children who should have scholarships do not have them) that result in lower school attendance on the part of indigenous children and youths as well as lower permanence and greater failure.

This hypothesis cannot be affirmed based on the results of the research in Chiapas and Oaxaca. In Oaxaca, we found that indigenous elementary and secondary schools–or those with a majority indigenous school population––have a high percentage of students who are Oportunidades beneficiaries. Thus, in the Mazatlán Villa de Flores boarding school, all of the students (22 in total) have scholarships; Santa Elena bilingual elementary school (Jamiltepec municipality) has 20 students, 15 of whom are beneficiaries. The technical secondary school in the municipal capital of Mazatlán had 262 students enrolled during the 2007-2008 academic year, only 14 of them with Program scholarships;* finally, in the tele-secondary school located in San Simón in the municipality of Mazatlán, all of the 32 enrolled students are Mazatecos and have Oportunidades scholarships. On the other hand, in non-indigenous schools or those in mixed-race population areas, we tend to find fewer beneficiaries among the school population; only 24 of the 84 students in the general elementary school in San Simón have Program scholarships, whereas 67 out of 167 in the elementary school in Charco Nduayoo, a mixed-race locality, have scholarships.

Data on coverage with respect to indigenous students in Chiapas are similarly telling. In the Tzotzil locality in El Aguaje in the San Cristóbal municipality, we found a bilingual elementary school and a tele-secondary school; the latter, which has been in operation since 2004, has 76 students currently, 72 of which are Program beneficiaries. In the indigenous locality of El Escalón in the same municipality, there is a bilingual elementary school where all 148 students–81 of whom are girls–have scholarships. This school was one of the first of its kind to be founded in Chiapas and is 60 years old. In the tele-secondary school in Corazón de María, also a Tzotzil locality in San Cristóbal, there are 31 students in their first year, 25 in their second and 20 in their third year; only two of them are not beneficiaries of Oportunidades. Females constitute 60% of the student body since, as a teacher noted, "...because of the Oportunidades Program...they send the boys to work and the girls to study"; before the Program started, the proportion of students in the secondary schools ranged from 2:1 to 5:1 in favor of the boys. On average, 10 to 12 students drop out of school per year.[14]

As mentioned before, all of the indigenous localities studied in the Tojolabal region in the Chiapas municipality of Las Margaritas have bilingual elementary schools. The bilingual elementary school in Saltillo is complete and has teachers for first to sixth grades. Unlike many elementary schools, this school even has the second and fifth grades divided into two classrooms each, which was possible since there were enough teachers in the school. In fact, at the time the research was conducted, the school principal said they were looking for a second teacher for the sixth grade as well, as there were 39 students: "(This) is a year in which the kids need a lot of attention because the majority are in the secondary grades." All of the members of the teaching staff are native Tojolabal speakers.

The elementary school in Saltillo has a total of 221 students (six of whom are from the neighboring locality of Chacala). Only three do not have Program scholarships, although two have scholarships from the Secretary of Public Education (SEP). The school principal stated that the SEP scholarships are granted for good performance, although it was necessary to make sure that "the scholarships were not duplicated"; thus, those who have Oportunidades scholarships cannot also have SEP scholarships. The school also has a School Breakfast Program.

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* Of the 262 students that began the 2007 academic cycle in the Mazatlán technical secondary school, 12 had withdrawn by the end of May 2008; this figure is according to the school principal, who affirmed that these 12 students had Oportunidades scholarships but had to withdraw when moving with their families to other localities for "political reasons." Interview with Paloma Paredes, conducted May 27, 2008.

There is also a technical secondary school with a majority indigenous student body in Saltillo, with a total of 143 students (63 in their first year, 38 in their second year and 42 in their third year); of these, only five have scholarships from the Oportunidades Program. The school handles regular and special SEP scholarships for children of teachers, assuring that scholarships are not "duplicated," as in the case of the bilingual elementary school. The five students who do not have Oportunidades scholarships are children of teachers; even so, according to the school principal, "they are affected because they spend on materials what they would spend on other things which are also necessary." The principal values the Oportunidades Program, saying, "if we didn't have Oportunidades, we would have half (as many) students; it's a very important hook for us, it encourages the students to come." This reflects a local perspective on the prolongation of educational trajectories of the youth thanks to the Program (as well as the presence of educational institutions in the locality), which will be described in detail in the corresponding section.

Finally, in the bilingual elementary school in the Tumbalá locality of Emiliano Zapata–one of the most marginalized regions in the Chiapas sample–there are 253 students, nearly all Oportunidades beneficiaries.

Nevertheless, the hypothesis regarding the smaller number of indigenous students who are Program beneficiaries suggested by Schmelkes and colleagues in light of research on the exploratory diagnostic for education, which included a period of fieldwork in the Sierra Tarahumara during which time 19 schools were visited, was more difficult to falsify with the results obtained in the Chihuahua evaluation. Conditions were worst in indigenous schools in the Pima microregion of Yepachi-Maycoba, in terms of infrastructure and teaching staff as well as number of Oportunidades beneficiaries; the presence of schools does not indicate study programs in accordance with the bilingual and multicultural system (as in other parts of Tarahumara), but rather segregation between Pima and mixed-race children that demonstrates a conflictive interethnic relationship model.[8]

The most extreme case is in the Piedra Azules locality, where the multigrade elementary school has one teacher for 15 indigenous students; none of these students have Oportunidades scholarships. This school also has an extremely precarious infrastructure (one classroom and a small dining room) and the students exhibit very poor educational performance, largely because children are often absent due to working with their parents in farming, which can require traveling to ranches far from town. Likewise, there are 50 Pima students from different ranch complexes in the zone at the 37-year-old Yepachi boarding school; none have Oportunidades scholarships. A similar situation exists in the Maycoba indigenous elementary school, where only 20 of 96 students (40 Pima and 56 mixed-race) have support from Oportunidades. All of these schools have a limited teaching staff, so teachers must teach several grades, and these schools have the lowest levels of achievement, attainment and efficiency.* They also face problems with absenteeism as a result of children doing domestic and farm work with their parents.

Schools that serve primarily mixed-race students, although they too have deficiencies in infrastructure and quality, are nevertheless better equipped with educational technology and have a larger teaching staff.‡ According to the observations of Sariego and colleagues,[8] a tendency toward segregation of Pima and mixed-race children is observed at the elementary educational level; whereas the former attend schools with precarious infrastructures, a lack of teachers and a poor boarding school system, the latter attend local schools recognized as having greater prestige and social distinction, more financing, and better infrastructure and equipment to support teachers; these latter schools are also not obligated to using the boarding school system. Though the schools themselves are not the cause of such discrimination–which is due to more complex structural causes–they do reproduce that discrimination and, therefore, run the risk of legitimizing it. Partially compensating for these educational inequalities in the Pima region is the existence of a scholarship program (for Chihuahuan students in the region) offered by the Temosachi city government and the government of the state of Sonora (through the Commission for the Support of Indigenous

* The following data may be relevant: in the Enlace 2007 exam, Juan Escutia indigenous elementary school in Yepachi received 489.8 points, whereas the state average for Chihuahua was 512.95 points, and the national average was 508.95.8

‡ Thus, for example, the non-indigenous elementary school in Maycoba has a staff of six teachers (one for each grade) in addition to the principal and is equipped with 15 computers, a television with cable and Internet access. The campus includes a house for the teachers with four rooms occupied by seven teachers, since all teachers are from outside the area. The school population is 125 students, of which 48 have Oportunidades scholarships. In comparison, the indigenous boarding school in the same locality has only four teachers, two administrators and a principal.

Peoples (Comisión de Apoyo a los Pueblos indígenas de Sonora, CAPIS)) to students at different educational levels who do not have the support of Oportunidades.

The situation documented in Samachique in the municipality of Guachochi is somewhat different from that described above, since a significant proportion of the school population at all educational levels has Oportunidades scholarships, contributing to prolonged educational trajectories for students. Even so, few indigenous beneficiaries complete high school; in addition, the possibilities for enrolling in university after finishing high school are scarce due to high enrollment costs, long distances between the locality and higher education centers, need to pay for lodging and, finally, low educational levels among Samachique students. For example, in 2008, most of the students in their sixth semester at the Samachique high school– Centro de Estudios Científicos y Tecnológicos del Estado de Chihuahua ((CECYTECH) State of Chihuahua Center for Scientific and Technological Studies)–took the admissions exam for the Autonomous University of Chihuahua, but only two successfully enrolled.*

The above points out the educational gap that exists between rural and urban education; the rural education is, in addition, majority indigenous in Samachique. Several local teachers who were interviewed indicated that although there is a high degree of failure at the elementary level, teachers pass the failing students so that they do not lose the Oportunidades scholarship. When these children who have fallen behind reach secondary school, they are not at the same level as the others and generally drop out of school before finishing their first year of secondary school. The same occurs with students from multigrade schools in other localities. Additionally, the majority of students do not speak Spanish well, which prevents them from learning at a satisfactory level and leads to school desertion.‡

Likewise, in the microregion in Norogachi, also in the Guachochi municipality, we found greater Program coverage with respect to scholarships for indigenous students (that is, greater coverage in the Pima region of Yepachi-Maycoba, as mentioned previously). Nevertheless, the numbers continue to be low when compared with Oaxaca and Chiapas. Gabriela Mistral private general elementary school, run by religious orders in Norogachi, has 230 students, only eight of which are mixed-race; 71 (30.86%) are Oportunidades beneficiaries. Rafael Ramírez federal general school–the other elementary school in Norogachi–has a school population of 107 students, 49 of which (46%) have Oportunidades scholarships–25 girls and 24 boys. Nevertheless, it is important to clarify that students at Gabriela Mistral school have scholarships from one program or another,§ whereas in Rafael Ramirez, only the Oportunidades Program is present.

The low coverage of Oportunidades in Chihuahua–relative to the coverage in the states in the southern part of the country–is shown by the figures of beneficiaries in the three microregions in the study during the period from 1999-2007: 236 in Pima, 185 in Samachique and 121 in Norogachi. In all, in the 17 municipalities in Tarahumara, 33,801 youths had an Oportunidades scholarship at one time or another during this eight-year period.[8] According to the databases provided by the Oportunidades Program itself, between 2000 and 2008, there were 325,127 youths total in Chihuahua who were beneficiaries, whereas in Chiapas the number of beneficiaries during that same period was 3,882,364; the figures for Oaxaca and Sonora were 3,078,937 beneficiaries and 415,703 beneficiaries, respectively. The total national beneficiaries between 2000 and 2008 was 33,082,110.#

Nevertheless, according to the hypothesis mentioned earlier, not only is coverage of the Program important–differences in coverage are notable between northern and southern states–but attendance and permanence in the

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* This occurred even though students in the Samachique high school took a preparation course for the admissions exam (CENEVAL) as part of a new state program in which public and private institutions participate (CDI, CONAFE, University of New Mexico, Autonomous University of Chihuahua, La Salle and the Interinstitutional Program to Support the Indigenous ((PIAI) Programa Interinstitucional de Apoyo al Indígena), located in the city of Chihuahua), whose objective is to facilitate the inclusion of indigenous students in higher education.

‡ It could therefore be stated that a "sympathy effect" adds to the ability of the Program to not only prolong educational trajectories, but also to postpone school desertion by indigenous students in rural areas until the beginning of secondary school.

§ A good proportion of the indigenous students in Gabriela Mistral have the support of European organizations whose affiliates "adopt" a Rarámuri child by paying for their studies. These funds go directly to financing the school and are administered by religious leaders who use them to pay for the education as well as room and board of the students.

These figures were taken from information about scholarships at the beginning of each academic cycle according to educational level from the Oportunidades Program website (see Oportunidades Program 2008, in the bibliography of the present document).

school on the part of indigenous students are important as well. It is thus worth mentioning that desertion occurs among Program beneficiaries, especially in Chihuahua; close to one-quarter of former beneficiaries from Tarahumara and its three microregions included in the study between 1999 and 2007 abandoned the educational system before finishing elementary school, therefore constituting the least successful group within the Oportunidades Program.[8] It is difficult to pinpoint the profile of these youth; however, according to field data obtained in the Chihuahua study, it is very likely that they are mostly indigenous children who reside in small localities where there are no educational institutions and that they must move to capital towns that have boarding schools.

EDUCATIONAL OFFERINGS AND INFRASTRUCTURE

The results of the qualitative evaluation contain evidence that Oportunidades has contributed to lengthening the educational trajectories of children and youths exposed to the Program in the four regional studies. As explained in the previous section, however, this situation is conditioned by the presence and proximity of schools for the indigenous and non-indigenous populations. In the section corresponding to the trajectories, we will see that the presence of elementary and secondary schools in the localities themselves is an important factor in the prolongation of educational trajectories among males and females, as well as in reducing or delaying educational discrimination against females. Nevertheless, the presence of schools is a necessary but not sufficient factor in school attendance and permanence. Other factors, such as the type of educational institution and its infrastructure, need to be taken into account. A descriptive analysis of these factors is offered next so as to provide a context for understanding the problems related to the study; these problems are described in later sections.

In the microregions studied, the educational services offered–still insufficient in regions such as Tarahumara –decrease in number and age as educational level increases, evidenced by a clearly insufficient educational offering at the secondary and high school levels that is concentrated in the municipal capitals or in localities with more inhabitants.

Thus, it can be said that "the recent creation of schools at higher levels of education (from secondary to higher education) permits us to explain, in part, the generational differences in amount of schooling attained by members of the same domestic nucleus. Students from younger generations have, in effect, greater opportunities for instruction than their parents and even than their older siblings thanks to the presence of educational institutions in their own localities".[6]

Another fundamental point is that while the broad coverage and offerings of elementary schools in the southern states has led to the decline of boarding schools (as well as decreased enrollment, such as in the boarding schools in Joloniel, the Chiapas municipality of Tumbalá and in Mazatlán Villa de Flores, Oaxaca),* the offerings of boarding schools for elementary through high school need to be increased in northern regions such as the Sierra Tarahumara because they constitute "essential bridges that facilitate access to schools by the poorest population",[8] especially since youths need to migrate from rural localities in order to prolong their educational trajectories.

With respect to school infrastructures, in general terms, it can be stated that a large proportion of these schools are in precarious condition (leaky roofs, absence of doors and windows, bathrooms or latrines without water), and lack materials necessary for teaching-learning processes. This is most evident in rural areas, which constitute one of the most important factors in the differential impact of the Oportunidades Program on education. As mentioned earlier, indigenous students usually live in rural areas and therefore use educational institutions where the lag and deficiencies are greater than those of schools in urban and semi-urban areas.

In all of the regions studied, the rural elementary and tele-secondary schools show the greatest limitations in both infrastructure and educational materials; in the case of tele-secondary schools, their performance is affected by problems with electrical systems or televisions. In some cases, where the institutions are in better structural condi-

* The boarding school in the capital of Mazatlán, created in 1970 and currently run by the SEP and CDI, has the capacity for 50 students but enrollment in the last academic cycle barely surpassed 20.

tion and have sufficient materials, the difference is, to a great extent, a result of the initiative and steps taken by teachers, the type of participation by and relationships with parents and community members, and, in some cases, the intervention of private and/or religious institutions, as well as other programs focused on education.

Chiapas

As was mentioned in the previous section, the educational offerings in the localities studied in Chiapas indicate more educational services at the elementary level, particularly with the presence of the general and indigenous/bilingual systems. Except for Álvaro Obregón Loma, all of the localities have at least one elementary school, while secondary level educational offerings are less than half those at the elementary level; there is no high school or higher education, making it essential to move or travel daily to semi-urban and urban areas that have these services (Table 1).

Table 1
Educational supply in the localities studied in Chiapas

CHIAPAS.

MICRO-REGION	LOCALITY	ELEMENTARY LEVEL		SECONDARY LEVEL	
		GENERAL	INDIGENOUS OR BILINGUAL	TELE-SECONDARY	TECHNICAL
San Cristóbal	El Aguaje		1	1	
	Corazón de María		1	1	
	PEDERNAL	1		1	
	El Escalón		1		
	SAN ISIDRO LAS HUERTAS	1			
Las Margaritas	**LA LIBERTAD**	1			
	Saltillo		1		1
	BELLO PAISAJE	1			
	EL ENCANTO	1		1	
	Chacalá		1		
Tumbalá	Emiliano Zapata		1	1	
	Álvaro Obregón Planada		1		
	ÁLVARO OBREGÓN LOMA	--	--	--	--
	EL PORVENIR		1		
Totals	Schooling category	5	8	5	1
	Educational level	13		6	

As for infrastructure conditions, the elementary schools in both systems operate with significant deficiencies, especially in indigenous schools. To illustrate this point, we need only describe the situation in the elementary schools in the indigenous localities of El Escalón (San Cristóbal) and Emiliano Zapata (Tumbalá). The bilingual elementary school in El Escalón is 60 years old, and the current building was last renovated 15 years ago; since then, no maintenance has been performed. Currently, problems are caused by deterioration in some of the roofs. In addition, very little of the furniture and desks are in good condition, and the teachers are not supported by school materials; according to the school principal, there is near-total dependency on the local Education Committee. Emiliano Zapata bilingual elementary school, with 253 students (all Oportunidades beneficiaries, as mentioned before), requires urgent maintenance. Some of the classrooms have deteriorated and even lack windows; the children get wet and cold when it rains. In addition, this school has four multimedia computers, but only two work because the technician responsible for installing the necessary regulator has not yet come to the locality and they do not know for certain when he will.

A certain contrast is seen between these schools and the regular elementary schools in mixed-race localities such as El Encanto (Las Margaritas). The federal regular school in this locality has 189 students, of which only eight are beneficiaries of Oportunidades. The school in the town center has six teachers (one per grade), a physical education teacher and a principal. All have worked there for at least 10 years without interruption, a relevant piece of infor-

mation compared the frequent staff turnover in other rural schools, where teachers ask for transfers to larger, more urban localities or schools closer to their places of origin when possible. The key to the permanence of personnel is that all of the teaching staff in the El Encanto school live in the nearby municipal capital of Las Margaritas.

According to its principal, the school is 40 years old but does not have too many problems with maintenance and infrastructure: "there are schools where you can't work during the rainy season because the roof has leaks." Currently, El Encanto elementary school has an EncycloMedia for the fifth and sixth grades; however, "the fifth grade apparatus" is broken at the moment, which is a problem since the principal recognizes that it is "a good supportive resource," admitting that "right now we are not taking advantage of its full capacity" because of a lack of training. When the morning shift ends at this school, the principal goes to Las Margaritas to teach at a high school in the municipal capital.

The contrast is less marked in the case of unitary or multigrade elementary schools, since both general and indigenous/bilingual schools have significant deficiencies in infrastructure and human resources. The mixed-race locality of San Isidro de las Huertas (San Cristóbal) has only one elementary school of this type; this school has 22 students and one teacher. When the previous teacher retired and there was a delay in getting a replacement, students from this school did not have classes for two weeks; the regulation that requires assigning a substitute teacher while the paperwork for a new permanent teacher is being processed was not followed.

The other non-indigenous elementary school in the unitary system in the Chiapas study is in the locality of Bello Paisaje (Las Margaritas), with only 19 students who attend classes in the same classroom regardless of the grade. The teaching staff consists of a single teacher who is also the principal; students are organized according to level of schooling: "first and second grades together, third and fourth grade…because they have work in common." During fieldwork, confusion was observed in one of the classes taught by this teacher, as well as a lack of seriousness resulting from improvisation and a lack of appropriate methodology for working simultaneously with children of different ages.[5] Nevertheless, these circumstances affect the students in Bello Paisaje less than students in schools of this type in indigenous localities because students in Bello Paisaje are Spanish speakers and are in close proximity to secondary and high schools in the nearby municipal capital of Las Margaritas.*

It was shown that in some cases, the teaching staff seeks administrative support for structural improvements, but the results are usually discouraging. Returning to the case of the bilingual elementary school in Emiliano Zapata, the principal unsuccessfully requested that the SEP incorporate the school into the Quality School Program five years ago; because this involved a competitive selection process, the project presented by the principal was not selected. There was some evidence of what happens when steps taken by the teaching staff come together with the involvement of parents committees and some type of support (such as AGE)‡ to improve the educational facilities. Such is the case in the bilingual elementary school in the indigenous locality of Saltillo (Las Margaritas). This school is a complete elementary school with teachers for first through sixth grades; second and fifth grades are divided into two classrooms each. All of the teaching staff are native Tojolabal speakers and live in the locality, which has led to a close relationship between them and the local people.

The Saltillo bilingual elementary school has 221 students–only three of whom do not have Oportunidades scholarships–and participates in the School Breakfast Program, which was reorganized and improved by the principal when he took charge of the school:

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* Taking advantage of these options is also facilitated by the existence of remunerated activities and other resources available to households in Bello Paisaje, which is the only locality in the Chiapas study with an intermediate degree of marginalization (the other localities have either low or high marginalization).

‡ Some schools have the support of AGE and, according to the information obtained, the money received is used to remodel the buildings or acquire better educational materials. In Chiapas, however, these resources (consisting of between $5,000 and $10,000 pesos) are still insufficient.

"They used to give each student a bag of tuna, sardines, soy, milk….but we realized when we visited the houses they didn't prepare it. After several meetings, where the community put up resistance because they said the women worked in the cornfields and making the food in school robbed them of a lot of time, they voted in favor of a committee of women to organize the mothers to prepare the food in the school. Now, they take advantage of the program 100% and the results are visible in the achievement of the children. Every day, six women prepare the food, and in addition they bring tortillas from their houses. This initiative could not have been achieved in Marabilla Tenejapa or in Tuxtla [where he worked previously as principal and teacher, respectively], but in Saltillo it was possible." (Interview with Guillermo Rodriguez, principal of the Saltillo elementary bilingual school, October 15, 2007. Field journal kept by Daniela Jimenez.)

Of all the secondary schools in the Chiapas study, the tele-secondary in the indigenous locality of Corazón de María (San Cristóbal) has the greatest infrastructure deficiencies. The local education committee asks each student for an enrollment fee of 100 pesos, which is used for building maintenance, repairs, etc. Moreover, the committee members are constantly looking after the care, cleaning and surveillance of the building. Since its founding in 1995, 10,000 pesos were received for paint and materials. Nevertheless, at the time the fieldwork was conducted, only two of the four computers owned by the tele-secondary were functioning. The school has bathrooms, although the water pump does not function; the only ones who use the bathrooms are the teachers (who fill the pump manually). The students use outdoor latrines on school grounds. Besides the three classrooms and the administration office, the school has a library and a projection room that is also used for dances. According to school personnel, a laboratory is also needed.

Chihuahua

The study scenario in Chihuahua (Sierra Tarahumara) is characterized by hilly terrain and a dispersed population where boarding schools compensate, to a certain extent, for a scarcity of elementary schools, but not for the even lower coverage of secondary and high schools. Two other conditions representative of the region are active participation by a variety of private and religious institutions in the educational sector and a tendency toward ethnic segmentation, the latter reinforcing an underlying conflictive interethnic relationship among the local population in Sierra Tarahumara.[8] Nevertheless, there are also cases in which the policies result in positive discrimination, especially in educational institutions run by religious orders in which they seek to offer better conditions for indigenous children, who live in the most severe poverty conditions.

The educational offerings in the three microregions in the Chihuahua study are synthesized in Table 2:

Table 2
Educational supply in the three microregions in Chihuahua

MICRO-REGION	LOCALITY	ELEMENTARY LEVEL		SECONDARY LEVEL				HIGH SCHOOL LEVEL	
		GENERAL	INDIGENOUS OR BILINGUAL	TELE-SECONDARY	TECHNICAL	GENERAL	INDIGENOUS	TECHNOLOGICAL (CECYTECH)	TELE HIGH SCHOOL
Yepachi-Maycoba.	**Yepachi ***	1	1	1					1
	Maycoba	1	1	1					
	Kipor	1							
	Piedras azules	1							
Samachique	Samachique		1**			1***		1	
Norogachi****	**Norogachi**	2	1		1				1
	Ciénega de Norogachi	1			1	1			
	Siquirichi		1				1		

Totales	Educational category	7	5	2	2	2	1	1	2
	Educational level	12		7				3	

* Two boarding schools: one for indigenous children in elementary and one for high school students, supported by CDI food assistance
** Elementary boarding school supported by CDI.
***Has a private boarding school built with support from the Chihuhuan foundation of business owners, Fundación del Empresariado Chihuahuense, A.C. (FECHAC).
****Also includes the localities of Mesa de Paréhuachi, Santa Cruz and Riquéachi, with multigrade elementary schools supported by CONAFE.

The educational deficiencies in these schools are related not only to their precarious infrastructure, but also to the deficient level of teacher training; some of the teachers do not even have a degree from a teaching school. It is in these unitary elementary schools where the accumulation of disadvantages resulting from these problems is most evident. Piedras Azules elementary school (in the Yepachi-Maycoba microregion), mentioned earlier, is an extreme example, with only one teacher for 15 indigenous students (none of whom are Oportunidades beneficiaries). In addition, its building infrastructure is extremely precarious and consists of only a deteriorated classroom and a small dining room.

In effect, the situation observed in the elementary schools in the Pima microregion illustrates the gap that exists between indigenous and non-indigenous education. In Yepachi as well as in Maycoba, there are two elementary schools, one indigenous and one mixed-race, with no differences between educational models; both schools teach classes in Spanish (the majority of Pima children speak only Spanish, and their ethnic identification is defined by self-ascription and heredity).* The indigenous schools are in worse conditions in terms of infrastructure, teaching staff and number of Oportunidades beneficiaries. As mentioned in the previous section, schools attended primarily by mixed-race students, although they also have deficient infrastructure and quality, are better equipped with educational technology and have a larger teaching staff. It was therefore concluded that the school does not, in itself, cause ethnic discrimination, but rather contributes to it through the segregation of Pima and mixed-race children, exposing them to different situations in terms of teacher quality and building infrastructure. That is, the educational system is the cause of discrimination rather than the school itself.

It can be said of the two tele-secondary schools in the region (one in Yepachi and the other in Maycoba) and the only tele-high school (in Yepachi) that this discriminatory tendency diminishes as the students reach higher educational levels; students mix regardless of their ethnicity, and teachers (many from outside the area) are not necessarily part of the interethnic local networks. The educational programs and requirements are the same for indigenous and mixed-race students. In the tele-high school, the decrease in ethnic differences is even more pronounced because there tend to be more indigenous than mixed-race students. In addition, contrary to what occurs in elementary education, some of the mixed-race students in the secondary and tele-high schools who come from localities outside Yepachi have to live in a boarding school in Yepachi, supported by financing from CDI.

In the microregion of Samachique, there are two preschools near each other; one is attended exclusively by Rarámuri children and the other by mixed-race children. Nevertheless, both schools are in good condition thanks to the care given to them by the teaching staff, which is all mixed-race and comes from localities far from Samachique. The separation of children according to ethnicity is justified in terms of the use of distinct methods for indigenous children so that they learn Spanish, according to statements by the teachers.

In Samachique, there is also an elementary school and a boarding school facility, both of which have a long history. The school was founded around 1943 and later began to operate as a boarding school belonging to the Instituto Nacional Indigenista (INI, National Indigenous Institute (today known as CDI)). The school was later transferred

* Nevertheless, the lack of attention given to the linguistic and cultural diversity that characterizes the schools in the region, where no bilingual education exists, is one of the factors that could be contributing to the disappearance of the Pima language.

to the state–as was the case for all schools in the system–and the INI took over only the adjacent boarding facility. The student population is majority indigenous and composed of children from the locality itself and two nearby ranches. There are few students who stay in the boarding facility; those who do are from distant communities, although there are cases in which children from Samichique use the facility to prepare their food but not to sleep.

The school has a significant teaching staff, all of whom are mixed-race and mostly from outside the locality. Classes are taught in Spanish. The elementary school recently received the EncycloMedia program promoted by the federal government. The response of the students has been very good, according to several teachers. Nevertheless, the Internet system's poor reception and the constant electrical outages prevent this tool from being fully utilized. The curriculum contents are the same used by other educational institutions in the state. According to the principal of the elementary school, "we try to teach the children to write, speak Spanish, as well as add; tools that will help them later when they look for work".[8]

The secondary school in Samachique is one of the few in the study area that does not belong to the tele-secondary model. Its students are mostly indigenous, and a large proportion are from adjacent ranches. The school was founded in 1998, and its success is due in large part to a well-equipped, private boarding facility that provides housing and food for free to males and females from distant localities. Classes are taught by mixed-race teachers from outside the area.

Finally, the high school in Samachique, which is currently a Center for Scientific and Technological Studies, was created less than a year ago (before it operated as a tele-high school). As in the other levels in the study, the student population is made up of mostly indigenous youths and some mixed-race, who used to prefer to travel to Guachochi or Creel to study at the general high school. The classes are also taught in Spanish and the curriculum is general; it does not use any material from the guidelines for intercultural education.

Next, it is pertinent to compare Gabriela Mistral private general school, managed by a religious order, with Rafael Ramirez federal elementary; these are the two elementary schools located in Norogachi. The private school facilities are in better condition due to private financing, although none of the teachers have education at the university level. On the other hand, the infrastructure at the Rafael Ramirez school is visibly inferior; all of the roofs in the classrooms are severely damaged by leaks, the windows are broken and the floor is cement. However, the teachers have professional training in education. What is really important, though, is that such preparation does not translate into better services for the students; in addition, staff turnover is constant and only three of the teachers have remained in the school for more than one academic cycle.

The study area centered in Norogachi consists of nine localities and has another two elementary schools in addition to those already mentioned, as well as four secondary and one tele-secondary school. All of the schools have roughly equal proportions of indigenous and mixed-race students. In the tele-high school, for example, 72 students were enrolled during the 2007-2008 academic cycle; 35 were mixed-race and 39 were indigenous. This is a phenomenon similar to what has been observed in other regions,: the distances tend to be shortened and interethnic separation lessened. For indigenous students from the region, however, passing from elementary to secondary and high school depends on securing housing in boarding schools, which is scarce, at the secondary and high school levels. Actually, the only possibility that exists is a CDI boarding facility in Norogachi, intended mainly for Rarámuri students in secondary education, although exceptions are made for students taking classes at the tele-high school.*

Oaxaca

General and indigenous or bilingual elementary schools were found in all three microregions studied in this state. All of the secondary education consists of general schools, since there are no bilingual secondary schools. The high schools, which are located in El Corral (in the municipality of Mazatlán Villa de Flores) and Jaltepec (in San

* The 15 children who live there are from the localities of Tuchéachi, Nawéachi, Sarabéachi and Tegómachi; this figure includes 11 boys and four girls, all Rarámuri. Three of these students are in high school (two boys and one girl)

Juan Cotzocón), are Bachilleratos Integrales Comunitarios (Comprehensive Community High Schools), which are intercultural (part of the Colegio Superior de Educación Integral Intercultural de Oaxaca (Oaxaca Comprehensive Intercultural High School Education)) and teach the indigenous language, at least in theory.

In all of the schools, there is a majority of indigenous students. Nevertheless, the proportion of students according to ethnicity depends on the make-up of each locality; thus, in the microregion of Cañada Mazateca, most of the students are indigenous. The proportion of indigenous students is less in the Mixe region and is even smaller in the coastal region.

Table 3 synthesizes the educational offerings found in the localities studied in Oaxaca. The elementary level is found in all of the localities studied, whereas the number of secondary offerings is roughly half that of those at the elementary level (six secondary schools); only the two high schools mentioned previously were found. Jaltepec is in the municipality of San Juan Cotzocón, in the Lower Mixe Region; this locality is exceptional for having a school for each level of study, from preschool to the college. The latter is represented by the Centro de Estudios Ayuuk ((CEA) Ayuuk Center for Studies)–the Intercultural Indigenous University of the Mixe region.*

Table 3
Educational supply found in the localities studied in Oaxaca

OAXACA							
MICRO-REGION	LOCALITY	ELEMENTARY LEVEL		SECONDARY LEVEL		HIGH SCHOOL	HIGHER EDUCATION
		GENERAL	INDIGENOUS OR BILINGUAL	TELE-SECONDARY	TECHNICAL	COMPREHENSIVE COMMUNITY HIGH SCHOOL	UNIVERSITY (INDIGENOUS)
Cañada Mazateca Mazatlán Villa de Flores	Mazatlán Villa de Flores	2			1		
	Piedra Ancha		1				
	El Corral	1				1	
	El Progreso		1				
	Almolonga	1					
	San Simón	1		1			
Lower Mixe	Jaltepec		1	1		1	1

It is significant that the infrastructures of the elementary schools in the three microregions in Oaxaca are in similar condition in spite of differences in geographic location. Although some elementary schools have AGE (Apoyo a la Gestión Escolar (Administrative Support for Schools)) and therefore receive between $5,000 and $7,000 pesos per academic cycle, this amount is insufficient and represents practically the only support these schools receive. The elementary schools are much older in comparison to both the secondary schools and the few high schools that exist and, in most cases, the buildings have not been substantially renovated since their creation in the 1960s and 1970s. The buildings have deteriorated and there are not enough resources to properly maintain them; they lack doors, windows, furniture and adequate recreation space. None of the buildings have a library, and collaboration by parents is more and more difficult to obtain with regard to this and other issues.

In four of the seven elementary schools located in the microregion of Mazatlán Villa de Flores, the schools have not only deteriorated, but are also poorly utilized. Political polarization in the municipality has resulted in confrontations at the very heart of the populations, causing students in small localities to leave elementary schools located in more concentrated populations (that have higher quality educational offerings, according to the principals) to

* Another option for higher education of this type is the Intercultural University of Chiapas (UNICH per abbreviation in Spanish) in the municipality of San Cristóbal de las Casas. Nevertheless, in the Chiapas study, there were no students from the UNICH found among the youths in the analytical sample; those indigenous youths who attend higher education in Chiapas often do so at the Autonomous University of Chiapas (UNACH per abbreviation in Spanish), located in the municipal capital of San Cristóbal. By bringing together non-indigenous and indigenous students from diverse parts of the state, it could be argued that UNACH is at least multicultural, if not intercultural.

attend rural elementary schools in their communities of origin. This phenomenon began in the mid-1990s, similar to how conflicts occurred in the municipality of Tumbalá, Chiapas, and has resulted in a continual decline of schools in concentrated populations. Currently, these schools have more classrooms than they use, but the precariousness of the buildings continue to increase and they will inevitably deteriorate.

The situation in the tele-secondary schools is, to a large extent, similar to that described for the elementary level. In the three microregions studied in Oaxaca, significant deficiencies in infrastructure that affected teaching quality were found, since the educational programs at this level depend to a great extent on audiovisual equipment. There are not enough televisions, and those that exist are old and deteriorated. The schools have few classrooms and lack doors and windows.

With regard to these aspects, differences were found among tele-secondary schools, which are usually located in small municipalities, and secondary schools located in municipal capitals. The latter are technical secondary schools, a distinct category; although they also have serious deficiencies in infrastructure, both parents and students say they prefer these over the tele-secondary schools. Their age in comparison to the tele-secondary schools seems to be a factor in this choice, although most of the households studied (indigenous and non-indigenous, beneficiaries and non-beneficiaries) end up choosing the tele-secondary schools;[6] as is the case in Chiapas, the tele-secondary schools are less expensive for families because they are located in their communities of origin.

The presence of high schools is more recent; therefore, their facilities are less deteriorated compared with those of other educational levels. Even so, the teachers complain of a lack of didactic materials and the need for more classrooms and computer equipment. As is the case for secondary schools, high schools located in municipal capitals were observed to have larger facilities (and larger student populations) than those in smaller localities. The exception in the study set is CECyTE (Colegio de Estudios Científicos y Tecnológicos del Estado de Oaxaca (State of Oaxaca High School for Scientific and Technological Studies)), located in María Lombardo de Caso in the municipality of San Juan Cotzocón. Here we found evidence that the school is continually improving its equipment and it is in better condition than any other school in its category in the region, perhaps, even better than those in the other microregions studied in Oaxaca.

We can conclude that the deficiencies in infrastructure that exist at all educational levels and in all of the microregions studied in this state are the first indicator of the poor quality of educational services there. As in Chiapas and, even more so, in Chihuahua, this serves as a basis for diagnosing the disadvantages and marginalization experienced by students who live in rural areas as opposed to those who live in urban areas–although unlike in Chihuahua, these deficiencies more homogeneously affect indigenous and non-indigenous students. In principle, though, schools located in semi-urban areas (municipal capitals) are seen to be at an advantage over those located in small localities in the municipality, with larger student populations and, therefore, more support from the Secretary of Public Education (SEP).

Sonora

With regard to coverage of educational offerings and infrastructure in the microregions studied in Sonora, intermediate conditions are reported as compared to Chihuahua and Oaxaca-Chiapas. The information obtained reflected deficiencies in indigenous education, where there are a good deal of inconsistencies (three elementary schools in one town, with very few students in each), a lack of resources and a prevalence of external factors affecting educational processes (unions, political officials, etc.).[4] Yet, it is necessary to emphasize the heterogeneity found in the Yaquis, Mayan and Guarijíos groups concerning educational opportunities and conditions, which vary among communities and according to diverse factors.

In the microregions studied in Sonora, elementary schools in all of the localities visited were observed, although not always for indigenous/bilingual education. Rather, indigenous education exists in two of the three microregions studied, the Yaqui and Guarijía regions, whereas in the Mayan microregion it was practically non-existent except at the preschool level.

At the secondary level, the educational offerings in the regions studied in Sonora were less than half that of elementary education, with three tele-secondary schools (two in the Yaqui microregion) and a technical secondary school.* In San Bernardo, in the municipality of Álamos (in the Guarijía region), there is a CECyTES (Sonora scientific and technological high school); this is the only locality in Sonora that offers high school education of those originally selected for the study. Nevertheless, after visiting other regions and localities, more educational options were found. In the Yaqui region (in Vicam), a high school was reported to offer technical majors, and there is another CECyTES in Pótam. There is a high school in the Mayan microregion located very near a CONALEP (in Huatabampo), as well as a technical high school (in Basconcobe and Citavaro).

San Bernardo (with a student community of 390 from preschool to high school) is notable due to the presence of three elementary schools for 219 students: the Cuauhtemoc Federal Elementary School, with a morning session, has 109 students with 59 boys and 50 girls, of which seven are Guarijíos; Plutarco Elias Calles Federal Elementary School, which holds afternoon sessions, has 81 students (42 boys and 39 girls, with six Guarijíos students); and New Creation Federal Rural Elementary School, in nearby Colonia Makurawe, has 16 students (seven boys and nine girls, 11 of whom are Guarijía and five of whom are mixed-race). This situation is similar to that observed in Chihuahua and contributes to the differences between these states and those in the south, where elementary and secondary schools are more uniformly distributed; in Chihuahua and Sonora, on the other hand, a concentration of schools in a few places produces a misconception of excess educational offerings when, in reality, many small localities in rural areas remain without coverage. In the case of Sonora, this became particularly problematic due to the absence of boarding schools that could provide more possibilities for educational migration for children and youths who live in distant regions.

The geographic distribution of the educational offerings in Sonora also has important implications with regard to the availability of jobs for teaching personnel and their work preferences. Indigenous teachers tend to be concentrated outside of their localities of origin; when looking to improve living conditions, many ask for transfers to places where there is no bilingual indigenous education or where such education is not taught in their language. In the Yaqui region, on the other hand, 90% of the teachers in the indigenous system are native speakers of the language; in the Mayan region, the majority of teachers do not speak the language.‡ Many teachers choose to move to localities where their knowledge of the language is not useful, resulting in there being no bilingual teachers for management positions in indigenous regions. This is the situation, at least, in the microregion studied in the Mayan region (La Bocana-Huitzchaca-Citavaro-El Salitral-Los Viejos), in spite of its proximity to a dense indigenous population (Etchojoa). The researchers were told that the preschool center in La Bocana was bilingual, but in reality, only one teacher–who does not speak Yoreme–taught the students a couple of songs in the indigenous language.

The infrastructure in the schools in the regions studied in Sonora is very unequal. The existence of equipment and resources is more evident in the high schools, less evident in the secondary schools and even less evident in the tele-secondary and elementary schools. Some schools in the Mayan region, such as in Pótam and La Bocana, have relatively adequate infrastructures, but in the Yaqui region, a more precarious infrastructure was found under a tree. The obvious reality is that in indigenous regions, resources seem to be fewer and the problem with electricity has significant consequences for the use of computers and educational technology. Other serious problems involve deficient school bathrooms and do not have an adequate supply of water.

In particular, the greatest deficiencies are found in the elementary schools, especially with respect to maintenance and resources. In the La Bocana school, there was a need to replace roofs, wiring, and the doors on all of the classrooms, as well as install good locks and window bars and renovate the bathrooms. For a long time, steps have

* In this section, a table describing the educational offering is not included because the database does not have sufficiently precise data on, for example, the type of system that the schools belong to at the elementary level.

‡ There are not precise data on the location of indigenous teachers in Sonora. In the DGEI, a statistic with respect to this was in process when fieldwork was being conducted, but was not expected to be ready until September 2008 (interview by Armando Haro with DGEI staff in Hermosillo, August 22, 2008).

been taken so that the Federal Electric Commission would install a transformer outside of the schools and thus have sufficient capacity for operating the seven air conditioners (currently unusable) acquired through the Quality Schools Program. in Huirivis (the Guaymas municipality in the Yaqui region), The bilingual elementary school's roofs leak, it does not have a library and it lacks a house for teachers. The latter was reported to be a significant deficiency because the two professors who work at the school do not have anywhere to stay, and it takes a long time to travel to the locality on a daily basis.

To conclude, results of the analysis of educational coverage, offerings and infrastructure are offered next, in light of the hypotheses described at the beginning of section Educational coverage, offerings and infrastructure in the regions studied:

- Coverage of health services and educational services, in particular, is substantially broader in the southern states in Mexico (Chiapas and Oaxaca) than in the northern ones (Sonora and especially Chihuahua), which is, in part, a reflection of higher population density and a greater concentration of towns in the south. In Chihuahua and Sonora, schools at various educational levels are concentrated in a smaller number of towns–even giving the impression of excess educational offerings–thus leaving many rural localities in large regions without coverage. On the other hand, in Oaxaca and Chiapas, the majority of rural localities have an elementary school and are within the radius of influence of secondary schools.
- It is significant that while broad coverage and offerings of elementary schools in southern states have led to a decline in boarding schools (characterized by decreased enrollment that prevents all open positions from being filled), in Sonora and Chihuahua it is necessary to increase the offerings of boarding schools so as to support the prolongation of educational trajectories for those who have to leave their communities and regions of origin in order to study.
- The educational coverage and offerings (especially at the elementary level) may be sufficient in regions studied in southern states, but it is also necessary to address the infrastructure, maintenance and availability of resources in the schools; significant educational gaps between urban and rural areas were found in the four states; these gaps especially affect the indigenous population since that population is usually located specifically in rural areas. The elementary schools, commonly the oldest, are more poorly equipped, maintained and renovated. With regard to tele-secondary schools, because of their characteristics and mission, they depend to a great extent on audiovisual resources and an adequate supply of electricity as well as ventilation and air condition, but these resources are normally deficient or non-existent in rural areas. Thus, the existence and relative abundance of tele-secondary schools in Chiapas and Oaxaca would, in principle, decrease the inequalities between rural and urban areas in terms of educational coverage and offerings, but their deficient infrastructures perpetuate or increase the inequalities with respect to technical secondary schools in urban centers and municipal capitals.

Some of the circumstances mentioned above have a number of significant implications for the coverage and impact of the Oportunidades Program, which are summarized below.

- With a greater number of schools (especially at the elementary level) than health centers, many localities in the northern regions fall within the radius of action of the former but outside that of the latter. This means, especially in Chihuahua, that the criteria for inclusion in the Oportunidades Program could be problematic since both services are required in order for Oportunidades components to operate comprehensively; that is, many indigenous students in rural localities without nearby health centers do not have the support of the Program despite needing it and living near or relatively near elementary schools. This requires a reconsideration of the conditions under which it is possible to grant an Oportunidades scholarship to families that require it and, therefore, consideration of the possibility of separating the actions and shared responsibilities of education and health. That is, in light of the contribution to the prolongation of educational trajectories of indigenous students, the Program could increase its coverage to all those who need support and can attend a school, at least at the elementary level.

- Even so, the presence of elementary schools and, to a lesser extent, secondary schools, is greater in the southern states than in the north. Since their founding in the 1990s in rural communities in Chiapas and Oaxaca, secondary schools have supported the prolongation of educational trajectories of indigenous Oportunidades beneficiaries. On the other hand, in light of the persistent scarcity of elementary schools in the Tarahumara region and in some regions in the state of Sonora, the possibility could be considered that the Oportunidades Program should encourage the authorities at CONAFE to support the opening of new schools and schools for promoting education in small population nucleuses located in the most remote areas of Tarahumara. Alternatively, in light of the fact that many students have migrated to centers where there are boarding schools or elementary schools (Chihuahua and some localities in the Tumbalá municipality of Chiapas) or have moved to localities that have secondary schools and high schools (Chiapas, Oaxaca), the usefulness of establishing a differentiated system for scholarships could be considered. Given that educational coverage in these regions continues to be incomplete, access to education implies a series of costs (transportation, housing, food) that, if not covered by the schools themselves (that is, boarding facilities), would require an additional scholarship from Oportunidades to compensate those who do not have schools nearby.
- Educational strategies and programs that especially benefit rural schools were found to exist: SEP scholarships, Breakfast School Programs, Apoyo a la Gestión Escolar ((AGE) Administrative Support for Schools) and Quality Schools. In addition, inter-institutional collaborations were identified that included private and public entities at the municipal, state and federal levels focused on diverse factors, such as the provision of scholarships and boarding schools and the capacity-building of students at diverse educational levels, especially in the Tarahumara region. Such strategies are oriented toward decreasing the educational disadvantages experienced by indigenous students in rural areas and can mitigate the problems caused by scarce educational coverage and the lack of Oportunidades educational scholarships.
- With respect to the hypothesis about less coverage (there are indigenous children and youths who should have Oportunidades scholarships but do not, which reduces school attendance), it was not possible to confirm the existence of this problem in Chiapas or Oaxaca. In fact, in the bilingual elementary schools and tele-secondary schools in indigenous localities in southern states, we found that more than 90% (and at times 100%) of the students had Oportunidades scholarships. Furthermore, in elementary and secondary schools, especially in Chiapas, we found a greater number of girls than boys–with percentages of 60% or more. In northern states, on the other hand, the percentage of scholarships is less (between 30 and 47%) and, in the cases of the elementary schools studied in the Pima region of Yepachi-Maycoba, we did not find any students with an Oportunidades scholarship.
- The second part of the hypothesis mentioned above refers to the consequences of attendance caused by less Program coverage, lack of permanence and failures among students without scholarships. However, it was shown that school desertion occurs without distinction and often among students with Oportunidades scholarships. For example, roughly one-fourth of former beneficiaries from Sierra Tarahumara left the educational system before finishing elementary school. This may be due, in part, to problems with educational coverage more than to coverage by the Program itself, since student beneficiaries who leave school are usually those who have to travel from small localities where there are no schools. When such traveling becomes problematic (because of transportation costs or the need for children to work in farming, for example), Program scholarships do not constitute sufficient incentive to stay in school.
- On the other hand, in order to find the causes for less permanence and greater failure among indigenous students, with whom this occurs, it is necessary to pay more attention to additional factors, such as the socio-economic dynamics in rural communities, that affect the schooling of children and youth. Early involvement of children in farming and domestic work and, in many cases, the need to migrate with their families for work or political reasons (in Oaxaca and Chiapas) forces them to interrupt their educational trajectories. In such circumstances, it is not unusual for parents to place a very low value on schooling, especially when considering the difficulties their children face with regard to deficient infrastructure and scarce resources in the schools. In situations that are ethnically and linguistically mixed, or in regions where it is possible to contrast indigenous and non-indigenous

populations, a gap can be seen between rural and urban as well as indigenous and non-indigenous schools; this gap is relatively evident at the elementary level. Especially in certain regions in Chihuahua and Sonora, segregation between indigenous and non-indigenous students in elementary education is observed; the latter attend schools that are not without problems related to infrastructure and resources, but are better recognized locally in terms of prestige and social distinction and have more financing, better infrastructure and support for the teaching staff, without having to provide boarding facilities.

- All of the factors mentioned above, together, have more of an impact than coverage of the Oportunidades Program alone due to negative effects on school attendance and permanence as well as academic achievement.
- Finally, the poor quality of rural and indigenous education added to the "sympathy effect" (not marking absences so the children do not lose their scholarships) to which the system of scholarships provided by Oportunidades indirectly contributes reduces efforts to prolong educational trajectories. As a result, school desertion tends to be postponed until the beginning of secondary education, especially in the case of indigenous children; this has particular consequences for the serious lag that indigenous students carry with them from elementary school, especially in circumstances that are more directly inter-ethnic but not dominated by monolingual Spanish education. Likewise, educational discrimination against female youths is not completely eliminated, but rather is postponed until the end of secondary education (where secondary education exists or there is easy access to secondary schools). The statements made with respect to this last point will be substantiated through analysis of relevant data in the sections that follow.

QUALITY OF EDUCATION. INTERNAL SCHOOL PROCESSES

The results obtained in this section are based on an analysis that took into account the hypotheses below, all of which are based on information contained in the exploratory diagnostic on education:[4]

- The educational reality in which the Oportunidades Program operates is not homogenous, but rather deeply polarized with respect to the quality of education in elementary, secondary and high school, especially between indigenous and non-indigenous schools, but also between regions where there are more indigenous and those where there are less. The differential effects of the Oportunidades Program are due more to said polarization than to a differential impact of the Program itself. The gap between indigenous and non-indigenous schools continues to exist, with or without the presence of Oportunidades.
- The deficient quality of indigenous education (lack of teacher training, inconsistent functioning of classes, hostility and discrimination toward the indigenous) reduces the schools' capacity to attract and keep students. General elementary schools operate better than indigenous schools, and the latter systematically face greater difficulties in achieving student permanence and passing grades.
- The pedagogical practices of teachers are linguistically and culturally removed from the linguistic and cultural realities of indigenous communities. This contributes to the deficient quality of the schools in indigenous environments and to the reduced ability to attract and keep students.
- The absence of teachers and very poor teaching quality reduces possibilities for the Oportunidades Program to have an impact.

We can now begin to analyze information on the quality of education in terms of heterogeneity–between indigenous and non-indigenous as well as within each one of these two "poles." That is, another gap can be superimposed on that stated by our first hypothesis ("the gap between indigenous and non-indigenous schools continues to exist, with or without the presence of Oportunidades"): that which exists between rural and (semi)urban areas, or between small, poorly connected localities and those that are equipped and in the municipal capitals. Control over attendance (of teachers and students) and a minimal level of teaching quality is more common in technical secondary schools and high schools in urban municipal capitals, whereas absenteeism and general poor teaching quality with

a lack of structured lessons are widespread in rural schools (unitary and bilingual elementary and tele-secondary) where supervisors and coordinators in the area of education, with their offices in the cities, "pass by unseen." Thus, a recommendation generated by the SWOT analysis in the present document refers specifically to the need to grant scholarships based on educational performance instead of according to class attendance alone. However, this will not sufficiently solve the problem if teachers are absent and lack interest. As the principal of the tele-secondary school in Pedernal, an ethnically mixed community in the Chiapas municipality of San Cristóbal, observed: "the attitude of the average teacher is to work the hours scheduled, anything outside of that will be very difficult to accomplish and, in addition, in exchange for what? They are not being paid for this. Once the work becomes routine, their commitment goes only so far."

Principals in rural schools usually show more initiative to fulfill certain norms and ensure that their teaching staff fulfills them as a result of collective pressure by community members and students' parents, as well as their own willingness to act according to the expectations derived from their responsibilities (see Bourdieu's "concept of habitus," 1977). In spite of the large distance between the Tumbalá locality of Emiliano Zapata and where the teachers who work in the bilingual elementary school reside, these teachers insist on traveling daily between school and home. This has made many of the inhabitants in Zapata unhappy, since they would like teaching personnel to provide more assistance in the afternoons. The principal of the school, Federico, spends more time in the locality than any other school staff to fulfill his responsibilities, fill out documents and help the local people in other ways. Federico has also asked the teachers in the school to stay in the locality for at least one hour after classes to help parents and students, although few have agreed to do so.

The primary problem caused by teacher apathy is not their refusal to do more than what is stipulated, but rather them not fulfilling even the minimal responsibilities that correspond to their current work hours. For example, in the unitary elementary school in El Salitral in the Mayan microregion of Sonora, the teacher in charge of the school arrives very early almost every workday; however, around 8:30 in the morning she lets the children go visit adjacent houses where they have breakfast and talk with their hosts until 11:30 in the morning. It is already midday by the time the children return to school to review their work. The disinterest and lack of rigor with which teachers manage their classes was also documented in other regions. The teachers in Mazatlán Villa de Flores mentioned that their time in the municipality is only a brief stage in their professional careers, a requirement or "sacrifice" that they submit to in order to "accumulate points" to get better jobs or more work hours (especially in the case of secondary school teachers). In addition, given the political conflict in the microregion, the maximum time stipulated for remaining in one place is two years.

As we shall see later, the lack of fulfilling curriculum plans as well as functions and obligations reduces the possibilities for the Oportunidades Program to have an impact, along with the practice of "passively" preserving scholarships by certifying attendance or not reporting absences. Teacher absenteeism exacerbates these problems. In Chiapas, according to the teachers themselves and the principals of the schools, there are teachers in the most rural and remote localities who teach classes for only two days a week–the rest of the time is spent traveling to and from where they live (their own homes or those of family members with whom they live). A similar situation was reported in Sonora, especially in the Guarijía region of the Álamos municipality (in the localities of Colonia Makurawe and Los Jacales), where the teachers are used to arriving at school midday on Tuesdays and leaving early on Thursdays to go home. In addition, in other places in the Guarijía region (for example, Guajaray), it is common for a group of teachers to leave work together for several days to attend workshops and other activities.

Teacher absenteeism is less common in the schools located in rural areas near municipal capitals (for example, in the mixed-race community of El Encanto, which is very near the Chiapas municipal capital of Las Margaritas); in such cases, teachers travel daily between the locality and the municipal capital where they live without problems. Teacher absenteeism tends to decrease even more in capitals and important population centers where teachers reside and a large proportion of educational offerings are concentrated. Such is the case in Chihuahua and Sonora, although in these circumstances, the educational gap is greater between rural and urban or semi-urban areas, especially in regions with low school coverage.

The results of one particularly detailed study on teacher absenteeism conducted in Oaxaca show very high absenteeism, especially in rural elementary schools and tele-secondary schools. During the three months in the distinct localities studied, a significant number of days without school activities was recorded and were justified in several ways (national civic activities, capacity-building courses for teachers, teacher strikes, state meetings, cultural festivals, protests, massive protest marches, etc.).* During the 14 weeks of fieldwork in the distinct microregions in Oaxaca, at least 12 days were recorded where there were no classes because of union commitments on the part of the teachers. During this same period (between March 8 and June 13, 2008), there were three holidays (May 1, 5 and 15) resulting in 3-day weekends, in addition to Easter break, which began early and ended much later than what is stipulated by the SEP calendar. Together, this adds up to an average of one day a week without class, a conservative calculation since it does not include school days spent organizing dances, sports tournaments and other types of extracurricular activities.

The teachers explain their absences by alluding to participation in union activities outside of their work communities; their presence in the schools is also decreased because of teacher education classes, internal school processes related to administration, illness, domestic issues,‡ and as in the case in Chiapas, traveling to their places of origin during the weekends. The latter occurs more frequently in the municipality of Mazatlán Villa de Flores, since teachers there are from remote towns and stay for only short periods in the microregion. Jamiltepec and San Juan Cotzocón have a lower incidence of absenteeism due to travel time, since teachers usually have family connections there or belong to the communities where they work.

In the presentation of results so far, issues related to educational coverage and offerings, school infrastructure and equipment, and the attitudes of teachers (lack of motivation, absenteeism) have been discussed in terms of their contribution to the educational gap that exists between rural areas (that are mostly but not entirely indigenous) and urban areas. In the particular case of indigenous and non-indigenous elementary schools and curriculum content and quality, inequalities occur in the context of a harmful dynamic in which segregation and homogenization come together. That is, indigenous differences were emphasized and reproduced by confining students to centers designed primarily for them–which, as we have seen, usually have more deficient infrastructure and less human and material resources. On the other hand, there is an insistence on denying such differences by paying little or no attention to cultural and linguistic particularities. A representative case has already been mentioned with two elementary schools–one indigenous and the other mixed-race–in Yepachi and Maycoba, the Pima microregion studied in Chihuahua-Sonora. In this case, there is no difference between educational models, since Spanish is taught in all schools; the only distinction between them is in separating the Pima and mixed-race children.

Nevertheless, it is necessary to remember that most of the Pima children in Yepachi-Maycoba speak Spanish; thus, there is a need to substantiate the statement about the dual dynamic of segregation-homogenization in regions and schools where language plays a role in self-ascription as indigenous and non-indigenous. During the ethnographic study in Chiapas, where monolingual speakers of indigenous languages and partial knowledge of Spanish continue to be obstacles to communication with mixed-race populations for adults and youths alike, homogenization is an incipient educational modification designed to decrease the disadvantages for the students from the time they enter elementary education in bilingual schools. Therefore, for example, unlike the usual method of teaching indigenous children in their own language until third or fourth grade, Spanish and Tzotzil are combined beginning in first grade in the bilingual school in Corazón de María (San Cristóbal), where only four of six teachers are native speakers of Tzotzil,. Combining both languages from the beginning is considered an effective method for enabling students to become fluent in Spanish; these students would otherwise wait until halfway through elementary school to begin

* The databases for ethnographic study in Oaxaca have a particularly large amount of information on this topic for the localities of Santa Elena Comaltepec (Jamiltepec) and Mazatlán Villa de Flores.

‡ These circumstances are more often presented by teachers who have children and have to take care of their needs, whether in the locality itself or elsewhere.

learning Spanish. As explained by a teacher in the mixed-race community of San Isidro las Huertas (also in San Cristóbal):

> "In his personal experience, Professor Gómez has discovered that bilingual curriculum, of which he is a product, is not adapted to the reality of those communities. The basic book focuses on teaching Spanish fluency to children at ages during which it is more difficult for them to learn a new language. When the child begins to write his first letters, he is actually already learning his "dialect" (sic). It is a waste of time to stress it, to the detriment of teaching Spanish at early ages. The professor believes that continuing to apply bilingual education as it is done now will perpetuate the lag that the indigenous speakers have compared to mixed-race [populations]." (Interview with Juan Gómez, staff teacher at the Unitary School 5 de Febrero, in San Isidro de las Huertas, October 2007. Field notes by Karla Milla.)

It could be argued that apart from the effectiveness of improving Spanish fluency in indigenous students, the reality of the gradual disappearance of bilingual education and linguistic diversity exists. The evidence obtained in the other states points in this direction: we have already seen that bilingual education in the Mayan microregion in the Sonora study is practically non-existent and/or limited to the preschool level. At the elementary school in Samachique in the Sierra Tarahumara, formerly a boarding school run by INI, there is a mostly indigenous student population, but all of the teachers are mixed-race and come from other regions, so the classes are taught in Spanish. In addition, in the Yepachi-Maycoba region, few Pima children speak the language, and their concentration in "indigenous schools" is due more to segregation than to the existence of a program of studies in accordance with the bilingual system.

Thus, the evidence obtained in Oaxaca is particularly striking. In many of the bilingual schools in the regions studied, the native language of the students is rarely used in the learning process. The teachers themselves mentioned that the educational programs are designed in a homogenous manner, without taking into account aspects specific to indigenous and rural realities. This official position is blind to the linguistic deficiencies of indigenous students, who, though they speak Spanish to some extent, are faced with a formal system that is alien and incomprehensible to them.

In practice, then, the bilingual schools are not differentiated from the general schools: the programs and books are the same, and the use of the indigenous language in the bilingual schools is limited to learning vocabulary with no context and is not used as an instrument for teaching or in the daily life of the school. One of the objectives of the indigenous schools is to teaching writing in the native language, but that is complicated by the fact that the books use "official" variations of the indigenous language that rarely coincide with the language of the students in the localities studied. In addition, it was observed that many teachers in bilingual schools do not speak the students' language and, when they do, they usually speak with variants of the language that inhibit fluid communication between teacher and student.

In Oaxaca, evidence was also obtained regarding problems caused by the homogenization of academic performance evaluations. Those who design the exams to evaluate student knowledge assume that all of the educational programs are covered, but this is far from reality in the regions studied. Teachers recognized that if students were evaluated using only exams sent by the SEP, the majority of them would be unable to pass the courses year after year. The teachers confess that they use other types of criteria to allow students to advance along their educational trajectories, criteria that are not related to achievement or performance, but rather to discipline and attendance at and participation in sports and cultural activities. In the tele-secondary in Cerro Mojarra (in the Mixe region of San Juan Cotzocón), for example, students are not failed in order to avoid the administrative steps necessary when giving an extra exam.

The above logic also plays a role in the academic lag experienced by some indigenous students in secondary education–which could bring into question the method of homogenizing educational content in elementary school and avoiding the indigenous language from the outset. Secondary education is one of the best places to obtain evidence of the difference in quality between indigenous and non-indigenous elementary education; the disparities in

performance between indigenous and non-indigenous students can be perceived in the tele-secondary schools and even in the comprehensive community high schools, which are found to be at a relative disadvantage with respect to secondary and technical high schools in the municipal capitals and semi-urban and urban localities. Indigenous students attending secondary schools have serious comprehension problems and limitations in reading and writing Spanish (they cannot read or write in their own language either). According to teachers in secondary schools in indigenous regions with mixed-race populations in Chiapas (Las Margaritas, San Cristóbal), non-indigenous students have better comprehension because their parents have more schooling (having completed elementary school) and are more likely to help their children with homework after school. It was also shown in Oaxaca that indigenous students from bilingual schools were at a disadvantage relative to their mixed-race schoolmates who are better prepared for the school culture, primarily because of the language used in formal instruction.

The evidence obtained in Samachique, Chihuahua, indicates that the Oportunidades Program could be involuntarily contributing to this educational lag. Some local teachers admit that, although there is a high degree of failure at the elementary level, the teachers keep passing the children to higher grades so that they do not lose their Oportunidades scholarships. When these children get to secondary school, they are not at the same level as the others, and they generally drop out of school before finishing the first year of secondary. The same occurs for students coming from multigrade schools in other localities. The majority of these youths do not speak Spanish well, which prevents them from learning at a satisfactory level and leads to school desertion.

According to classroom observation, the problems indigenous students have in secondary schools are aggravated by negativity on the part of teachers toward permitting students to use a non-Spanish language among themselves. According to statements from students, this is sometimes accompanied by inflexible attitudes on the part of teachers and even threats of punishment.*

It is also worth mentioning that in some cases, teachers in secondary education use more constructive techniques to work with newly enrolled indigenous students. This was seen in the tele-secondary school in Corazón de María in the Chiapas municipality of San Cristóbal de las Casas. Because of the language barrier, a teacher decided that it was necessary to provide the students with reinforcement in Spanish for at least four months. In addition, when beginning this work, this teacher found that the easiest way to reach the indigenous students was to use some of the students with better Spanish skills to translate some fundamental points to the others. As the teacher admitted, the problem here lies in the fact that the curriculum plans are designed for a city environment and use situations that are not adapted to the reality of the students' environment.

Another possibility is to develop educational models that are more appropriate for secondary education in indigenous regions instead of limiting such models to high education, such as at the Universidad Intercultural de Chiapas Intercultural ((UNICH) University of Chiapas) and the Centro de Estudios Ayuuk ((CEA) Ayuuk Center for Studies) in the Mixe region of Oaxaca. In Chihuahua, the general secondary school in Samachique and the secondary school in Basihuare (a town situated one hour away) are part of a recently developed educational project whose objective is to begin to introduce subject matter with a high degree of cultural relevance, which includes some materials related to the Tarahumara language and culture; thus, strengthening the ties between the students and their communities. Courses in the Rarámuri language have been offered for a year under this new intercultural education system. There is also a course taught by two non-indigenous teachers that encourages students to talk about their language, customs and traditions so that the other students can learn about their culture and share in their way of seeing the world. With this new dynamic, the students are intended to participate in classes more actively and the teacher is meant to become a cultural facilitator. It is difficult to evaluate the results of this new teaching approach

* The ethnographic evidence in Oaxaca also shows, in addition to poor preparation on the part of teachers, that these teachers use violence as a means of control over the students. Both students and their parents mentioned the anti-pedagogical methods used by some teachers but did not express opposition to them since they assume that, on occasion, it is necessary to use force to get students to obey. The teachers, on the other hand, know that such practices are negative, but continue to use them.

because it was introduced recently, as in the case with UNICH and CEA; yet, it is worth pointing out the efforts that teachers make toward a more truly intercultural education that is unlike "indigenous education", which perpetuates the educational lag of students in elementary school by homogenizing lesson contents and trying to get them to become fluent in Spanish from the outset, without using any indigenous language whatsoever. It is also necessary to mention that the Samachique secondary school is the only one in a large portion of the area studied that does not use the tele-secondary model (thus avoiding the problems with this type of school). This represents a new way of teaching and assisting students in the region, a task made more feasible by the role played by a modern boarding facility that is connected with the school.

While intercultural education at the secondary level recorded by fieldwork had been developed recently and was scarce, it is practically non-existent in the regions studied at the high school level, with the possible exception of the Bachilleratos Integrales Comunitarios (Comprehensive Community High School) in Oaxaca. In general, it was found in Tarahumara that discriminatory tendencies against indigenous students tended to decrease as students advanced in their educational trajectory. This is partly because students in high schools mix regardless of their ethnicity (the programs and requirements are the same for everyone) and teachers––many from outside the area––are less affected by, or involved in, local interethnic social networks characterized by mistrust and discrimination. In the municipal capital of San Cristóbal (Chiapas), it was possible to interview principals and teachers in the different high schools ((Colegio de Bachilleres de Chiapas, Escuela de Comercio y Administración, Colegio Nacional de Educación Profesional Técnica, etc.) Chiapas High School, High School for Business and Administration, National High School for Technical Professional Education, etc.), who stated that they did not know very much about the particular circumstances of the indigenous students from rural communities. This was justified based on a professional attitude of non-discrimination and equality, although the teachers recognized that the students performed at a very low level in general. It was also reported that indigenous graduates tended to work in health and educational services as nurse technicians, nurse's aides and bilingual teachers; given that these graduates come from high schools with poor quality education and a lag among indigenous students and those from rural regions that follows them to higher educational levels, the deficient quality of education and health services is perpetuated; this, in turn, is exacerbated by pre-existing deficiencies in infrastructure and services.

In nearly all of the microregions studied, few indigenous students graduating from high schools were reported to be attending university. In the above section, some reasons were mentioned for the case of Samachique in Sierra Tarahumara that explain the continued low number of indigenous students who end up attending higher education: the low educational level of said students constitutes a significant obstacle with regard to entrance exams and the requirements of higher education; other reasons include enrollment costs, distance between community of origin and school and need to spend money on food and housing.

In conclusion, below are a summary of the results that considered the guiding hypothesis about educational quality and internal school processes:

- The Oportunidades Program reduces differences between indigenous and non-indigenous students with respect to attendance and remaining in school, but the gap between schools (as far as infrastructure, teaching quality, teacher absenteeism, etc.) continued regardless of the presence of the Program. The unitary and bilingual rural elementary schools and tele-secondary schools have greater deficiencies than the non-bilingual elementary and technical secondary schools in the capitals and larger population centers. At the same time, the educational lag of indigenous students originating in elementary schools with significant deficiencies and inadequate teaching methods is perpetuated in secondary schools where there are scarce resources and little willingness on the part of teachers to work toward decreasing the disadvantages that the indigenous students have compared to non-indigenous students.
- Lack of fulfilling curriculum plans, functions and obligations in schools–along with "passive" scholarships (based on certification of attendance) or unreported absences–reduces the possibility for Oportunidades to have an impact on generating skills through the prolongation of educational trajectories,

- Curriculum programs are not covered in many elementary schools due to deficiencies in the schools and teaching personnel, as well as the lack of adaptation of official criteria for evaluating academic performance to the realities of students from rural and indigenous localities. Teachers need to identify other evaluation criteria that permit the continuity of students' schooling, criteria not related to achievement and performance, but rather to discipline and presence at and participation in sports and cultural activities.
- Our second hypothesis suggested that the deficient quality of indigenous education reduced the ability of schools to attract and keep students. Nevertheless, it must be concluded that attendance and remaining in school are sustained and assured by a set of practices within the school intended to make continuity and prolongation of educational trajectories possible, even in the context of schools that are extremely fragile.
- Nevertheless, this set of practices at the elementary education level, when not resolving the roots of the problem of low achievement and high educational lag, may simply postpone school desertion until the secondary level. Although there is a high degree of failure at the elementary level, teachers keep passing students on to higher grades so that they do not lose their Oportunidades scholarships. When these students get to secondary school, they are not at the same level of the others and, as is shown by the evidence obtained in Chihuahua, they usually leave school before finishing their first year in secondary school. Most of these youths do not speak Spanish well, which prevents them from learning at a satisfactory level and contributes to school desertion.
- In addition, the permanence of students that are lagging behind in secondary and high schools does not reduce this disadvantage, but rather prolongs and reproduces it, due in part to the poor quality of education that also affects these schools. Graduates from secondary and high schools in rural and indigenous localities tend to emigrate or to work in the scarce educational and health careers offered by the labor market in their regions: nurse technicians and nurse aids, bilingual teachers, etc. The lag that follows graduates from early education levels to the workplace contributes to continued deficiencies in the quality of services offered by educational and health centers–circumstances that are further exacerbated by pre-existing deficiencies in infrastructure and services at these centers. In summary, by supporting school attendance and permanence but not educational quality or achievement, the Oportunidades Program fosters more expectations and hope than actual capacities; abatement of the reproduction of intergeneration poverty, marginalization and social lag need more services and higher quality services.
- Lastly, to return to the structural conditions that cause and perpetuate lag in schooling at the elementary level, we must note the hypothesis suggested regarding linguistic and cultural distance between pedagogical practices in the various schools and the realities of the students. It could be said that no elements exist to falsify this hypothesis, given the scarcity (and also lack of fulfillment) of curriculum programs and the evaluation models used for students in rural and indigenous localities. Nevertheless, the most relevant finding is the dynamic between segregation and homogenization that characterizes elementary schools in the "indigenous" or "bilingual" education system. In reality, it was found that very often what distinguishes an indigenous school from a non-indigenous school is the school population, but in practice both abandon bilingual and bicultural curriculum programs and teach classes in Spanish in the indigenous schools beginning in the first elementary grade. This occurs under the premise of better Spanish fluency and being in accordance with homogenous teaching programs that, nevertheless, do not completely assure the educational continuity that the Oportunidades scholarships seek to create. But the educational and linguistic disadvantages that indigenous students have as they enter secondary schools raise questions about the effectiveness of this method as well as the traditional bilingual method, which also experiences such disadvantages. One possible solution that has begun to be used in higher education schools (Chiapas, Oaxaca) and secondary schools (Chihuahua)–and whose introduction could be pertinent to elementary schools as well–consists of developing an intercultural educational model. It is too soon to evaluate the effectiveness of such a model, but it has the potential to break the cycle of segregation-homogenization that continues to reproduce educational lag in students from indigenous and rural areas by being intercultural (instead of simply bicultural or multicultural). The intercultural model is designed to stimulate communication among distinct ethno-linguistic groups and includes classes taught in indigenous languages that are about those

languages and cultures. Heterogeneity–which is an undeniable reality–should not be a problem to be eradicated, but rather part of the solution; in a culturally, socially and materially unequal society, the formal declaration in favor of equality may end up being significantly oppressive and may in itself reproduce inequalities.*

SCHOOL-COMMUNITY RELATIONS

The information analyzed in this section gathers some of the points mentioned previously to begin to explore the educational impact of Oportunidades in terms of prolongation of educational trajectories in a more detailed manner. According to the hypothesis expressed in the exploratory diagnosis developed by Schmelkes and colleagues, one reason for the differences in educational impact is the importance indigenous communities place on school.[4] This describes how such communities perceive the schools and their relationships with them, which includes various local projects or interests, such as their children learning Spanish–seen as a primary, middle-term benefit of schooling (as found in some indigenous regions during the ethnographic studies). In addition, formal schooling in such communities was seen as dispensable, or at least lower priority given diverse domestic and economic demands.[4] The involvement of children in business, agriculture and domestic tasks continues to be a priority for many parents in rural and indigenous communities. This section must explore precisely how Oportunidades scholarships are involved in this diverse set of factors involving the relationships between communities and schools.

A first objective of this aspect of the analysis is the relationships and communication that exist between school personnel and local Program liaisons (a function performed by female beneficiaries of Oportunidades) as well as the liaisons' contact with Oportunidades personnel and actions and those of the schools. This began to be explored during fieldwork through asking both liaisons and teaching and administrative personnel in schools, "What do you know about the Plataforma de Jóvenes con Oportunidades ((PJO) Oportunidades Youth Program)?"

Many liaisons admitted to not being up-to-date on that component of the Program or having found out by chance; many teachers were certain they had not heard about it. During the study in Chiapas, where a new version of this program was recently developed,‡ it was stated that there is no direct communication between teachers in rural areas and Oportunidades educational liaisons; the news that circulates around the school is limited to receiving, filling out, and delivering forms, which is done through the region's Supervisor of Education.§ There is no relationship with the educational liaison in many rural localities, and principals often did not even know who their liaisons were.

Thus, many teachers and school principals stated that they felt distant, or even "excluded", from the Oportunidades Program because they had not received any information about when meetings were held or the topics that would be discussed in those meetings. In conversations with the researchers, the teachers stated that they should play a more active role that does not limit them to filling out forms (personnel in schools usually show discomfort or dissatisfaction with bureaucratic requirements involved in keeping track of and reporting student attendance).

Nevertheless, the closeness of the relationships and the communication that exists between liaisons and other members of the community depends on several factors that vary from one locality and region to another. One is the persistence of the teacher or principal in the indigenous school as a community promoter, a role that goes beyond that of being a teacher during school hours and consists of inheriting a nearly extinct bilingual and bicultural educational system. As mentioned before, this role is more and more uncommon because of the homogenization

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* See Agudo Sanchíz[15] for one study conducted to explore the question of the role of educational promoters and bilingual teachers in the Chol region of Chiapas.

‡ This new version of the PJO consists of youths receiving direct support for the purposes of having resources to a) facilitate passage from secondary to high school education, and b) facilitate access to higher education. Thus, support is provided in advance in three stages: 1) in the third part of secondary school, 2) in the middle bimester of the last year of high school, and 3) upon finishing high school.

§ The system for controlling school attendance consists of keeping a daily list that is used to make diagrams at the end of each month: these diagrams are, in turn, used to produced an overall statistic of attendance per student.

of educational systems, the disappearance of curriculum programs aimed specifically at indigenous populations and disinterest among teachers in carrying out tasks that go beyond those of formal education during class hours (in addition to teacher absenteeism during school days). Nevertheless, community-school relationships were found in some localities in Chiapas. During fieldwork in the indigenous locality of Saltillo (Las Margaritas), it was possible to observe different expressions of cordiality, trust, and even camaraderie between teaching personnel in the bilingual elementary school, including the principal and members of the community. For such relationships to exist, it was shown to be essential that the teachers be Tojolabales and stay in the locality on a regular basis (the old style of bilingual cultural promoter in terms of previous indigenous politics). The principal is regularly invited to talk about "the importance of education" in community assemblies, moments that, along with teachers from the school, are used to create campaigns for children to continue their studies.

In contrast, the relationships between parents and teaching personnel in the technical secondary school in Saltillo appear to be more limited. The principal, who understands and speaks only Spanish, has been in charge of the school for eight years without having much contact with students' parents. The class schedule is from 7:30 to 2:50, "eight hours organized into 50 minutes modules" and all of the classes are taught in Spanish, according to the principal.

Contrary to that which is described for the Saltillo elementary school in terms of school-community relationships is absenteeism among teachers from outside the community who go to the localities where they work, at most, for only three or four days per week. Nevertheless, there are community initiatives and strategies, such as education committees and local authorities that require teachers to spend at least two or three nights in the communities, aimed at mitigating this problem; to that end, teachers are provided with food and housing. On the other hand, it can be difficult to achieve general consensus in the community about what to do about teacher absenteeism, which complicates the work of the education committees and the presidents of teacher-parent associations:

> "I have the impression that the SEC now follows the parents associations more closely." "How do you relate with the SEC authorities?" "I go when my superiors call for me, and I agree with the supervisor. He gives us a notebook where we are supposed to write down, for example, all of the absences by the teacher during the month." "And do you write them down?" "If I wrote them down, he would have a the notebook would be as full as a cemetery, that's the problem." "Is he absent a lot?" "Uf! It began to be three or four absences a week, until one day I called the teacher, who is Mesquite, on behalf of the reconciliation committee, I said, 'Hey, why don't you come?' And he said because he had a meeting. 'And why don't you notify me like they told me you had to do?' He didn't answer me anymore. They stole my notebook where I wrote down his absences. The wife asked for it and I lent it to her. She told me that the teacher, Jesus, wanted to know how many sheets there were and how many absences he had. The thing is that, later, she said she had sent another woman to give it to me and that woman never gave it back to me, no matter how much I asked for it. "Well, it's bad." "That's how things are done here. The teacher has all of the mothers on his side. It isn't that way for me because I point things out to him. Once, when I saw him drunk, and complained and said to him what kind of an example was he setting, and he answered, 'Do you want a bottle?' "What do they say, that he's a good teacher?" "Yes, they say he is good and that he loves the children a lot, that he takes them out walking, sometimes he takes them as far as Álamos, Navojoa, or around there, to the river, to see places, they play soccer, the women accept him because they say he makes up for the absences by holding classes in the afternoons." (Interview by María del Carmen Bohorques with the president of the Parents Association in Los Jacales, municipality of Álamos (Sonora), May 2008).

Nevertheless, the fact that cordial and trusting relationships between teachers and parents–such as those seen in Saltillo–are more and more rare in certain regions depends on factors and conflicts primarily outside the schools. We have mentioned that in the microregion of Mazatlán Villa de Flores in Oaxaca, the teachers see their time at the school and their work as a necessary sacrifice for two years, a period during which they try to stay out of the political relationships and conflicts that characterize the region. In addition, Federico, the principal of the bilingual elementary school in Emiliano Zapata, in the Chiapa municipality of Tumbalá, said that that he arrived in the locality in 1998, a time that he remembers as very difficult because of the serious political conflicts that divided the locality

and region. Some inhabitants of the locality had been displaced by these conflicts and had to stay as refugees in the Chiapas municipal city of Tumbalá for six months. Under such circumstances, the teachers at the elementary school saw the difficulty in convincing parents to send their children to classes. Even today, resentment exists between residents in Emiliano Zapata and the adjacent communities; this resentment is expressed in the behavior of many of children at the school, who fight among themselves and join rival groups according to the political alliances of their parents. This creates a stressful atmosphere and makes working at the school difficult. Federico has imposed certain rules to avoid these conflicts during class hours, although there is nothing to guarantee that the problems will not continue after school.

Another source of discouragement for Federico is lack of interest on the part of parents. When teachers talk to them about difficulties with their children, parents simply respond that "they are farmers" and that the work in the field is an option for their children; thus, they are content if their children just learn to read and write. Federico has insisted that parents help their children by providing an adequate space in the house for them to do their homework, but positive effects from have not been seen yet.*

The above ethnographic evidence has a series of significant implications for the educational impact of Oportunidades and is related, in turn, to some of the reasons why teachers under-report (or do not report) student absences. This behavior is justified by strong forces, significant among them fear of reprisals and conflict between parents:

> "Parents leave for entire weeks to work in other places, to the coast, or the United States for longer periods. They leave their children in the care of family members and that contributes to absenteeism. The absences are marked down but only to a certain degree since the parents, after all, have to survive however they can and when it's time for the harvest they need all the hands that are available; in this case, the children's. Harvest time is the most critical for school absences but we can't mark down all of the absences because if we did, the parents would come and complain." (Interview with Mateo Gómez, teacher, bilingual elementary school in the Corazón de María region, April 14, 2008. Field journal by Karla Milla.)

In various places, not reporting absences is also justified by teachers' intentions not to hurt the students, which are particularly important when there are political conflicts such as those mentioned above. Those responsible for coordinating Oportunidades in the area of education in the municipal capital of San Cristóbal referred to certain procedures for helping students in cases when they are expelled from their communities. Cases of expulsion have been frequent in Chiapas, and children of families who are expelled can lose their scholarships for not attending school. Nevertheless, in such cases, school principals and those responsible for education in the region have reached an agreement to prevent that from happening. The procedure consists of not reporting the absences of students who are expelled; at the beginning of the next academic cycle, they are enrolled in schools in the new localities where they reside. In turn, those responsible for education in the region do not report these cases to their superior in the state capital of Tuxtla since "the students themselves would be the ones who are most affected;" in the words of one official, "There are no rules or indicators that tell us how to resolve such situations. Each region has their own rules, according to their own nature."

Nevertheless, for many non-indigenous teachers, this rationalization does not completely free them from fear of reprisals by parents of indigenous students whose "mentality" presumably does not allow them to accept or understand being "punished for absences:"

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* The data related to Emiliano Zapata bilingual elementary school and the experiences of its principal have been taken from the field notes of Rosalva Pérez (October 2007 and April 2008) and from an interview conducted by Alenjandro Agudo (April 2008).

"The indigenous have experienced a lot of deception and exploitation and that is why a power struggle develops between them and people of mixed-race who they come in contact with. They call those of us who don't speak their language and don't look like them "caxlanes," a derogatory term. I think that this game shouldn't continue and that what a teacher should do is be available for them. For example, I can't mark children absent during rainy periods because I know that they have to walk 5 kilometers. It's worse when they later miss school for a week because of an illness." (Interview with Claudia Gutiérrez, teacher at the tele-secondary school in the region of Corazón de María, April 2008. Field journal by Karla Milla.)

An alternative perspective–that of the members of indigenous communities where the teacher works–can be illustrated, in part, by the statements of a member of a local education committee:

"About the case of the teacher at the tele-secondary who was expelled from the community, Félix says that it was because of lack of respect for local customs. He didn't want to give more details about the issue, but he gave as an example that the expelled teacher wouldn't help with activities for the Cinco de Mayo celebration. Félix clarifies that his expulsion was not due to issues related to student attendance." (Interview with Félix Díaz, member of the Corazón de María Education Committee, April 2008. Field journal by Karla Milla.)

These problems reflect in a certain way the "invaluable aspect of ethnicity" and the problems that exist with interethnic relations in regions with diverse populations. Nevertheless, what is important is not only that absences are not reported (for the different reasons stated), but also the reasons for the absences and school absenteeism in general. Thus, we must return to the hypothesis and the arguments related to it: the educational impact of Oportunidades depends, in part, on the value attributed to the school by the various rural and indigenous populations where formal instruction can be perceived as less important than the youths contributing to the work and income for the household; this was illustrated in the statements cited earlier from the teacher at the bilingual elementary school in Corazón de María, who adduced that it would be problematic to report absences during the harvest.

These circumstances are found in the results obtained during fieldwork in other states as well. In high schools in Samachique (Chihuahua), absences for work purposes do not necessarily result in youths abandoning their studies indefinitely, in part because the educational authorities have flexibility (as shown in Chiapas with respect to forced displacement of children and youths from their communities of origin) with regard to giving beneficiaries the opportunity to be absent from school for a period of time in order to help their families in farming and domestic work. Therefore, few youths have lost their scholarships due to not attending school.

Nevertheless, in such circumstances it can be argued that the Oportunidades scholarships are what prevent absences from becoming a definitive abandonment of the school. Another very different scenario can come about where no scholarships exist despite the presence of the conditions necessary for them to exist, such as in the precarious elementary schools in the Pima region of Yepachi-Maycoba. Added to the problems faced by these schools and poor teacher performance is that children are often absent because they go with their parents to distant ranches to work on farms. Thus, with the absences of Oportunidades scholarships and given the limited academic performance that students can achieve in such schools, it is difficult to convince parents that it is more advantageous to keep their children in school. Child labor is not optional here, but rather is a necessity for both parents and students.

Similar circumstances were reported in Oaxaca where, although the Oportunidades Program has contributed to reducing student absenteeism, absenteeism has not been completely eradicated. Causes of absenteeism include community celebrations and participation in domestic work and the field and, to a lesser extent, illness. In the Costa Chica region, student attendance was observed to be higher than that in San Juan Cotzocón, where children work in the field with their families during the harvest. The same happens in Mazatlán Villa de Flores, except that here the students work in family parcels or coffee plantations, whereas the children in Cotzocón work as day laborers.

Thus, teachers in the schools in the Oaxaca study were also observed to be permissive or lax with respect to recording student absences–which, in a certain sense, teachers use to compensate for their own absences. Two high

school principals recognized that in some cases of student desertion, attendance continued to be recorded so that the beneficiaries would continue to get Program scholarships and family incomes would not be affected. Evidence of this "sympathy effect" was also found in the Sonora study, especially with respect to indigenous children:

> "Although often when you get the attendance list you could expel children from school who are not meeting the requirements, many times you don't because you see the conditions in which they live, so why hurt someone, although it is little what they give them, it is a lot for them [...] but the mother is part of it too. You talk with the mother, but she doesn't have...she doesn't want to help the teacher. So you can't do much there, you can't change the mother's ideology." (Interview with a teacher at the Baugo Elementary School, Sonora, conducted by Benjamín Alonso Rascón, May 2008.)

In summary, in the home or the fields, child labor is important to domestic income; far from eradicating child labor by increasing educational trajectories, it is combined with increasing trajectories, in light of the dilemma regarding economic-domestic priorities. No doubt Oportunidades has contributed to mitigating the tension between work and education by fostering school attendance, as we will show in the following section; nevertheless, it is important to recognize that the children's participation in farm work is also a means of building capacities in the rural environment, as well as a space in itself for socialization and learning.[6] Thus, our SWOT analysis recommends adapting school hours and calendars to ritual, farming and work schedules in certain regions where school attendance might be affected by the distances children have to travel during inclement weather conditions (for example, in Sierra Tarahumara).

Next, we will present the principal conclusions of this section:

- Evidence suggesting that not reporting absences for Oportunidades beneficiaries could be an extensive practice by rural teachers was found. Teachers justify the practice on the premise of not hurting the students, but in indigenous communities, it is also combined with fear and lack of trust in light of the possible responses and reprisals from parents and local education committees. Need to work (for example, during the harvest) and the difficulty in attending school during rainy and cold seasons are also factors.
- The results of the research tend to reinforce the following hypothesis: one cause for differences in the educational impact of Oportunidades in rural versus non-rural and indigenous versus non-indigenous communities is the importance placed on the school. This hypothesis could be alternatively formulated as: the factors that cause and justify school absenteeism have less weight where Oportunidades scholarships exist, since in such cases absenteeism does not become desertion, but rather is combined with periods of school attendance.
- Evidence of social relationships between teachers and parents was found, as was evidence of community strategies that seek to decrease teacher absenteeism, especially in rural and indigenous communities, and to take advantage of the presence of teachers for activities after school (helping with administrative processes, helping students after class hours, etc.). Nonetheless, such relationships and strategies are not homogeneous nor are they exempt from the differences and tensions found within the heart of the communities themselves.
- A lack of communication between staff in rural schools and the local and regional liaisons for the Oportunidades Program was identified. There is very little or no contact with educational liaisons, and all of the information about the Program available to teaching staff is received indirectly through radio and television or through contacts and bureaucratic processes with regional school supervision centers. Therefore, the experience that teachers have with Oportunidades is normally limited to reporting absences and sending forms to the authorities at supervision centers. The lack of disseminating information among the diverse actors in the educational sector negatively affects knowledge about the Plataforma de Jóvenes (Youth Program) component of Oportunidades, as well as the general objectives of the Program.

DOMESTIC AND EDUCATIONAL TRAJECTORIES OF CHILDREN AND YOUTH

We can deepen the analysis of the results obtained for educational trajectories with the following hypotheses:

- Support by Oportunidades has lengthened the educational trajectories of children and youths who receive scholarships, although the impact is expected to be less for indigenous children and youths and greater for those who are non-indigenous or mixed-race.
- With respect to the relationship between educational coverage and the impact of the Oportunidades Program over the long-term, the presence of a secondary school in the locality itself is an important factor for prolonging educational trajectories for boys and girls and/or reducing educational discrimination against girls–who not only complete elementary school, but also go on to study at the secondary level.[16]
- Prolonged exposure to the Program reduces educational discrimination against girls (both indigenous and non-indigenous) in the majority of cases up to completion of secondary education.[16]
- The position of individuals (children from the marital nucleus and the individual's position in the reproductive-domestic cycle) have implications for: 1) the role that said individuals play in the domestic economy (age at which they begin to work), and 2) the educational trajectories of these subjects. First-born children are generally extremely important economic resources. It is common for first-born children in impoverished rural areas to leave school at a very early age to participate in farm work (in the family parcel or as day laborers). The youngest children, on the other hand, can benefit from monetary contributions or work that older siblings do for the domestic economy such that younger children reach more advanced educational levels.[13]
- The incorporation of a household into the Oportunidades Program in the relatively advanced stages of their domestic cycle (when the first-born has already left school–for reasons explained before–and the last-born is already studying) accentuates the break that exists in the family histories. That is, the socio-demographic tendency mentioned above is accentuated, and notable differences are created between members of a single family; the inequality created by the domestic cycle is exacerbated.
- Households that are consolidated and include aging members with significant health problems (diabetes, hypertension and other chronic-degenerative illnesses) are part of possible scenarios that lead to the participation of children and youths in the household economy (domestic and farm work) –to a greater extent than other household arrangements–and have repercussions for the interruption of the educational trajectories of the children.
- Social networks are an important factor that determines the possibilities for schooling and entrance into the workforce that are available to youths from households incorporated into the Oportunidades Program in 1998 (help from family members and close friends, local possibilities for salaried work or contacts for emigration, presence of schools beyond the elementary level or being near urban centers, etc.).
- The availability of a family's own resources (income from salaried work or money sent home from family members who emigrated, existence of farm land and cattle, etc.) makes it possible to maintain youths in secondary or high school education, especially for non-indigenous households, even after the support given by the Oportunidades Program has been terminated upon withdrawal from the Program.[16]
- Through support in the form of scholarships and, therefore, through lengthening educational trajectories, the Oportunidades Program contributes to former beneficiaries postponing entrance into the workforce, age at first union and age at time of first pregnancy.
- Youths not exposed to Oportunidades tend to replicate the traditional pattern, whereas beneficiaries and former beneficiaries prolong their educational trajectories and delay marriage or establish new domestic units.
- Given scarce local economic options, former Oportunidades beneficiaries seek employment alternatives outside their localities in cities in the central part of the state or other regions in the country.
- In spite of efforts made by the Oportunidades Program, given scarce labor options and very precarious local opportunities, traditional life and labor patterns have not decreased or given way to different ones, but rather have been postponed.[16]

The discussion in this section must begin with one of the above hypotheses: Support from Oportunidades has lengthened the educational trajectories of children and youths who receive scholarships, although the impact is expected to be less for indigenous children and youths and greater for those who are non-indigenous or mixed-race.

This supposition required analysis of generational change, including gender and ethnicity. To this end, databases were developed using information from all of the case studies of beneficiary and non-beneficiary households from the three microregions studied in each of the four states. With the available data and taking into account the imbalance between beneficiaries and non-beneficiaries (there being more of the former than the latter) and between indigenous and non-indigenous (again, there are more of the former than of the latter), former beneficiaries with long-term exposure to the Program and their peers who were never beneficiaries between the ages of 15 and 25 years were chosen as the cohort of the most interest in studying the long-term impact of the Oportunidades Program.

As we shall see next from the intergenerational comparison in all of the regions studied in the four states, notable progress in years of schooling can be seen for children as compared to their parents. In addition, in all cases, such inter-generational differences are more notable in households that are beneficiaries of Oportunidades than in non-beneficiaries.

Next, when introducing the variables gender and ethnicity, we begin to appreciate the significant differences between the northern and southern regions–the latter have broader educational coverage by the Oportunidades Program than the former, as we saw previously. We shall begin by presenting the circumstances mentioned above through two tables (4 and 5) that synthesize the information obtained in Chiapas and Oaxaca:

GENERATIONAL	INDIGENOUS		NON-INDIGENOUS	
STATUS	MALE	FEMALE	MALE	FEMALE
Beneficiary parents	2.4	1.9	2.6	2.8
	(n=22)	(n=22)	(n=8)	(n=8)
Non-beneficiary parents	2	1	3	2.8
	(n=8)	(n=8)	(n=4)	(n=5)
Beneficiary children	8.8	8.9	7	8.4
	(n=18)	(n=16)	(n=4)	(n=7)
Non-beneficiary children	5.6	7.7	7.6	10
	(n=3)	(n=7)	(n=3)	(n=2)

Table 4
Schooling according to status in the Program, generation, gender and ethnicity in the analytical sample for Chiapas

GENERATIONAL	INDIGENOUS		NON-INDIGENOUS	
STATUS	MALE	FEMALE	MALE	FEMALE
Beneficiary parents	4.08	3.83	6.6	5.82
	(n=13)	(n=12)	(n=5)	(n=11)
Non-beneficiary parents	4.92	4.21	7.5	2.00
	(n=12)	(n=14)	(n=4)	(n=6)
Beneficiary children	9.31	10.2	9.23	8.83
	(n=13)	(n=15)	(n=13)	(n=18)
Non-beneficiary children	7.17	7.17	9.57	7.25
	(n=12)	(n=18)	(n=7)	(n=8)

Table 5
Schooling according to status in the Program, generation, gender and ethnicity in the analytical sample for Oaxaca

Based on the above tables, it can be said that the parents' generation –indigenous as well as non-indigenous and beneficiaries as well as non-beneficiaries–shows a gender gap that favors the males (more so in Oaxaca than in Chiapas). On the other hand, when analyzing the children, we see that in Chiapas, the difference for years of schooling as compared to the parents is greater: a) between females than between males (both indigenous and non-indigenous) and b) between indigenous beneficiaries than between non-indigenous beneficiaries. In the case

of children in indigenous households, these differences are also greater between beneficiaries than between non-beneficiaries (Table 6).*

Table 6
Differences in schooling (years) according to status in the Program, generation, gender and ethnicity in the analytical sample for Chiapas

GENERATIONAL STATUS	INDIGENOUS		NON-INDIGENOUS	
	MEN	WOMEN	MEN	WOMEN
Non-beneficiary children minus non-beneficiary parents	3.6	6.7	4.6	7.2
Beneficiary children minus beneficiary parents	6.4	7	4.4	5.6

In the case of Oaxaca, when analyzing the children, both indigenous and mixed-race as well as beneficiaries (including former beneficiaries) and non-beneficiaries, we see that the gender gap favoring the males always exists for children who are mixed-race, beneficiaries and non-beneficiaries. However, it is evident that for non-indigenous beneficiaries, the gap favoring the males is much smaller for beneficiaries. On the other hand, the gender gap disappears for indigenous non-beneficiaries (male and females have the same schooling levels) and is reversed in favor of the females for indigenous children who are beneficiaries, with female indigenous beneficiaries receiving 0.89 years more schooling than male indigenous beneficiaries (Table 7):

Table 7
Differences in schooling (years) according to status in the Program, generation, gender and ethnicity in the analytical sample for Oaxaca

GENERATIONAL STATUS	INDIGENOUS		NON-INDIGENOUS	
	MALE	FEMALE	MALE	FEMALE
Non-beneficiary children minus non-beneficiary parents	2.25	2.96	2.07	5.25
Beneficiary children minus beneficiary parents	5.23	6.82	2.63	3.01

In Oaxaca, although all of the children have more years of schooling than their fathers and mothers (as is the case in Chiapas), the girls in the group of indigenous beneficiaries have nearly seven years more schooling than their mothers. It is also notable that the mixed-race girls who are not beneficiaries also attained higher levels of schooling than their mothers, but the indigenous beneficiaries surpass all other categories.

At this point, it is necessary to express a certain amount of caution with respect to the conclusions that can be derived from these interpretations of the quantitative data. Such caution is especially warranted when the small sample size (n) included in the tables above is considered. Nevertheless, taking into account this caveat, it is possible to state that the results shown above indicated tendencies that, for the cases of Oaxaca and Chiapas, allow questions to be raised about the our hypothesis, which is supported only partially: support from Oportunidades has, in effect, lengthened the educational trajectories of children and youths who receive scholarships, but said impact is greater, not less, in the case of indigenous children. Furthermore, the impact is greater in the case of females than in males. Therefore, the Program has contributed to closing the ethnic and gender gaps with respect to remaining in school.

* A certain anomaly seems to exist here. In the case of non-indigenous males and females, the increase in years of schooling with respect to their parents is greater among non-beneficiaries than among beneficiaries. That is, non-indigenous former beneficiaries have fewer years of schooling than non-indigenous individuals who were never beneficiaries.

Next, applying the same analysis to the samples for the Chihuahua and Sonora studies, we see that although the ethnic and gender gaps have diminished, they have not managed to reverse themselves in favor of indigenous youths or females; that is, these gaps have decreased but not completely disappeared. Let us look at the situation in Chihuahua (Table 8):*

GENERATIONAL	INDIGENOUS		NON-INDIGENOUS	
STATUS	MALES	FEMALES	MALES	FEMALES
Beneficiary parents	6.55	4.00	5.20	6.17
	(n=11)	(n=12)	(n=10)	(n=12)
Non-beneficiary parents	3.92	5.27	6.90	7.00
	(n=12)	(n=11)	(n=8)	(n=7)
Beneficiary children	10.26	9.17	10.82	9.33
	(n=19)	(n=12)	(n=11)	(n=9)
Non-beneficiary children	7.86	7.46	10.00	9.50
	(n=22)	(n=26)	(n=9)	(n=6)

Table 8
Schooling according to status in the Program, generation, gender and ethnicity in the analytical sample for Chihuahua

Children (beneficiaries and non-beneficiaries) attained school levels that were notably higher than their parents, with differences ranging from 2.19 (for children and parents who were indigenous and non-beneficiaries) to 5.62 (for children and parents who were mixed-race and beneficiaries). The data in the table 9 also us to conclude that among Oportunidades beneficiaries, those who are progressing most in terms of years of schools are boys of mixed-race and indigenous families (10.82 and 10.26 years of schooling, respectively), and, to a lesser degree, girls in both types of families (9.33 and 9.17, respectively):

GENERATIONAL	INDIGENOUS		NON-INDIGENOUS	
STATUS	MALES	FEMALES	MALES	FEMALES
Non-beneficiary children minus non-beneficiary parents	3.94	2.19	3.1	2.50
Beneficiary children minus beneficiary parents	3.71	5.17	5.62	3.16

Table 9
Differences in schooling (years) according to status in the Program, generation, gender and ethnicity in the analytical sample for Chihuahua

Therefore, although Oportunidades achieved a significant intergenerational increase in schooling attainment for children and parents in the regions studied in Chihuahua, the Program has not been able to remove the gender gap, although this gap has been reduced by roughly one year of school for both indigenous and mixed-race populations.

A similar situation can be seen for the regions studied in Sonora. In the Yaqui region, greater impact in average schooling was observed for former beneficiary males who have attained higher levels than females (albeit only one year, on average). Thus, in this region, the highest levels of schooling correspond to former beneficiaries who were indigenous males (12.33 years on average, which corresponds to completing high school), followed by mixed-race males who were former beneficiaries (11.42 years); next are females who were mixed-race former beneficiaries (10.5 years of schooling) and, finally, females who were indigenous former beneficiaries (7.28 years). The gender

* The same clarification is made here as in the cases for Oaxaca and Chihuahua: the size (n) shown in the tables is small and thus problematic for drawing conclusions about impact, although interpretation of the quantitative data does indicate tendencies that allow for our hypotheses to be refined or questioned.

gap, combined with the ethnicity gap, continues to exist to a great extent in indigenous and mixed-race populations in Sonora, and the indigenous females continue to be on the lowest rung. The group of non-beneficiaries only slightly surpasses female former beneficiaries who are indigenous; therefore, it can be said that Oportunidades has had a significant impact on increased levels of schooling for indigenous and mixed-race males who finish high school (which is rarely seen in southern states and is even less common in Sierra Tarahumara) and mixed-race females.

Similarly, in the Guarijía microregion of Sonora, former beneficiaries have an average schooling level that surpasses 10 years (10.36), which is equivalent to more than one year of high school, whereas non-beneficiaries had barely finished elementary education, with an average of 6.09 years of schooling. Among former beneficiaries, we also found several youths who finished high school (7 of 22) as well as one graduate from the university and a university student. There are five youths who finished secondary school and four who reached a certain grade; only two former beneficiaries had low levels of schooling (one attended school until fourth grade and another until sixth grade). Among non-beneficiaries, three youths never went to school, four stayed until between first and second grade and another four left school after finishing sixth grade.

We also found that there is an even more notable ethnic gap among former female beneficiaries in the Guarijía region. Whereas mixed-race females who receive support from the Oportunidades Program have a relatively high average level of schooling (10.75 years), indigenous females have an average of only 7.8 years of schooling, which, although low, is higher than that of male and female non-beneficiaries. On the other hand, if the ethnic gap between males in past generations was in favor of mixed-race males, this has slightly reversed itself for youths who are former beneficiaries of the Oportunidades Program such that indigenous students are now more favored: mixed-race males have an average of 11.55 years of schooling, while indigenous former beneficiaries have an average of 11.8 years. However, the gender gap still exists, although it is very small between mixed-race males and females (and more pronounced among the indigenous population).

In summary, unlike the south, gender gaps in the regions studied in the northern states have not totally closed, but have diminished notably; in addition, the ethnic gaps have decreased, although they have not disappeared.

Contrasts between the southern and northern regions can be substantiated by looking specifically at the average schooling level attained by the youths included in the analytical samples. The table in appendix B4 shows that roughly one-quarter of former beneficiaries in Tarahumara and the three microregions in the study in Chihuahua abandoned the educational system before finishing elementary school. As mentioned before, according to data obtained during fieldwork, the profile of this rather unsuccessful group of students could correspond to children who are mostly indigenous and reside in small localities where there are no schools; these students are forced to travel to capital towns that have boarding schools. Early incorporation into farming and domestic work as well as a need to migrate in many cases due to the family's work, forces them to interrupt their educational trajectories.

With regard to schooling attainment by ethnicity on the part of Oportunidades beneficiaries, it can be stated that in Chihuahua and the other regions studied, there is not homogeneity; rather, schooling attainment depends on many variables, among which four stand out: distance to schools, existence of boarding schools, age at which youths and children enter the labor market and quality of educational services offered by the schools. As an example, we have selected the case of former beneficiaries in Maycoba, in the Pima region of Sonora (see graphic C2 in the appendix). Here, indigenous boys abandon elementary school the least and indigenous girls the most; indigenous and mixed-race females successfully complete secondary school most often and mixed-race boys and girls are most likely to complete high school.

The situation of these former beneficiaries can be contrasted with that of former beneficiaries in the three microregions studied in Chiapas; their attained schooling is synthesized in the table B5 in appendix B. These tables indicate the high coverage of the Program among the indigenous and non-indigenous in Chiapas; nevertheless, the relevant data here is the decrease in the gender gap in San Cristóbal as well as Tumbalá, where more females than males complete elementary and secondary school; in Las Margaritas and in Tumbalá (which is nearly all indigenous), more females than males also complete high school.

The table showing schooling attainment for youths in Chiapas also indicates that schooling level increases the later the students begin to receive scholarships. That is, for both females and males, more former beneficiaries completed secondary education than elementary education. This is illustrated by case studies of beneficiary households (especially indigenous households in Las Margaritas and, to a lesser degree, Tumbalá), as well as by the experience of short-term beneficiaries–especially of mixed-race–who experienced a significant prolongation of educational trajectories (up to secondary and high school) even though they began receiving scholarships toward the end of elementary school or the beginning of secondary school and the household was withdrawn when the beneficiary was in secondary school.

Particularly solid data with respect to the above is found in the analysis of educational trajectories in Oaxaca. Graphs C3, C4 and C5 (see appendices) show the average schooling of former and current beneficiaries from Jamiltepec who were incorporated into the Program between 1999 and 2002 and were in third or fourth grade, second or third year of secondary, and first year of high school, respectively. These graphs show surprising results: only 5% of females in 1999 began to receive scholarships when entering the third-fourth elementary grades and later went on to complete high school, and this percentage is less among males; on the other hand, 5% of males and more than 20% of females who began to receive scholarships in 1999 when they were in their second or third year of secondary education at that time completed high school; finally, between 70 and 80% of those incorporated into the Program in 2002 when they were already in their first year of high school graduated.

Results for other microregions studied in Oaxaca provide similar data. In San Juan Cotzocón, only around 10% of those who began to receive Oportunidades scholarships in 2001 when they were in elementary school completed high school; on the other hand, this percentage was 45% for males and, even more significantly, 70% for females who began to receive scholarships in 2002 having already begun high school.

This also suggests another significant circumstance: advantages and opportunities exist that keep children in secondary education in spite of the absence of scholarships. That is, from ethnographic evidence, we observed that support from the Oportunidades Program is added to the advantage of other external resources and options (help and financial support through social networks, including from family who emigrated, salaried work by first-born children, expansion of secondary schools and mandatory education at this level since 1990, etc.) that make the prolongation of educational trajectories possible in the absence of scholarships and, in the case of youths who had already reached a certain level of education before receiving scholarships, as a result of certain household characteristics. This is significant in terms of the differences–and inequalities–created within households with long or relatively long reproductive trajectories, where older children may contribute to the household income and enable younger siblings to prolong their schooling. As a result of these and other circumstances, those who begin later have a greater probability of having already overcome the barriers that lead students in more vulnerable groups to drop out of school.

It is now necessary to examine the above with respect to some of the variables mentioned in the discussion of Maycoba, Sonora. We must consider the existence of elementary schools in the localities and/or the distance between them and the localities. According to the principle of different types of persons needing different types and quantities of support and resources to reach similar levels of well-being–a key principle in the human capacities approach–a recommendation could be made to eliminate scholarships only in those regions and localities where there is direct access to elementary schools or facilities for accessing these schools, and the schools exist in abundance. This recommendation should obviously be implemented with extreme caution, since the problem of exclusion adds to the problem of lack of access; if this is not taken into account, the elimination of scholarships for elementary education in the wrong locations could contribute to increased desertion before completing the cycle. For example, it would be impossible to make the above recommendation in the case of Sierra Tarahumara in Chihuahua; according to data from the analytical sample and on beneficiaries at the municipal level in Chiapas, it would also be impossible to make that recommendation for Tumbalá or San Cristóbal (where there are fewer elementary and secondary schools or access to them is more difficult).* In Las Margaritas, on the other hand, there are a greater number of elementary and

* In Tumbalá and other regions in northern Chiapas, the continuity of some of the boarding schools was shown, but such continuity has deteriorated in other regions where there is a strong elementary school presence in the localities.

secondary schools and, with respect to the households in the samples, there are schools in the localities themselves or in the nearby municipal capital.

We shall return to the above data to discuss another relevant question. According to information obtained in Chihuahua, in the Pima region of Yepachi-Maycoba and in Samachique, fewer girls than boys abandon elementary school before completion, while female indigenous and mixed-race youths are most likely to successfully complete secondary school. Under the same circumstances, it is also expected that a greater proportion of females than males in Oaxaca will be reported to attend higher education. Nevertheless, as we have also seen in Sonora, a significant difference was reported in favor of former beneficiaries who are indigenous males as compared to former beneficiaries who are indigenous females. Thus, whereas in the Yaqui and Guarijía regions the former have an average of 12.33 and 11.8 years of schooling, respectively, the latter barely attain an average of 7.28 of schooling in the Yaqui region and 7.8 years in the Guarijía region–equivalent to a little more than the first year in secondary school.

What are the causes of this persistent difference in spite of the presence of Oportunidades? Even in Chiapas––where an increase in the number of years of schooling for females is observed (corresponding roughly to completing secondary school – nine years of schooling) and with a majority of those in rural schools–we must look at the qualitative data to explore what is happening when female youths finish their secondary education. Do females abandon their studies after finishing secondary school for the same reasons as males who also abandon their studies at that level? Are females relatively free to choose whether or not they continue high school?

These questions allude to another hypothesis: educational discrimination against females has not been completely eliminated, but rather is postponed to the end of secondary education, especially in localities where Program scholarships are combined with the presence or nearness of schools at that level. This hypothesis was derived from preliminary results obtained during the pilot study in Chiapas in 2007, especially when comparing the educational trajectories of girls and women in the beneficiary localities in the microregion of Corazón de María, San Cristóbal. The research conducted that year revealed dissimilar results–for example, a case was recorded in Tumbalá of a non-beneficiary indigenous household whose first-born daughter completed secondary education and continued on to high school, despite not having scholarships from the Program. This was observed in other regions as well. On the other hand, in other indigenous and mixed-race localities, cases were observed in which parents began toward the end of secondary education to refuse to allow their daughters to go to the municipal capital for high school because it was "dangerous" and expensive. Over time, these parents admitted that they had other plans for their younger male children or those who were already studying in high school outside the locality. After finishing secondary education, the tasks waiting at home for female youths include housework, caring for older or ill family members and/or younger siblings and working in the family cornfields. The youths become discouraged in light of this perspective, which fails to take advantage of human capital, and begin to consider alternatives such as emigrating for work (nationally or internationally) or getting married.

Thus, some teachers stated that the third year of secondary school is when they observe the greatest amount of school abandonment, a circumstance that principals or teachers may in certain cases try to remedy by visiting the homes and interviewing the parents to convince them to keep their children, especially girls, in school. Teachers attribute a lack of success in these interviews to the "mentality" of indigenous families, presumably a conflictive one that indicates a lack of understanding; the stigmatization of these families is shown in this case, as well as in cases where health services are provided.

Nevertheless, the results of the fieldwork, along with the analysis of trajectories and average school attainment shown previously, do not permit confirmation of the hypothesis of a persistence in and postponement of educational discrimination against females. In fact, is it difficult to substantiate that said discrimination persists when all of the evidence generated by the four regions studied is considered together; rather, it would be necessary to refine the hypothesis by, for example, by investigating the reasons why it continues to be more difficult for females to move to other localities than for males in the localities where there are no secondary schools.

In addition, it is important to report the cases where, thanks in part to the prolongation of educational trajectories stimulated by the Program, female youths acquire new life aspirations and expectations that lead them to

implement certain strategies to counteract the problems they face. Especially in the municipality of Las Margaritas (the indigenous localities of Saltillo and La Libertad), we observed agreements and alliances between two or more students made for the purposes of convincing their parents that they would not be traveling alone to the municipal capital to attend high school classes.

These strategies reveal autonomy processes among beneficiary youths and former beneficiaries that may even lead to initiative for earning money and getting work in order to support their high school education–which is also, in part, aimed at persuading their parents of the feasibility of their plans. Thus, female students use temporary work as CONAFE interns and instructors to compensate for the termination of educational scholarships from Oportunidades upon finishing high school. These types of options continue to be generated as female youths look for and disseminate information about such possibilities (including the Plataforma de Jóvenes (Youth Program) component of Oportunidades) through networks that include their own younger siblings and friends from other families.

The above relates to the existence of "co-responsible" youth, where former beneficiaries of the Oportunidades Program voluntarily act as educational promoters and replace the role of liaisons as disseminators of information about the educational possibilities and support of the Program (for example, PJO). All of these initiatives constitute opportunities that could be used by the Program to strengthen connections among diverse actors and consolidate and improve the dissemination of information.

Finally, the following supposition remains to be discussed: the inclusion of a household into the Oportunidades Program in relatively advanced stages of the domestic cycle exacerbates the inequality created among its members by this cycle. We have alluded to the differences within beneficiary homes between oldest and youngest children born, in either case, between 1988 and 1990. The situation suggested here is nevertheless distinct: in general, those children born before 1986-1988 have shorter educational trajectories and enter salaried work earlier (often though emigration, though they also help parents with work in the cornfield or get jobs near the locality doing manual work to help support a widowed mother and/or younger siblings).

The educational inequalities exacerbated by long-term exposure to Oportunidades are characteristic of domestic groups with long reproductive trajectories. In general, a significant generational difference is observed with regard to the possibilities for prolonging schooling for youths in households incorporated into the Program between 1998 and 1999. In these cases, it is also possible to distinguish between youths born before and after 1988-1990. Those born after this period began elementary school precisely when the household was incorporated into Oportunidades and, in many cases, finished secondary school and even high school with a scholarship from the Program

Thus, in the case of long reproductive trajectories or a large number of children, it may be possible to accumulate domestic advantages over the short- and medium-term by receiving a larger number of educational scholarships and combining these scholarships over the long-term with income from older children (for paid work or from rural land). In many cases, in households with more than five children, there are at least two or three who are now beginning elementary education and will be beneficiaries of Oportunidades in two or three years, generating expectations for the household related to the possibility of having continued support from the Program

We shall now review some of the results of the research in light of the following hypothesis: the Oportunidades Program has helped to postpone the entrance of former beneficiaries into the workforce through the prolongation of educational trajectories. This supposition required an analysis of trajectories of former beneficiaries and non-beneficiaries based on the analytical sample; this represented the next step after the study of generational change described previously.* Therefore, in the analysis presented here, status in the Program as well as variables for gender, ethnicity and position of youths in the reproductive-domestic cycle of the household of origin should be included.

If we examine the cases of all youths who were attending school between second and fourth grade in 1998-1999, regardless of whether they received Oportunidades scholarships, we see that the hypothesis is confirmed–although in a distinct manner according to the above-mentioned variables.

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* This type of analysis is much more deeply developed in the thematic technical document by Mercedes González de la Rocha, which evaluates the work and occupations of former beneficiary youth.

Shorter educational trajectories are observed, especially for first-born indigenous children who did not have Oportunidades scholarships; both males and females barely finished elementary school. However, emigration for work reasons (to different regions of the country such as Cancún or Playa del Carmen, as well as the United States) is more common among males, whereas females tend to be already married, have one or two children and do various types of domestic work or farming in their new homes or, in some cases, in their parents' homes. Last-born indigenous children who are non-beneficiaries of the Program may not be very different from their older brothers, although we found the completion of at least elementary education and single females living with their parents and helping in a variety of domestic jobs or having emigrated for work reasons (including to the United States). In fact, in Oaxaca, significant results showed that non-beneficiaries remain in their towns for less time than former beneficiaries who postponed their decision to migrate, a decision that could have been stimulated by the prolongation of educational trajectories.

We found a similar situation among non-indigenous and non-beneficiary households; we also found that first-born children completed secondary education, and a greater number of cases of youths were emigrating (to work in Playa del Carmen and Cancún in the case of those from Chiapas), while last-born children were performing work that requires more qualifications (store assistants, nurses aids, etc.).

Last-born children in non-indigenous beneficiary households can be considered to be at the opposite pole from the first-born non-beneficiary indigenous children. Nevertheless, although the former have longer educational trajectories than the latter, we found situations that are mixed (males and females who have only completed elementary school, males who work as manual laborers in construction/day laborers and females working as homemakers). In any event, among last-born former beneficiaries who are not indigenous, we found relatively long educational trajectories that would be very rare in first-born non-beneficiaries (both indigenous and non-indigenous); fewer first-born former beneficiaries who are indigenous continued to study after completing secondary school. However, their youngest brothers, as mentioned before, have a greater likelihood of studying at the high school level.

Next, we have a set of hypotheses that allude to the contrast between the future work of former beneficiaries and non-beneficiaries in terms of local, regional, and international options. Though this is related to that mentioned above, a clearer response to the question regarding the differences between youths who were exposed to the Program and those who were not exposed is needed.

We can approach this question in a counterfactual manner; that is, supposing–as does one hypothesis–that indigenous youths with scarce resources, including those who are former beneficiaries, stay in their localities to work in farming, as do parents and peers who were not exposed to the Program. Nevertheless, this hypothesis cannot be confirmed based on the results in Chiapas judging from the quantity of cases of indigenous youths in the United States and in the state of Quintana Roo. It is possible, however, to observe a difference in gender; it is usually the young women who remain closer to their localities and homes, returning to spend time with their families on weekends and during breaks from jobs in the capital, or staying in the localities on a regular basis to help with housework as well as help their fathers in the cornfields and with taking care of animals. In some regions, these young women even accompany their mothers to sell fruits and vegetables (that they produced) in markets located in the capitals.

In addition, former beneficiaries of Oportunidades face deteriorated or non-existent job markets, working in their localities and regions when they finish their educational trajectories with higher expectations and, we can presume, better individual skills. The results of the secondary analytical sample appear to confirm this. In addition, in the case of those who do not go on to high school education and do not try to attend higher education, farm work in the locality or in the family parcel itself is no longer a preferred option. There are also cases of female former beneficiaries who, whether to finance higher education studies, to become independent and/or to help their paternal family, look for work as domestic employees and assistants in stores and businesses in the municipal capitals. In the majority of these cases, the young women (between 18 and 21 years old) remain single.

Alternating school and work, or doing both simultaneously, was most likely in Chiapas and Chihuahua. This is, in effect, a constant among youths who attend higher education. In the cities where they live, they work as store assistants in different types of commercial and service-oriented establishments and offices, as well as domestic

employees; they may also work in assisting construction workers. In the case of Chihuahua, some even get jobs in the manufacturing industry in the state for a few days per week. Those studying education begin to practice their profession early, before finishing their studies, in exchange for a small salary. There are also those who decide to work for a few years as CONAFE promoters (a relatively new position and common in Chiapas and Chihuahua), thus assuring a scholarship for their future university studies. All take advantage of school vacations to look for some type of work that allows them to save money for school in their place of origin or in the city where they study. In several testimonies, these students confessed that when they find some type of work, they feel tempted to abandon their studies and dedicate themselves to making more money; they all indicate the precariousness of their situations and the difficulties they face in adapting to the codes of urban life.

Another possibility is that the traditional pattern is not broken, but rather simply postponed until later stages. That is, when work alternatives go beyond farm work to include construction, domestic services or emigration to where there are jobs in the service sector, and/or when the conditions do not exist for making the transition between high school and higher education, we find that the traditional life and work pattern is not necessarily decreased but rather is postponed. The few indigenous youths who complete high school education–for example, through the CONAFE option–face significant obstacles that separate the expectations created by prolonged education from the available means for satisfying those expectations. The young who are better prepared and have more advantages and opportunities manage to attend regional higher education centers and universities that may not, however, guarantee the socio-economic mobility expected from the prolongation of educational trajectories.

Nevertheless, there are significant clarifications to be made with respect to the hypothesis mentioned. Perhaps the jobs and work former beneficiaries expect do not differ substantially from those they would have obtained had they not prolonged their educational trajectories. However, both children as well as parents agree that completing secondary education is now more important to get work in new places that require reading, handling numbers, making calculations, etc. Youth often find that one of the requirements for working even in construction or domestic service is having an educational certificate.

Hence, former beneficiary youths tend to find work in the same sectors––constructions, services––but perform jobs that require more skills and offer the possibility of slightly higher salaries. That is, such youths are no longer seen to be confined to work as manual construction workers, but rather become foremen or supervisors of manual workers; they are no longer limited to work as cleaning and kitchen staff in shops, large department stores and restaurants, but rather assist clients, take notes and perform calculations. Again, the latter often happens through emigration, which follows particular patterns already established in the regions of origin of the youth.

The ethnographic evidence obtained also shows how candidates for emigration can simultaneously combine jobs and time spent in their locality of origin with jobs and time spent in their destination locality, or postpone leaving for a few years. This is the case among former beneficiaries whose older siblings are already at their destination locality who choose to emigrate after completing secondary education or some or all of high school. Again, the younger students follow in the footsteps of their older siblings, albeit after completing elementary education and at later ages, between 17 and 23 years old.

We have discussed previously the incidence of more prolonged educational trajectories for former beneficiaries and the possibility of obtaining a slightly better job (through emigration). Nevertheless, it is worth remembering a previous point with respect to the accumulation of resources in diverse and changing domestic scenarios. For example, certain mixed-race localities in Las Margaritas illustrate how certain advantageous factors (including the absence of, or reduction in, ethnic discrimination against non-indigenous populations) combine with certain characteristics of the households themselves to mitigate unfavorable factors resulting from less exposure to Oportunidades (or being withdrawn from the Program). Households exposed to Oportunidades for six years or less are not necessarily more precarious in terms of basic resources such as access to land and other sources of income. For example, households exposed to the Program may have long educational trajectories that are advantageously combined with relatively long reproductive trajectories (households with an average of five children) and income from the work of older children (often through national and international emigration and with contacts and networks that also constitute important resources); in

addition, households that were incorporated into the Program for less than six years have the ability to keep children in secondary school, as well as in high school, after having being withdrawn from the Program.*

With regard to the hypotheses about the postponement of age at first union and first pregnancy as an impact of Oportunidades, it is necessary to mention a couple of important points. The Oportunidades scholarships (and the possibility of support from PJO) contribute to the prolongation of educational trajectories beyond secondary school and open up possibilities for access to higher education and, therefore, for remunerated jobs that require more qualifications; nevertheless, this possible positive impact is reduced for oldest children born between 1986 and 1988. Cases of former female beneficiaries who establish their first union after finishing secondary school and have their first child at the age of 18 or 19 years old continue to be seen, which does not seem to demonstrate, in principle, a substantial difference compared to the previous generation, whose mean age at the time of first pregnancy was very similar. Thus, the real difference stems from the use of contraceptives to limit or spread out the number of births and the need for medical care in clinics and even private health centers (for example, for care and follow-up of pregnancies). The situation of former beneficiaries (and sometimes also in the case of young husbands) has seemed to be affected, at least in this respect.

Similarly, through a preliminary analysis of the study of ages of young women at the time of their first birth in Oaxaca, a significant percentage (37.5%) of daughters who were former beneficiaries were shown to have already had their first child, but the percentage of those who had not was greater (62.5%). Mothers who were former beneficiaries had their first child at an age very similar to the average for their mothers (18.07 years in the case of former beneficiaries and 18.51 years in the case of all mothers in the previous generation). On the other hand, the percentage of non-beneficiary females with and without children was practically identical to that of former beneficiaries (63% of non-beneficiary females have not had children and 37% were already mothers). What is significant is that non-beneficiary females had their first child at an earlier age than their first-born girls (19.7 years of age) and at an earlier age than former beneficiary females. It is also significant that many former beneficiary females are using distinct strategies to continue their studies in spite of having had a child, often with the help of their parents–a situation confirmed in Chihuahua, but not in Chiapas where maternity usually means the definitive interruption of educational trajectories. In other words, age at birth of first child does not indicate that these women are following the pattern set by their mothers. Without doubt, a significant proportion of former beneficiary females, typically those who have had less schooling, are already in traditional unions with farmers, day laborers and other men from their town or neighboring towns. But the large number of women, with or without children, who continue to study suggests that these women will not establish unions that reproduce the intergenerational cycle of poverty.

Thus, the distancing of the traditional pattern tends to happen more often among last-born beneficiaries and former beneficiaries, and, in certain contexts, enables certain combined capacities to be developed: the desire to study at a secondary educational level and high school added to the existence of schools at those levels in the locality or nearby; and the existence of social networks, additional support and income that help pay the cost of attending high school or higher education centers while also persuading reluctant parents (money sent home from family members who emigrated, extra sources of income such as salaried work–taxis, construction–sale of crops, small family groceries, work with CONAFE, etc.).

This can be seen more clearly where there are no such capacities (for example, the capacity for corporal health) and where accumulated disadvantages exist in domestic scenarios. As mentioned before, consolidated and aging households where there are significant health problems (diabetes, hypertension and other chronic-degenerative illnesses) lead to scenarios (to a greater degree than other domestic arrangements) in which the participation of children and youths in the economy of the home (domestic and farm work) and the interruption of the educational trajectories of the children is more likely.

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* We are referring to the case of households in Bello Paisaje not incorporated into the Oportunidades Program at the time of the research that were withdrawn from the Program after two to four years of participation.

Nevertheless, even here there are significant gender and age differences. On the one hand, in families characterized by long reproductive cycles, the oldest child, born before 1986 (who is more than 25 years old), has already taken over the role as primary provider. The increased age of the parents and health problems such as diabetes, being widowed or the incapacitation of the father due to illness or accident are likely to occur in these households even before the youngest children reach the third grade or begin secondary school. A typical case is the following: a widowed (indigenous or non-indigenous) mother of more than five who is incapacitated due to multiple illnesses looks to support from Oportunidades to help her family get ahead. She also relies on the salaried work of at least one of her two older sons (25 years old or older), who combines his job (in construction or services in the municipal capital) with work on the family parcel.

Next, we will present the primary findings of the analysis in this section; in the section that follows, we will discuss other general conclusions about the diverse factors that influence the long-term educational impact of the Oportunidades Program.

- The results of the research in the four states confirm that the Program has contributed to lengthening educational trajectories for children and youth who in this regard break from the traditional pattern of older family members. Nevertheless, the results obtained in the regions studied in the southern states (Oaxaca and Chiapas) indicate that it is necessary to modify the hypothesis about the differential impact of the Program or, to be more precise, to reverse it. The Program has contributed to lengthening the educational trajectories of children and youth, but this positive impact is greater–not less–in the case of indigenous populations than in the case of populations that are not indigenous. Furthermore, among both indigenous and non-indigenous groups, the positive impact is greater in the case of females than in that of males. Therefore, the Program has contributed to closing two educational gaps in the southern regions: the gender and ethnic gaps. The quantitative data, which shows that more than 90% of the students in elementary and secondary schools in indigenous regions have Oportunidades scholarships and that there are more female students than male, corroborates the observations made in the field.
- In the regions studied in the northern states (Chihuahua and Sonora), on the other hand, the ethnic and gender gaps decrease, especially the latter, but persist instead of reversing themselves in favor of indigenous females as in the southern regions studied. If we take into account the reduced educational coverage and reduced coverage of the Program itself that was documented in the northern regions, the hypothesis about the differential impact of the Program can be refined or reformulated as follows: the positive impact on the prolongation of educational trajectories for indigenous females is reduced where educational coverage and the coverage of Oportunidades is reduced. In other words, the ethnic and gender gaps decrease but are not completely closed in the regions where coverage is less–which can lead to more systematic corroboration of the impact of the Program on educational trajectories and, incidentally, the need to increase coverage in regions where there are schools but no health services.
- Especially in scenarios where there is an accumulation of advantages, average schooling attainment by Oportunidades beneficiaries increases the later the age at which children receive scholarships. Such advantages include resources derived from additional domestic income (money sent home from family members working outside of the locality, monetary contributions from first-born siblings, etc.) as well as the presence, abundance and proximity of elementary and secondary schools. In other words, the youths who begin to receive their scholarships later (for example, having begun secondary school before the household is incorporated into the Program) are in a certain respect already "selected": they have overcome the difficult barriers that mark the moments of desertion by more vulnerable groups–thus, the "accumulation of advantages."
- The presence of a secondary school in the locality contributes to prolongation of educational trajectories; for example, it serves as a factor for temporarily dissuading parents who do not consider higher levels of schooling for daughters to be useful or positive from terminating their daughter's education. In several interviews, parents of girls who were not able to finish educational trajectories, for whatever reason, see the entire issue as a "waste," a judgment that is not as commonly applied to males who are in the same situation. Nevertheless, the data from the four studies combined with an analysis of average schooling of children does not necessarily sup-

port the hypothesis that long-term exposure to the Program delays, but does not totally eliminate, educational discrimination against females.

- Oportunidades scholarships (and the possibility of support through PJO) contribute to the prolongation of educational trajectories beyond secondary school and open up the possibility of access to higher education and, therefore, to remunerated jobs that require more qualifications; nevertheless, this positive impact is reduced in oldest children born between 1986 and 1988. That is, the distancing from the traditional pattern tends to occur more among last-born beneficiaries and former beneficiaries and in the presence of certain combined capacities and accumulated advantages.
- The Program does not postpone age at first union and first pregnancy in all cases, but it does do so in the majority of them (for more than 60% of beneficiary females, according to data from the samples used in the four regions). Especially in first-born females, the first child is born when the mother is between 18 and 19 years old, which does not constitute a significant change with respect to the above. Roughly 35% of female former beneficiaries in the analytical sample had already given birth to their first child. The differences with respect to the older generations in these cases, however, can be described in terms of the use of certain health and hygiene habits (cleaner and better organized houses, keeping medical appointments, family planning, etc.).
- The Oportunidades Program does not directly influence the quality of the education or the professional capacity-building of the beneficiaries; an increase in school attendance and prolongation of educational trajectories do not mean that the student learns more. Nevertheless, as a result of the prolongation of educational trajectories, the former beneficiaries end up having relatively better capacities (and educational certification or degrees) that enable them to find jobs with slightly better conditions.
- Due to deteriorating local and regional labor markets, those capacities are often put into practice after emigrating to the United States or regions with significant tourist centers and services. This has important implications for rural development and for the development of the regions studied in particular: those with more schooling tend to migrate, draining localities of human resources and reproducing the cycle of marginalization and poverty on a regional scale.

CONCLUSIONS: THE DIVERSE FACTORS THAT INFLUENCE THE LONG-TERM EDUCATIONAL IMPACT OF THE OPORTUNIDADES PROGRAM

Throughout this document, and especially in section Domestic and educational trajectories of children and youth, the results achieved by Oportunidades over a period of ten years of intervention have been discussed. The primary result of the Program is its contribution to lengthening educational trajectories of children and youth; furthermore, this positive impact is greater––not less––for indigenous groups than for non-indigenous groups. This is especially true in Chiapas and Oaxaca, where the coverage of educational services is particularly extensive and the number of household beneficiaries of the Program is high.

Hence, the long-term educational impact of the Oportunidades Program has not been uniform. Next, we will summarize the diverse factors that influence its impact based on evidence obtained during fieldwork about different aspects of the educational reality in the regions studied:

- The greater coverage and offerings of elementary schools and the recent creation of schools for higher levels of education (secondary school and higher) contribute to explaining generational differences in the length of schooling for members of the same domestic nucleus. Students from younger generations have greater opportunities for instruction than their parents or their older siblings due to the presence of schools in their own locality.
- The diverse circumstances found among the households themselves make prolongation of educational trajectories and schooling attainment difficult for children. With respect to educational levels attained, Oportunidades scholarships are only an incentive; the Program tends to lose its importance as a result of different socio-economic circumstances, gender divisions, and short-term survival needs. From the perspective of the parents, these factors are incompatible with prolonging their children's educational trajectories. Thus, when finishing secondary

school, the older daughters may be prohibited from studying because "they are going to get married anyway" and because they are needed to work at home; the males may be required to work on the family parcel or contribute monetarily to their households through outside jobs. These circumstances are particularly important in households with older members and/or serious health problems or incapacitation where young males have been forced to become the primary providers and young females are needed to help their mothers or grandmothers with domestic tasks, such as caring for their younger siblings.

- Furthermore, the personal circumstances of the parents can constitute an obstacle to their children's schooling attainment. In many households, children and youths do not have a space for doing homework and may have little or no help from older family members who have little schooling or little time. All of these circumstances are not only an external threat, but also a weakness of the Program. Stimulating the capacities of youths so that they do not reproduce the pattern of older family members is not easy if they continue to be inextricably and interdependently linked with their domestic groups. Therefore, it is a weakness that the Program does not consider the fact that the needs and capacities of older members of the family (for example, their educational and work trajectories) have direct and indirect repercussions for youth, who face significant obstacles to breaking the intergenerational reproductions of poverty. The capacities approach is based on the principle that for human development purposes, it is necessary to consider each member of the domestic group, including mothers.[17]
- Evidence was obtained that indicated the possibility that not reporting the absences of Oportunidades beneficiaries could be a widespread practice among rural teachers, which they justify based on not hurting the students or making enemies of the parents. The apparent impact of Oportunidades on the decrease in failure in elementary and secondary school, therefore, could reflect an inclination on the part of the schools to fail Oportunidades beneficiaries less often. The evidence mentioned for drawing this conclusion could be relatively generalizable because the practice of not reporting absences has been found in very diverse localities in the four regions studied, and is therefore significant.
- There is significant linguistic distance between the pedagogical practices of the teachers and the needs of indigenous students. The bilingual method used in higher grades of teaching elementary school students first in their language and later in Spanish does not seem to work well; equally detrimental is the practice found in nearly all of the regions studied of completely homogenizing the educational content and trying to make students fluent in Spanish when they begin elementary school. This not only indicates poor educational quality in rural elementary schools for indigenous student, but also a lack of response to and the perpetuation of the problem in secondary schools, where educational lag persists.
- In domestic and community scenarios characterized by the accumulation of advantages (monetary support from first-born siblings and family members who emigrated, the presence, abundance and proximity of elementary and secondary schools, etc.), the schooling attained by the Oportunidades beneficiaries increases as the level of schooling when they begin to receive scholarships becomes more advanced.
- Oportunidades scholarships alone may not be sufficient if there is not easy access to schools. Nevertheless, setting aside the question of which factors are most significant, various recommendations can be considered. One such recommendation would be to build more schools, but this would not contributed to another important factor: teaching quality. Instead of the dispersion of resources and students and the consequent danger of perpetuating a vicious cycle (the fewer students enrolled, the less resources the school receives), increasing capacities and personnel in existing schools could be considered. Alternatively, to mitigate the problem of displacement of students, additional resources could be used to facilitate the transportation of students to neighboring localities where secondary schools exist (by, for example, introducing school vehicles). With respect to the Program, however, adding an additional amount to scholarships could be one option for secondary education students who have to travel to municipal capitals or other localities to attend school. This measure would be consistent with the human capacities approach and the heterogeneity that requires certain individuals and groups to have different types and amounts of support and resources.

- As educational discrimination against females decreases or is eliminated by the combination of scholarships and schools at levels higher than elementary, youths will acquire new aspirations and expectations for their lives; this results in creating informal alliances, conceiving of new strategies and acquiring initiatives to obtain diverse sources of support, including favorable opinions, for prolonging their educational trajectories. In addition, the friendships and groups constituted by these students are significant social networks through which information is disseminated regarding the Program as well as the PJO and other educational opportunities and financing available to beneficiaries and former beneficiaries for attaining schooling beyond the secondary and high school levels. As was confirmed by fieldwork, this is related to the existence of former beneficiary youths who are "co-responsible" for acting as important educational promoters or liaisons for the Program.* The possibility of training these youths as RECCOS (Responsables de Capacitación a Comités de Promoción Comunitaria (capacity-builders for community promotion committees) or educational promoters who would become part of the Program staff (as salaried employees) should be considered; such individuals could better fulfill the role of educational liaison. It may be possible to dispense with the current liaison program since their knowledge of secondary and high school education is much more limited than the beneficiary youths mentioned; in addition, as was shown on repeated occasions during fieldwork, the liaisons do not fulfill their function as points of contact and providers of information about the educational activities of the Program.

IV. SWOT Analysis

The most relevant strengths, opportunities, weaknesses and threats arising from the various factors discussed in this document are indicated below in table format.

Before discussing the SWOT analysis and the recommendations derived from that analysis, the following should be clarified: strengths and weaknesses will be considered here to be internal or attributable to the Oportunidades Program itself, while opportunities and threats will be considered to be external to the Program. Therefore, recommendations raised with respect to the latter will allude to social policy or educational services in the broadest sense, but not to the Program itself. In the table below, reference is also made to the page numbers and paragraphs in the body of the document where the corresponding strengths, opportunities, weaknesses and threats are found.

TOPIC	STRENGTHS AND WEAKNESSES/OPPORTUNITIES AND THREATS	RECOMMENDATIONS
Educational coverage	**Weakness:** Many indigenous rural communities, especially in Chihuahua, do not have health services and therefore have not been able to be considered candidates for the *Oportunidades* Program's educational scholarships, in spite of having schools nearby or relatively nearby.	Reconsider criteria for eligibility by separating the shared responsibilities of health and education; increase coverage of the Program to poor indigenous households whose children and youths can attend schools, at least elementary schools, even if there are no health services.
Educational offerings	**Threat**: A scarcity of elementary schools persists in many regions (especially in Sierra Tarahumara, Chihuahua).	Encourage the CONAFE authorities to open new schools to promote education and more schools in small population centers located in more remote places. In indigenous regions, CONAFE's community courses could themselves adopt the bilingual intercultural version offered by PAEPI.
Educational offerings	**Weakness:** Though within the action radius of elementary and secondary schools, youths from many localities must migrate or travel regularly to said schools, which involves additional costs (transportation, housing, food).	Introduce within *Oportunidades* a differentiated system of scholarships that provides additional amounts for those who must travel to study.

* Actually called Oportunidades Correspondents, these youths are preferably students in their first year of high school. In cases where there are none of these youths available, students in their second or third year of high school or, in extreme cases, secondary school students, are used.

Educational offerings	**Threat:** Few secondary and high schools have residential facilities, and those that do have no state or federal support.	Create the boarding school model for secondary and high school level education.
Educational offerings and coverage	**Opportunity:** Educational institutions and programs exist at the federal and state level that compensate for poor coverage of education and the Program in the northern regions (Sierra Tarahumara, Chihuahua) or support the prolongation of educational trajectories for beneficiaries and non-beneficiaries of *Oportunidades*.	It would nevertheless be advantageous to increase coverage of the *Oportunidades* Program in these regions since, for example, in the Pima region of Yepachi-Maycoba (the states of Chihuahua and Sonora) there are elementary schools with precarious infrastructure and resources whose students do not have *Oportunidades* scholarships.
Educational offerings and coverage	**Threat:** The widespread presence of elementary schools in southern states has led to the abandonment of boarding schools, although there are still not enough elementary schools in northern states to support prolonged educational trajectories for those who have to leave their regions and communities of origin to study.	Convert boarding schools into secondary education schools in southern regions (where the number of schools at that level is still insufficient) and increase the offerings of boarding schools at all levels in the northern states.
Educational quality	**Threat:** Poor teaching quality (especially in rural and indigenous elementary schools) reproduces the problem of students lagging behind at higher educational levels and for the few who obtain work as service providers in equally deficient schools, in work performance,. This results in no real positive or sufficient effect on the prolongation of educational trajectories.	Certify schools to achieve quality in overall performance according to various indicators. Nevertheless, it is necessary to first work in a truly intersectoral manner with the schools, linking educational processes and content to improvement programs (such as those found in Sierra Tarahumara), to strengthen subject matter such as mathematics and Spanish and provide capacity-building at the high school level in order to take university admissions tests.
Educational quality	**Threat:** Poor or non-existent methods in "indigenous/ bilingual education," segregation of indigenous students in schools where Spanish is taught and the same methods as regular schools are used. The combination of segregation and homogenization does not guarantee performance or continuation of indigenous students in secondary schools, where they are found to be at a disadvantage as compared to non-indigenous students.	Replace the indigenous/bilingual subsystem––as an apparatus segregated from the rest of the public education system–– with a truly intercultural and heterogeneous subsystem, beginning with basic education; adapt the regular school system to truly address this diversity.
Educational quality; internal school processes	**Weakness:** Intersectoral collaboration does not exist; instead there is sectorization in the educational actions of the *Oportunidades* Program. These are directed exclusively toward school assistance and permanence, but the gap as far as quality and resources continues between rural and urban and indigenous and non-indigenous schools. Therefore, prolongation of educational trajectories exists, but there is not enough creation of or improvement in capacities.	The Program should be systematically linked not only to other scholarship programs and the creation of educational infrastructure, but also to strategies that work in conjunction with schools to improve teaching quality and academic achievement. Convert *Oportunidades* into part of a broader and truly intersectoral model.
Internal school processes; school-community relations	**Weakness:** In light of the extensive practice of not reporting absences so as to not damage relationships with students' parents and avoid the loss of *Oportunidades* scholarships, there is the possibility of weakening elements pertaining to shared responsibilities, particularly certification of school attendance; in addition, the apparent impact of *Oportunidades* on decreasing indices for failure in elementary and secondary schools reflects an inclination on the part of schools to fail *Oportunidades* beneficiaries less often. Together, this can result in diluting the impact of *Oportunidades* and converting the Program into a mechanism solely for transferring income.	Grant a component of the educational scholarships based on academic performance and not only on assistance, as long as the evaluation criteria are adapted to the social and cultural diversity of the students and avoid homogenization and the unvarying use of Spanish. This could be done by providing a base scholarship and increasing it according to academic performance or achievement beginning in high school. Alternatively: certify schools. This recommendation affects the educational sector, not only the Program; achieve quality in overall performance for various indicators and provide *Oportunidades* scholarships to all students once they achieve a certain level
School-community relations	**Threat:** Various factors external to the school exist, including factors not pertinent to the *Oportunidades* Program, that contribute to school absenteeism: adverse weather conditions, student health problems, need for children and youths to work in the household and agricultural work (often through emigration) etc.	The impact that the *Oportunidades* Program may already have on increased student attendance in school can be strengthened if, with the agreement of the local secretaries of education, the academic calendar and school hours were adjusted. In the colder regions of the Sierra Tarahumara, for example, extend winter vacation and delay the school starting time.
School-community relations	**Strength:** Factors that cause and justify school absenteeism have less weight where *Oportunidades* Program scholarships exist, since in those cases such absenteeism does not result in desertion but rather is combined with periods of school attendance.	Not applicable

Educational trajectories of children and youths	**Threat:** Various domestic factors persist in making continuity and academic achievement difficult for youth, such as traditional gender and role divisions within the household. For example, the parents' decisions (e.g., regarding the need for youths to do domestic and agricultural work and generate income) have weight, and there is little help from parents in providing a space to do homework. **Weakness:** The Program does not directly respond to the capacities and needs of older generations, resulting in diminishing the possibility for youths to break the cycle of intergenerational reproduction of poverty.	Consider the possibility of the Program working in a more intersectoral way with other strategies to stimulate the capacities of the parents more directly; for example, educational components for adults, strategies directed toward literacy and job-related capacity-building for parents; and credit for productive activities on the part of parents (microbusinesses, agricultural production, etc.)
Educational trajectories of children and youth	**Strength:** The Program has contributed to closing two important educational gaps: ethnic and gender. Thus, the prolongation of educational trajectories is greater among indigenous than among non-indigenous and among females than among males. These effects are relatively greater in regions and localities where Program coverage is broader due to broader coverage of educational and health services (Chiapas and Oaxaca).	Not applicable
Educational trajectories of children and youth	**Opportunity:** In scenarios where there is an accumulation of advantages, the average schooling reached by *Oportunidades* beneficiaries increases the later they begin to receive scholarships (for example, during secondary education instead of elementary). Such advantages consist of resources derived from additional domestic incomes (money received from family who emigrated, monetary contributions from first-born siblings, etc.), as well as the presence, abundance and nearness of elementary and secondary schools.	Eliminate scholarships in elementary education when such advantageous scenarios exist (but not when the population is dispersed and there is a scarcity of schools) and concentrate resources at the secondary and high school levels and the *Oportunidades* Plataforma de Jóvenes (youth program).
Educational trajectories of children and youth	**Opportunity:** The prolongation of educational trajectories and the increase in average schooling to which *Oportunidades* contributes take place most often in situations where there are sufficient educational offerings (for example, secondary schools nearby or in the locality itself).	Include an additional amount for secondary education scholarships in situations where students have to travel to municipal capitals or other localities to attend school.
Educational trajectories of children and youth	**Opportunity:** There are youths who are interested in high school or higher education whose initiatives for attaining said levels enable them to play an effective role as an educational liaison, who serving as a point of contact for dissemination of information about the educational support and components of the Program (for example, the *Oportunidades* Plataforma de Jóvenes youth program).	Substitute existing educational liaisons (whose experience in secondary and high school education is limited) with youths who are former *Oportunidades* beneficiaries; these youthyouths could be trained as RECCOS or promoters and thus be incorporated into the Program to strengthen the link between different actors and dissemination of information related to the educational components of the Program.
Educational trajectories of children and youth	**Strength:** Through academic scholarships and prolongation of educational trajectories, the Program has contributed to postponing or weakening the reproduction of the traditional pattern (in terms of age at first union and job placement) by younger beneficiaries and former beneficiaries. Primarily through emigration, said youths exercise their new skills in jobs in sectors similar to traditional sectors (construction, services) but in positions and with salaries that are slightly more advantageous.	Not applicable
Educational trajectories of children and youth	**Threat:** The emigration of former beneficiaries with better capacities presumes a decrease in human resources in their rural areas of origin. This tends to reproduce the cycle of marginalization and poverty at a regional level.	Consider the possibility of stimulating the capacities of the parents themselves more directly; educational components for adults, strategies directed toward literacy and job-related capacity-building for parents; credit for productive activities by parents (microbusinesses, agricultural production, etc.)
Educational coverage	**Weakness:** Many indigenous rural communities, especially in Chihuahua, do not have health services and therefore have not been candidates for the *Oportunidades* Program's educational scholarships, in spite of having schools nearby or relatively nearby.	Reconsider criteria for eligibility by separating the shared responsibilities of health and education; increase coverage of the Program to poor indigenous households whose children and young adults can attend school, at least at the elementary level, despite the lack of health services.

Educational offerings	**Threat**: A scarcity of elementary schools persists in many regions (especially in Sierra Tarahumara, Chihuahua).	Encourage the CONAFE authorities to open new schools for promoting education and schools in small population centers located in more remote places. In indigenous regions, CONAFE's community courses themselves could, in addition, adopt the bilingual intercultural version offered by PAEPI.
Educational offerings	**Weakness:** Though within the action radius of elementary and secondary schools, youths from many localities must migrate or travel regularly to said schools, which involves additional costs (transportation, housing, food).	Introduce in *Oportunidades* a differentiated system of scholarships that provides additional amounts for those who must travel to study.
Educational offerings	**Threat:** Few secondary and high schools have residential facilities. Services, and those that do have no state or federal support.	Create a boarding school model for secondary and post-secondary education.
Educational offerings and coverage	**Opportunity:** Educational institutions and programs exist at the federal and state level that compensate for poor coverage in education and the Program (Sierra Tarahumara, Chihuahua); or support prolonged educational trajectories for beneficiaries and non-beneficiaries of *Oportunidades*.	It would be advantageous to increase coverage by the *Oportunidades* Program in these regions, since in the Pima region of Yepachi-Maycoba (the states of Chihuahua and Sonora), for example, there are elementary schools with poor infrastructure and resources whose students do not have *Oportunidades* scholarships.
Educational offerings and coverage	**Threat:** The significant presence of elementary schools in southern states has led to the abandonment of boarding schools, although the number of schools in northern states is not sufficient to support prolonged educational trajectories for those who have to leave their regions and communities of origin.	Convert boarding schools into secondary schools in southern regions (where the number of secondary schools is insufficient) and increase the offerings of boarding schools at all levels in the northern states.
Educational quality	**Threat:** Poor teaching quality (especially in rural and indigenous elementary schools) leads to students lagging behind at higher educational levels and, for the few who manage to get work as service providers in equally deficient schools, in the labor force. This results in no real positive or sufficient effect on the prolongation of educational trajectories.	Certify schools' ability to achieve a certain level of performance according to various indicators. It is necessary to first work in a truly intersectoral manner with the schools: link educational processes and content to improvement programs (such as those found in Sierra Tarahumara), strengthen subject matter such as mathematics and Spanish, provide capacity-building in high school for taking university admissions tests.
Educational quality	**Threat:** Poor or non-existent methods in "indigenous/bilingual education," segregation of indigenous students in schools where Spanish is taught and methods distinct from those in regular schools are not followed. The combination of segregation and homogenization does not guarantee performance or the continuity of indigenous students in secondary schools, where they are found to be at a disadvantage as compared to non-indigenous students.	Replace the indigenous/bilingual subsystem––as an apparatus segregated from the rest of the public education system–– for a truly intercultural and heterogeneous system, beginning with basic education; adapt the regular school system to address this diversity fully.
Educational quality; internal school processes	**Weakness:** Intersectoral collaboration does not exist; instead, there is sectorization in the educational actions of the *Oportunidades* Program. This is directed exclusively toward educational assistance and permanence, but the gap as far as quality and resources continues between rural and urban and indigenous and non-indigenous schools. Therefore, prolongation of educational trajectories exists, but there is not enough creation of or improvement in capacities.	The Program should be systematically linked not only to other scholarship programs and the creation of educational infrastructure, but also to strategies that work in conjunction with schools to improve the quality of teaching and academic achievement. Convert *Oportunidades*, in part, into a broader and truly intersectoral model.
Internal school processes; school-community relations	**Weakness:** In light of the extensive practice of not reporting absences so as to not hurt relationships with students' parents and to avoid the loss of *Oportunidades* scholarships, there is the possibility of a weakening of elements pertaining to shared responsibilities, particularly certification of attendance in educational institutions; likewise, the apparent impact of *Oportunidades* on the decline of indices regarding failing elementary and secondary school reflects an inclination for schools to fail beneficiaries of *Oportunidades* less often. This can result in a dilution of the impact of *Oportunidades* and convert the Program into a mechanism to solely transfer income.	Grant a component of educational scholarships based on academic performance, not only on assistance, as long as the evaluation criteria are adapted to the social and cultural diversity of the students and avoid homogenization and the unvarying use of Spanish. This could be done by providing a base scholarship amount and increasing it according to academic performance or achievement beginning in high school. Alternatively: certify schools. This recommendation affects the educational sector, not only the Program: achieve a general level of performance for various indicators and provide *Oportunidades* scholarships to all students once they achieve a certain level

School-community relations	**Threat:** Various extracurricular factors exist, including factors not pertaining to the *Oportunidades* Program, that contribute to school absenteeism: adverse weather conditions, student health problems, need for children and youths to work in the household, agricultural work (often through emigration), etc.	The impact that the *Oportunidades* Program may already have on increased school attendance can be strengthened if, with the agreement of the local secretaries of education, the school calendar and hours are adapted. In the cold regions of the Sierra Tarahumara, for example, extend winter vacation and delay starting time.
School-community relations	**Strength:** Factors that cause and justify school absenteeism have less weight where *Oportunidades* Program scholarships exist, since in these cases such absenteeism does not result in desertion, but rather is combined with periods of school attendance.	Not applicable
Educational trajectories of children and young adults	**Threat:** Various domestic factors persist in making continuity and academic achievement difficult for young adults, such as traditional gender and role differences within the household. The parents' decisions have weight (regarding, for example, the need for youths to do domestic and agricultural work and generate monetary income); the parents may also offer little help in providing a space to do house work, etc. **Weakness:** The Program does not directly affect the capacities and needs of the older generations themselves, resulting in a diminished possibility for youths to break the cycle of intergenerational reproduction of poverty.	Consider the possibility that the Program works in a more intersectoral way with other strategies to stimulate more directly the capacities of the parents themselves; such as including educational components for adults, strategies directed toward literacy and job-related capacity-building for parents; credit for productive activities by parents (microbusinesses, agricultural production, etc.)
Educational trajectories of children and young adults	**Strength:** The Program has contributed to closing two important educational gaps: ethnic and gender. Thus, the prolongation of educational trajectories is greater among indigenous individuals than non-indigenous and among females than males. These positive impacts are relatively greater in regions and localities where coverage by the Program is wider due to wider coverage of educational and health services (Chiapas and Oaxaca).	Not applicable
Educational trajectories of children and young adults	**Opportunity:** In scenarios where there is accumulation of advantages, the average schooling reached by *Oportunidades* beneficiaries increases the later they begin to receive scholarships (for example, during secondary school instead of elementary). Such advantages consist of resources derived from additional domestic income (money received from family living abroad, monetary contributions from first-born siblings, etc.), as well as the presence, abundance and nearness of elementary and secondary schools.	Discontinue scholarships in elementary education when such advantageous scenarios exist (but not when the population is dispersed and there is a scarcity of education schools) and concentrate resources at the secondary and post-secondary levels of education and in the *Oportunidades* Youth Program.
Educational trajectories of children and young adults	**Opportunity:** The prolongation of educational trajectories and the increase in average schooling to which *Oportunidades* contributes are most likely to take place in situations where there are sufficient educational offerings (for example, secondary schools nearby or in the locality itself).	Increase the amount of the secondary education scholarships for students who have to travel to municipal capital cities or other localities to attend school.
Educational trajectories of children and young adults	**Opportunity:** There are adolescent students who are interested in higher or post-secondary level education, whose intiativeinitiative for attaining such levels allows them to play an effective role in education as liaisons who serve as points of contact for the transmission of information about educational support and components of the Program (for example, the *Oportunidades* Youth Program).	Substitute the education liaisons (whose experience in secondary and post-secondary level education is limited) with youths who are former *Oportunidades* beneficiaries who could be trained as RECCOS or promoters and, thus, could be incorporated into the Program to strengthen the link between different actors and dissemination of information related to the educational components of the Program.
Educational trajectories of children and young adults	**Strength:** Through academic scholarships and prolongation of educational trajectories, the Program has contributed to postponing or weakening reproduction of the traditional pattern (in terms of age at first union and job placement) by younger beneficiaries and former beneficiaries. Primarily through emigration, said youths exercise their new capacities through job in sectors similar to traditional ones (e.g., construction, services), but in positions and salaries that are slightly more advantageous.	Not applicable

Educational trajectories of children and young adults	**Threat:** The emigration of former beneficiaries with better capacities presumes a decrease in human resources in their rural areas of origin. This tends to reproduce the cycle of marginalization and poverty at a regional level.	Consider the possibility of stimulating the capacities of the parents themselves more directly through educational components for adults, strategies directed toward literacy and job-related capacity-building for parents; and credit for productive activities on the part of the parents (microbusinesses, agricultural production, etc.).

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VI. Appendices

A. METHODOLOGICAL APPENDIX

Sample Design

First analytical sample

As mentioned in section Sample design and selection of households: final composition of the study sample of the present document, it was necessary to maximize the differences in the intervening variables in this analytical sample (Table A1):

Table A1
Variables of the analytical sample

Indigenous beneficiaries (n=4)	Non-indigenous beneficiaries (n=4)
Indigenous non-beneficiaries (n=4)	Non-indigenous non-beneficiaries (n=4)

a) With regard to the "ethnicity" variable, maximizing the difference involved indigenous-speaking monolingual households and Spanish-speaking monolingual households.
b) With regard to "incorporation into the Program," maximizing the difference involved long-term beneficiary households (incorporated into Oportunidades in 1998 or 1999) and non-beneficiary households. For each of the two subtypes of beneficiary households in the analytical sample (four indigenous beneficiaries and four non-indigenous beneficiaries), households were selected that at the moment of incorporation into the Program had at least one first-born child (male or female) attending school between second and fourth grade. The other two households of this subtype were selected for having last-born children between second and fourth grade at the moment of incorporation into the Program (Table A2). That is, it was necessary to take into account the fact that long-term beneficiary households could have been in distinct stages of their domestic cycles at the moment of their incorporation into the Program (early stage of expansion and advanced stage of expansion).

Table A2
Variables of the analytical sample

Indigenous beneficiary households	Two households with first-born child between 2nd and 4th grade in 1998	Two households with last-born child between 2nd and 4th grade in 1998	Total 4 households
Non-indigenous beneficiary households	Two households with first-born child between 2nd and 4th grade in 1998	Two households with last-born child between 2nd and 4th grade in 1998	Total 4 households
Total beneficiary households	Total 4 households	Total 4 households	Total 8 households

In addition, the eight non-beneficiary households in each municipality or microregion were selected by pairing them with beneficiaries according to their similarity with beneficiaries in 1998 or 1999 in terms of the following criteria:

1. Capital vs. periphery: if the beneficiary households selected were in a municipal capital, the pairing norm dictates that the non-beneficiary households should also be in the capital.
2. Socio-economic condition: occupation, access to land and level of education of the heads of households in 1998/1999.
3. Size of household in 1998/1999.

For the selection of non-beneficiary households, the preference was for those who were never incorporated. An alternative (in the event of not finding any households that were never incorporated in the localities in the municipality) was to choose households that were incorporated as beneficiaries but for a very short period of time (i.e., were withdrawn at most two or three years after having been incorporated); however, when such cases were not found, households that were very recently incorporated into the Program were chosen (Table A3).

Table A3
Households that were recently incorporated

Indigenous non-beneficiary households	**T**wo households with first-born child between 2nd and 4th grade in 1998	Two households with last-born child between 2nd and 4th grade in 1998	Total 4 households
Non-indigenous non-beneficiary households	Two households with first-born child between 2nd and 4th grade in 1998	Two households with last-born child between 2nd and 4th elementary grades in 1998	Total 4 households
Total beneficiary households	Total 4 households	Total 4 households	Total 8 households

Case studies were conducted in all 16 households in the municipality or microregion within each state (eight beneficiaries and eight non-beneficiaries chosen by pairing with the same characteristics of beneficiaries in 1998/1999), and interviews were conducted with different members of the household following the guide mentioned in appendix Instruments used in the evaluation of the present document.

Secondary Sample

Information was obtained about the current situation of all of the children (schooling, occupation, unions, pregnancies, etc.) in the households in the first sample (beneficiaries and non-beneficiaries, indigenous and non-indigenous). For a complete study, the son or daughter who corresponded to the group of interest was selected; that is, boys or girls who were between second and fourth grade in 1998/1999. Each case study was performed with the help of interview guides in order to obtain information about domestic and work trajectories.

In cases where the sons or daughters of the group of interest lived with their domestic group of origin (their parents), the case study was done as part of the general study of said household, interviewing these children about the topics of evaluation (educational and work trajectories, reproductive health, etc). In cases where the youths lived somewhere else within the same municipality, the information needed for completing the case study was obtained from that other household. In these cases, a comparative intergenerational study of the evaluation topics was conducted (that is, whether they have more or less access to health, education, jobs that are distinct from their parents, etc.). Finally, in the cases where the youths lived outside the municipality, sufficient information was obtained (and corroborated in situ) to be able to locate them after the research was conducted (complete address, telephone number, email). Mothers, fathers and/or siblings were asked about the absent youth, including their occupation, the type of job they had, whether they were married, where they lived, and if they helped the household of origin monetarily.

Instruments used in the evaluation*

Guide for obtaining and systematizing information about domestic groups and their educational trajectories, health and occupations

Several informal and semi-structured interviews were necessary to obtain detailed information for completing the case studies of types of households that made up the analytical sample. The guide included primary points and questions about the quality evaluation that field researchers needed to take into account during the interviews: health, education and work of the members of the domestic group. In addition, it was necessary to obtain information about the changes that occurred in all of these aspects during the years that the beneficiary households were exposed to the Program, from 1998 or 1999 on (it was also relevant to find out if any of the non-beneficiaries had experienced changes, and of what type). Finally, the informants were asked to make their own assessment of educational or work trajectories, experiences with educational and health service providers and, where applicable,

* In the analytical documents for the four ethnographic studies (Chiapas, Oaxaca, Chihuahua and Sonora), a description of all of the instruments used was included. We are limiting ourselves here to describing those that are directly relevant to education, since that is the topic of the present technical thematic document.

the Oportunidades Program and its components throughout the decade. Thus, information was sought about the formal aspect of services and the Program as well as about the social experience of service users and beneficiaries.

Domestic composition table

This instrument accompanied the interview guide described above and served to complete the data about the composition and structure of each household: name of each member, gender, family relationship to other members of the domestic group, year of birth/age, place of birth, marital status, etc. Two domestic composition tables were completed for each case study; one contained information about the composition and structure of the domestic group in 1998 or 1999, the other about the current composition and structure. It was also necessary to specify the native language of the members of the domestic group (or at least of the head of household and/or their partner, or the woman representing the beneficiary household in the event that the home was incorporated into the Program). In the table, it is clear from the outset whether the household was a beneficiary of the Oportunidades Program and whether its members saw themselves as indigenous or non-indigenous. When particular information not covered by the domestic composition tables was encountered, that information was incorporated into the interview guide for the household case studies. Finally, all of the information was recorded in the researchers' field journals.

Guide for follow-up of indigenous and non-indigenous former beneficiaries and their peers (youths who were not former beneficiaries of Oportunidades)

Going outside of the domestic environment was necessary for following up with former beneficiaries of the Program and obtaining information about their current educational and work situations. The identification of youths in this case followed the logic of the analytical sample mentioned before; that is, the former beneficiaries interviewed could be children who were between second and fourth grade in 1998/1999.

The objective of this instrument was to understand the processes that led former beneficiaries between the ages of 18 and 20 to follow particular family, migratory and labor trajectories and to understand the role that having been beneficiaries of the Program may have played and if it gave them some advantage over non-beneficiaries in terms of schooling, commitment to school as a means for social climbing, actual social skills, knowledge, work skills and other skills resulting from the Program.

To this end, it was necessary to distinguish between results and processes. With regard to results, it was necessary to take into account that the majority of former beneficiary youths would probably be doing work similar to the non-beneficiaries, such as farming, day labor, construction work, small business owners, and assistants in businesses. It was necessary to identify occupation, position at work (supervisor, self-employed, salaried, family with pay, family without pay), economic sector, size of the productive unit (number and type of workers) and all of the characteristics of the activity. Since this was an ethnographic study, current results as well as the processes through which said results were achieved were both of interest. Did former beneficiaries actually have more or less health care? Did they actually have access to school and a better level of instruction, helping them to acquire more skills? Was there better alimentation (breakfast before going to school, for example) and hygiene in their houses? Did they have parents who made sure that the work they permitted or asked their children to do did not prevent them from fulfilling school requirements? Were the students less likely to be absent during holiday, planting and harvesting time or when there were more domestic responsibilities to attend to (when a younger sibling or mother or father was sick, when some type of administrative tasks or other types of work had to be done, etc.)?

Guide for interviewing educational service providers

This guide includes the points and questions relevant to obtaining the personal information and information about educational services necessary for understanding the impact of Oportunidades on beneficiaries and former benefi-

ciaries. In addition to interviews, careful observations were made at the schools, enabling detailed descriptions of the characteristics of buildings, locations and access as well as the services they provided.

Since the evaluation is long-term, all of the topics had to be researched retrospectively; this meant locating teachers who had been teaching in the schools long enough to provide information about the last ten years (in the case of elementary schools) and about the last eight years (in the case of high school). These teachers also provided information about important changes that have occurred in educational facilities and services over the last 10 years.

Finally, in addition to interviews, direct observation was conducted for several days in classrooms.

Guide for the interview of female liaisons for Oportunidades

This guide includes the points and questions relevant for obtaining information from educational liaisons as well as individuals involved with health, nutrition and control and monitoring––important actors for understanding the operation and impact of the Oportunidades Program in the localities. In relation to the long-term character of the evaluation of the Program, the relevant topics in this case (experience of liaisons with other beneficiaries and with the diverse components and recertification of Oportunidades) had to be researched retrospectively; it was necessary to discover whether the current situation was similar to that which occurred years before or if important changes had occurred over the last ten years.

Guide for interviews with other relevant actors

Finally, whenever possible, it was necessary to locate and interview––according to the points described in this guide–– "key actors", or important actors in the life of the localities and families whose authority and actions could have influenced the impact of the Program; these include local small business owners, employers, owners of farming businesses or other types of businesses, rural land authorities, civil and religious leaders, etc. After identifying the type of actor interviewed, it was necessary to gather information about their roles in the locality as well as their actions and opinions with respect to the changes that have occurred in the last ten years with respect to the Program.

B. Tables

Table B1
Coverage of the Oportunidades Program in the municipalities in the Chiapas study

	LAS MARGARITAS	SAN CRISTÓBAL	TUMBALÁ	SOURCE
Total Population	98374	166460	28884	Conteo de Población y vivienda 2005 (Population and Housing Census 2005)
Male population	48675	80335	14190	
Female population	49699	86125	14694	
Total households	16880	34798	5019	
Indigenous population	50929	71962	28023	
Localities (counting capitals)	398	92	108	Conteo de Población y vivienda 2005 (Population and Housing Census 2005)
Indigenous localities	129	76	99	Indigenous locality: where 40% or more inhabitants speak an indigenous language (excluding localities with one or two households and municipal capitals)
Mixed-race localities	174	14	0	
Undefined localities	94	1	8	
Localities with *Oportunidades*	218	54	73	*Oportunidades* databases
Indigenous localities with *Oportunidades*	89	43	71	
Total population in indigenous beneficiary localities	39218	15951	24566	

Table B2
Final composition of the sample with case studies during fieldwork in Chiapas, Oaxaca, Chihuahua and Sonora

MICROREGION	ETHNICITY AND STATUS IN THE PROGRAM				
CHIAPAS	**INDIGENOUS BENEFICIARIES**	**INDIGENOUS NON-BENEFICIARIES**	**MIXED-RACE BENEFICIARIES**	**MIXED-RACE NON-BENEFICIARIES**	**TOTAL**
Las Margaritas (Tojolabal)	4	4	4	4	16
San Cristóbal (Tzotzil)	4	3	4	2	13
Tumbalá (Chol)	16	0	0	0	16
Total	24	7	8	6	45
OAXACA	**INDIGENOUS BENEFICIARIES**	**INDIGENOUS NON-BENEFICIARIES**	**MIXED-RACE BENEFICIARIES**	**MIXED-RACE NON-BENEFICIARIES**	**TOTAL**
Mazateca	4	4	4	0	12
Mixe	3	5	2	2	12
Costa Chica	4	5	4	5	18
Total	11	14	10	7	42
CHIHUAHUA	**INDIGENOUS BENEFICIARIES**	**INDIGENOUS NON-BENEFICIARIES**	**MIXED-RACE BENEFICIARIES**	**MIXED-RACE NON-BENEFICIARIES**	**TOTAL**
Samachique (Tarahumara)	4	4	4	4	16
Norogachi (Tarahumara)	4	4	4	4	16
Yepachi-Maycoba (Pima)	4	4	4	4	16
Total	12	12	12	12	48
SONORA	**INDIGENOUS BENEFICIARIES**	**INDIGENOUS NON-BENEFICIARIES**	**MIXED-RACE BENEFICIARIES**	**MIXED-RACE NON-BENEFICIARIES**	**TOTAL**
Guaymas (Yaqui)	5	3	5	3	16
Etchojoa (Mayo)	4	3	5	4	16
Álamos (Guarijío)	4	5	4	3	16
Total	13	11	14	10	48
Grand total	60	44	44	35	183

Table B3
Educational offerings in the three municipalities in the Chiapas study

	MARGARITAS.	TUMBALA.	SAN CRISTOBAL.
ELEMENTARY EDUCATION			
State elementary school	19	2	32
State indigenous school	9	14	2
Community elementary school	67	2	0
Indigenous community elementary school	10	18	10
Federal indigenous elementary school	111	34	41
Federal regular elementary school	31	3	56
Private regular elementary school	0	0	12
TOTAL	247	73	153
SECONDARY EDUCATION			
Community secondary school	3	0	0
Community indigenous secondary school	0	0	2
State general secondary school	1	0	4
Federal general secondary school	0	0	2
Private general secondary school	0	0	7
Federal technical secondary school	5	1	5
State tele-secondary school	33	17	13
Federal secondary school for workers	0	0	1
TOTAL	42	18	34
HIGH SCHOOL EDUCATION			
Colegio de Bachilleres (trade high school)	0	1	2
COLEGIO DE ESTUDIOS CIENTIFICOS Y TECNOLOGICOS VEINTE DE NOVIEMBRE (high school for scientific and technological studies)	1	0	1
Bachillerato General (liberal arts high school)	1	0	8
Tele-high school	1	2	0
Distance learning high school	3	0	0
Centro de Atención Múltiple (multiple services)	0	0	1
Colegio Nacional de Educación Profesional Técnica (national high school for professional technical education)	0	0	1
Centro de Bachillerato Tecnológico (technological high school)	0	0	5
TOTAL	6	3	18
	295	94	205

Table B4
Average schooling for former beneficiaries in the regions studied in Chihuahua

EDUCATIONAL LEVELS COMPLETED BY FORMER BENEFICIARIES IN THE SIERRA TARAHUMARA AND THE THREE MICROREGIONS IN THE 1999-2007 STUDY (PERCENTAGES)

	YEPACHI-MAYCOBA	SAMACHIQUE	NOROGACHI	SIERRA TARAHUMARA
Completed high school	5.93	17.84	23.14	12.16
Completed secondary	34.75	28.65	26.45	29.03
Completed elementary	37.29	29.19	23.97	37.04
Incomplete elementary	22.03	24.32	26.45	21.77
Total former beneficiaries	236	185	121	33,801

Source: Sariego et al, 2008: 194.

Table B5
Schooling of former beneficiaries in the three regions studied in Chiapas

	LAS MARGARITAS			
	INDIGENOUS FORMER BENEFICIARIES		MIXED-RACE FORMER BENEFICIARIES	
	MALES	FEMALES	MALES	FEMALES
Incomplete elementary school	5	13	7	9
Completed elementary school	57	7	16	26
Incomplete secondary school	9	17	9	6
Completed secondary school	64	65	47	29
Incomplete high school	12	12	7	7
Completed high school	18	27	8	12
TOTAL FORMER BENEFICIARIES	**165**	**141**	**94**	**89**

	TUMBALÁ			
	INDIGENOUS FORMER BENEFICIARIES		MIXED-RACE FORMER BENEFICIARIES	
	MALES	FEMALES	MALES	FEMALES
Incomplete elementary school	40	35	0	0
Completed elementary school	7	27	0	0
Incomplete secondary school	0	31	0	0
Completed secondary school	26	30	0	0
Incomplete high school	46	21	0	0
Completed high school	13	27	0	0
TOTAL FORMER BENEFICIARIES	**132**	**171**	**0**	**0**

	SAN CRISTOBAL			
	INDIGENOUS FORMER BENEFICIARIES		MIXED-RACE FORMER BENEFICIARIES	
	MALES	FEMALES	MALES	FEMALES
Incomplete elementary school	22	13	10	7
Completed elementary school	38	42	24	29
Incomplete secondary school	23	21	4	6
Completed secondary school	37	42	9	8
Incomplete high school	1	1	1	1
Completed high school	2	2	0	0
TOTAL FORMER BENEFICIARIES	**123**	**121**	**48**	**51**

C. Figures

CURRENT COVERAGE OF THE OPORTUNIDADES PROGRAM AND ITS EVOLUTION (2005-2008) IN THE MUNICIPALITIES STUDIED IN OAXACA

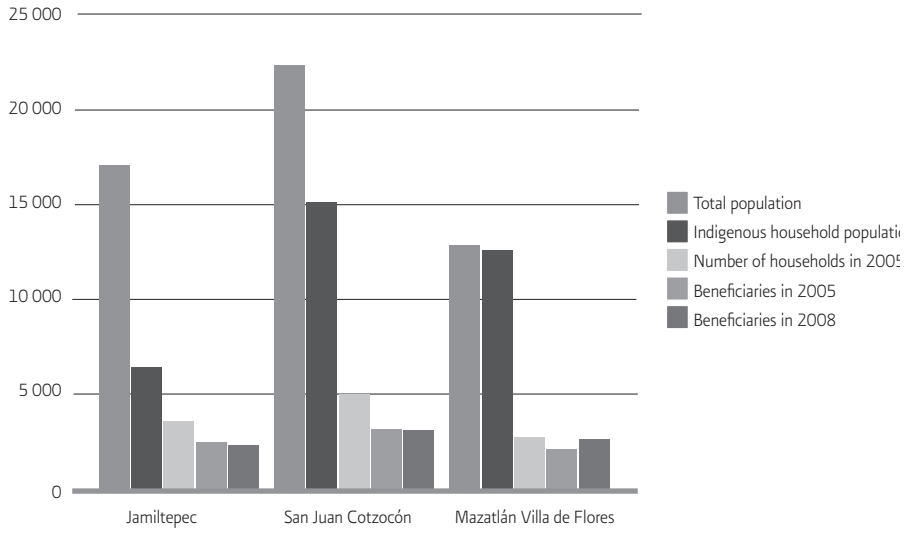


Figure C1
Comparative coverage in the three municipalities (municipality totals)

Source: II Conteo de Población y Vivienda 2005 (2nd Population and Housing Census 2005) by INEGI and list of localities and number of families at the beginning of fiscal year 2005 and 2008, beneficiaries registry, Oportunidades Program (in González de la Rocha with Sánchez and Paredes, 2008: 324).

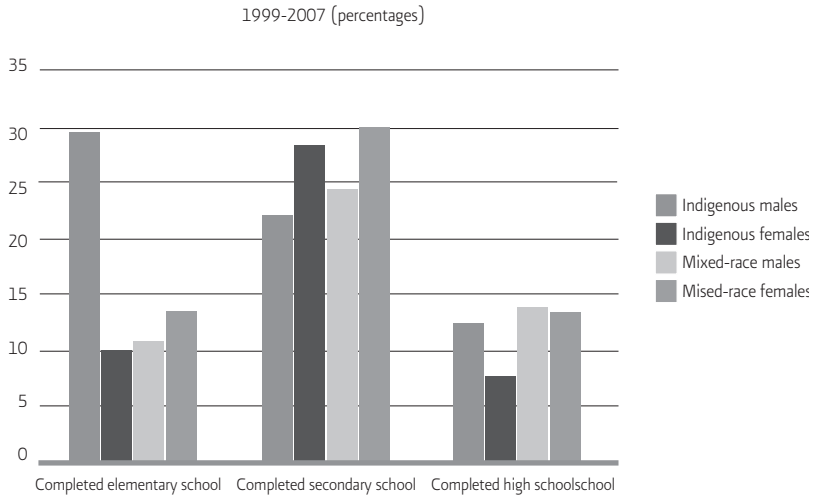
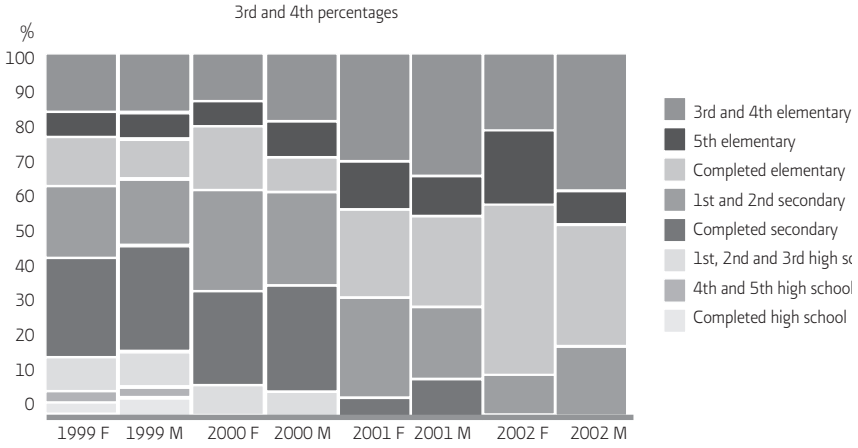


Figure C2
Average schooling attainment by former beneficiaries in Maycoba (Sonora)

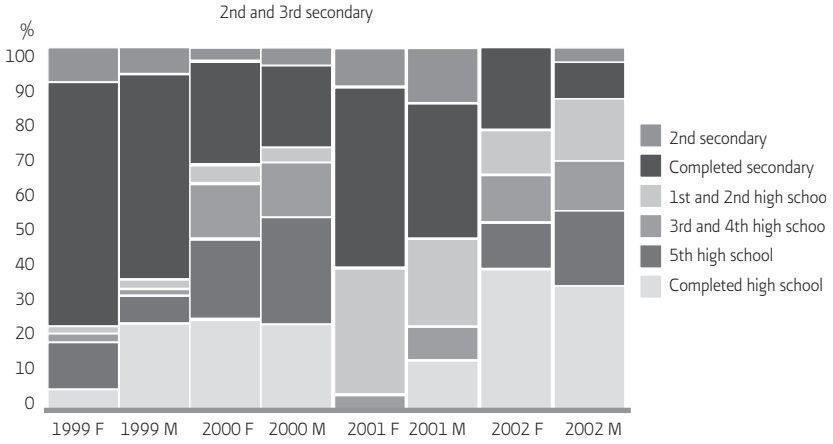
Source: Sariego et al, 2008: 196.

Figure C3
Average schooling of former beneficiaries incorporated into Oportunidades in the third and fourth grades, Santiago Jamiltepec (Oaxaca)



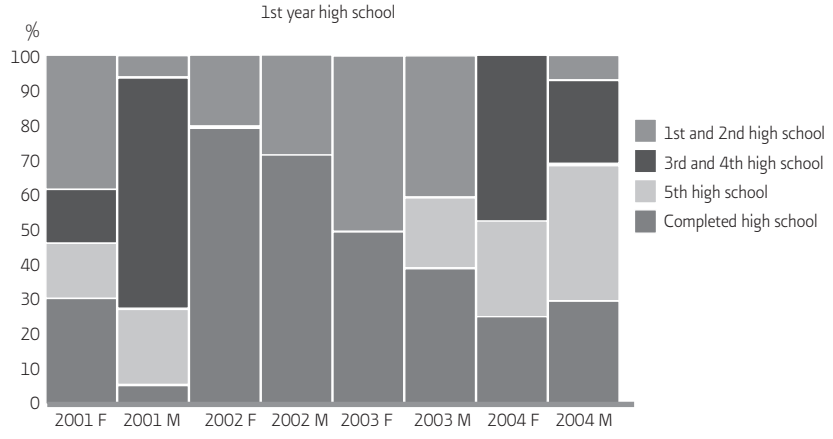
Source: Developed by Laura Pedraza. Courtesy of Mercedes González de la Rocha and Laura Pedraza.

Figure C4
Average schooling of former beneficiaries incorporated into Oportunidades in their second and third years of secondary school, Santiago Jamiltepec (Oaxaca)



Source: Developed by Laura Pedraza. Courtesy of Mercedes González de la Rocha and Laura Pedraza.

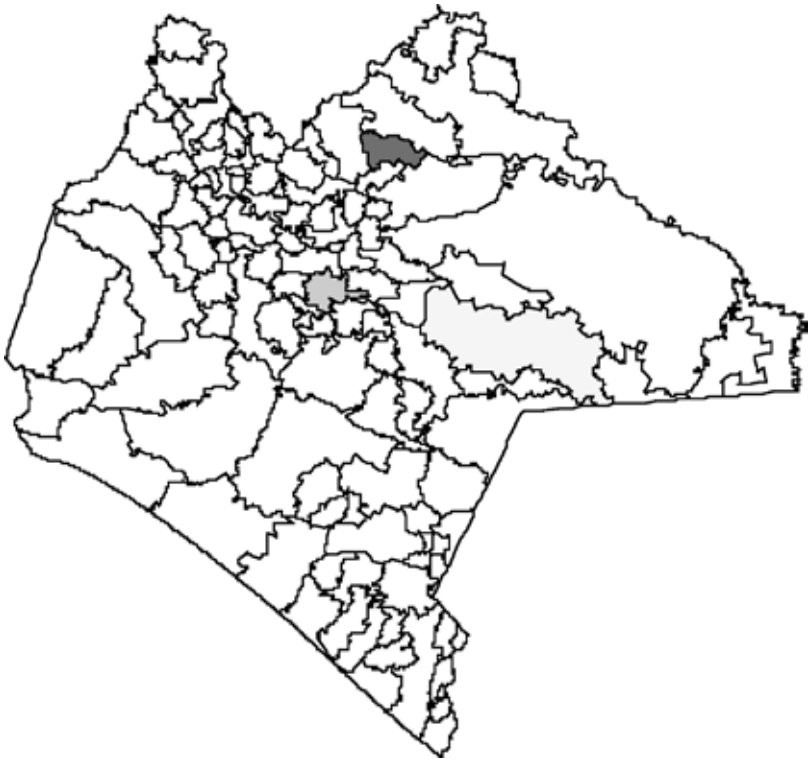
Figure C5
Average schooling of former beneficiaries incorporated into Oportunidades in their first year of high school, Santiago Jamiltepec (Oaxaca)



Source: Developed by Laura Pedraza. Courtesy of Mercedes González de la Rocha and Laura Pedraza.

D. Maps

LOCATION OF THE MUNICIPALITIES SELECTED FOR THE CHIAPAS STUDY

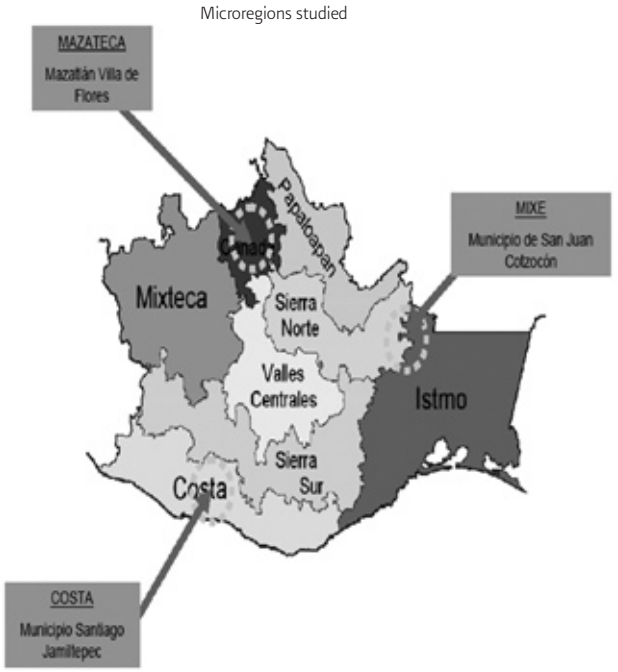


Map D1
Location of the municipalities selected for the Chiapas study

San Cristóbal de las Casas (Altos Centrales de Chiapas – Tzotzil region).
Las Margaritas (Tojolabal region).
Tumbalá (Chol region).

Source: Agudo Sanchíz, 2008b:172.

Map D2
Location of the microregions for the Oaxaca study



Source: González de la Rocha with Sánchez and Paredes, 2008;327.

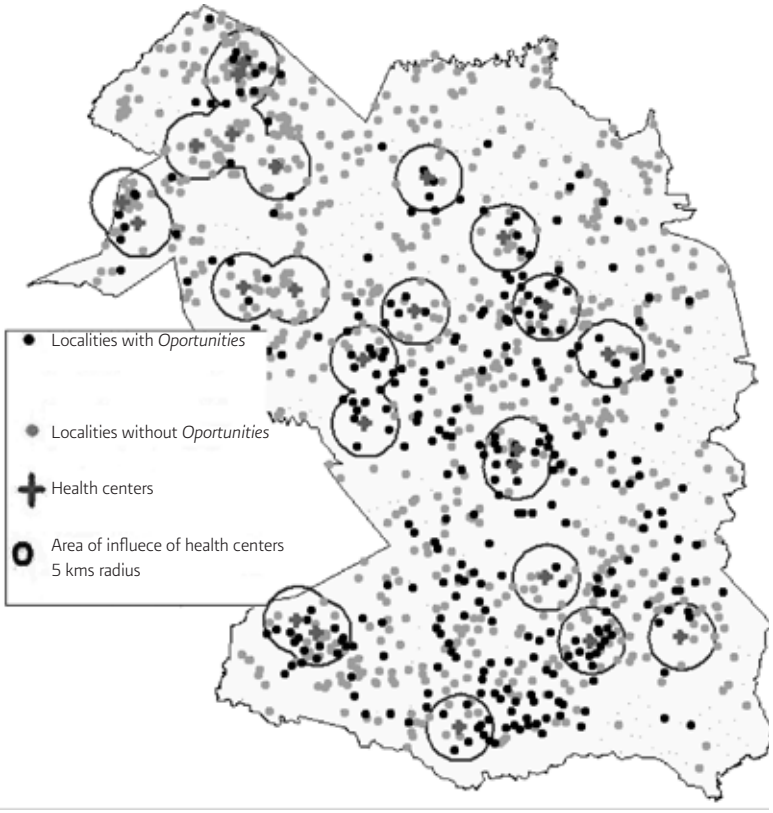
Map D3
Region of the Chihuahua study

Note: The localities in the study are located in the municipalities of Guachochi, Temósachi and Yécora (this last state does not appear on the map because it belongs to the neighboring state of Sonora, although it borders the municipality of Temósachi).

Source: Sariego *et al,* 2008:189.

Map D4
Location of microregions in the Sonora study

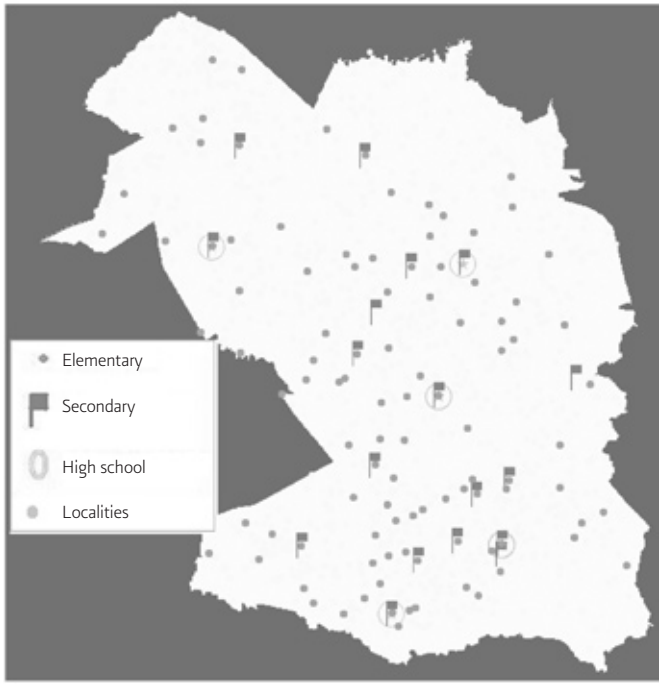
Source: Haro *et al*, 2008:46.



Map D5
Areas of influence of the health centers and coverage of t he *Oportunidades* Program in the municipality of Guachochi (Chihuahua)

Source: Sariego *et al*, 2008:197.

Map D6
Location of schools in the municipality of Guachochi (Chihuahuia)



Source: Sariego *et al,* 2008:197.

A

B

C

Map D7
Area of influence of elementary schools (A), secondary schools (B) and high schools (C) in the municipality of Goachochi (Chihuahua)

Source: Sariego *et al*, 2008:198.

Map D8
Coverage of the *Oportunities* Program and areas of influence of health centers and elementary schools in the municipalities of San Cristóbal (A), Las Margaritas (B) and Tumbalá (C), state of Chiapas

A

B

C