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NICARAGUA

RED DE PROTECCIÓN SOCIAL—MI FAMILIA

BREAKING THE CYCLE OF POVERTY

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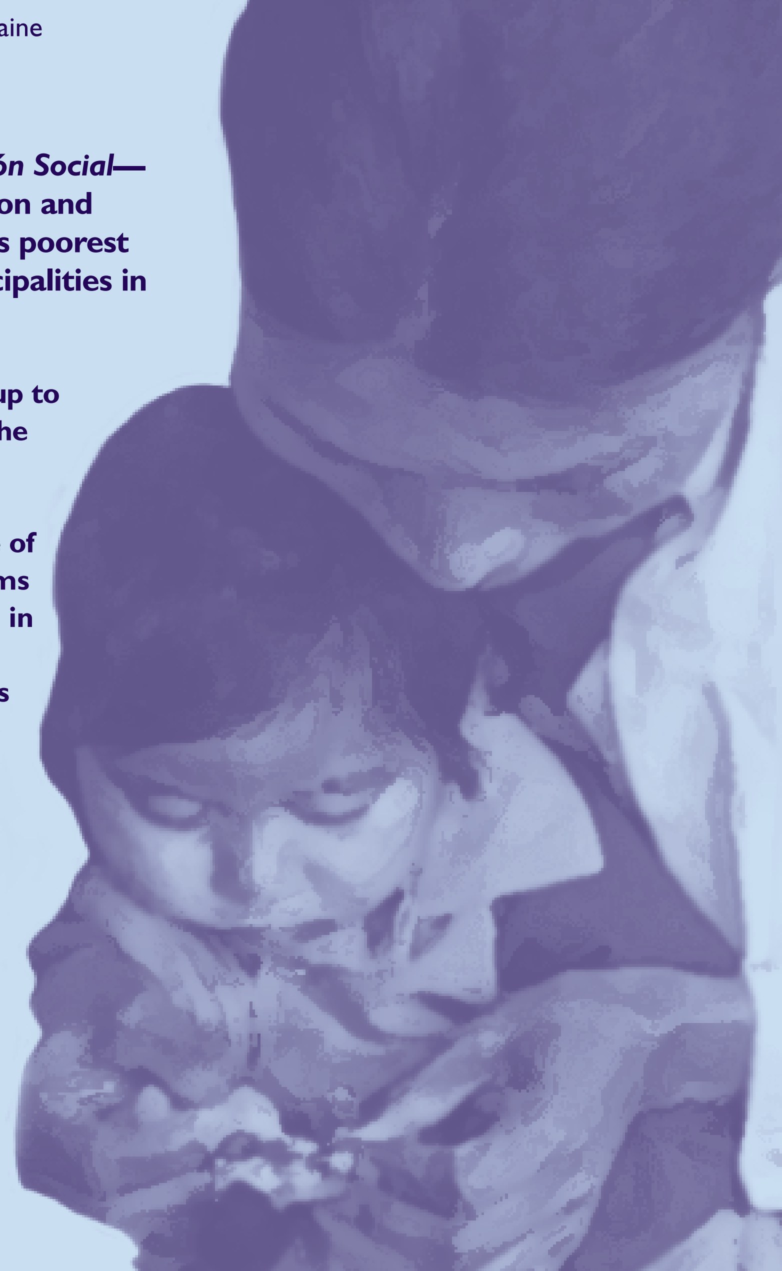

In its first two years, 2000–02, the *Red de Protección Social—Ministry of the Family* (RPS) improved the nutrition and education of approximately 10,000 of Nicaragua's poorest families. Operating as a pilot project in six municipalities in Matagalpa and Madriz, RPS could claim:

- **Substantial increases in family purchasing power—up to 40 percent for the extremely poor—with most of the spending going toward more and better food;**
- **A one-third reduction in the extreme-poverty rate;**
- **A reduction of 5 percentage points in the incidence of children under five who are stunted (few programs in the world have seen this level of improvement in only two years);**
- **A nearly 20 percentage point rise in enrollment rates for primary school children; and**
- **The child-labor rate cut in half in program areas.**

In addition, the poorest benefited the most under the program—reducing many inequalities across socioeconomic classes.

Overall, the program was well targeted to poor areas and poor households, though there was some confusion at the local level about beneficiary selection. An area for improvement is program communications.

Starting in 2000, after competitive selection by the Government of Nicaragua (GON), the International Food Policy Research Institute began an extensive quantitative and qualitative evaluation of the pilot phase of RPS. This brief presents highlights of the evaluation's findings. (See boxes on methodology for details of the evaluation.)

Since the evaluation, GON has extended RPS to a second phase covering three additional municipalities. Currently there are more than 30,000 beneficiary households in the program.

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HOW DOES RPS WORK?

A conditional cash-transfer program (see box on page 3), the pilot *Red de Protección Social* supplements the household income of beneficiaries for up to three years to:

- increase family spending on food;
- increase primary school enrollment during the first four years; and
- improve the health and nutrition of children under the age of five.

Beneficiaries receive a cash transfer intended for the purchase of more, and better-quality, food. Those with eligible school-age children receive three additional transfers: one each for school attendance and school supplies, and one to be given to the teacher. Transfers are made every two months, and beneficiaries travel to the nearest distribution point to collect them.

To receive the cash transfers, beneficiaries must:

- attend health education workshops every two months;
- bring children under five to preventive health care appointments;
- ensure enrollment and an 85 percent school attendance record for children between 7 and 13 who have not yet completed the fourth grade; and
- deliver the teacher transfer to the school.

With the assistance of the health care providers and schools that report to the central office, RPS monitors the requirements listed above. When some or all of the requirements are unfulfilled; a transfer, or portion thereof, is withheld.

MAIN FINDINGS OF THE EVALUATIONS

What effect did RPS have on household economies?

The program decreased the percentage of beneficiaries living in extreme poverty by one-third (15 percentage points) to 30 percent. The RPS safety net enabled beneficiary households to increase their expenditures by an average of 18 percent. For the extremely poor, the increase was 40 percent. The years 2000–02 saw a sharp economic downturn in Nicaragua, especially in coffee-growing areas where RPS was operating, so this safety net was particularly needed. Reflecting the program's emphasis, most of the increase in family spending went toward food. Beneficiary households improved their diets, consuming more nutrient-dense foods including fruit and vegetables. They also reported that the grant enabled them to buy foods that they otherwise could not afford regularly. For the poorest households, this meant more frequent purchases of beans and rice; better-off households introduced occasional meat.

Did RPS beneficiaries stop working?

RPS does not appear to create negative incentives for work: labor-market participation changed little under the program. Men, however, indicated that they were able to work on their own plots more and work closer to home, rather than having to travel long distances in search of wage labor. With the transfers and related higher spending on food, they said that they ate better and had more energy to work. Women indicated they had more time to spend on child care.

How did RPS affect schooling?

For grades one through four, RPS produced an increase in enrollment of 18 percentage points when compared with the control group; as a result, enrollment and attendance levels in those grades are now above 90 percent among RPS beneficiaries.

What is a "conditional cash-transfer" program?

The Government of Nicaragua's *Red de Protección Social* program reflects a new approach to providing safety nets for the poorest people in society: the conditional cash-transfer program (CCT). CCTs are designed to reduce poverty over the long term in extremely poor regions. They have become an important poverty-reduction tool in Latin America and elsewhere. *Progresa* (currently OPORTUNIDADES) in Mexico is one of the better known conditional cash-transfer programs.

The premise of CCTs is that families remain in poverty from one generation to the next because poor parents cannot invest adequately in their children. Decades of research have shown that attention to early child health, nutrition, and education significantly increases children's chances of climbing out of poverty later in life. Yet increasing the availability and quality of schools and health services often fails to make much difference when the poor cannot afford them in any case.

Conditional cash-transfer programs like *Progresa* and RPS deliberately target those most in need, by community in some areas and by household in others. Further, they make the financial assistance contingent on attendance at school and health appointments. CCTs therefore:

1) ensure a basic income, or safety net, for the poor; and
2) ensure investment in the next generation.

In sum, by targeting cash transfers to poor households, the program alleviates short-term poverty. By linking the transfers to investments in human capital, the program addresses long-term poverty. ■

There was an even larger increase, 23 percentage points, in the percentage of children regularly attending school (during the previous month). Not only did RPS bring new students to school; it also improved attendance among those previously in school.

Nearly all men and women interviewed said they believe that education is just as important for boys and girls; the evaluation found no quantitative differences in enrollment or attendance by sex.

While it is impossible to attribute attitudes directly to the program, beneficiaries expressed a strong positive attitude toward education and said they would try to keep their children in school even after the program ends. Indeed, many pupils attending grade four at the start of RPS are still enrolled, even though advancement past fourth grade was not a formal requirement of the program. RPS led to a 7 percentage-point increase in the percentage of children continuing to sixth grade.

Beneficiary children were able to attend classes better equipped with school materials and better dressed, avoiding the shame of going to school barefoot or without school uniforms.

Some nonbeneficiaries, however, were unable to purchase similar items, causing social stress among children. While RPS reduces inequality in many ways (e.g., for enrollment rates across income groups), here it created a visible difference in some cases. In some communities, beneficiary families responded by contributing part of their benefits toward purchasing school supplies for nonbeneficiary children.

Was there any change in child labor?

Parents unanimously expressed opposition to child labor, although the realities of life often require it. In tandem with increased enrollment, the percentage of children ages 7 to 13 who were working declined by 5 percentage points and was half as large in program areas (6 percent) as in control areas (13 percent).

How did RPS affect the health and nutrition of young children?

Improved diets and increased preventive health care for beneficiary children appear to have led to one of the more striking successes of the program: a dramatic decline in stunting among children under five. The rate of stunting dropped 5 percentage points, from 42 percent to 37 percent. This decline is more than one and one-half times as fast as the rate of annual improvement nationwide from 1998 to 2001. Few programs in the world can point to such a large decrease in stunting in such a short time.

All beneficiaries agreed that their children's health improved under the program. They also said they greatly appreciated the preventive health services offered by RPS. RPS was responsible for an increase of 11 percentage points in the percentage of children under age three who had preventive health visits. (The first three years are the most vulnerable in terms of child growth.) In program areas, 93 percent of young children had a preventive health visit in the past six months. Participation by children age three to five also increased substantially.

Beneficiary mothers readily acknowledged the importance of vaccines. Vaccination rates for children aged 12–23 months climbed over 30 percentage points in *both* intervention and control areas—while they were decreasing in other areas within the same municipalities. The rise appears to be due to increased coordination with the Ministry of Health in these areas, in part fostered by RPS. Therefore, it is appropriate to attribute at least part of this improvement to the program.

Anemia, however, remains high—32 percent—among children under five. Despite wide distribution of iron and antiparasite supplements, RPS appeared unable to improve hemoglobin levels or lower the rate of anemia among beneficiary children. The qualitative analysis showed that mothers know the supplements are important for their children's health. Most said they administered them; however, this appears not to be the case. Mothers offered a variety of

reasons: children do not like the taste; the pills cause vomiting or diarrhea; and they stain children's teeth.

In the case of anemia, the qualitative analysis allowed researchers to better understand the quantitative findings, and should aid in redesigning the anemia-prevention component of the program.

During the pilot phase and at the start of the second phase of RPS, however, health services were interrupted, largely due to the bureaucracy involved in contracting private providers. Given the importance of the services provided by RPS, it is crucial that they remain reliable and consistent.

What difference did the health workshops make?

RPS requires attendance at bimonthly health education workshops. These classes are particularly important to promote longer-term changes in practices concerning sanitation, health, and nutrition within the household and community at large. The evaluation showed that beneficiaries have a positive attitude toward the workshops and that the material is presented in a simple manner.

There is room for improvement, however, particularly in reducing the participant-facilitator ratio and in adjusting the material and presentations to make them even more accessible for women with little formal education, perhaps drawing from methodologies used in adult education. The evaluation found that some themes did seem to be taking root (e.g., household and community sanitation practices), whereas others did not (e.g., changes in diet introducing different foods such as soy products and certain vegetables). While dietary changes often take time, for cultural and taste reasons, it is worth reconsidering how and whether those themes could be reinforced.

How good was communication between program officials and community members?

Information flows from program officials to the local level are generally deemed to be good. Program staff and *promotoras*—volunteers selected by the community—expressed a high level of commitment to making the program function well. And beneficiaries appeared to understand program objectives, requirements, and sanctions.

The evaluation found a need, however, for ongoing monitoring of communications and local understanding of program requirements. For instance, the weight-gain requirement in force during the pilot phase presented complications. Initially, families of children under five did not receive the transfer if the child lost weight relative to a standard population in two consecutive measurements, a condition officially ended in early 2003.

Actions taken by some beneficiaries to comply with the weight-gain requirement (such as "overfeeding" children just before a health visit) indicated stress for beneficiaries as they tried to ensured they would retain benefits. Then in 2003 many beneficiaries seemed unaware that this requirement had been dropped—highlighting the importance of ongoing communication of program requirements to local staff and beneficiaries.

In a related finding, some *promotoras* were asking beneficiaries to present receipts for items purchased with the benefits—although this is not a requirement of the program. In general, beneficiaries can be more empowered if they are well informed about how the program works, including their rights and obligations.

Relations within the household

While RPS transfers benefit the whole household, the program is designed to give the actual cash to one adult member—almost always a woman. This design gives women more independence in spending decisions, as well as new avenues for meeting and discussing issues of concern to them. On the whole, both men and women agreed that giving the benefits to a woman was best, since the cash is intended for food and care of children—both typically viewed as a woman's domain.

The availability of additional resources had various positive social effects, including diminished tensions in the household. Nearly half of those interviewed in the qualitative study said that intrahousehold relations had improved. There was no evidence of domestic violence related to participation in the program.

The program appears to have empowered women to some extent, and raised recognition of the importance of women's roles. Some describe an increased equality between men and women as a result of RPS.

Relations within the community

RPS makes extensive use of *promotoras*, and beneficiaries rated the work of these volunteers highly. Indeed, most *promotoras* take their positions seriously and even welcome extra work, such as assisting with health fairs or community work groups. Thus many *promotoras* are emerging as community leaders. In addition, organizing women to participate in activities within the community has been made easier.

Not all community members are beneficiaries, however, so it is important to assess the extent to which new community activities involving beneficiaries may exclude others. Targeting creates differences and some tensions between beneficiaries and nonbeneficiaries. Although these effects were found to be mild, it is important to pay attention to potential negative effects and try to minimize them. This can be done by reducing errors in targeting and encouraging nonbeneficiaries to participate in certain activities, such as health fairs, with beneficiaries.

CONCLUSION

RPS makes an important contribution to Nicaragua's poverty-reduction policy. Among its beneficiaries, the program has improved a number of indicators included in the national poverty-reduction strategy, including school enrollment and malnutrition. Further, these achievements have occurred during a difficult economic time, when progress stalled on a number of indicators at the national level.

Most evidence from the evaluation suggests that if the program were expanded elsewhere in poor, rural areas of Nicaragua, it would be equally successful. The recommended improvements would likely make it even more effective in the future.

Methodology for the quantitative evaluation

The quantitative evaluation involved before-and-after measurements in both treatment and control communities. Including controls seemed appropriate since there was insufficient capacity to implement the intervention everywhere at once.

An evaluation using a control is widely recognized as the most rigorous for ascertaining program effects, since it provides a good measure for what is known as the counterfactual, that is, what would have occurred had the program not been implemented. This proved especially important in the evaluation of RPS, because during the two-year period of the pilot, program areas suffered a substantial economic decline associated with a drought in 2001 and with record low coffee prices in the world markets. Had there not been a control it might have mistakenly been concluded that the effects of the program were smaller than they actually were.

One-half of the 42 *comarcas* (administrative localities) incorporated in the first stage of the pilot were randomly selected into the program at the outset. Thus there were 21 *comarcas* in the intervention group and 21 in the control group.

Treatment communities were selected at a public event with representatives from the *comarcas*, the Government of Nicaragua, the Inter-American Development Bank, IFPRI, and the media. *All control communities were incorporated into the program in early 2003.*

Interviewers conducted household surveys of more than 1,500 families in both intervention and control communities before the start of the program and annually thereafter. ■

Methodology for the qualitative evaluation

The study is based on ethnographic field research by a three-member team. Each field researcher spent between seven and eight weeks living in each of two intervention communities. The researchers lived in informants' houses, shared in their daily lives and activities, and conducted a range of semistructured interviews, case studies, and observations.

The principle underlying this kind of study design is to trade numerical breadth for empiricist depth: by building on a foundation of personal trust, information gathered from such an approach is more discursive and often more reliable than a formal survey can be. The sacrifice is that, given how labor intensive the process is for both data gathering and analysis, an ethnographic approach must focus on a much smaller sample size.

The findings, therefore, are empirically linked to the six communities where the study was implemented. Where findings were consistent across all or most of the study communities, it is likely they can be generalized to others as well. Where key findings emerge in just one or two communities, however, they are still worth noting. We stratified across several categories in selecting communities: household versus geographic targeting, geographical diversity, poorer and less poor communities, and more and less accessible communities.

Within communities, the samples are largely representative. An average of 20 households, mainly beneficiaries but also including some nonbeneficiaries, was studied in each community, representing 10 percent or more of households.

The qualitative and quantitative studies are complementary, and their integration is an important characteristic of the evaluation design. It allowed measurement of given indicators using the quantitative study first, and then use of qualitative approaches to better understand and explain quantitative results. ■

NOTE: The six municipalities in the program were the Totogalpa and Yalagüina municipalities in the department of Madriz, and the Terrabona, Esquipulas, El Tuma-La Dalia, and Ciudad Darío municipalities in the department of Matagalpa.

Targeting

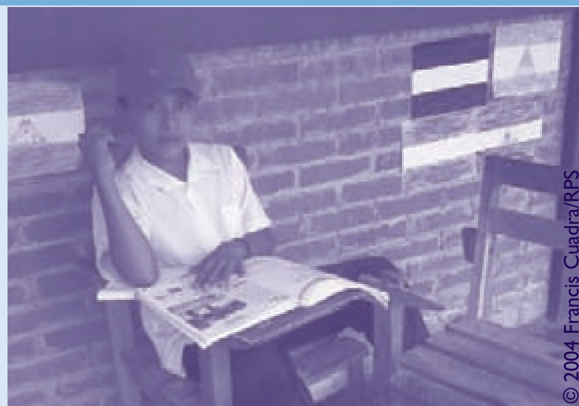
RPS was very well targeted: 81 percent of its beneficiaries came from the poorest 40 percent of the population, according to an assessment in 2001. This proportion compares favorably with that of similar programs. For instance, the comparable figure found for *Progresa* was 62 percent.

In areas where the program was geographically targeted, nearly all extremely poor and poor households were included as beneficiaries. Furthermore, because the program was well targeted to rural areas with poverty rates above 80 percent, the percentage of nonpoor households participating in the program in geographically targeted communities was only 15 percent.

Even this 15 percent leakage, however, overstates the case since many of these nonpoor households, according to the Nicaraguan poverty line, spend on average less than two dollars a day per capita.

In communities with household targeting, a proxy means test was developed and implemented. One-fourth of all households were ascertained to be above the poverty line and did not receive cash transfers, though their children were eligible to receive the health services.

Overall, the targeting mechanisms were not well understood at the local level. Community members offered a variety of reasons for why individuals were or were not included: luck, God, or location on the map—which referred to the fact that the program is in part implemented using census maps that are not always coincident with communities. Notably, political influence was not mentioned as a factor in the targeting. Lastly, there was no evidence that anyone had moved from other communities outside the program area to receive benefits.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Statistical targeting can never be perfect, so it is important to follow it up with a clear appeals process. While the absolute number of individuals and households erroneously excluded (either because of imprecision in the proxy means test, failure to be present during one of the censuses, or other reasons) is small in comparison to the size of the program, the implications of their exclusion are potentially important. In the qualitative study, two-thirds of 120 households interviewed indicated that they felt there had been errors of exclusion in their community. These perceived exclusions caused distress among both excluded and included, particularly because they did not understand the reasons, nor feel that they could alter the situation. This points to the importance of providing access to an open appeals process to correct errors when they occur. Selection is one of the areas in which greater participation and ownership of the program by beneficiaries should be promoted. ■

Supporting documents from IFPRI's evaluation of RPS and related materials:

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