

Building on an earlier exploratory study, in 2007–2008 the CGIAR's Standing Panel on Impact Assessment (SPIA) undertook an initiative in collaboration with seven CGIAR centers to augment the evidence of policy-oriented research (POR) impacts within the CGIAR system and to further the development of methodologies in this challenging area of impact assessment. Seven case studies were commissioned. This impact brief describes the major results that emerged from the International Food Policy Research Institute (IFPRI). The summary version of the full case study report can be found in: Behrman, J.R. 2008. IFPRI and the Mexican PROGRESA anti-poverty and human resource investment conditional cash transfer program. In: CGIAR Science Council. 2008. *Impact Assessment of Policy-Oriented Research in the CGIAR: Evidence and Insights from Case Studies*. A study commissioned by the Science Council Standing Panel on Impact Assessment. CGIAR Science Council Secretariat: Rome, Italy. (Available at <http://impact.cgiar.org/>)



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## Assessing IFPRI's Impact: the Case of the Mexican PROGRESA Program

During the 1994/5 transition from the administration of President Carlos Salinas to President Ernesto Zedillo, the Mexican economy experienced a severe economic contraction. Policy-makers were concerned about the negative implications of this shock for the poor, but had a variety of views on the appropriate policy response. Some argued for strengthening existing pro-poor programs, including the 15 general and targeted food subsidy programs. Others argued for new approaches based on research into the synergies among various forms of investment in human resources, the nature of intra-household allocations of these investments, and the basic transfer characteristics of food provision to households in quantities smaller than those consumed by the household. New approaches were sought that were better targeted towards the poor, more transparent, less costly in terms of administration, less vulnerable to corruption, and more suited to systematic evaluations.

Out of these discussions, a new anti-poverty and human resource investment program, PROGRESA<sup>1</sup>, was designed as a major component of Mexico's anti-poverty strategy. In August 1997 it was introduced, initially in small rural communities, but has since been expanded to cover about 30 million poor Mexicans in all but the most populous urban areas. PROGRESA became known for its efforts to enhance the country's human resources by benefiting younger Mexicans through conditional cash transfers (CCTs) rather than the in-kind provision of specific foods that had dominated previous programs; its efforts to ensure participation and empowerment of more vulnerable members of poor households (for example women, infants, and children); and its systematic efforts at evaluation. The CCTs are made to mothers and are conditional on such behaviors as children and adolescents attending school, infants receiving micronutrient supplements, mothers attending sessions on nutritional and health practices, and all family members having regular

health and nutritional check-ups. PROGRESA incorporated data collection and systematic evaluation as integral components from the start, with baseline and follow-up data collection, and an initial random assignment of the program among 506 rural communities. Indeed, one major reason why PROGRESA is so well known is its central commitment to the evaluation of impacts from the start.

In 2000, for the first time in seven decades, Mexicans elected a President, Vicente Fox, who did not belong to the Institutional Revolutionary Party (PRI). Despite fears that PROGRESA would not survive following the election, the program was in fact sustained, and subsequently expanded to cover upper secondary schooling and more urban areas. Renamed Oportunidades, the program continues in basically the same form today.

## The benefits and costs of PROGRESA

While there are no estimates of the overall benefit–cost ratios (BCRs) of PROGRESA, there are estimates of BCRs through schooling attainment, which are of substantial interest given the relative importance of CCTs related to schooling in the overall program. These estimates assume that program benefits arise from increases in future earnings as a result of increased schooling, ignoring other potential impacts of the program such as improved health and nutrition. Estimates of the costs of the program include administration (costs of targeting, transferring benefits and assessing conditionality) and private costs associated with participation in the program, as well as any distortionary costs of raising public funds to finance the program. All costs and benefits are discounted to the start of the program. The BCRs of 6 years of exposure to PROGRESA indicate benefits that are several times higher than costs under most scenarios for rates of return to schooling attainment (6, 8, and 10 percent) and potential discount rates (3, 5, and 10 percent).

At a broader national level, positive spillovers from PROGRESA include the institution of a culture of formal policy evaluation in Mexico. At an international level, the concept of CCT programs and their systematic evaluation has been advocated by organizations such as the World Bank and the Inter-American Development Bank (IADB), has been implemented in a number of other countries, and is under consideration in others.

## IFPRI's involvement

The International Food Policy Research Institute (IFPRI) was active in research into a number of related issues prior to the design and initiation of PROGRESA. These topics included the efficacy of food subsidy programs, nutrition and health interventions, gender targeting, intra-household allocations, and related policies. IFPRI was contracted to undertake the initial evaluation of PROGRESA in 1998–2000. This was followed by a series of contracts for subsequent evaluations by the Mexican Instituto Nacional de Salud Pública (INSP).

The study on which this brief is based<sup>2</sup> explores the influence and impact of IFPRI's work in relation to PROGRESA and its CCTs, by considering four questions:

- Was the PROGRESA program design influenced by prior IFPRI research?
- Why was IFPRI chosen to undertake the initial impact evaluation of PROGRESA?
- How did the IFPRI evaluation of PROGRESA contribute to the program?
- Were there spillovers from the IFPRI evaluation of PROGRESA?

## Assessing IFPRI's impact

The case study aimed to use BCRs to estimate the impact of IFPRI's involvement with PROGRESA. However, while the benefits and costs of the PROGRESA program can be calculated, these do not identify the portion that should be allocated to IFPRI's influence. IFPRI produces policy research outputs that aim to foster better government policies. Estimating BCRs for this research is more challenging than making such estimates for other forms of research with more direct and tangible impacts.

Six types of information source were examined to obtain an understanding of IFPRI's specific impact and influence:

- Documents written by key actors in the development of PROGRESA, prior to its establishment. PROGRESA was largely designed by Mexican researchers, whose research papers prior to the program might have revealed any impact of IFPRI and IFPRI-related research on the program's development.
- Documents that discuss the development of PROGRESA, written after its initiation. These include accounts by some of the key actors in the develop-

ment of the program and other knowledgeable observers.

- Interviews with 39 key informants, including people who were directly involved with developing and implementing the program, Mexican government officials, IFPRI staff and members of the IFPRI evaluation team, and members of the subsequent Mexican INSP evaluation team, as well as representatives of international organizations.
- Documents written by PROGRESA staff during the IFPRI evaluation period.
- Media reports about PROGRESA.
- Other relevant documents, including the transcript of a Brookings Institution Workshop/Press Conference that featured PROGRESA, relevant e-mails, and an IADB press release about the program.

## Influence and impact

A number of conclusions could be drawn from the review of the information sources outlined above. First, the study concludes that IFPRI did not directly participate in the design of PROGRESA and that it would be misleading to claim that a major part of PROGRESA's benefits should be attributed to IFPRI's role in the design process. Nonetheless, it appears that prior IFPRI research and the work by the evaluation team members did influence the program's initial design and subsequent adaptation. For instance, key informants emphasized the IFPRI evaluation team's contribution to improved survey design, information from which helped PROGRESA itself, informed the initial evaluation of PROGRESA and were used later to uncover impacts of PROGRESA that were not originally envisaged in the evaluation design. Thus, a small part of the benefits of the PROGRESA program may be attributed to IFPRI's inputs.

IFPRI offered a number of advantages as the organization contracted to carry out the program's evaluation. For instance, it offered an independent, international perspective, with a reputation for credible analysis of policy-related issues, and flexible yet reliable and low-cost management. Key people involved in the development and implementation of PROGRESA agreed that the IFPRI evaluation team made a significant contribution to the short- and long-term sustainability and expansion of the program. Results of the first set of impact evaluations were presented to President-elect Fox and members of his transition team, and may have contributed to the decisions to

continue, and ultimately expand, the program after the election.

Finally, substantial spillover effects have occurred both in Mexico and internationally as a result of the evaluation of PROGRESA. A culture of formal policy evaluation was promoted in Mexico, while IFPRI's engagement in the evaluation probably added considerably to both Mexican and international awareness of, and receptivity to, new knowledge about evaluation processes, as well as to the understanding of CCTs.

Thus the evidence suggests IFPRI probably did have a significant impact on the direct and indirect outcomes of the program, even though this may have been a small percentage of the total impact of PROGRESA.

## Benefits and costs

In order to quantify more clearly the impacts of IFPRI's involvement in PROGRESA, simulations of the BCRs were calculated under five headings. These are shown in Table 1. The BCR estimates are sensitive to the assumptions made about such matters as discount rates and rates of return to schooling, because the benefits must be estimated over the future working life of students who are in school while they are program beneficiaries. The first row under each heading presents conservative estimates of BCRs, while the second row shows the estimates with more moderate assumptions. The total impact IFPRI's involvement is the sum of the individual impacts.

The study suggests that IFPRI may have had an impact through reducing delays in program implementation due to the technical advice it provided. Specifically, the greater credibility of the evaluation studies conducted by IFPRI as opposed to alternative providers may have led to faster program expansion. Under a conservative assumption that this expansion was three months faster in 1999–2000 than if IFPRI had not been involved, the BCR is calculated at 16.4.

The analysis also suggests that the IFPRI evaluation team helped improve the design of both the program itself and the evaluation during its interaction with the PROGRESA team. In the conservative assumptions in Table 1, these contributions are assumed to account for 0.03 of the PDV of the PROGRESA benefits for the 1998–2000 period.

**Table 1.**  
**Benefit–cost ratio (BCR) estimates**

	Estimated BCR
1. Impact through reducing delays in program implementation only	
Conservative assumptions (delay reduced by 0.25 years for 1998–2000)	16.4
Moderate assumptions (delay reduced by 0.5 years for 1998–2004)	1733.0
2. Impact through improving evaluation and program design only	
Conservative assumptions (0.03 of present discounted value (PDV) of benefits for 1998–2000)	5.8
Moderate assumptions (0.06 of PDV of benefits for 1998–2006)	303.9
3. Impact through increasing probability of program continuing after election of 2000 only	
Conservative assumptions (probability of survival after election up 0.05)	57.1
Moderate assumptions (probability of survival after 3 elections up 0.10)	5991.6
4. Impact through spillovers within Mexico and internationally only	
Conservative assumptions (0.025 of PDV of program benefits)	4.9
Moderate assumptions (0.10 of PDV of program benefits)	1133.5
5. Impact with all effects combined	
Conservative assumptions	84.3
Moderate assumptions	9162.0

A positive impact is considered through the increased probability of program continuation after the Mexican presidential election of 2000. The analysis suggests this may have arisen because of the quality of the technical advice provided by IFPRI and the credibility of the IFPRI evaluation study compared to alternatives, which facilitated political agreement for program continuation.

The impact through spillovers is also considered potentially important. Again, this is thought to have occurred because of the quality of IFPRI's technical advice and the credibility of the evaluation studies, which helped facilitate dissemination of knowledge and advocacy about CCTs modeled on PROGRESA. Under the (probably very) conservative assumptions used in Table 1, the spillover impact of PROGRESA is calculated at 0.25 of the present discounted net program benefits, while IFPRI's involvement in the initial evaluation accounted for 0.10 of this spillover.

## A high return on investments?

Even under the most conservative assumptions, the BCR estimates suggest that the benefits were high relative to the costs of the IFPRI evaluation of PROGRESA

for each of the four types of impact. These estimates suggest that any one of the impacts in isolation would justify the program. For example, the BCR for spillovers alone under conservative assumptions is 4.9, while for evaluation and program improvements alone it is 5.8 – and it is much higher for the other two impacts alone. The BCR is much larger if all four impacts are considered together – 84.3 under the conservative assumptions. Moreover, if the moderate assumptions are more plausible than the conservative ones (as may well be the case), then the benefits exceeded the costs by far more. The IFPRI evaluation of PROGRESA thus apparently resulted in a substantial international public good with a high return on the resources used to undertake the evaluation.

## Notes

- 1 PROGRESA is an acronym for the original name of the program (Programa de Educación, Salud y Alimentación, Program for Education, Health and Nutrition).
- 2 Behrman, Jere R. 2007. *Policy-oriented Research Impact Assessment (PORIA) Case Study on the International Food Policy Research Institute (IFPRI) and the Mexican PROGRESA Anti-poverty and Human Resource Investment Conditional Cash Transfer Program*. IFPRI Impact Assessment Discussion Paper No. 27. International Food Policy Research Institute: Washington, DC, USA.