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## FIRST NATIONAL CONFERENCE

**EDUCATING GIRLS:  
ACHIEVING  
THE DEVELOPMENT  
OF GUATEMALA**



**Guatemala, January 29th. 1991**

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**EXECUTIVE SUMMARY**

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On January 29, 1991, for the first time in Guatemala, leading policy makers from public and private sectors were called together at a national conference to deliberate on the role that the education of girls plays in the country's social and economic development. The conference, Educating Girls: Achieving the Development of Guatemala, was the culmination of two years of discussions and studies that pointed clearly to the importance of the issue for the country's future. The Conference was sponsored by the USAID Mission in Guatemala, the Resident Representative in Guatemala of the United Nations Development Fund, and the National Office of Women of the Ministry of Labor. The conference planning committee included representatives of these organizations and representatives from private sector institutions, including the Foundation for Guatemalan Development (FUNDESA), the Universidad Rafael Landivar, DataPro, S.A., and the Guatemalan Sexual Education Association (AGES).

At the conference, worldwide and Guatemala specific data on the relationship of girls' primary education to social and economic development were presented to the conference participants. In workshop sessions, the participants reviewed these data analyses and focused on the policy implications for Guatemala's social and economic development.

This executive summary reviews the data reported at the conference and summarizes the actions taken by the conference participants with respect to girls' education in Guatemala.

**What information was reported at the conference?**

During the past 10 years, severe economic crises in developing countries have required local, national, and international agencies to examine closely the factors that contribute to a country's development. This study has provided striking information on the strong positive relationship between the level of education of the population--and in particular the level of education of girls--and a country's development.

**What do the worldwide data report?**

Countries that do not develop their human resources suffer serious consequences economically and socially. Where large numbers of the population are uneducated, industrial and agricultural productivity are significantly lower. The health, nutrition, and living conditions of the members are also significantly lower. Such conditions exact a high cost on a country's resources in increased expenditures on health and welfare of the population.

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The age at which a woman first marries rises consistently with her level of education-- a difference of nearly four years between women without any formal education and women with primary education and at least some secondary education. Delaying the age at first marriage tends to postpone the age at which the woman has her first child. This delay reduces the health risks to the mother and child associated with early pregnancy. Finally, women who have higher levels of education are more likely to participate in the national labor market. In Guatemala, 20 percent of women with one year of education are economically active as compared to 85 percent of men with the same level of education. However, women participation in the labor market increases to 50% when a woman completes 4 to 6 years of school.

These and other Guatemalan data presented at the conference confirmed the conclusions reached in studies conducted worldwide on the correlation between girls' education and improvements in indicators of social and economic development.

### **What were the results of the national conference *Educating Girls: Achieving the Development of Guatemala*?**

Following their analysis of the Guatemala specific data, the participants concluded that immediate action is required on the part of public and private sector institutions to bring about rapid improvements in the education of girls. The participants also agreed that a multitude of factors contributes to the serious conditions that have inhibited the educational advancement of girls in Guatemala; no single factor (e.g., attitudes of parents; cultural values; the quality of teaching) is responsible for Guatemala's low primary school completion rates among girls and high illiteracy rates among women. The participants determined that each public and private sector entity must assume a role in overcoming the obstacles that prevent girls' progress in school. Only through institutional collaboration can Guatemala's social and economic development achieve rapid improvements.

At the final plenary session of the conference, the participants unanimously agreed that without explicit government policies to promote the equal schooling of girls, it is unlikely that government, institutional, family, community, and school practices will be changed. The plenary session agreed to form a National Commission on Girls' Education, and they nominated 12 leaders from the public and private sectors to constitute the National Commission. The conference session then established two immediate mandates for the National Commission:

- To develop a national emergency plan to address girls' education in Guatemala, with an emphasis on the role that must be played not only by the public sector, and specifically the Ministry of Education, but by each participant in the country's economy (e.g., Ministries of Finance, Economy, Agriculture, Development, Labor, Roads, and Defense) as well as by private sector institutions (e.g., banking, industry, and agricultural producers), and

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In countries where governments have invested in the education of girls, the investment has been "repaid" through greater participation of women in the waged, modern labor sector and higher economic productivity ; lower infant and maternal mortality rates; improved child nutrition and family health; and longer life expectancy. Part of the reason for the high rates of illiteracy among women worldwide is that girls have significantly higher dropout rates than do boys. Due to a complex set of factors, girls who do enroll in school tend to have higher rates of absenteeism than boys, and to drop out of school after the first, second, or third grades. When girls drop out of school prior to completing four to six years of primary school, they tend not to retain the basic skills of reading and writing. The evidence suggests that increasing the retention of girls in primary school is a solution to the high illiteracy rates world-wide.

#### What do the Guatemala data report?

Of all countries in the Western Hemisphere, Guatemala has the second highest rate of illiteracy among women: one out of every two women is unable to read and write. Forty-five percent of Guatemalan women have received less than one year of education and fewer than one out of three Mayan women have received any formal education. Girls in Guatemala face severely limited opportunities for educational advancement; the obstacles to such advancement appear to be especially large for girls who attend rural schools. The patterns of low school retention that exist for rural girls have an impact on the country as a whole. One enrollment model estimates that only half of all children who enroll in primary school in both rural and urban areas ever complete sixth grade. Rural girls make up 36.5 percent of the school-aged population, yet only 11.8 percent of the population enrolled in sixth grade are rural girls (these statistics do not reflect the high incidence of dropout that occurs throughout the school year since enrollment data are reported on the first day of the school year).

According to the recent analyses of Guatemalan data based on studies conducted from 1987 and 1989 presented at the conference, a consistent relationship exists between four to six years of primary education of girls and indicators of education, health, employment and family welfare. Education has consistently been positively associated with the use of prenatal care in both rural and urban areas. Prenatal care as a preventive health measure is a positive indicator of the health of the mother and the newborn. There is also a strong relationship between prenatal care and reduced maternal mortality rates.

For Guatemala as a whole, only 34.2 percent of women between 15-44 years of age received prenatal care during their last pregnancy. While only slightly more than 15 percent of rural mothers with no education obtained formal prenatal care, over 57 percent of those with four to six years of education obtained such care.

A strong inverse relationship also exists between primary education and infant mortality. Infant mortality is twice as high among women with minimum education as among women who completed six years of primary school and acquired some secondary education.

- **To create a national consciousness-raising campaign to inform the public of the importance that the education of girls holds for Guatemala's development.**

**At the conclusion, the newly formed National Commission on Girls' Education expressed its commitment to respond to the conference mandate through close multi-sectoral and interdisciplinary cooperation--an ambitious and significant step for Guatemala's future.**

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## **I. ACKNOWLEDGEMENTS**

The authors wish to thank Liliana Ayalde and Richard Martin who recognized the importance of girls' education for Guatemala's development and provided the vision, focus, and support that permitted this activity to come to pass. The authors also wish to thank Dr. Barry Smith, whose belief in the role that the education of girls and women plays in the achievement of world peace served as the catalyst for mobilizing efforts within USAID/Guatemala.

The authors also wish to thank the sponsoring institutions for making this event possible: USAID/Guatemala, The United Nations Development Program (UNDP) Representative to Guatemala, The National Office of Women (ONAM) of the Ministry of Labor, and representatives of FUNDESA (the Foundation for Development). Appreciation is also extended to the Asociación Guatemalteca de Educación Sexual (AGES) for its logistical support in carrying out the national conference. Thanks go to Mario Nathusius, Isabel Nieves, Derek Steele, and Gloria Tujab who served as facilitators for the Conference; and to Nefalí Hernández, Lucy Martínez Montt, Eugenia de Monterroso, Bruce Newman, María Luisa Beltranena de Padilla, Magali de Rodil, Magda Bianchi de Serrano, and Tony Zaed who made substantial contributions to the conference.

The National Conference Planning Committee members included: Lucrecia Alegría (UNDP), Beatriz Bezmalinovic (DataPro, S.A.), Carmen de Cáceres (ONAM), Susan Clay (USAID/Guatemala), Carmen de Monterroso (AGES), Gabriela Núñez (Juárez and Associates; Universidad Rafael Landívar), and Gloria Tujab.

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## **II. INTRODUCTION**

On January 29, 1991 an historic event took place in Guatemala. For the first time in any country in the world, key national public and private-sector policy makers met to formulate policy recommendations concerning a previously little known development issue: the role that four to six years of formal primary education of girls plays in a country's social and economic development. In this national meeting--Educating Girls: Achieving the Development of Guatemala--newly analyzed Guatemalan data on the relationship between girls' education and development in Guatemala were presented to key leaders in business, agriculture, industry, government, and religion, individuals whose previous experience with the country's education system and problems was limited. The convening of these individuals was based on the belief that without commitment from Guatemala's public and private sector to improving the educational opportunities of girls, the productive potential of much of the country's labor force will remain untapped and vast human and material resources will not be brought to bear on Guatemala's development.

### **What is New about the Role that Girls' Education plays in a Country's Development?**

The role of Women in Development has been an area of interest for international institutions for the past 20 years. Evidence world-wide has shown the importance of women's work in the industrial and agricultural production of countries, particularly in developing countries where women are responsible for approximately 60 percent of agricultural production (Sivard, 1985). International institutions have led efforts to improve women's credit opportunities, to form women's cooperatives, to increase women's integration into development programs of all types, and to reduce the high levels of illiteracy among women.

Research world-wide has shown that women who received four to six years of formal primary schooling as children have significantly lower rates of fertility, infant and child mortality and morbidity, malnutrition, and illiteracy, and significantly higher rates of educational attainment, employment, productivity, health, and nutrition. This finding, coupled with the serious discrepancies in developing countries between boys' and girls' school enrollment, drop-out, retention, and graduation rates has led to an examination of the role that girls' education plays in development and a call for governments to focus on this key issue in development. A World Bank study of approximately 200 countries showed that nations that have invested heavily in the primary education of girls in the past benefit through higher economic productivity, lower infant and maternal mortality, longer life expectancy for both men and women, and lower fertility rates than do countries that have not invested in female primary education (King, 1990). Until recently, little attention was focused on girls' education; Guatemala's efforts stand among the first world-wide to address this key development issue.

### **How did the issue come to the attention of Guatemala's policy makers?**

In 1985, and again in 1988, USAID/Guatemala conducted assessments of the education sector in Guatemala (Academy for Educational Development et al, 1985, 1988). These studies highlighted the high rates of illiteracy among women, particularly in the rural areas (second only to Haiti among countries in the Western Hemisphere), and the high drop-out and low retention rates among girls. These assessments recommended that the country's educational system focus on methods for increasing girls school enrollment, retention, and completion rates. Early in 1989, the Ministry of Education and USAID/Guatemala designed the Basic Education Strengthening Project (BEST), a complex set of activities focusing on system-wide efforts for making improvements in education in the country. A general area of interest in the project was improvements in educational conditions for girls (e.g., research on girls' school retention). However, since so little was documented about these conditions, specific solutions were not proposed in the Project design.

However, due to the strong evidence mounting on the relationship of girls' education to social and economic development, USAID/Guatemala initiated a series of activities in 1989 to explore in depth the condition of girls' education in Guatemala in order to focus the activities within the BEST Project.

#### Mission Concept Paper.

As a basis for developing a strategy, USAID/Guatemala contracted Dr. Barry Smith to study the issues and to develop a concept paper examining the relationship of primary education of girls to social and economic development. As a result of the review of the evidence, Dr. Smith recommended that the Mission conduct

- A literature review of Guatemala specific research,
- A world-wide literature review focusing on the relationship of girls' education to social and economic development, and
- Analyses of three existing Guatemalan data sets to provide a statistical data base for conducting further work in Guatemala.

Each of these activities was to respond to the question: What is the relationship of the education of girls (four to six years of primary education) to social and economic development?

### Guatemala-specific literature review.

As a first step to studying the issues in Guatemala, USAID/G contracted the Centro de Información y Documentación Educativa de Guatemala (CINDEG), located at the Universidad Rafael Landívar, to conduct the literature search of research, publications, and data bases specific to Guatemala (Eva Sazo de Méndez and María L. de Gómez, 1990).

The literature review concluded that research and planning has not taken place in Guatemala to identify the causes of the disproportionate drop-out and retention rates of boys and girls--research and planning that could inform educational policy at national and local levels. In addition, the literature review noted that organizations whose activities are related in some way to education have not focused in a unified fashion on common concerns and potential actions that could address the problem.

### World-wide literature review.

To complement the local study, the Offices of Women in Development and of Science and Technology (Agency for International Development, Washington, D.C.) conducted a world-wide review of literature on the same subject, bringing together in one document the extensive research that has been published on the relationship of the education of girls to social and economic development (Floro, M. and J. Wolf, 1990).

### Analyses of three Guatemalan data sets.

In addition, with USAID/Guatemala funding, DataPro S.A., with the assistance of the National Statistics Institute (Instituto Nacional de Estadística), conducted extensive analyses of three large Guatemalan data sets that contained sex-disaggregated data on national representative samples. The objective of these analyses was to provide Guatemala specific information on the relationship of girls' primary education to social and economic development indicators. The final report served as the basis for discussion at the National Conference, "Educating Girls: Achieving the Development of Guatemala."

### **Why was an event organized for the country's policy makers and What Were Its Objectives?**

The results of the Guatemalan data analyses were so striking that USAID/Guatemala suggested that the evidence on the importance that girls' education holds for Guatemala's development be brought to the attention of the country's leaders, to assist them in national planning efforts. Leaders present at the international conference, Education for All, held in 1989 in Thailand, pointed out that expenditures on girls' education were funds well spent.

When resources are invested in educating girls, they achieve multiple benefits in social and economic development and in real savings for the country. For this reason, USAID/Guatemala, along with the other sponsoring institutions, approached the key policy makers of the country, to bring to their attention the importance of girls' education as a solution to the country's development problems and to provide them with an opportunity to formulate policy recommendations for improving girls' education in Guatemala.

#### **Who sponsored the event?**

Funding for the event was provided by USAID/Guatemala; planning and implementation of the event was a collaborative effort of a number of public and private-sector institutions and individuals. A key element in the planning was the conviction that inter-institutional and inter-sectoral cooperation was fundamental to the event's success. Therefore, the co-sponsorship of international, national, and private-sector institutions and individuals was sought.

Because of its key involvement world-wide in issues of women's and children's health and education, USAID/Guatemala sought the co-sponsorship of the United Nations Development Program's Representative to Guatemala. In addition, co-sponsorship of the National Office of Women (of the Ministry of Labor) was invited, because of this office's knowledge and experience with issues and activities related to women and girls in Guatemala. Because of their work in supporting educational improvement in Guatemala, representatives of FUNDESA were requested to assume a major role in carrying out the event.

#### **Who planned the National Conference?**

The National Conference was planned by representatives of the three sponsoring institutions and by representatives from the following organizations: the Asociación Guatemalteca de Educación Sexual (AGES), which was contracted to carrying out logistical arrangements for the event; from DataPro, S.A., which was responsible for conducting the analyses of the Guatemala specific data related to girls' education and development; the Universidad Rafael Landivar, a private Catholic University in Guatemala, and from an international foundation serving the interests of indigenous peoples throughout the world.

Details on the planning process, for institutions wishing to replicate such an event, are reported in a separate document and can be obtained from USAID/Guatemala, Office of Health and Education.

The report that follows presents a description of the events surrounding the planning and implementation of the national conference, "Educating Girls: Achieving the Development of Guatemala" and includes a discussion of:

- The conditions worldwide with respect to the education of girls.
- The relationship that the education of girls (four to six years of formal primary education) has with indicators used to measure a country's social and economic development (e.g., infant and child mortality and morbidity; fertility; level of family nutrition; industrial and agricultural production; employment and income generation).
- Recent analyses of Guatemala-specific data on the relationship of the primary education of girls to indicators of social and economic development in Guatemala.
- The inter-institutional planning of the national conference and the developmental approach used in conducting the interactive conference workshop sessions.
- The conclusions reached by the conference participants and the commitments made to improving educational opportunities for the girls in Guatemala.

### **III. BACKGROUND<sup>1</sup>**

#### **A. THE EDUCATION OF GIRLS IN THE GLOBAL CONTEXT**

##### **What do we know about the education of girls in developing countries?**

During the past twenty years, education has increasingly become a major priority in developing countries that are struggling to attain political, economic, and social development. Despite the efforts of the 1970s and early 1980s, which resulted in increased school enrollment and literacy rates, education in developing countries remains in crisis conditions due mainly to economic recession, population growth, and structural adjustment programs that have caused a serious depletion in resources and a rechanneling of financial resources budgeted for education.

Problems of school access, expansion, and quality continue to provide a challenge for governments and policy makers. As an example, primary school girls--the mothers and workers of the future--do not receive an adequate share of the available educational resources. Studies of resource distribution for primary schools show that girls are at a disadvantage with respect to boys (King et al., 1989).

According to recent UNICEF reports (1990), 100 million children have no access to education and of these, 60 million are girls (i.e., 20 million fewer girls than boys have access to education). In addition, of the 83 developing nations, 68 have lower primary school enrollment rates for girls than for boys. This disadvantage is even more evident in the upper grades (fourth to sixth grade of primary school and secondary school) (Population Crisis Committee [PCC], 1988).

The problems underlying the education of girls are complex. To evaluate them, it is not sufficient simply to compare enrollment rates by gender, since these rates disguise the problems of absenteeism and dropout that occur following enrollment, which are significantly higher in the female population. It is difficult therefore to know how many girls in developing countries may enroll in school yet receive little or no primary school education (UNESCO, 1989; King et al., 1989).

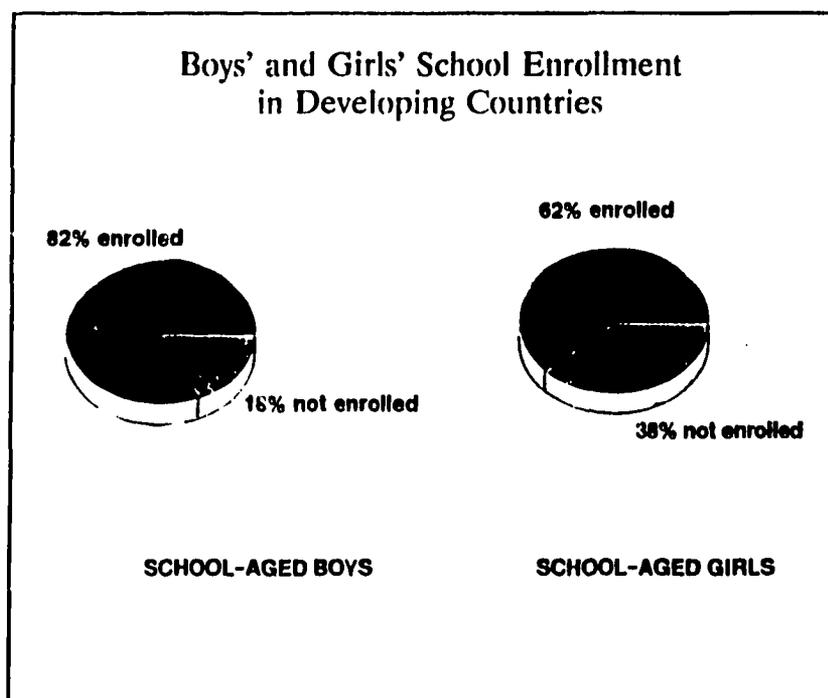
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<sup>1</sup> This chapter was based in part on the keynote address of the Minister of Education, Licenciada María Luisa Beltranena de Padilla.

## What do we know about girls' enrollment rates in primary school?

Estimates of girls' access to primary school are generally determined by analyzing data obtained from school enrollment records. Among the developing nations in Africa, Asia, and Latin America, 38 percent of school-age girls **never** enroll in school. In comparison, the graph for unenrolled school-age boys is 18 percent (see Graph 1) (King et al., 1989).

**Graph 1 School Enrollment Levels in Developing Countries**



Source: King et al., 1989

The figures for girls' school enrollment in Latin America are higher than the worldwide average. Less than 20 percent of school-aged girls are not enrolled in school in the Latin American region (PCC, 1988). However, enrollment data for Central America are not consistent with data for all countries. Table 1 shows that Costa Rica has managed to provide equal schooling to its population. Among the population without access to education, the percentages for males and females are the same. Between 1985 and 1987, only seven percent of the males and females over 12 years old were unable to obtain any education. These enrollment levels are comparable to those of industrialized nations.

**Table 1 Educational Levels in Central America, by Country and Sex (percentage of the population over 10 years of age, 1985-1987)**

	COSTA RICA *		EL SALVADOR		GUATEMALA		HONDURAS		NICARAGUA	
	F	M	F	M	F	M	F	M	F	M
NONE	7	7	30	24	45	34	24	23	28	28
PRIMARY SCHOOL (incomplete and complete)	57	56	46	49	44	52	57	59	48	48

SOURCE: García y Gomáriz (1989) based on national surveys

\* For persons over 12 years of age.

In contrast, Guatemala is at the bottom of the scale in Central America with respect to educational levels for individuals over 10 years of age. Between 1985 and 1987, almost half of the female population received no formal education. The differences between the percentages for males and females that had no education were the highest among all Central American countries (García and Gomáriz, 1989).

#### **What do we know about the female literacy rate?**

In general, literacy rates for adult populations are a reflection of historical tendencies to enroll and remain in primary school (PCC, 1988). Consequently, an analysis of girls' education in developing countries requires a review of both the male and female adult literacy rates.

With the exception of a few countries that are notable for their limited progress, the Latin American region has shown considerable improvement in its literacy rates in recent years<sup>2</sup>. Guatemala, however, is one of the exceptions. Within the region, only Haiti has a higher adult illiteracy rate than Guatemala (UNESCO, 1988, 1989). Guatemala is the only country in the region in which the majority of women are not literate (U.S. Bureau of the Census, 1980).

The differences between literacy rates for males and females in Central America are shown in Table 2. As with their national enrollment rates, Costa Rica has managed to eliminate the differences in literacy rates for males and females. However, high literacy rates in Costa Rica for people over 15 years of age cannot be compared with those of the rest of the isthmus.

<sup>2</sup> See Table in Annex

**Table 2 Illiteracy Rates in Central America, by Country and Sex (percentage of the population 15 years of age or older, 1985)**

	COSTA RICA	EL SALVADOR	GUATEMALA *	HONDURAS	NICARAGUA
FEMALES	7.4	30.7	50.0	41.6	26.0
MALES	7.3	25.0	37.0	39.3	23.4
TOTALS	7.4	27.9	44.0	40.5	24.8

SOURCE: García y Gomariz (1989) based on UNESCO and national sources

\* 1981

In contrast with the statistics of Costa Rica and the averages in Latin America, Guatemala has the largest disparity in literacy rates between adult male and female populations: 13 percentage points (García y Gomáriz, 1989). In Guatemala, as in Asia, one out of every two females is unable to read or write.

Comparing worldwide statistics on the gap between male and female literacy rates, Guatemala is at the same level as Malaysia, Mali, Pakistan, and Zimbabwe (PCC, 1988). Even Botswana, Thailand, Jordan, Nicaragua, and Haiti have smaller disparities between the literacy rates of males and females (PCC, 1988).

### **What are the advantages of primary school education for girls?**

In developing countries, literacy and the basic education of women have important effects on social and economic development. The accumulated evidence shows that low educational levels of women hinder economic development and reinforce social inequality (Haddad et al., 1990).

Floro and Wolf (1990) indicate that until recently, research has focused mainly on aspects of access to primary education rather than on the social and economic impact that education has on women and on their futures. Recent worldwide evidence, however, shows the strong relationship of girls' primary education to indicators of social and economic development.

The positive effects of primary education of girls are clearly evident in improved family welfare and social and economic conditions. With respect to the economic effects of girls' primary education, recent research has shown the relationship between increased years of primary education among women in the work force and better paid employment, both in rural and urban areas, increased productivity and salaries, and participation in the informal work sector and/or self-employment.

Research conducted on the impact of girls' education on non-commercial and family welfare matters showed improved productivity in domestic work, in the care of children, in health and nutritional habits, in employment opportunities, and in production for family consumption.

In addition to the effect of girls' primary school education on women's productive capacity, a strong relationship exists between girls' education and reductions in birth rates and in rates of infant mortality, as well as in increases in infant health rates. Research also reveals the positive effect of a mother's education on the education of her children. Studies that analyze the effects of primary school education on girls' self esteem and confidence, and on their adoption of new social roles as women, however, are almost nonexistent. It should be noted that these effects may depend on the social, economic, and cultural conditions within each country (Floro and Wolf, 1990).

In their review of worldwide literature on the social and economic effects of girls' primary school education on developing countries, Floro and Wolf (1990) note that in addition to the traditional tasks of child rearing and domestic labor, women also perform agricultural, manufacturing, and commercial tasks. Without access to education, their ability to develop skills that allow them to improve their productive capacity and to contribute to the welfare of their families and countries is seriously limited.

#### **What is the economic impact of girls' education?**

King (1990) and Psacharopoulos (1989) point out that a direct relationship exists between girls' education and a country's economic development. With respect to the private and social rate of return from investments in education, they found that the rate of return for girls is higher than for boys, especially at the primary level.

Education tends to be a long-term social investment, producing greater long-term than short-term effects. The development of cognitive abilities and the basic skills of writing, mathematical calculation, communication, and information processing provide girls with greater opportunities to participate in economic activities and training programs, and in personal, family, and social development.

The majority of women from rural areas are illiterate and as a result have fewer opportunities and more limited access to resources than do men. A program for primary school education, with a structure and curriculum that responds to social and cultural realities, is a determining factor for changing the economic roles and status of girls and women in rural areas. Primary education of girls increases the number and types of jobs available to women entering the work force. In his study of two micro enterprise programs in the Dominican Republic and Peru, Reichmann (1989) pointed to the importance that skills in writing and arithmetic have on women being granted loans. In Peru, poor writing skills prevalent among women partially explain why fewer women than men request loans and why women are involved in activities that require smaller loans (Arias, 1989).

### **What is the social impact of girls education?**

Recent studies conducted in several developing countries indicate that family well-being and especially the survival, health, and educational achievement of the child are directly related to the educational level reached by the mother. In Morocco, a study of parents' influence on the reading abilities of their children found that improved reading levels in children is partially determined by the mother's level of education.

Regarding the effect of parents' education on the health of their children, Blumberg (1989) analyzed the results of several worldwide studies showing an inverse relationship between education levels of women and infant mortality and infant nutrition. Other studies have also identified a strong inverse relationship between women's educational levels and fertility rates.

Levine et al. (1987), in their study of 300 mothers in Mexico City, demonstrated the relationship between clinical prenatal care received and the education levels of the mother. A survey on the crisis of infant health found that mothers with at least six years of schooling more often took their children to clinics within the first three days of an illness than did mothers with less schooling or with none at all.

In summary, worldwide research provides positive evidence that primary school education for girls produces significant improvements in a country's social and economic development as measured by such indicators as increased participation of women in the work force, better skills and abilities, greater access to credit and training programs in the informal sector, increased production for domestic consumption, improved child rearing, nutrition, and family health practices, and a reduction of birth rates and of infant and child mortality and morbidity rates.

## **B. THE EDUCATION OF GIRLS AND THE DEVELOPMENT OF GUATEMALA<sup>1</sup>**

Guatemala presents some of the greatest challenges to development found in any of the Latin American countries. Development projects are often frustrated by a lack of appropriate mechanisms to achieve significant progress in key indicators in health, family spacing, and economic development. Recent research conducted world-wide demonstrates that investments in primary education of girls have a significant and positive impact on a country's development across sectors. In countries where governments have invested in education of girls, this investment has been "repaid" through higher economic productivity and greater participation of women in the waged, modern labor sector, lower infant and maternal mortality rates, improved child nutrition and family health, longer life expectancy, and lower fertility rates.

The purpose of this presentation is to examine the relationships of an often overlooked intervention strategy -- the formal education of girls -- with selected indicators from recent, nationwide studies undertaken in Guatemala. The relative strength of such relationships can be examined comparatively with the costs and benefits of other interventions. As we will see, these comparisons strongly support investments in improving the formal education of girls as a necessary basis for ensuring that other development investments become effective instruments of social and economic development.

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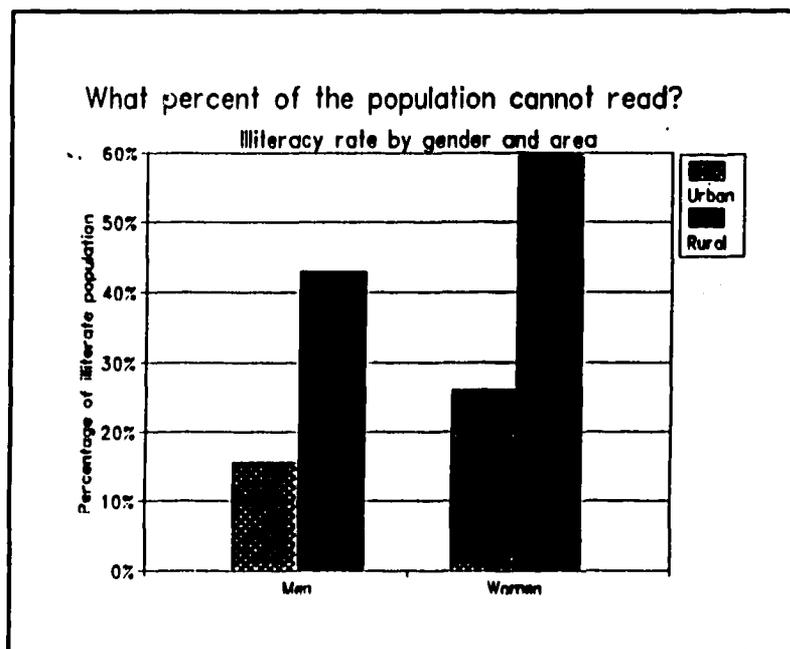
<sup>1</sup> See the appendix for the survey questions that served as the basis for this statistical analysis.

## WHAT IS THE LEVEL OF GIRLS' PARTICIPATION IN THE EDUCATION SYSTEM?

Among all countries in the Western Hemisphere, Guatemala has the highest rate of illiteracy among women, estimated at 40% of the population seven years and older. As Graph 2 shows the percentage of persons who are illiterate is not evenly distributed by either residence or gender groups. Illiteracy among rural women, who make up over 32% of the total population, is over 59%, and even in urban areas there are nearly twice the numbers of illiterate women as men.

Approximately 2.7 million Guatemalans are illiterate - 59.9% of whom are women and 80% of whom live in rural areas. As Graph 3 illustrates, rural women alone make up over 47% of the illiterate population. According to an analysis of the 1987 Demographic and Health Survey, the illiteracy rate among Mayan women (71.9%) is nearly three times that of Ladinas (24.6%).

**Graph 2 Total Illiterate Population**

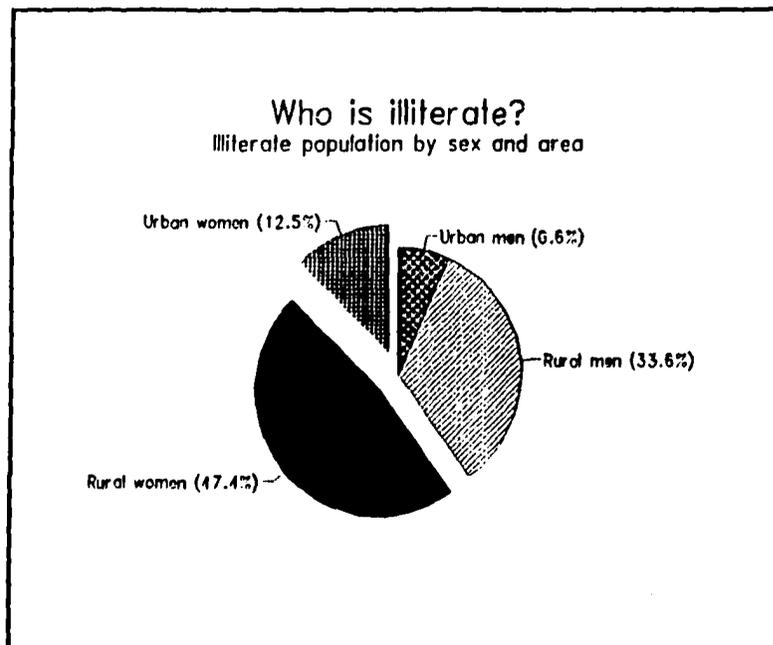


**Table 3 Illiterate Population by Gender and Place of Residence**

Place of Residence	Total Population A	Total Illiterates B	% Illiterates as Place of Residence B/A	% of Illiterate Population
Men-Urban	1,133,953	176,036	15.5%	6.6%
Men-Rural	2,100,798	902,267	42.9%	33.6%
Women-Urban	1,292,667	336,216	26.0%	12.5%
Women-Rural	2,144,934	1,272,384	59.3%	47.4%
<b>TOTAL</b>	<b>6,672,352</b>	<b>2,686,903</b>	<b>40.3%</b>	<b>100%</b>

Source: Instituto Nacional de Estadística, Encuesta Nacional Socio-Demográfica 1989

**Graph 3 Illiterate Population by Gender and Place of Residence**



The formal education system shares the blame for the overall lack of literacy skills in the country. Table 4 shows that nearly 45.6% or 1.4 million women have received less than a full year of formal education. Women lag behind men in all levels of primary education completion and the number of educated women is especially low among rural and indigenous populations: fewer than one out of every three Mayan women has received formal education.

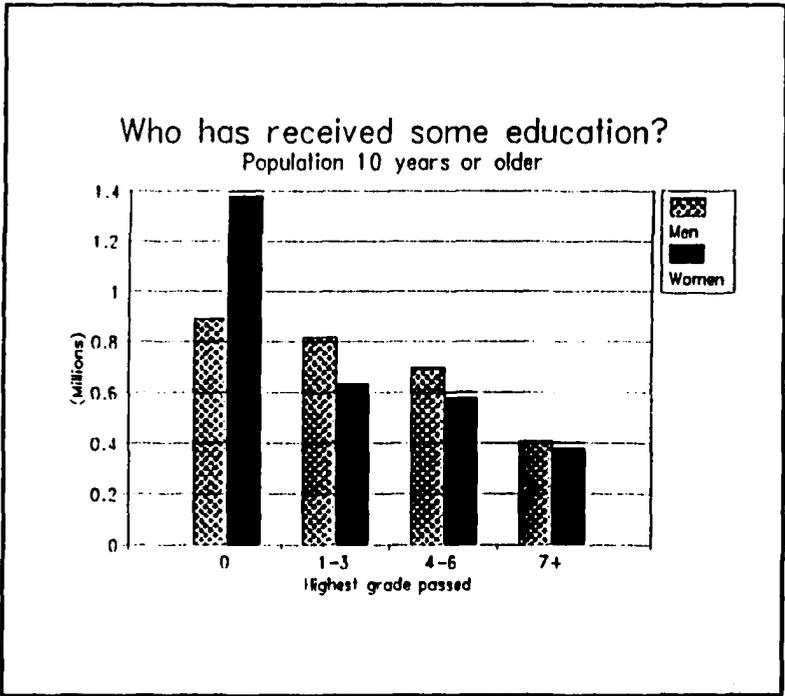
**Table 4 Population 10 Years and Older by Gender and Highest Grade Passed**

<b>Last grade passed</b>	<b>Men</b>	<b>Women</b>	<b>% Men by grade</b>	<b>% Women by grade</b>
<b>0</b>	888,639	1,377,346	31.7%	45.6%
<b>1-3</b>	816,535	692,436	29.1%	22.9%
<b>4-6</b>	695,662	575,869	24.8%	19.0%
<b>7+</b>	405,593	378,150	14.4%	12.5%
<b>Total</b>	<b>2,806,429</b>	<b>3,023,801</b>	<b>100%</b>	<b>100%</b>

Source: INE, Encuesta Nacional Socio-Demográfica 1999

The percentage of Guatemalan women with some education is considerably lower than in other developing countries. The DHS survey conducted in 28 developing countries in Asia, Latin America, and the Caribbean found that overall, the proportion of women who have had some education exceeds 80% in all of these countries except Guatemala, Haiti, and Indonesia.

**Graph 4 Population 10 Years and Older by Gender and Highest Grade Passed**



Distortions such as those mentioned previously for the adult population are the result of an educational process applied over time to cohorts of boys and girls. The probability of change may be evaluated by examining current attendance rates by age. Table 5 shows the proportion of boys and girls, ages 6 through 15, who are enrolled in public and private primary schools throughout the country.

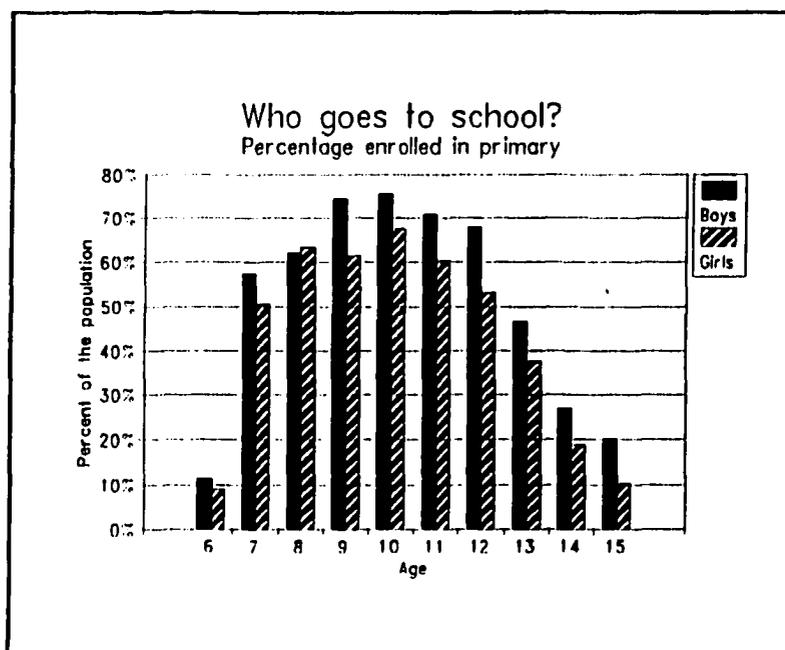
**Table 5 Percentage of Population Enrolled in Primary School by Gender and Age**

<b>Age</b>	<b>% Boys</b>	<b>% Girls</b>
<b>6</b>	<b>11.2%</b>	<b>9.0%</b>
<b>7</b>	<b>57.3%</b>	<b>50.5%</b>
<b>8</b>	<b>62.1%</b>	<b>63.3%</b>
<b>9</b>	<b>74.4%</b>	<b>61.4%</b>
<b>10</b>	<b>75.6%</b>	<b>67.5%</b>
<b>11</b>	<b>70.8%</b>	<b>60.3%</b>
<b>12</b>	<b>67.8%</b>	<b>53.1%</b>
<b>13</b>	<b>46.6%</b>	<b>37.6%</b>
<b>14</b>	<b>26.9%</b>	<b>18.9%</b>
<b>15</b>	<b>19.7%</b>	<b>10.3%</b>

Source: USIPE, Estadísticas Educativas 1988 Estadística Final 1989

This figure combines urban and rural students, because no comparable denominators are available to match the urban-rural definitions used for enrollment data. Nonetheless, the proportion of girls enrolled in primary lags behind that of boys at all ages except at eight years.

**Graph 5 Percentage of Enrolled Population in Primary School by Gender and Age.**



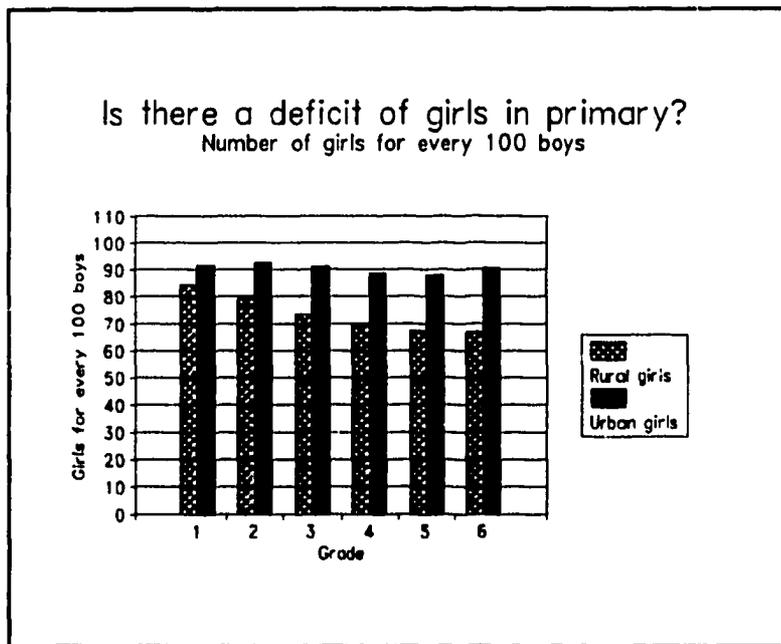
**Table 6 Deficit of Girls in Primary School:  
Enrollment of Girls  
for every 100 Boys by Grade**

<b>Grade</b>	<b>Rural</b>	<b>Urban</b>
1	84.2	91.7
2	79.2	92.3
3	73.1	91.0
4	69.5	88.4
5	67.1	87.7
6	66.5	90.4

Source: USIPE, Estadísticas Educativas 1988, Estadística Final, 1989.

As indicated previously, data are available to examine enrollment rates by urban and rural areas. The relative enrollments of boys and girls, however, does permit the evaluation of trends with school grade and student age between urban and rural areas. The underlying assumption to such comparisons is that approximately equal numbers of boys and girls should be enrolled in school, since there are approximately equal numbers of boys and girls in the population. The indicator used is the number of girls enrolled for every 100 boys of the same grade. If there are no distortions, there will be 100 girls enrolled for every 100 boys. Table 6 presents this indicator for grades 1 through 6. Urban enrollments show a moderate bias favoring enrollment of boys in all grades. However, the pattern in rural schools shows markedly decreasing enrollments of girls compared to boys in primary. Indeed, there are more six grade girls than boys in rural schools.

**Graph 6 Deficit of Girls in Primary School:  
Enrollment of Girls  
for every 100 Boys by Grade**



**Table 7      Number of Students in Sixth Grade  
by Gender and Place of Residence**

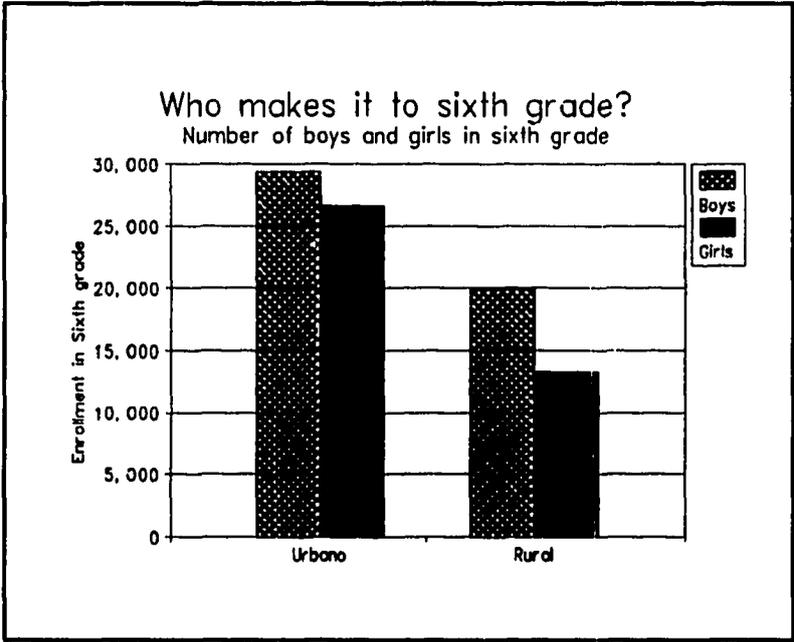
	<b>Urban</b>	<b>Rural</b>	<b>Total</b>
<b>Boys</b>	29,374	19,989	49,363
<b>Girls</b>	26,566	13,293	39,859

Source: USIPE, 1989

The distortion in girls' attendance is even more serious than the foregoing data would indicate. It must be remembered that these relative biases against girls' education occur within a school system where few children complete sixth grade. One enrollment model estimates that 509 out of every 1,000 entrants complete sixth grade, and these figures include both urban and rural public and private schools.

Nearly 72.9% of the school age population live in rural areas, but only 37.3% of sixth graders are actually from rural areas - approximately half of what it should be. The prospects for rural youth, and especially rural girls, are grim indeed. Rural girls make up 36.5% of the school-aged population, yet graph 7 indicates that 11.8% of the sixth graders are rural girls.

**Graph 7      Number of Pupils in Sixth Grade  
by Gender and Place of Residence**



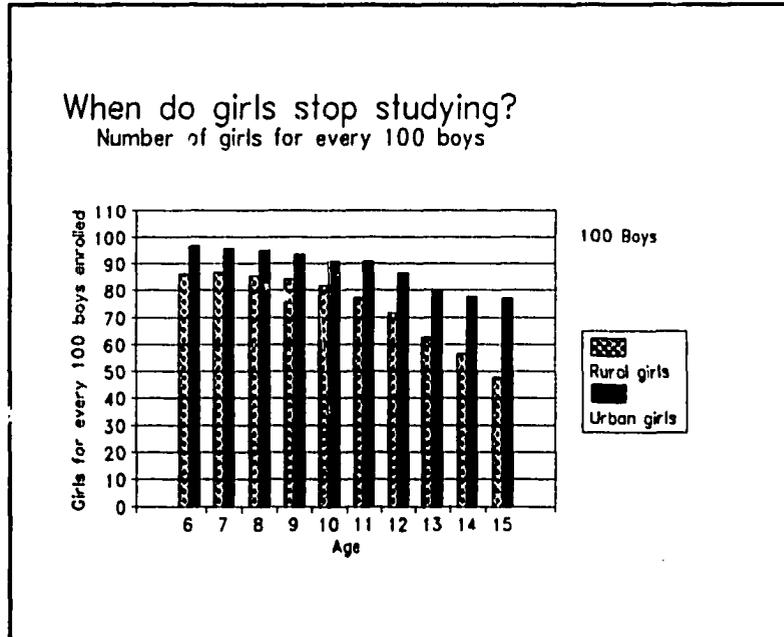
**Table 8 Deficit of Girls in Primary School:  
Ratio of Girls Enrolled for  
every 100 Boys by Age**

Age	Rural	Urban
6	86.3	96.5
7	86.8	95.6
8	85.3	94.9
9	84.1	93.6
10	81.8	90.7
11	77.3	90.7
12	71.7	86.4
13	62.8	80.1
14	56.5	77.8
15	47.9	77.0

Source: US. PE, Estadísticas Educativas 1988, Estadística Final, 1989

The "relative enrollment" indicator also allows us to examine urban-rural differences by student age, and, as Table 8 shows, age would appear to be the key factor affecting the enrollment of girls. As can be seen, even in urban schools there is a decrease in the girl:boy ratio beginning at about 12 years of age; in rural schools, this shift in relative enrollments begins some two years earlier and declines sharply. By age 15 there is only one girl for every two boys enrolled in rural primary schools. It is not currently known whether this pattern is caused by cultural pressures to remove sexually maturing girls from school, and to assign them productive tasks, or by a lack of perceived importance of continuing girls' education or by other causes related to the education process itself.

**Graph 8 Deficit of Girls in Primary School:  
Enrollment of Girls for every  
100 Boys by Age**



The outcome of these patterns and processes described in the previous graphs, however, is clear. In Guatemala, girls face severely limited opportunities for educational advancement, and the obstacles to such advancement appear to be especially large for girls who attend rural schools. Given that Guatemala's population is largely rural, the patterns which we can observe for rural girls have large impacts on the country as a whole. As later sections of this presentation will show, there are significant and substantial social and individual costs to the failure to deliver adequate and appropriate educational experience to girls before they assume their role in society.

## WHAT IS THE RELATIONSHIP OF GIRLS' EDUCATION TO INDICATORS OF HEALTH?

Women play very significant roles in Guatemalan society as care-takers of the young, and therefore they are the targets of most intervention projects designed to improve the health of the mother-child dyad. The education of the mother can itself result in improved health or can facilitate other actions carried out with the same objective.

In this section, health outcomes are examined in relationship to the education of mothers. The data were drawn from the national probability samples used for either the 1989 Socio-Demographic Survey conducted by INE, the National Statistics Institute, or from the 1987 Demographic and Health Survey (DHS) conducted by Westinghouse/IRD with Institute for Nutrition of Central America and Panama (INCAP) and the Ministry of Public Health and Social Assistance. The sample is limited to women 15-44 years of age, and, for most analyses, to those women in that group with a child currently five years of age or under.

**Table 9      Formal Prenatal Care by  
Level of Education**

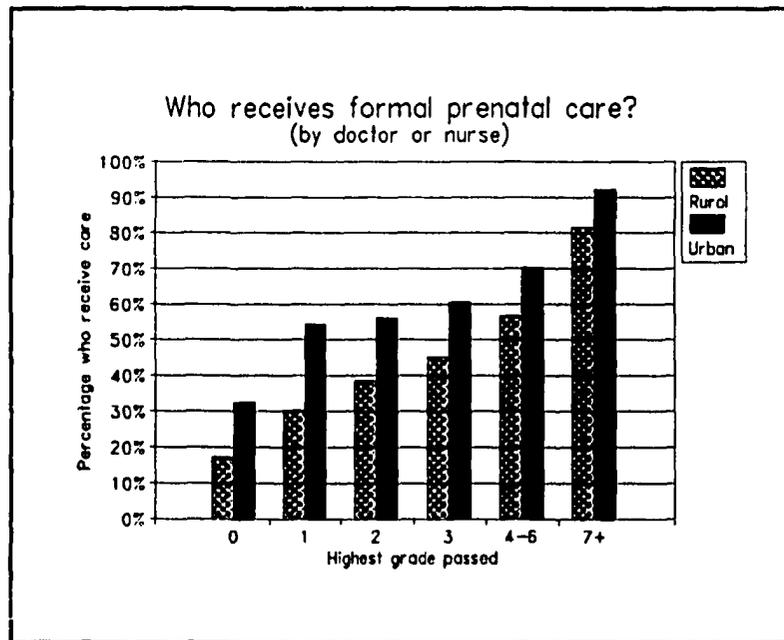
<b>Last grade passed</b>	<b>Urban</b>	<b>Rural</b>
0	32.5%	17.4%
1	54.3%	30.2%
2	56.2%	38.4%
3	60.4%	45.0%
4-6	70.2%	56.5%
7+	92.0%	81.4%

Source: MSPAS/DHS, Encuesta Nacional de Salud Materno-Infantil, 1987, 1989.

Prenatal care is a useful preventive health measure that safeguards the health of the mother and the newborn. In numerous studies, education has consistently been positively associated with use of prenatal care. There is also a strong relationship between prenatal care and reduced maternal mortality rates. Presently, maternal mortality rates are relatively high in Guatemala -- 1000-1700 deaths per 100,000 live births as data of the World Bank - - compared to the estimated average maternal mortality rate for Latin America (300 deaths per 100,000 live births) and that of the United States (8 maternal deaths per 100,000 live births).

The 1987 Demographic and Health Survey provides data on the percentage of women who receive prenatal care from a doctor or trained nurse. For Guatemala as a whole, only 34.2% of women 15-44 years of age received such care for their last birth. As Graph 9 shows, education of the mother is strongly linked to the use of prenatal care in both urban and rural areas. While only slightly more than 15% of rural mothers with no education received formal prenatal care, over 80% of those with secondary education did. The relationship with education is consistent at all levels of primary education for both urban and rural mothers.

**Graph 9      Formal Prenatal Care by  
Level of Education**



**Table 10 Infant Mortality Rate by Mother's Level of Education**

Highest grade Passed	Deaths/1000 live births
0	81.5
1-3	86.4
4-6	60.9
7+	40.5

Source: MSPAS/DHS, Encuesta Nacional de Salud Materno-Infantil, 1987, 1989

**Table 11 Child Mortality by Mother's Ethnic Group**

Ethnic Group	Urban	Rural
Mayan	90.6	92.9
Non-Mayan	59.5	89.6

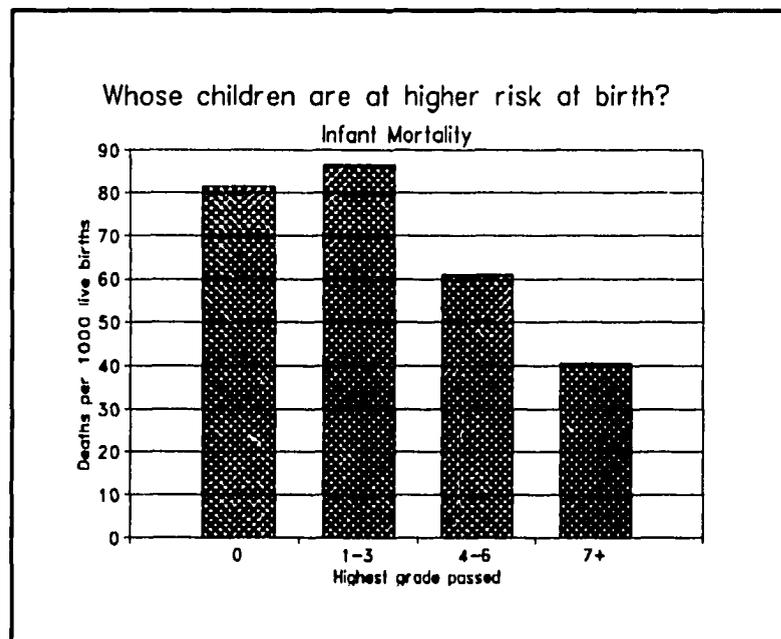
Source: INE, Encuesta Nacional Socio-Demográfica 1986-1987, Morbilidad Infantil, Lactancia Materna, Inmunización, 1989

Table 10 examines a key development indicator – infant mortality – as a function of the education level of the mother. Infant mortality is twice as high among women with minimum education (80-85/1,000 live births) as among women with secondary education (approximately 40/1,000). Women with intermediate amounts of primary education experience intermediate levels of infant mortality (60/1,000). That there is a strong relationship with education is clear, although many factors such as underreporting of child mortality, known to be particularly high in rural areas and among women with little education, are known to confound this relationship.

Global evidence generally confirms the positive impact of women's education or literacy on maternal child health indicators (i.e., infant and child mortality, child health, prenatal care). Infant mortality among women with less education is twice that among women with some secondary education. In the 28 countries in which the 1987 Demographic and Health Survey was administered, women's education was found to be closely related to their health status and to that of their children.

Guatemala, the Latin American country with the highest percentage of women without education, had the second highest infant and child mortality rate while other countries, where nearly all women have some education, have infant and child mortality rates less than half the rate in Guatemala. In an empirical modeling effort based on a time-series (from 1960 to 1980) cross-national data from 80 developing countries, research estimates indicate that an 50% increase in the gross primary female enrollment rate could be expected to reduce the infant mortality rate by 30% over a 20 year period.

**Graph 10 Child Mortality by Mother's Level of Education**



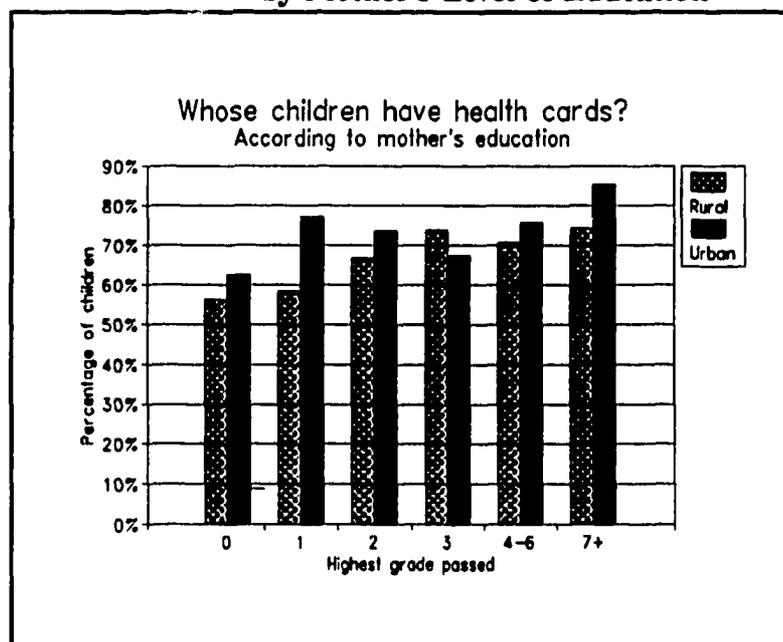
**Table 12 Children with Health Card by Mother's Level of Education**

Last Grade passed	Urban	Rural
0	62.5%	56.3%
1	77.1%	58.3%
2	73.7%	66.7%
3	67.2%	73.8%
4-6	75.7%	70.8%
7+	85.2%	74.4%

Source: MSPAS/DHS, *Encuesta Nacional de Salud Materno-Infantil*, 1987, 1989

Another important indicator of health care utilization often used in developing countries is whether the child has a health card issued by the Ministry of Health center or post. Health cards mean that some health card services are routinely sought, such as vaccination, growth monitoring, etc. Graph 11 shows the relationship between mother's education and the possession of a health card for children five and under. There is a significant association between these two variables resulting in a 25-40% increase in health card coverage.

**Graph 11 Possession of Health Cards for Children by Mother's Level of Education**



The impact of this improved compliance of health coverage is clear in the following graph, which indicates what percentage of children under five have received their third dosage of polio vaccine. Coverage rates for both urban and rural populations rise nearly a third across the education span studied. This type of an impact must be assumed to result from an interaction between education, promotion, and actual increases in availability of the health service in question. Under this hypothesis, more educated mothers are assumed to be more receptive to the promotional messages, and act more effectively to obtain the vaccination service, than their less-educated counterparts.

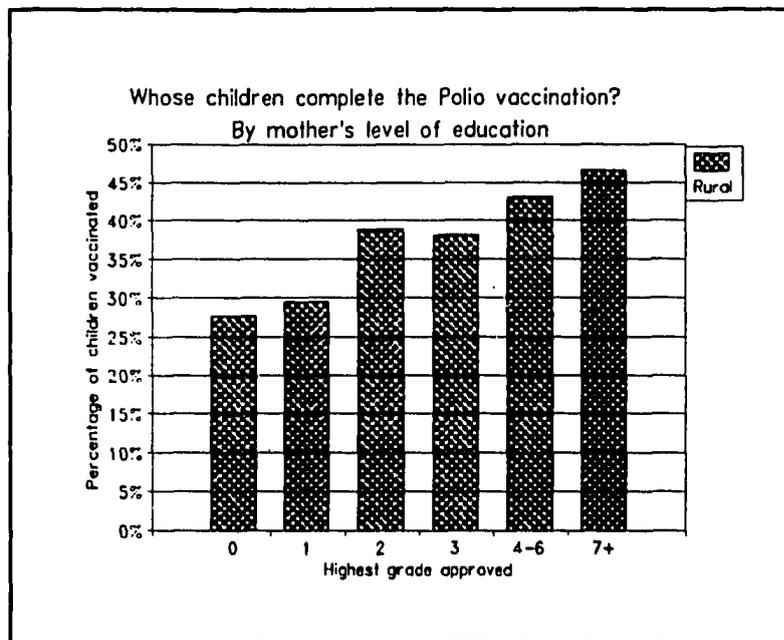
A key issue in vaccination programs, and one in which education would be presumed to have an impact, is the completion of the vaccination schedule. In the case of polio vaccination, this is most easily represented by the application of the third dosage of the vaccine. As the table 13 shows, "completion rates" for the third dosage of vaccine are about one-half of those for the first dosage. Especially in the rural areas, the effect of education is very large, nearly doubling the percentage of children vaccinated.

**Table 13      Immunization Coverage Against Polio  
by Mother's Level of Education**

<b>Last grade approved</b>	<b>Polio 1</b>	<b>Polio 3</b>
0	64.0%	27.6%
1	71.2%	29.5%
2	77.2%	38.9%
3	83.1%	38.1%
4-6	80.4%	43.1%
7+	79.1%	46.5%

**Source:** MSPAS/DHS, Encuesta Nacional de Salud Materno-Infantil

**Graph 12     Immunization Coverage Against Polio  
by Mother's Level of Education**



Overall, the relationship between women's education and this set of health indicators is consistent and frequently quite strong. While the mechanisms by which women are able to improve their children's health are clear, how education affects their ability to employ these mechanisms are not well established. Given the strength of the relationships presented here, designers of development strategies in health should carefully examine the adequacy of message content and appropriateness of media given mothers' education.

There are several hypotheses about the relationship between women's education and child health.

1. One possible explanation is that education influences the thought and decision-making process enabling women to identify causality of events and exposes them to "scientific" processes and knowledge. These skills enhance women's knowledge, access, and utilization of health services.

2. **Another hypothesis is that education increases women's influence within the family, allowing them to direct more of the family resources to child health. Literate women feel more confident in their ability to deal with health care personnel, pharmacists, etc.**

**More than 16% of urban Ladina mothers and 42.3% of rural Ladina mothers with children under five years of age have completed less than one year of formal education. The proportion of Mayan mothers with less than one year of formal education surpasses 70% in urban areas and 80% in rural areas.**

## WHAT IS THE RELATIONSHIP OF GIRLS' EDUCATION TO FAMILY WELL-BEING?

Demography research has consistently provided compelling evidence of the effect of women's schooling or literacy on overall reductions in fertility and mortality rates. The worldwide 1987 Demographic and Child Health survey shows that there is a strong inverse relationship between formal education and birth spacing in most countries even when intervening variables such as declines in breastfeeding and changes in employment and marriage patterns are taken into account.

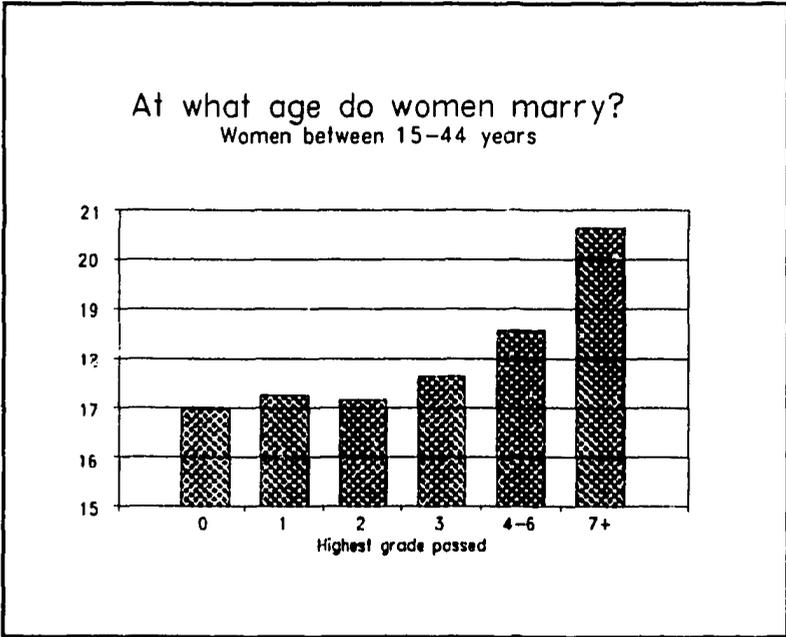
**Table 14** Average Age of Women at First Union by Level of Education

Grade	Age
0	16.9
1	17.2
2	17.1
3	17.6
4-6	18.5
7+	20.6

Source: Demographic and Health Survey (DHS), Encuesta Nacional de Salud Materno-Infantil, 1987, 1989

Graph 13 shows the effect of education on the age at first marriage among Guatemalan women surveyed by the 1987 DHS. The age at first marriage rises consistently with education to achieve a difference of nearly four years between women without any formal education and women with at least some secondary education. Delaying age at first marriage also tends to delay age of mother at first birth. Given that one of the key maternal risk factors is early birth, these effects are significant both in statistical and health terms.

**Graph 13    Average Age of Women at First Union  
by Level of Education**

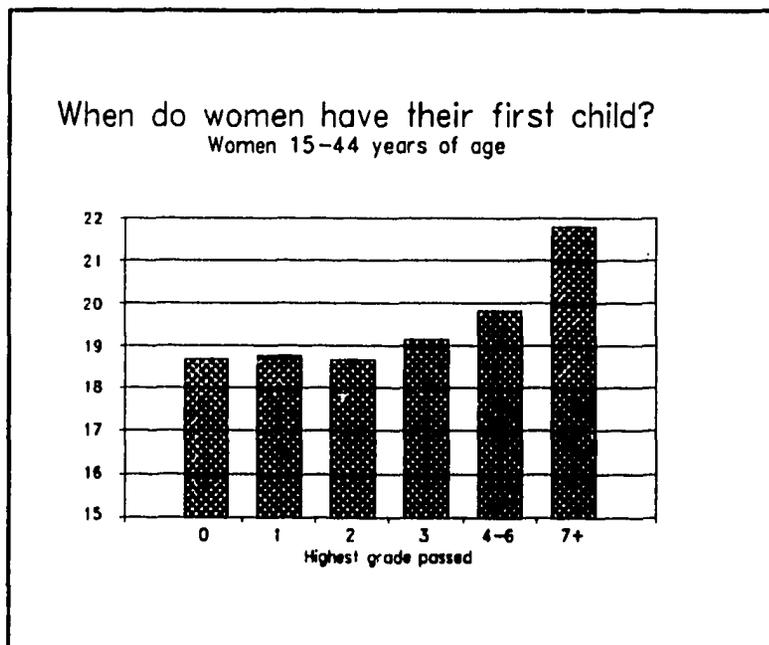


**Table 15 Average Age of Women at Birth of First Child by Level of Education**

Grade	Age
0	18.6
1	18.7
2	18.6
3	19.1
4-6	19.8
7+	21.7

Source: Demographic and Health Survey (DHS),  
Encuesta Nacional de Salud Materno-Infantil, 1987, 1989.

**Graph 14 Average Age of Women at Birth of First Child by Level of Education**



**Table 16 Desired and Total Fertility Rates  
by Level of Education**

Highest Grade Passed	No. of children desired	Actual number of children
0	6.2	7.0
1-3	4.9	5.6
4-6	3.2	3.9
7+	2.5	2.7

Source: Demographic and Health Survey (DHS), 1987

High population growth rates are a problem in many developing countries which are already limited in their ability to attend to the basic needs (health, nutrition, education, housing, employment, etc.) of the population. At the family level, this may also represent an obstacle to achieving an improved standard of living. Careful planning may be required by a couple in order to have the number of children they desire.

Women in all of the countries surveyed in the DHS showed an increasing tendency to use family planning as their education increased. The educational differentials are particularly striking in Guatemala where the use rate is five times greater among women with a secondary or higher education than among women with no education, even though there are other factors that affects in these decisions. Estimates based on empirical modeling indicate an increase in the gross primary enrollment rate of girls from 20 to 70 percent (accompanied by a moderate level of government support for family planning), can be expected to result in a reduction in the total fertility rate, twenty years later, by about 0.5 births per woman.

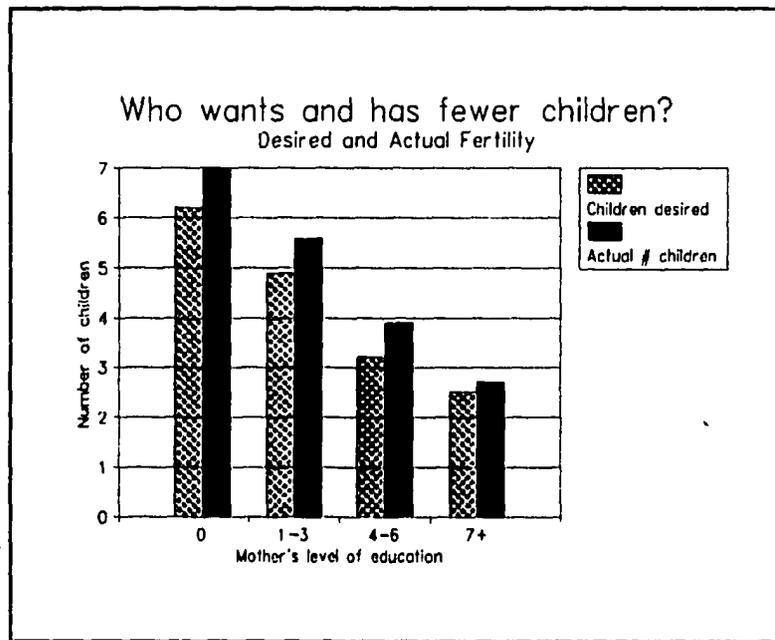
Although international research confirms the relationship between women's education and decreased fertility, how education affects this relationship is not clear. Literature on this subject suggests several hypotheses on why education of women affects fertility:

1. Education leads to later age at first marriage due to parents' and daughter's desire to benefit from her increased ability to generate income. Delaying marriage into her 20s puts a woman past her most fertile period (18-23 years). Increased earning potential increases the opportunity costs of having additional children, lowering women's ideals regarding family size.

2. Education increases a woman's ability to act on her desire to space births either directly through increased status within the family, or indirectly, through power gained with control over her own income.

Graph 15 examines total and desired fertility estimates from the 1987 Guatemalan DHS by educational level and both measures. As may be observed, there is a very strong relationship between educational level and both indicators. An important point to note is how the difference between desired and actual rates diminishes at higher education levels, suggesting that more effective control over fertility is being exerted by more educated women.

**Graph 15**    **Desired and Total Fertility Rates by Level of Education**



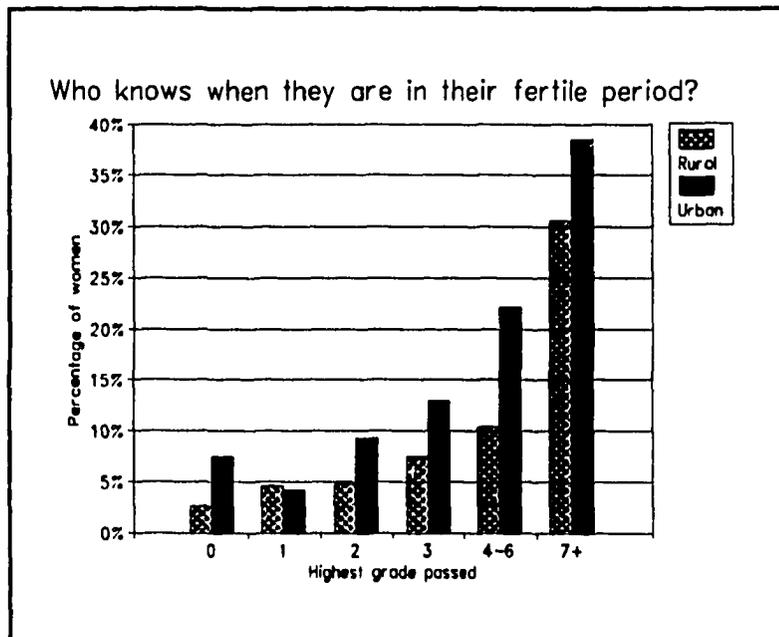
**Table 17 Knowledge of Fertile Period by Level of Education**

Highest Grade passed	Urban	Rural
0	7.4%	2.6%
1	4.2%	4.6%
2	9.2%	4.7%
3	12.9%	7.4%
4-6	22.1%	10.4%
7+	38.5%	30.6%

Source: MSPAS/DHS, *Encuesta Nacional de Salud Materno-Infantil*, 1987, 1989

Many Latin women prefer to rely on calendar methods such as the rhythm method which require accurate knowledge of their fertile period to plan their families. Graph 16 shows the percentage of women who can correctly identify when during the menstrual cycle they are in their fertile period (i.e., during the middle of their cycle). As can be seen in the graph, the knowledge necessary to effectively use calendar methods is very low among women, urban as well as rural, who have little formal education.

**Graph 16 Knowledge of Fertile Period by Level of Education**



There is a strong relationship between the education of women and the demographic indicators examined in this section. Education enables couples to achieve their desired family size and to maintain appropriate birth spacing. Furthermore, educated women tend to delay marriage and childbearing, thus reducing their reproductive risk.

## WHAT IS THE RELATIONSHIP OF GIRLS' EDUCATION TO EMPLOYMENT/NATIONAL PRODUCTIVITY?

Women worldwide make a major contribution to the development of national economies. Women are estimated to comprise 41% of the formal labor force in developed countries and 32% in developing countries. In addition to their participation in the modern economic sector, women contribute to national development through such activities as food supply production and participation in the informal service, farm, and family labor sectors. Some studies estimate that if an economic value could be attached to women's unpaid household labor, this labor would add approximately four trillion dollars, or about one-third, to the world's annual economic product.

The following analysis will consider the impact of women's education on their participation in the economically active population. The economically active population is constituted of participants in the Guatemalan labor force over 10 years of age who are presently working in a remunerated activity. This analysis will also examine women's possibilities for employment in the formal labor market as indicated by levels of full employment. The term full employment refers to members of the economically active population working a normal 8 hour work day and earning more than the minimum wage specified for work in that sector.

**Table 18 Economically Active Population (EAP) and Levels of Employment by Gender and Education**

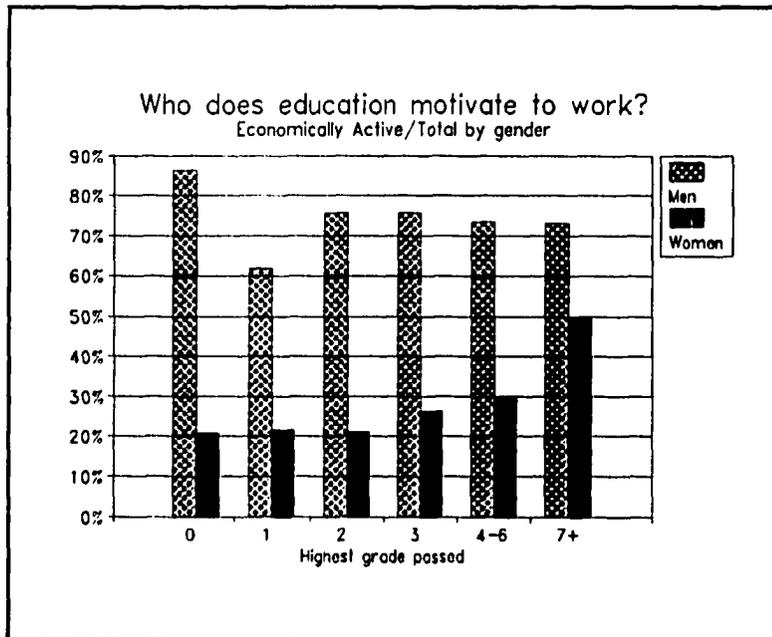
Group	Total Men	Total Women	EAP Men	EAP Women	EAP/Total Men	EAP/Total Women
0	888,639	1,377,346	765,293	286,313	86.1%	20.8%
1	134,075	122,098	82,860	26,418	61.8%	21.6%
2	327,028	272,795	246,863	57,308	75.5%	21.0%
3	355,432	297,543	268,601	77,810	75.6%	26.2%
4-6	695,662	575,869	510,251	170,574	73.3%	29.6%
7+	405,593	378,150	295,804	188,306	72.9%	49.8%
<b>Total</b>	<b>2,806,429</b>	<b>3,023,801</b>	<b>2,169,672</b>	<b>806,729</b>		

Source: Data from Instituto Nacional de Estadística (INE), Encuesta Nacional Socio-demográfica 1989

Whether Guatemalan women form part of the economically active population is in part affected by their educational status. As Graph 17 shows, only about 20% of women with minimal (3 years or fewer) education are economically active, compared to about 85% of men. Unlike men the proportion of women who are economically active rises with additional education. Finishing primary grade increases the proportion of economically active women by 50% (to 30% of the total economically active population), and fully 50% of women with secondary education are economically active.

These data confirm the relationship between formal education and the effective contribution of women to the Guatemalan economy and labor force.

**Graph 17 Economically Active Population (EAP)  
Level of Employment by Gender and Education**



**Table 19 Women's Employment:  
Level of Full Employment Among the  
Economically Active Population (EAP)**

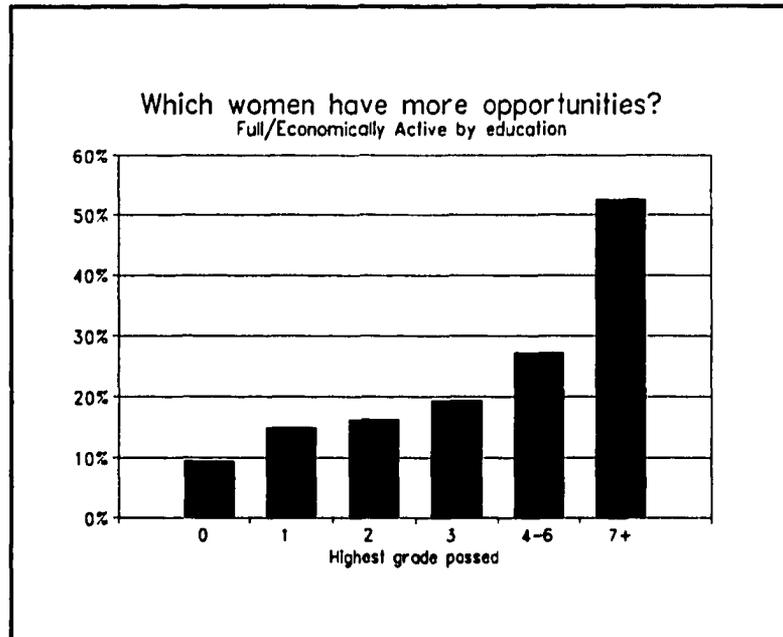
Grade	Total Population	Total EAP	Total Full	Full/EAP
0	1,377,346	286,313	26,820	9.4%
1	122,098	26,418	3,964	15.0%
2	272,795	57,308	9,290	16.2%
3	297,543	77,810	15,094	19.4%
4-6	575,869	170,574	46,360	27.2%
7+	378,150	188,306	98,956	52.6%
<b>Total</b>	<b>3,023,801</b>	<b>806,729</b>	<b>200,484</b>	

Source: INE, Encuesta Nacional Socio-demográfica 1989

Full employment is another issue that serves to highlight the "quality" of the employment women achieve. Table 19 shows the proportion of women in the economically active population who are considered to be fully employed. This proportion increases with a woman's level of education.

Women with a minimum of secondary education have the greatest possibilities of obtaining employment. More than half the women 52.6% with this level of education who are economically active are fully employed. However, given the fact that only half of the women with secondary education are economically active, this level of employment is only attained by one out of every four of these women. The level of full employment achieved by women with less formal education is considerably less than this ratio.

**Graph 18 Women's Employment:  
Level of Full Employment Among the  
Economically Active Population**



**Table 20** Average Monthly Income by Level of Education (in Quetzales)

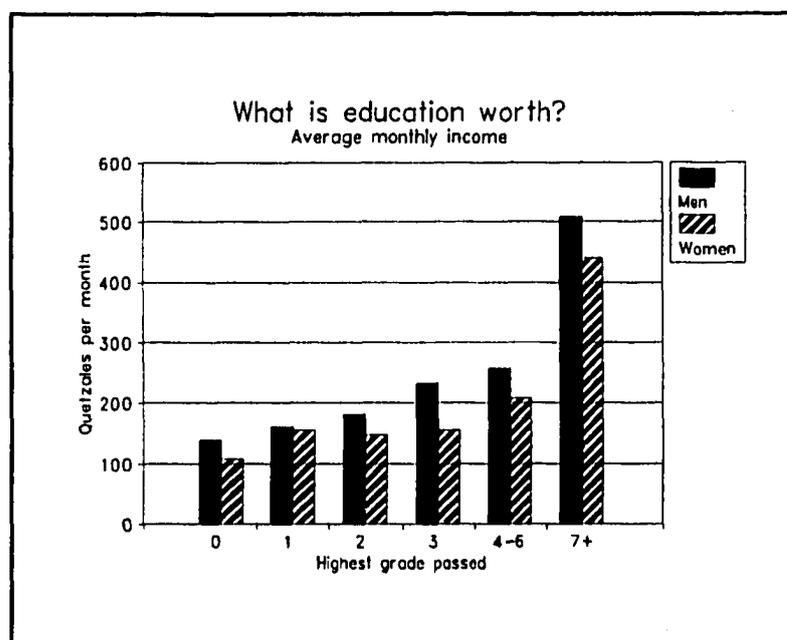
<b>Grade Passed</b>	<b>Men</b>	<b>Women</b>
<b>0</b>	138	106
<b>1</b>	160	154
<b>2</b>	180	148
<b>3</b>	232	154
<b>4-6</b>	257	208
<b>7+</b>	508	440

**Source:** Data from the Instituto Nacional de Estadística, Encuesta Nacional Socio-Demográfica 1989

Even given the above, is education "worth it"? This table examines the average reported monthly income of the economically active population by educational level and for both men and women. The largest impact on income is associated with secondary education. For both men and women, income doubles when the level of formal education increases to 4-6 years of schooling. Women do not seem to receive much reward, however, for the additional years of education represented by second and third grades.

In order to address the issue of the value of education, we simulated the impact of providing one additional year of education to all the members of the economically active population with fewer than four grades completed.

**Graph 19 Average Monthly Income by Level of Education**

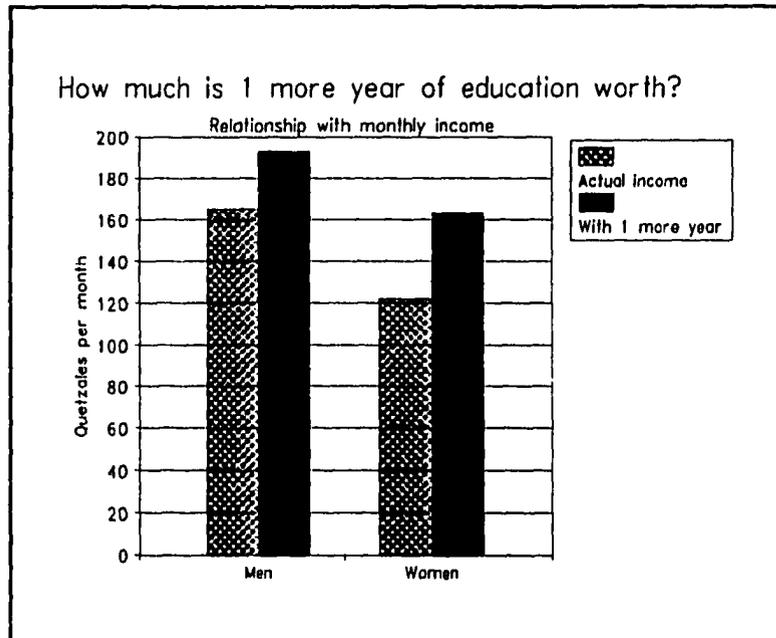


In order to address the issue of the value of education, we simulated the impact of providing one additional year of education to all the members of the economically active population with fewer than four grades completed.

To do this simulation, the monthly income of persons who had completed third grade was applied to the members of the labor force with two grades completed without modifying the number or the composition of the work force active in each sector of the economy. This process was applied to all economically active persons with none, one, two, or three years of education completed. The model does not include members of the labor force who had completed four years or more of primary school.

Graph 19 shows the current and simulated incomes for men and women. If an additional year of education were to be given to each member of the work force, the average male would enjoy an additional Q.28 monthly, an increase of 17%, while the average woman would receive Q.39 more monthly, a 32% increase. It is significant that the individual benefit to economically active women is 39% higher than to men.

**Graph 20 Benefit of One Year of Education:  
Relationship of an Additional Year  
of Education with Monthly Income**



Graph 20 shows the current and simulated incomes for men and women. If an additional year of education were to be given to each member of the work force, the average male would enjoy an additional Q.28 monthly, an increase of 17%, while the average woman would receive Q.39 more monthly, a 32% increase. It is significant that the individual benefit to economically active women is 39% higher than to men.

As Table 21 shows, the overall impact of adding one year of education to those (existing) economically active persons with fewer than four years completed would be over Q. 500 million annually, an amount comparable to the budget of the entire Ministry of Education. This major impact, while admittedly somewhat simplistic in approach, is independent of factors such as increased proportion of economically active population, gains in general productivity, among others.

**Table 21 Value of an Additional Year of Education:  
Relationship with Monthly Income**

	<b>Total Present Income</b>	<b>Increment Quetzales</b>	<b>No. of people</b>
<b>Men 0-1</b>	86,127,225	13,866,914	624,375
<b>Men 1-2</b>	10,071,725	1,259,672	62,889
<b>Men 2-3</b>	34,559,600	9,947,145	191,805
<b>Men 3-4</b>	50,339,575	5,351,516	216,942
<b>TOTAL Men</b>	181,098,125	30,425,277	1,096,011
<b>Women 0-1</b>	22,608,775	10,427,683	213,867
<b>Women 1-2</b>	3,067,350	(136,616)	19,857
<b>Women 2-3</b>	6,041,825	251,876	40,936
<b>Women 3-4</b>	8,600,950	3,030,228	55,943
<b>TOTAL Women</b>	40,318,900	13,573,170	330,603
		<b>Monthly Increase Quetzales</b>	<b>Yearly Increase Quetzales</b>
<b>Men + Women</b>		43,998,447	527,981,361
<b>Average Increase</b>		<b>Men</b>	<b>Women</b>
<b>Actual, 0-4 years</b>		165	122
<b>With one additional year of school</b>		193	163

Education of women has been demonstrated to be an important factor in the increase in the number of women participating in the economic development of the country as well as in the level of employment these women attain. Women with higher levels of education are also better paid for their work and are more likely to be employed in the formal sector of the economy, and although differential salary levels persist between men and women, the relative magnitude of these differences is reduced among persons with higher educational levels.

Participation of women in the labor force not only benefits the national economy directly, but has a high social benefit, or social rate of return, as demonstrated in other sections of this analysis. In addition to the direct benefits of education of women, there are indirect social benefits to increasing women's income. Numerous studies indicate that income which is under women's control is more often spent for children's nutrition and a family's basic needs and reinforces women's decision-making power within the household.

#### **IV. PLANNING AND IMPLEMENTATION OF THE CONFERENCE**

The planning of the national conference, Educating Girls: Achieving Development in Guatemala, presented a challenge to the program organizers. The target audience--high-level decision makers from Guatemala's leading public and private sector institutions--was not well versed on the subject of education nor on the specific role that girls' education plays in the social and economic development of Guatemala. For that reason the conference required a flexible, participatory program methodology to achieve the conference objectives.

##### **What were the goals and objectives of the conference?**

The goals of the conference were

- to assemble a multi-sectorial group of high-level Guatemalan decision-makers to deliberate on the state of the education of girls in Guatemala and its influence on the country's social and economic development, and
- to facilitate intra-sectorial efforts to identify policies, strategies, and specific actions to promote primary education for girls.

The specific objectives of the conference were

- to analyze the influence that the education of girls has on socio-economic development indicators worldwide,
- to analyze the effects of primary school education of girls on the social and economic development of Guatemala, and
- to analyze the state of girls' primary school education in Guatemala and to propose the actions needed to make immediate improvements in the system.

As the final product of the conference, the participants were

- to establish a set of policy initiatives and action strategies to provide educational opportunities to girls at the primary level, and
- to formulate a follow-up action plan to implement the policies and strategies proposed during the Conference.

### **What strategies were used to accomplish the goals and objectives of the conference?**

To ensure full participation by the conference participants, each work group and conference plenary session was designed to encourage discussion and analysis among the participants on the relationship of girls' education to development indicators as well as to identify policy initiatives for developing a national strategy to address these problems. In addition, sessions were designed to create a commitment by the participants on taking action toward improving education for girls.

### **How was the conference planned and implemented?**

The Office of Health and Education of the Agency for International Development (USAID/Guatemala) invited representatives from a number of Guatemalan agencies involved in educational development to participate in the planning of the national conference, including UNESCO, the United Nations Development Program (UNDP), Rafael Landívar University, the National Office for Women (ONAM), the Foundation for Development (FUNDESA), and the National Program for Bilingual Education (PRONEBI). In addition, USAID sought the co-sponsorship of the event by the National Office for Women and the United Nations Development Program.

The organizers sought out a culturally mixed team of four men and women to serve as the conference facilitators and to provide technical support for the planning committee. The facilitators had combined experience in:

- design, implementation, and evaluation of primary school education programs and activities, especially those focused on rural and urban girls in Guatemala,
- planning and implementation of participatory conferences with an educational focus, and
- personal skills and demonstrated ability in group dynamics and knowledge and successful experience using strategies for establishing positive environments in conferences, seminars, and workshops.

USAID/Guatemala then contracted the services of the Guatemalan Association for Sexual Education (AGES) to provide logistical and administrative support to the planning committee.

The next stage included the design of an implementation plan, which included:

- identifying and selecting the participants,
- selecting techniques and procedures for the working sessions of the Conference,
- testing and validating the conference methodology,

- conducting a global and national literature search on primary education of girls,
- developing a publicity plan, and
- developing a Conference program.

**How were the participants selected and how was their attendance encouraged?**

The major criterion for selecting conference participants was that they represent all sectors closely tied to Guatemala's development. The following sectors were identified and the persons in leadership positions were selected from each.

- academia
- industry and business
- agriculture
- government
- military
- media
- religious community

In addition, efforts were made to include leaders of women's organizations and agencies promoting the interests of indigenous populations in Guatemala.

Based on the selection criteria, the number of participants was determined and a goal was set to invite a total of 100 of the most influential people from each of the sectors. In addition to a letter delivered personally to each invitee, a team conducted personal visits to each person to whom an invitation was being extended to explain the purposes of the event and to promote their participation. Two weeks before the event, each intended participant was sent a program agenda and a program for the event. In addition, a reception was held for the invitees one week before the event.

The facilitators conducted a survey of a sample of 25 percent of those invited, to solicit their opinions about the content, program, and methodology of the Conference. The survey results provided the basis for defining the procedures and techniques to be used during the event.

One week before the conference, a full rehearsal was conducted of the conference program, allowing adjustments to be made in the methodology.

**What types of information sources were used?**

A set of reference materials was developed for all conference participants to use as resources during the workshop sessions. In addition, the participants were presented with

a set of data analyses of previously unanalyzed Guatemalan data on the relationship of primary education of girls to social and economic development indicators--analyses that were commissioned specifically for the conference.

### **How was publicity for the Conference managed?**

Publicity support was sought from newspapers, television, and radio. Conference information was published in editorials, commentaries, announcements, and interviews in newspapers, television, radio, and magazines. The publicity reports focused on the state of primary education of girls in the national and global context as well as on the urgency of addressing the problem in Guatemala.

## **II. IMPLEMENTATION OF THE CONFERENCE**

The Minister of Education, María Luisa Beltranena de Padilla, presented the opening remarks at the conference, highlighting the importance of girls' education for Guatemala's development and the need for multi-sectorial participation in developing a national strategy to promote the primary education of girls.

Following several brief speeches that introduced the Guatemalan development context, Bruce Newman presented the results of the analyses of three Guatemalan data bases (See pages 13 - 45 of this report). These presentations were followed by two work group sessions. The first small group session focused on developing problem statements and declarations of belief and commitment, and the second on the development of goal statements. The results of the working groups were presented in full plenary sessions.

### **How was the Conference conducted?**

The conference participants were presented with the rules of conduct which emphasized the importance of full participation in conference activities. A packet of materials was given to all participants that included guidelines to be followed in each of the working groups. The groups were requested to name a spokesperson who would be responsible for ensuring that assigned tasks were completed by each group. Participants were requested to be brief in expressing their views and to be respectful of the views expressed by representatives of each sector.

The conference facilitators were responsible for creating a highly interactive conference program to ensure participation, cooperation, and effective use of time during the Conference. Because conference sessions were short, it was particularly important to follow strategies that would allow the participants to study the research data in such a way that they could quickly absorb the information and then apply their knowledge to an analysis of needed changes across sectors in Guatemala.

In small groups, the participants were assigned to develop a list of beliefs and commitments (referred to, in Spanish, as affirmations and declarations) concerning the education of girls in Guatemala. These beliefs and commitments formed the basis for the analysis of solutions and recommended policies to address girls' education. In addition, experts on economic analysis, quantitative data analysis, and education models were assigned to work with the small groups, to assist them in their analysis of the data and in their development of conclusions.

The groups were assigned activities in phases

- The first phase consisted in the analysis of the research reports and documentation provided in individual folders relating to the relationship of girls' education to development indicators at the national and worldwide level.
- In the second phase, goal statements on the impact of the status of girls' education on national development were first formulated by each participant and then were discussed within the group. They were then organized based on group consensus on their priority.
- The third phase focused on the development of declarations demonstrating priorities for addressing the problems related to girls' education.

After each working group, the participants met in a plenary session in which they identified the declarations that they shared in common; they then established a list of priority declarations and goals with respect to the education of girls in Guatemala.

The highlight of the final plenary session was the formation by the full audience of participants of a national commission to follow-up on the decisions reached at the conference. The commission was given the mandate to create a national emergency plan to address girls' educational needs as well as a national campaign to raise the public consciousness on the importance of girls' education.

The culminating activity of the conference was a closing ceremony presided over by the First Lady of Guatemala, Mrs. Magda Serrano, in which she expressed her satisfaction and pleasure in taking part in an event of importance to the children and development of Guatemala.

## **V. CONCLUSIONS AND RECOMMENDATIONS**

### **What were the final conclusions of the conference?**

The evidence presented at the conference on the relationship of girls' education to social and economic development sparked lively discussion by the participants and led to the development of a set of conclusions concerning the benefits of educating girls, the serious status of girls' and women's education in Guatemala, the obstacles to educational access for girls, and the disparities associated with geographic location, socio-economic level, and culture.

The following is a summary of the principal conclusions formulated by the work groups.

### **What are the benefits to Guatemala from educating girls?**

- A direct relationship exists between formal education of women, literacy, and family planning.
- Education has a direct relationship on age of first marriage. The more formal education a woman has, the more likely she is to postpone marriage.
- The potential a woman has to generate a higher income improves her ability to provide for the needs of her family.
- Increased participation of women in the economically active population has a positive impact on the overall productivity of a country.
- The educational level of the second generation is higher if the mother has completed at least five years of school.
- Permanent positive changes occur for a woman and her family if the woman has completed at least five years of school.
- The more education a girl has, the more able she will be to make responsible decisions as an adult.
- The infant mortality rate among women with some secondary education is 40 percent lower than the infant mortality rate among women with less than one year of formal education.
- The education of girls alone does not resolve the problem of under development but, it is a determining factor.

- Education is an investment: human, moral, economic, and social.
- Education is directly related to the index of development of a country.
- Economic conditions and the need to raise family earnings compel society to educate women.
- Publicity and promotion are needed on the importance of the education of girls.

**What are the obstacles hindering girls' access to education?**

- Economic, social, and cultural barriers hinder girls' access to development. These barriers will be overcome only through a national commitment to action.
- Traditionally, little importance has been placed on girls' education, which has excluded women from fully participating in the social, economic, and labor sectors.
- Family poverty has repercussions on girls' educational opportunities.
- The cultural patterns of rural families limit girls' participation in education, particularly as girls reach sexual maturity.
- Rural-urban migration is partly a result of limited access to education and other services.

**How are the educational disparities demonstrated?**

- A direct relationship exists between socio-economic level, geographic location, gender, and education.
- Low levels of girls' participation in education are exacerbated in rural areas.
- Dramatic educational differences exist between indigenous and ladino girls as demonstrated by marked differences in illiteracy rates and by participation at the primary school level.
- The educational system in rural areas is not adequately oriented to maintaining and conserving the customs of Mayan children.
- Parents have different educational expectations for their sons and daughters, usually favoring the education of their sons.

### **What is the status of girls' and women's education in Guatemala?**

- Women have lower levels of educational attainment than men: a reflection of the low levels of participation of women in the educational system.
- A girl's lack of education hinders her, once she becomes a mother, in providing an adequate orientation on health, family planning, and education for her family.
- The proportion of girls that enter and then leave the educational system is greater than that of boys.
- Striking differences exist between the level of instruction girls receive in urban and rural areas, indicating the need to focus on rural areas.

### **What were the DECLARATIONS formulated by the participants?**

The conclusions developed in the work group discussions served as a basis for issuing the following declarations.

- We declare that a girl has a right to receive an education.
- We declare that the education of girls and boys must include instruction in all the subject areas.
- We declare that an investment in girls' education is necessary for the development of society.
- We declare that the educational system must be flexible and oriented toward an education that is practical and useful for work and daily life, and that programs must be directed primarily towards girls.
- We declare that the curricula for minimum education in Guatemala must take into account Guatemala's languages and cultural patterns and eliminate gender and ethnic discrimination.
- We declare that educational efforts must be concentrated on rural areas.

At the plenary session, the participants created a single list of declarations, by priority. The declarations adopted by the plenary session were:

- A need exists to adopt a national emergency plan for the education of girls that will coordinate multi-sectorial efforts;

- A national public awareness and promotion campaign must be carried out on the importance of educating girls.

#### **What actions were proposed as a result of the conference?**

The work groups developed a series of concrete actions to be taken to accomplish the two conference goals, including:

- A. To adopt a national emergency plan for the education of girls:
- Request that the President of the Republic declare girls' education in Guatemala as a national emergency and request that he convene governmental institutions, the private sector, universities, international organizations, and other active groups of the country to form a national multi-sectorial commission.
  - Insure that the organizing entities of the conference (ONAM, AID, and UNDP) coordinate the activities of the commission.
  - Entrust the commission to develop a national emergency plan using the applicable policies proposed by ONAM, UNESCO, BID and other specialized organizations.
  - Suggest that the national emergency plan establish specific goals with a time frame.
  - Recommend that sub-commissions be created for the different regions of the country.
  - Advocate that the commission be formal and begin operations within one month.
  - Appoint the Minister of Education, Licda. María Luisa B. de Padilla, to present this proposal to the President and the members of the Cabinet.

B. To successfully carry out a national public awareness and promotion campaign, the following parameters were defined.

Target population	- Rural and indigenous population heads of households and parents, particularly among rural and indigenous populations.
Method of communication	- Radio: local leaders would be responsible for the transmissions. - Language used would be that of the target population. - Programs would be designed to be motivational.
Program Content	- Create an awareness of the role that girls' education plays in economic, political, and social development. - Strengthen self-esteem of girls and women as individuals, family members, and members of society. - Instill an appreciation for the reproductive, productive, and management roles of women. - Promote the education of girls as an instrument to transform the traditional role of women into one of leadership for social change.
Implementation	- Promote the campaign using the radio time the government has by law.
Follow-up system	- Identify the appropriate local organizations. - Establish a means of direct communication with these organizations. - Provide the appropriate training to these organizations for follow-up.
Evaluation	- The indicator of success of this campaign will be the increased enrollment of girls in primary school.

As the final activity, the plenary session named a national commission to oversee the development of a national program for educating Guatemalan girls. The following persons will be working in this first commission:

- Wendy Berger, General Coordinator, Secretary of Social Affairs for the City of Guatemala
- Carmen Amézquita, President, Civic Alliance of Women's Associations (ACAF)
- Ernesto Castillo, Director, Human Resources/Public Relations, Central American Brewery (Cervecería Centroamericana)
- Neftalí Hernandez, Director, National Institute of Statistics

- **Mario Nathusius, President, Foundation for Guatemalan Development (FUNDESA)**
- **Lucía Rivas, President, National Office for Women, Ministry of Work**
- **Ivonne Claverie Rivera, Advisor and Assistant to the Minister of Urban and Rural Development**
- **Pablo Schneider, President, Center for Economic Studies (CIEN)**
- **María Eugenia Sierra, Director, Registry Department, Human Rights Attorney's Office**
- **Derek Steele, President, Gamma Systems**
- **Cleonice Thomae, Director, General Association of Agriculturists (UNAGRO)**

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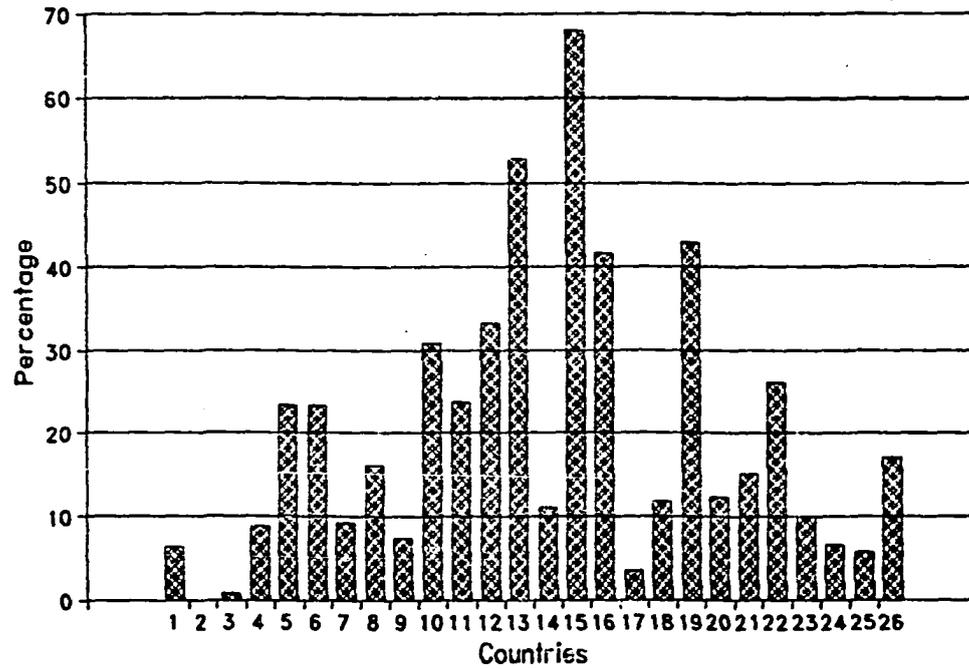
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**APPENDIX**

**FIGURE**

64.

FEMALE ILLITERACY  
Latin American Countries 1985



- |              |                     |               |                       |
|--------------|---------------------|---------------|-----------------------|
| 1. Argentina | 8. Colombia         | 15. Haiti     | 21. Paraguay          |
| 2. Bahamas   | 9. Costa Rica       | 16. Honduras  | 22. Perú              |
| 3. Barbados  | 10. Rep. Dominicana | 17. Jamaica   | 23. Surinam           |
| 4. Belize    | 11. Ecuador         | 18. México    | 24. Trinidad y Tobago |
| 5. Bolivia   | 12. El Salvador     | 19. Nicaragua | 25. Uruguay           |
| 6. Brazil    | 13. Guatemala       | 20. Panamá    | 26. Venezuela         |
| 7. Chile     | 14. Guyana          |               |                       |

Source: Lathr, 1989

5

**QUESTIONS FROM NATIONAL SURVEYS**

**Questions contained in the interviews from  
the National Maternal-Child Health Survey, 1987**

The following questions were used for the Statistical Analysis:

1. During the pregnancy of (last child's name) did you receive prenatal care?
2. Who provided prenatal care?
3. Who attended the birth of (name)?
4. Do you have a health card for (name of last child)? If, YES, would you show it to me?
5. Was he/she vaccinated against polio?
6. How many times?
7. Note the date of each vaccination.
8. Did you give any household made serum of water, sugar and salt or packaged oral rehydration salts to the child? (in reference to the last case of diarrhea among youngest five children)
9. What ethnic group do you belong to?
10. Have you ever gone to primary school or junior high school?
11. What was the last grade that you passed?
12. The last time you used the rhythm method, how did you determine what days you should not have sexual relations?

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**Questions contained in the interviews from  
the National Socio-Demographic Survey, 1989**

1. Gender of respondent (observation of interviewer)
2. Rural/urban classification of residence (observation of interviewer)
3. Do you know how to read and write a paper, account or message?
4. How old are you?
5. What was the last grade you passed at the primary, secondary or university level?
6. Do you belong to an ethnic group?
7. Did your child receive breast milk for more than three days after its birth?
8. During the last week did you work in some job, privately owned enterprise self employed position or in agriculture.
9. During the last week did you work in a business, workshop, farm or other family activity (not including normal domestic chores) without remuneration?
10. Even though you did not work last week, do you have a job, enterprise, privately owned business or family activity?
11. Were you looking for work or trying to establish your own enterprise or business last week?
12. Even though you did not look for work that week, had you been looking for work or had you been trying to establish your own enterprise in the four previous weeks?

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13. What was your income last month?

- a. Principal occupation
- b. Other occupations
- c. Retirement or pension
- d. Other transfers
- e. In kind

14. Which indigenous language do you speak?

15. Do you wish and are you able to work for salary, remuneration, earning or personal gain?

16. How many hours a week could you work?

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**AGENDA**

10

**AGENDA**  
**FIRST NATIONAL CONFERENCE**  
**EDUCATING GIRLS:**  
**ACHIEVING THE DEVELOPMENT OF GUATEMALA**

<b>ACTIVITY</b>	<b>PERSON RESPONSIBLE</b>	<b>TIME</b>
<b>Registration</b>	<b>Facilitators</b>	<b>8:00</b>
<ul style="list-style-type: none"> <li>* Participants register as they arrive.</li> <li>* They are seated for the plenary session.</li> <li>* The facilitators finalize the list of participants.</li> <li>* The list is distributed to the facilitators and resource personnel.</li> <li>* At 8:30, M. Nathusius addresses the participants.</li> </ul>		
<b>Welcome</b>	<b>Magali de Rodil and Mario Nathusius</b>	<b>8:30</b>
<ul style="list-style-type: none"> <li>* M. Rodil and M. Nathusius present the goals of the event and the role of each participant (e.g., that they represent themselves, not their institutions)</li> <li>* They describe the schedule and activities of the day.</li> <li>* They encourage participants to become actively involved in the day's events.</li> <li>* They introduce Licda. Beltranena de Padilla.</li> </ul>		
<b>Guatemala in the World Context</b>	<b>Licda. Beltranena</b>	<b>8:45</b>
<ul style="list-style-type: none"> <li>* Licda. Beltranena compares conditions in Guatemala with those in the rest of the world (no time allowed for questions and answers).</li> <li>* Following Licda. Beltranena's presentation, M. Nathusius addresses the participants.</li> </ul>		
<b>Presentation by B. Newman and N. Hernández</b>	<b>Mario Nathusius</b>	<b>9:00</b>
<ul style="list-style-type: none"> <li>* M. Nathusius presents B. Newman and N. Hernández.</li> <li>* During the first five minutes, N. Hernández describes national conditions with respect to the education of girls.</li> <li>* Following N. Hernández's presentation, B. Newman addresses the participants.</li> </ul>		

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<b>National Condition</b>	<b>Bruce Newman</b>	<b>9:10</b>
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- \* B. Newman describes analysis of data conducted in Guatemala without interpretation.
- \* M. Nathusius addresses the participants.

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<b>Presentation by Derek Steele</b>	<b>Mario Nathusius</b>	<b>9:30</b>
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- \* Derek Steele is introduced by M. Nathusius as the person responsible for explaining the procedures and plan of the conference
- \* The guidelines and instructions are provided as a reference for participants at each table.

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<b>Rules of the Game</b>	<b>Derek Steele</b>	<b>9:35</b>
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- \* D. Steele encourages participants to contribute their ideas and experiences to the dialogue.
- \* He describes the reference material available at each table (Bruce Newman's report and Sheets for recording Agreements and Declarations of beliefs) and explains how to use them.
- \* The following rules are also added:
  - > Each group must name a spokesperson.
  - > The spokesperson should ensure that activities are conducted efficiently, that the rules are followed, and that one or two persons do not dominate the exercise.
  - > The spokesperson can also serve as recorder for the group or name another group member to record comments or ideas.
  - > All ideas should be shared and considered.
  - > No evaluations or criticism may be made of the ideas expressed within the group or during the plenary. Challenges are not permitted when clarifications are made.
  - > The ideas should be brief, concise, and require minimum explanation.
  - > Repetition or elaboration of ideas presented by speakers is permitted.
- \* D. Steele then explains the procedures for preparing declarations of beliefs.

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- > Each work group must study the information presented by the speakers and the references provided to each table.
- > The groups then develop the validations. These are statements of facts that support a truth (based on the analysis of information).
- > With the list of validations at hand, the groups then develop their declarations of beliefs. These statements, relating to the education of Girls in Guatemala, are based on the groups' validations. (indicate the priority of each declaration)
- > The spokesperson then writes the completed declarations in the notebook provided to each table.
- \* D. Steele then asks the participants to sit at the table that corresponds to the paper they drew during registration.
- \* Finally, D. Steele introduces I. Nieves and G. Tujab.
- \* G. Tujab addresses the participants.

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**Presentation of  
Resource Personnel**

**Gloria Tujab**

**9:45**

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- \* G. Tujab presents Eugenia de Monterroso, Lucy Martínez Montt, B. Newman, and N. Hernández as resource personnel. Each one will move to their assigned post as their name is mentioned.
- \* G. Tujab explains how each resource person can assist each work group.
- \* The groups begin working using the materials provided for each table.

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**Small Group  
Session**

**Participants**

**9:55**

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- \* The assistants and other resource personnel begin to circulate, to answer questions, and to provide support for each table.
- \* At 11:45 D. Steele calls the plenary session to order.
- \* L. Alegría assists with presentation of declarations of beliefs.

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**Plenary Session****Derek Steele****11:45**

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- \* D. Steele explains that a single list of declarations will be developed and then asks that the spokesperson for table "A" read the declarations according to priority. L. Alegría records them.
- \* D. Steele then requests that the spokesperson of table "B" read the declarations that were not been mentioned by table "A".
- \* D. Steele asks for the remaining tables to read their declarations. L. Alegría continues to record them.
- \* Once all the declarations have been read, L. Alegría moves to another overhead projector where D. Steele directs the development of goals.
- \* An assistant remains next to the overhead projector that displays the declarations.
- \* D. Steele explains that the next step is to develop a list of goals based on the list of declarations.
- \* D. Steele reads the first declaration. The spokesperson for each table offers suggestions.
- \* Once agreement is reached, L. Alegría records the goal for the first declaration.
- \* The goals are approved by the assembly.
- \* D. Steele then announces the break for lunch.

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**Lunch****13:00**

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- \* M. Nathusius introduces U.S. Ambassador Stroock.
- \* Ambassador Stroock addresses the luncheon.
- \* During dessert M. Nathusius speaks to the participants, encouraging their continued participation. He then invites them to return to the conference room.

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**Presentation of the Second  
Part of the Conference****Mario Nathusius****14:00**

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- \* M. Nathusius describes the activities of the second part of the conference.
- \* D. Steele explains the procedures for the next conference session.

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**Rules of the Game****Derek Steele****14:15**

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- D. Steele coordinates the formation of groups based on agreed-upon goal.
- The assistants make a list of the participants in each group and prepare a list of the goals agreed upon.
- D. Steele explains how to use the manual and how groups should develop suggestions and guidelines..

The manual consists of two pages:

**FIRST**

**PAGE:** Contains a space for writing down the declarations and goal to be worked on by the group and spaces to list the group members.

**SECOND**

**PAGE:** Contains a list of the steps needed to reach the defined goal (they should be practical and explicit). The manual can then be adapted for different settings with different resources.

- D. Steele assists the groups in applying the strategies necessary to reach their goals.

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**Small Group Session****Participants****14:20**

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- The assistants circulate among the tables to ensure that the guidelines/suggestions developed by the groups are practical and capable of implementation. They answer any questions and encourage the participants.
- At 16:30, I. Nieves addresses the conference session.

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**Plenary Session****Isabel Nieves****16:30**

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- Each group is given five minutes to present its guidelines.
- Once all the groups have completed their presentations, participants are encouraged to make a commitment to develop an intersectorial plan of action.
- I. Nieves directs this task.
- L. Alegría takes her place by one of the overhead projectors to record the proposed actions.
- M. Nathusius addresses the session.

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- \* The assistants collect the completed guidelines from each table and remove all other materials used for the conference to prepare for the dinner.

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<b>Summary of the Conference</b>	<b>Gloria Tujab</b>	<b>17:45</b>
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- \* G. Tujab summarizes the purpose of the conference and emphasizes the invaluable contribution that each participant has made to the welfare of Guatemalan girls and to development in Guatemala.
- \* She discusses the importance of the guidelines and how they can be implemented.
- \* She then presents the First Lady of Guatemala, Mrs. Magda B. Serrano.

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<b>Closing Ceremony</b>	<b>First Lady, Mrs. Serrano</b>	<b>18:00</b>
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- \* The First Lady addresses the plenary session.
- \* When the First Lady finishes her speech, G. Tujab addresses the participants, thanking them for their participation and inviting them to the dinner.

**LETTER OF INVITATION**

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## **ENCUENTRO NACIONAL**

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### **Educando a la Niña: Lograremos el Desarrollo de Guatemala**

Guatemala, 18 de enero 1991

Señor Pablo Schneider  
15 Ave. 15-45, zona 10  
Edific. Centro Empresarial  
Torre I, oficina No. 302  
Ciudad de Guatemala

Estimado Señor Schneider:

La Agencia para el Desarrollo Internacional (AID), la Representación en Guatemala del Sistema de las Naciones Unidas para el Desarrollo (ONU), la Oficina Nacional de la Mujer (ONAM), y personalidades del Sector Privado están organizando el Primer Encuentro Nacional, "Educando a la Niña: Lograremos el Desarrollo de Guatemala". El encuentro tendrá como objetivo colaborar en la planificación de acciones dirigidas a impulsar la educación de las niñas, para contribuir al desarrollo futuro de Guatemala.

Este Encuentro Nacional contará con la participación de personalidades de los sectores más influyentes y dinámicos del país. Su propósito es el intercambiar ideas y experiencias que conduzcan a la identificación de estrategias y recomendaciones específicas para garantizar el mejoramiento del nivel educativo de las niñas, como una de las bases del futuro desarrollo económico y social de Guatemala.

Diversos estudios realizados por organismos nacionales e internacionales de desarrollo han evidenciado el impacto positivo de la educación de las mujeres durante su niñez en las variables económicas y sociales de los países, ya que produce efectos tales como:

- prosperidad económica a través del acceso al empleo,
- mejoramiento de la calidad de vida de la familia,
- aumento de la supervivencia infantil,
- mejoramiento de los niveles de salud y nutrición de la familia, y
- mejoramiento del desempeño escolar de los hijos.

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Según los resultados de Encuestas Nacionales Sociodemográficas en 28 países (1989), Guatemala es el país latinoamericano con el porcentaje más alto de mujeres que han recibido pocos años de educación formal, y ocupa el segundo lugar de mortalidad de infantes y niños; mientras que en otros donde la mayoría de las mujeres han recibido algunos años de educación formal, hay índices significativamente más bajos de muertes de infantes y niños que en Guatemala. Es obvio que debemos actuar, y lo debemos hacer ahora.

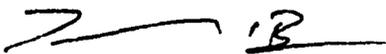
Teniendo presente que usted se encuentra entre las personas que en Guatemala juega un rol de gran importancia para influir en la formulación de políticas y estrategias de desarrollo, quisiéramos invitarle para que participe en la planificación e implementación de una propuesta de acción en relación a la educación de la niña, de cobertura nacional, que incidirá positivamente en el desarrollo socioeconómico de Guatemala.

Consideramos sumamente importante su participación en este Encuentro Nacional, en vista que el mismo será:

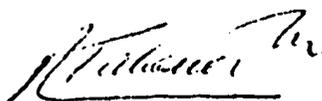
- El primer proyecto sectorial que durante 1991 tendrá carácter multi-participativo del sector privado y público,
- Una plataforma de intercambio multi-sectorial, con proyección nacional, para discutir las posibles acciones a tomar en el futuro inmediato y para lograr así mayor participación de la niña guatemalteca en el proceso educativo, y
- Un esfuerzo multi-participativo que puede tener un marcado impacto en el desarrollo socioeconómico de Guatemala y en su proyección mundial.

Es deber de todos asegurar que la educación de la niña convierta a la mujer en un reconocido agente capaz de participar activamente en el proceso de desarrollo económico y social del país. A la brevedad, le estaremos enviando la invitación formal para que usted nos acompañe en este Primer Encuentro, el cual se llevará a cabo el día 29 de enero, a partir de las 8:30 de la mañana, en el Salón Amatitlán del Hotel Camino Real. Desde ya, agradecemos su asistencia y participación para poder compartir su experiencia y opiniones en beneficio del futuro de Guatemala.

Atentamente,



**Terrence J. Brown**  
Director  
Agencia para el  
Desarrollo Internacional



**Ricardo Tichauer**  
Representante Residente  
Organización Naciones Unidas



**Lucía Rivas de García**  
Presidenta de la Asamblea  
Oficina Nacional de la Mujer



**PROGRAM**

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# ENCUENTRO NACIONAL

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## Educando a la Niña: Lograremos el Desarrollo de Guatemala

29 de enero, 1991  
Hotel Camino Real  
Salón Amatitlán

### PROGRAMA

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8:00 - 8:30	Inscripción	
8:30 - 8:45	Bienvenida y Apertura del Encuentro . . . . .	Mario Nathusius Magali de Rodil
8:45 - 9:00	La Niña en el Contexto Mundial . . . . .	María Luisa Beltranena de Padilla Ministra de Educación
9:00 - 9:05	La Realidad Socioeconómica de Guatemala . . . . .	Neftalí Hernández
9:05 - 9:25	La Educación de la Niña y el Desarrollo de Guatemala . . . . .	Bruce Newman
9:25 - 9:35	Dinámica del Encuentro . . . . .	Derek Steele
9:35 - 11:45	Sesión de Trabajo en Grupos . . . . .	Facilitadores y Personas Recurso
11:45 - 13:00	Plenaria . . . . .	Derek Steele
13:00 - 14:00	Almuerzo . . . . .	Palabras del Sr. Thomas F. Stroock Embajador de los EE.UU.
14:00 - 16:30	Sesión de Trabajo en Grupos . . . . .	Derek Steele
16:30 - 18:00	Plenaria . . . . .	Isabel Nieves
18:00 -	Acto de Clausura . . . . .	Gloria Tujab

Excelentísimo Señor  
Presidente de la República  
Ing. Jorge Serrano Elías

Cena

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**Facilitadores:**

Mario Nathusius  
Isabel Nieves  
Derek Steele  
Gloria Tujab

**Personas Recurso:**

Neftalí Hernández  
Lucy Martínez Montt  
Eugenia de Monterroso  
Bruce Newman

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**LIST OF PARTICIPANTS**

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**LIST OF PARTICIPANTS  
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ACHIEVING THE DEVELOPMENT OF GUATEMALA**

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- 927

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67. **Magalí de Rodil**  
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68. **María Teresa Rodríguez**  
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**UNAGRO**  
**Directora**

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**Presidente**

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**Front cover: Paola Ferrario**  
**Back cover top: Paola Ferrario**  
**Back cover bottom: Susan Clay**

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