Targeted Human Development Programs:

Investing in the Next Generation

Arianna Legovini
Ferdinando Regalia

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Arianna Legovini is an Economist in the Poverty and Inequality Unit. Ferdinando Regalia is a Junior Professional in the Social Programs Division of the Regional Operations Department 2 of the Inter American Development Bank. The authors thank Jere Behrman, Carola Alvarez, Ricardo Moran, Amanda Glassman and Nora Lustig for their thoughtful and comprehensive comments on the initial draft of this document. Presentations by Cristovam Buarque and Santiago Levy at the Seminar on Targeted Human Development Programs (June 1, 2000) provided valuable insights for this report.

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Poverty and Inequality Unit
Mail Stop E-0421
Inter-American Development Bank
1300 New York Avenue, N.W.
Washington, D.C. 20577

E-mail: povunit@iadb.org
Fax: 202-623-3299
Web Site: http://www.iadb.org/sds/*pov*

Foreword

Intergenerational persistence of poverty is generally linked to the reduced capacity of poor families to foster human capital accumulation of their children and pull them out of poverty. Supply-side interventions, which increase the availability and quality of schooling and health services, might be insufficient to improve this capacity when resource-constrained low-income families cannot bear the direct and indirect private costs of acquiring these services.

During the past decade a new generation of integrated poverty reduction programs, Targeted Human Development Programs (THDPs), have been implemented in Latin America to tackle this problem by addressing the demand side in the use of social services. The Inter-American Development Bank has played and continues to play an active role in establishing these programs and ensuring that they incorporate sound impact evaluation mechanisms.

This report sets out the rationale for implementing THDPs and outlines instructions for their design and implementation. In addition a list of appropriate country conditions for the implementation of THDPs is presented. The report also describes ways of incorporating impact evaluation mechanisms into project design and presents some of the results based on existing empirical evidence. Finally, a logical framework model for a THDP operation is included in the Annex.

Nora C. Lustig
Senior Advisor and Chief
Poverty and Inequality Unit

Contents

What Is a Targeted Human Development Program?

Targeted Human Development Programs (THDPs) are integrated poverty reduction programs designed to increase the capacity of the poor to accumulate human capital. The programs are directed primarily to poor and vulnerable families with pre-school and school-age children. Their main long-term objective is to eradicate the structural causes of poverty by fostering investment in the next generation's human capital. A secondary objective is to alleviate poverty in the short term, mainly through monetary transfers.

This report sets out the motivation for implementing THDPs and step-by-step instructions for design and implementation. It describes the implementation of impact evaluation mechanisms and results that can be expected and offers a list of appropriate country conditions for a THDP. A model logical framework for a THDP operation is presented in the Annex.

WHY FOCUS ON HUMAN CAPITAL ACCUMULATION?

There is a strong correlation between income and human capital levels. Poor families are generally unable to accumulate sufficient human capital and earn enough to pull themselves out of poverty. In addition, supply-side interventions aimed at increasing the availability and quality of schooling and health services may not be sufficient to level the playing field for poor families. Resource constraints may prevent low-income families from providing adequate nutrition, health care, and schooling for their children. For this reason, THDPs address the demand side in the use of social services.

The indivisible combination of short- and long-term objectives distinguishes THDPs from the traditional concept of transfer programs focused primarily on short-term income support. Strict enforcement of requirements ensures that the long-term objectives are met. Current transfers are conditioned on behaviors that increase human capital accumulation, including prenatal care, early childhood development, and children's health care, nutrition (including nutritional courses to parents), and school attendance.

An enhanced human capital asset base increases earnings potential and the capacity to move out of poverty. The intention is to permanently change the conditions of poor families by educating a whole generation of children and engendering a virtuous cycle of greater human capital and higher earnings. Educated children make educated parents who look after their own children's education; educated girls have lower fertility rates and better child feeding practices; and widespread primary and secondary education reduces inequalities.

While THDPs may help poor families withstand income shocks by increasing transitory and permanent household income; they should not be relied on as the main safety net mechanism for responding to macroeconomic shocks. This is because THDPs are designed to target the structurally poor and may not be easily expanded during downturns to incorporate *new* poor, partly because targeting relies on indicators of permanent poverty that are not affected by temporary income downswings.

EXPERIENCE WITH TARGETED HUMAN DEVELOPMENT PROGRAMS

Several THDPs have been implemented in Latin America during the past decade. The first experiment with the concept was the 1992 *Progresa* pilot program in Mexico. Its success led to the establishment of a countrywide program in 1997 that integrates education, health, and nutrition activities for pre-school and school-age children. *Progresa* is also the first social pro-

gram to have developed a statistically sound impact evaluation system for assessing the impact of the program on various dimensions of poverty reduction.

The Brazilian *Bolsa Escola* programs focus on schooling and provide monetary incentives for attendance and performance.

PRAF in Honduras combines supply-side and demand-side interventions in an experiment to measure the relative effectiveness and synergy of supply and demand actions.

Red de Protección Social in Nicaragua was designed along the lines of the *Progresa* model and modified to reflect the late enrollment and early dropout characteristics of the Nicaraguan countryside.

The *Apoyo Familiar* program in Colombia also combines different social sector interventions.[1]

[1] The Inter-American Development Bank has played and continues to play an active role in the establishment of these programs and in ensuring that they incorporate sound impact evaluation systems. IDB loans have been extended to support the programs in Colombia, Honduras, and Nicaragua. Another is in preparation for Brazil.

Motivation for an Integrated Approach

APPLYING AN INTEGRATED HUMAN CAPITAL DEVELOPMENT APPROACH

Targeted Human Development Programs adopt an integrated approach to developing the human capital of the poor by addressing the nutritional, educational, and health care needs of poor families. Nutrition, education, and health services are complementary in the generation of human capital.

Health status affects nutritional interventions. Efforts to increase food intake in poor families may fail to improve the nutritional status of family members whose health is weak. If the incidence of diarrhea and intestinal diseases is high, for example, interventions to increase food intake must be accompanied by improvements in sanitary and health conditions and good feeding practices.

Female education and training affect the health and nutritional status of family members. Educated women postpone childbearing, have fewer pregnancies, and provide better nutrition and health care to their children.

Nutrition and health status affect cognitive achievement. Several experimental studies find a significant positive association between nutrition and health (in particular iron status and lack of parasitic infections) and learning ability and cognitive achievement (see Behrman 1996 for a review). Pollitt and others (1993) find significant effects of early childhood supplementary feeding on various measures of cognitive skills in adolescents in Guatemalan villages. Using a longitudinal data set for the Philippines, Glewwe, Jacoby, and King (2000) find that malnourished children are less likely to be successful in school.[2]

Nutrition and health affect enrollment and earnings. Glewwe and Jacoby (1995) find that nutrition and health affect the age at which children enroll in school and that early childhood malnutrition delays enrollment. They also demonstrate that delayed enrollment has a sizable impact on lifetime individual earnings.

RELAXING DEMAND AND SUPPLY CONSTRAINTS

The rationale for implementing THDPs is the existence of demand constraints on the ability of poor families to invest in human capital. Demand-side interventions would complement—not substitute for—supply-side interventions.

Demand Constraints

Poor households cannot afford to send their children to school, pay for health care, or provide them with a balanced diet, and they must often send children to work to help support the household.

Income fluctuations induce discontinuity in school attendance. Jacoby and Skoufias (1997) use panel data from rural India to analyze how human capital investment in children responds to fluctuations in household income. They find that child labor and school attendance fluctuate significantly in response to variations in household income. Further, variability in school attendance might have a long-term negative impact on the human capital accumulation of poor children.

[2] They find that heterogeneity in learning endowments, home environments, or parental *preferences* cannot fully account for the fact that malnourished children perform poorly in school. While there is no strong negative impact of malnutrition on learning efforts (homework time and school attendance), malnutrition delays primary school enrollment. Their result supports a causal link between nutrition and academic success.

Children are sent to work to bridge the poverty gap. Bhalotra (2000) estimates the wage elasticity of children's labor supply using household data from rural Pakistan. The wage elasticity for boys is significantly negative: as their wage rises their labor supply declines. This implies that children work to bridge a poverty gap. The results support the claim that the primary reason for child labor is insufficient household income (below subsistence levels), rather than, for example, low returns to education.

Poor households cannot afford to send their children to school. Legovini and Lustig (2000) show evidence from household surveys in Latin America indicating that the most frequent reason cited for not sending children to school is the high cost of attendance (transport, clothes, material, and the opportunity costs of remunerated or unremunerated child labor). This signals the existence of resource constraints.

Supply Constraints

The accessibility and quality of school facilities, or the returns of child labor over the returns to education, play an important role as well.

Ray (2000) finds that poverty increases child labor hours and decreases school attendance in Pakistan but fails to find significant results for Peru. He speculates that the higher quality of schools in Peru may explain this difference.

Using household survey data from Mozambique, Handa (1999) finds that both demand-side interventions (increasing per capita consumption, improving adult literacy) and supply-side interventions (reducing the number of children per teacher) have large positive impacts on children's enrollment.

These findings suggest a need to address both demand and supply constraints. In addition, demand interventions will increase the pressure on existing structures. Experiments, such as the one developed by *PRAF II* in Honduras, can be designed to measure the relative efficiency and synergy of supply and demand interventions.

Designing and Implementing a Targeted Human Development Program

PROGRAM PRECONDITIONS

Four important conditions should be met before establishing a targeted human development program. First, the government's political and fiscal commitment should be ensured. Second, existing social programs should be thoroughly analyzed. Third, intersectoral coordination mechanisms should be established. Finally, a THDP requires an adequate institutional capacity.

Ensuring Political and Fiscal Commitment

Poverty targeted programs require *political commitment* to reach the very poor. This requirement is intensified for THDPs because they substantially affect the allocation of social spending, moving funds from general to targeted subsidies and from urban to rural populations.

Because THDPs are intended to increase the human capital of a whole generation, so that children can become educated parents and in turn educate their children, governments should make a *medium-term financing commitment* (10-15 years) before implementing a THDP.

THDPs should *replace programs with similar objectives* that failed to deliver positive results, to avoid duplication of effort and conserve resources.

Analyzing Existing Social Programs

The efficacy of *existing social programs* (food programs, vouchers) *should be analyzed* before implementing a THDP. Though few social sector programs have reliable evaluation results or adequate data to undertake such an evaluation, some analysis is essential to obtain a standard against which THDP performance can be measured and to reallocate resources efficiently.

THDPs are *one element of a wider array* of general education, health, social security, labor training, and housing policies to increase the asset base of the poor, increase their earning capacity through employment and productive activities, improve their living conditions through basic infrastructure and housing, and reduce disparities. It is thus important to recognize the role and limitations of a THDP and ensure its consistency with a country's poverty reduction strategy and overall sector policies. For example, if a government charges user fees for school and health services, adjusting fees in poor areas might be less costly than channeling transfers through the demand side.

Establishing Intersectoral Coordination Mechanisms

Adequate supply must be ensured before interventions are undertaken to stimulate demand for education, heath care services, and food. Most THDPs are first implemented as pilot programs in areas of easy access and few supply constraints—this was the case with *Progresa* in Mexico. The *Red de Protección Social* pilot program in Nicaragua followed the same approach, at least in terms of availability of schools. *Bolsa Escola* programs in Brazil have not required supply interventions because they operate in urban areas where school coverage and quality are considered adequate. However, when THDPs are expanded to more remote areas, extensive supply-side interventions—quantity and quality of health and education provisions—may be indispensable.

Combining demand- and supply-side activities requires substantial coordination between line ministries and the executing agency. For example, agreement is needed on the action plan defining the schedule of investment in social infra-

structure, the targeted population, the menu of interventions, and the mechanisms for service and benefit delivery. Interministerial coordination should also include finance ministers to ensure compatibility between program objectives and resource availability.

Building Adequate Institutional Capacity

Building the institutional capacity to manage a THDP is essential. Data collection and analysis and development of a targeting system (if one is not already available) require *substantial financial and technical resources*. Delivery and monitoring mechanisms need to be tested. Staff requirements are intensive at start-up (information system specialists, statisticians, and sector specialists, and external consultants can meet much of that need). Synergies with national statistical institutes should be fully exploited.

Once systems are in place, however, the program requires a relatively small staff to service a large number of beneficiaries. For example, *Progresa*'s administrative costs are less than 5 percent of the total program costs. In *Red de Protección Social*, a much smaller program at its beginnings, administrative costs will represent 12 percent to 13 percent of total costs after the first year of implementation.

PROGRAM DESIGN

Several issues should be taken into consideration in the design of a targeted human development program. Program objectives should be clearly stated and include measurable outcomes. In addition, the targeting and selection of beneficiaries are vital components of these programs. Targeted Human Development Programs should include education as well as health and nutrition components. Other issues important to consider in the design of these programs are exit rules, transparency, supply-side interventions, private sector providers, the effects on local markets, expansion to urban areas and the program's fiscal sustainability.

Setting Clear Program Objectives and Measurable Outcomes

Long-Term Objective. The long-term objective of THDPs is poverty reduction. Indicators (such as poverty headcount and measures of the depth and severity of poverty) need to be selected for assessing achievement of the objective. Where the objective is to bridge social disparities (for example, in education levels) across different groups (gender, geographic, ethnic), measures of education and wage inequality can be used as indicators.

Medium-Term Outcomes. The medium-term outcomes of THDPs vary according to the design of the program. Defining program outcomes that can be easily monitored and measured is key to evaluating program success. Medium-term outcomes could include, for example, an increase in the population's average years of schooling (*education*); a decline in maternal and infant mortality rates (*child and maternal care*), and a decline in the incidence of child malnutrition or illness (*health and nutrition*). Also, the active involvement of beneficiary families in program execution (*participation*) may promote positive behavioral changes in the medium term such as better hygiene and feeding practices.

Short-Term Outcomes. Short-term outcomes should be monitored to insure achievement of longer-term objectives. For example, school grants are expected to increase *school enrollment and attendance* and reduce dropout rates. *Repetition rates* should fall if scholarships increase with grades or if deposits are made in individual savings accounts after children have completed a given educational cycle (as in Brazil's *Bolsa Escola*). The program should reduce *child labor supply*, at least the number of hours children work. Sharper reductions can be expected if after-school programs and attendance monitoring are included, as in the Brazilian *PETI*.[3] *Prenatal and post-natal care* components

[3] The PETI is the Brazilian program for the eradication of child labor. In addition to providing scholarships to poor children, it implements an integrated strategy in communities with a high incidence of child labor. The strategy includes changes in produc-

should lead to an increase in the number of health care visits. Nutritional components, such as food supplements, food security, and nutritional training, are expected to improve the nutritional intake of parents and children in the short run, and their *nutritional status* in the medium run as well as compensate for imbalances in household food allocation. The income support component is expected to *alleviate the depth and extent of poverty* in the short term. Jointly with nutritional components, income support is expected to increase the quantity and variety of consumption goods acquired. When the target population is extremely poor, an increase in income should produce a more than proportional increase in food consumption. The proportion of total expenditures on child-care, children's clothing, and school supplies can also be expected to increase.

The program might generate *other outcomes* directly or indirectly. For example, it could change the *labor supply of adult members* of beneficiary families, affect the *intra-household balance of power* (since women receive the grants, their power to take decisions may increase), increase *business start-ups* and crowd out inter- and intra-household *private transfers*.

Establishing a Targeting System and Selecting Beneficiaries

Targeting and selection of beneficiaries are crucial components of THDPs. Some of the steps to follow in this regard are: (a) defining the target population, (b) selecting the beneficiaries and (c) developing an experimental design.

Defining the Target Population

Since the objective of THDPs is to reduce poverty through human capital development, the target population is poor families with young children. The aged poor and poor families without children are immediately excluded as potential beneficiaries; they can be assisted by other programs. The number of families covered depends on the financial resources available and the size of the transfer per family. Consideration must be given to the trade-off between size of the transfer and coverage as well as to the possibility of phasing in the program. Both institutional limitations and budget constraints may require gradual implementation.

Selecting Beneficiaries

THDPs often use a combination of geographic and household targeting. These methods rely on clear selection rules based on data from national household surveys and censuses. *Geographic targeting* is less expensive to administer but does not differentiate between poor and non-poor households in a community, so poor households in non-poor areas would be excluded while non-poor households in poor areas would be included. *Household targeting* requires more information but can discriminate, albeit imperfectly, between households. Geographic and household targeting should be combined in different geographic areas or stages of a program. When the program focuses on homogeneously poor communities, geographic targeting is most cost-effective as long as the cost of covering the non-poor is smaller than the administrative costs of surveying each household, adjusted by the expected leakage rate. As the proportion of non-poor increases in targeted communities, household means testing should be used.

Geographic areas can be ranked according to a *poverty or marginality index*, with the index depending on available data and government priorities. Communities can be ranked by a malnutrition index if reducing malnutrition is a priority (*PRAF II* in Honduras) or by the incidence of child labor in certain types of agricultural activities if reducing child labor is the priority (*PETI* in Brazil). A common poverty or marginality index uses census data to calculate a weighted linear combination of demographic and housing characteristics. These may include the percentage of illiterate population ages 15 and older, the percentage of dwellings without running water or sewerage systems, and the average number of occupants per room. Census data contain little information on household consumption and income, however.

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tion technology and campaigns to promote cultural change.

Combining census information with household income and expenditure surveys delivers better results. Household survey data can be used to estimate an econometric (probit) model to predict the poverty status of a household, as measured by per capita family consumption (preferably) or per capita family income (when consumption data are not available). The explanatory variables must be available in the census data so that the model can be extrapolated to the whole population. Estimated coefficients from the poverty probit model are applied to the census data at the region or locality level to determine the predicted incidence of poverty (drawing a poverty map). Localities can then be ranked by degree of marginalization. The ranking provides a schedule of implementation for the program.

Some restrictions apply to the choice of localities for a first phase. If the program contains no supply interventions (and none have been agreed to with line ministries), a THDP will be restricted to areas where the provision of education and health services is adequate. Otherwise, the conditions of the program cannot be enforced. In many cases THDPs are started as pilot programs in areas where road access is also relatively easy.

↳ *Warning: Results Cannot Be Automatically Extended*

*The lessons from the evaluation of pilot programs must be interpreted with caution. Results cannot be automatically extended to areas that require supply interventions. For this reason, a pilot program should try to cover areas that have different supply and demand needs. Experiments testing the relative effectiveness of supply and demand interventions (*PRAF II*) may also be desirable.*

Rules can be instituted to reduce the incentive to migrate *from a nonbeneficiary community to the beneficiary community—a minimum residency requirement, for example. This is a concern of local governments, which do not want to attract poor people from other districts (*Bolsa Escola*). In national programs, migration of poor families from control to beneficiary communities may bias evaluation results.*

Household Targeting. *Socioeconomic information used to test income or consumption levels is obtained through a questionnaire designed to collect data on household characteristics and the well-being of its members. Interviewees sign (or fingerprint) the questionnaire to certify its authenticity. The information should be saved in electronic files for processing. Each household and its members are assigned identification numbers, to protect the confidentiality of the information.*

Data collection and processing should be supervised through control of sample mechanisms of coverage and quality assurance*. Municipal authorities and local representatives should provide support, helping to identify the geographic borders of the locality and authorizing the activities of those conducting the questionnaires.*

Once household information has been obtained, beneficiary families are selected on the basis of a standardized evaluation of socioeconomic characteristics.

↳ *Warning: Program Admission Rules Should Not Be Disclosed*

Program admission rules should not be disclosed to avoid distorting family behavior. For example, if the proxy for testing income is the floor or roof material of the dwelling, a family could change them to qualify for the program. Nor should the rule selected distort behavior. For example, if the rule for program admission is the working status of children, reported child labor may suddenly increase to win access to the program. For this reason, THDPs target poor families with school-age children, regardless of whether the children attend school or work or do both.

Community Involvement. *To minimize errors of inclusion (of non-poor families) and exclusion (of poor families), the list of selected families may be submitted to the community for scrutiny, in some cases by public posting of selections.*

*Surveyors revisit any households identified by the community to ascertain the veracity of the claim and update the list accordingly. In Colombia, community committees (*veedurías ciudadanas*), which include the local priest, teacher, and doctor, review the lists to assess errors.*

Experimental Design

If the program is gradually expanded and an experimental evaluation design is used to assess its impact (see impact evaluation section), some geographic areas or households might be excluded from the program's initial phase. The random selection of villages or households for control and treatment groups should be transparent and open to all stakeholders. *PRAF II* used a lottery supervised by community leaders to select beneficiary and nonbeneficiary localities for treatment and control groups among localities that could qualify to receive the program. Children conducted the lottery drawing in the presence of stakeholders and the state institutions in charge of administrative probity.

Education Component

This component provides monetary incentives to beneficiary families conditional on children's school enrollment and attendance.

Scholarship Design

A grant that covers the opportunity and direct (transport and material) costs of a child attending school will fully compensate families for sending children to school. For most parents, who positively value their children's education more than their children's earnings, a smaller grant will induce them to send their children to school.

An *analysis* of female-male and rural-urban enrollment, delayed enrollment, and repetition and dropout behavior should be undertaken to design a structure of scholarships that maximizes the impact of the program. Common problems are delayed enrollment and dropout after first or second grade, high dropout rates between primary and secondary education, and high repetition rates. Gender differences are also important: in rural areas girls are often withdrawn from school earlier than boys to help in the house.

Strategies to deal with country- or area-specific problems include differential grants by grade level and gender and rewards for successful grade or school-cycle completion.

In *Mexico*, where analysis showed that enrollment declined and dropout increased significantly between primary and secondary schooling, *Progresa* awards scholarships to children in the last years of primary and first years of secondary school. The grants increase with grade level and between primary and secondary school to avoid dropout at this critical stage. To close the gender gap, *Progresa* awards larger grants to girls, which has resulted in greater female than male school attendance. The gender gap index needs to be selected carefully. In Mexico, the gap in attendance favored boys, but the gap in attainment favored girls. The effect of *Progresa* was to reverse the gender gap in attendance and strengthen the gender gap in attainment, effectively hurting boys.

In *Brazil*, a schedule of awards for successful grade completion and school cycle completion provides incentives for performance and completion of full school cycles (primary and secondary).

In *Nicaragua*, where the problem is delayed enrollment and high dropout in primary school, the *Red de Protección Social* awards grants to poor rural children in grades 1 though 4 to support the achievement of functional literacy. This choice was determined in part by the absence of grade 5 and above in many rural areas, a restriction that must be addressed through supply-side interventions.

Grants can be provided to individual children (as in Mexico) *or families* (as in Brazil). Family grants require every school-age child in the family to attend school. They are easier to administer but harder to monitor than individual grants. They motivate families to send all of their children to school rather than select among them, but enforcement penalizes all children

when one child fails to attend school. Both systems have some incentives for increased fertility: in the family grant, to extend the period of benefits, and in the individual grant, to increase the number of grants and extend the period of benefits. Imposing a cap on the number of children who can receive benefits and a time limit per benefit per family can help curb fertility incentives. Family grants and caps on number of children may, however, provide incentives for families to separate into different households.

Some basic principles can be used to calculate *grant amounts*. Household surveys such as the Living Standards Measurement Surveys (LSMS) can be used to *estimate direct and opportunity costs* of attending school. Direct costs can be derived from household expenditure modules; opportunity costs, from wage equations based on information from the employment and education modules.

The *opportunity cost for young children* may be hard to estimate because wage work is rarely reported for young children. When no information is available, the project team should investigate the socioeconomic conditions and time allocation of the target population. A second but inferior alternative is to use rules of thumb that set the opportunity cost equal to some arbitrary fraction of average earnings of unskilled workers.

Because the *opportunity cost* of attending school *increases with age and school achievement*, the grant amount of the grant should increase accordingly. The increase should be tied to grade levels, to provide positive incentives for performance. A cap on the number of allowed repetitions might be set as an additional performance incentive.

Indexing the grant to inflation can preserve the real value of the cash grant or the income-support component.

Delivery

School grants are delivered to beneficiary families conditional on children's school attendance. Grants are *usually delivered to the mother*, on the assumption that women will spend more of the grant on the children. The practice changes the balance of power in the household toward the woman. By-products, such as changes in household violence, family composition, and break-up patterns should be monitored.

Payments are delivered *through the banking system or the network of post offices*, where available, or to an alternative delivery agency. Brazil's *Bolsa Escola*, an urban program, uses the banking system. Rural areas, however, lack adequate coverage by financial institutions. The pilot phase of Nicaragua's *Red de Protección Social* also relies on the banking system or security agencies, but the expanded program may need an alternative delivery mechanism. In Mexico's *Progresa*, school grants and income support components are paid to beneficiary families by authorized agencies that specialize in managing cash transfers or by temporarily installed local *Progresa* units, *Módulo de Atención Progresa.* The expanded *Bolsa Escola* program, now in the planning stage, would deliver the grants through automated teller machines (ATM), offering poor families access to the banking system and greater flexibility in cashing their grants.

Monitoring School Attendance

School grants are conditional on children's enrollment and minimum attendance (usually 85-90 percent of the time). Temporary *noncompliance* results in a suspension of the benefits; repeated noncompliance results in automatic expulsion from the program.

Teachers Keep Attendance Records. Under one model (*Bolsa Escola*), teachers deliver the information to principals, who inform the agency that issues the attendance certificates to the banking system. External supervisors run random checks on student attendance and teachers' recording practices. In *Missão Criança*, a privately funded variation of *Bolsa Escola*, children's attendance is monitored by contracted nongovernmental organizations (NGOs) and the local church. Since the scholarship constitutes a sizable proportion of poor families' income,

mothers have a strong incentive to monitor their children's school attendance.

- ***Warning. To ensure truth in reporting, no incentives should be given to teachers to increase attendance.***

The Health and Nutrition Component

This component provides monetary and limited in-kind transfers to beneficiary families to increase their food consumption, diversify their diets, and improve their nutritional intake. Monetary transfers are conditional on an agreed schedule of medical visits and attendance at nutritional courses.

Design of the Health and Nutrition Package

In *Progresa*, *PRAF II*, and *Red de Protección Social*, the health component takes a preventive care approach. The *Progresa package includes* basic sanitation; family planning; pre-natal, assisted delivery, and post-natal care; vaccinations; children's development care; antiparasite treatment for the whole family; prevention and care of chronic tuberculosis; blood pressure and diabetes care; treatment of diarrhea and respiratory infection; control and detection of uterine cancer; and community training in nutrition, heath care, and hygiene. Nicaragua's *Red de Protección Social* provides a basic health care package of pre-natal, post-natal, and maternal care, children's vaccinations, and early childhood development.

Programs establish a *schedule of visits* for mothers and children. Mexico's *Progresa* protocol prescribes five pre-natal medical visits, two visits for breast feeding women, three visits in the first four months of life, eight visits from months 4 through 24, three annual visits for children 2-4 years old, two for children 4-16, and one for adults 17 and older. Usually the number and type of visits are based on Ministry of Health protocols. Sometimes they are too comprehensive and not cost-effective. Only interventions of proven cost-effectiveness should be considered. Experiments on the effectiveness of alternative health packages can be developed at the trial stage of project implementation, though that may not provide adequate time to obtain definitive answers.

Food supplements may be provided to address specific nutritional deficiencies. *Progresa* provides food supplements to breast-feeding and pregnant women, to children 2 years old and younger, and to malnourished children up to 5 years old. The supplements meet 20 percent of caloric requirements and 100 percent of micronutrient requirements. Anthropometric parameters are monitored.

A curriculum of basic health care, hygiene, and nutritional *training for mothers* is agreed with the administrators of the program and the health ministry.

Different options are available to *calculate the amount of the transfer* for this component. The trade-off between consumption needs and number of beneficiaries covered should be assessed. Most programs use the gap between average food consumption of beneficiary families and the value of a food basket that ensures minimum caloric intake for good health. By construction, these transfers will not fully cover the consumption needs of the extremely indigent and so should be adjusted upward when this group is a priority concern. The average value of food consumption of beneficiary families should be computed on a per capita basis. Consumption needs can be adjusted to account for consumption requirements of different family members and for economies of scale of larger families. But there is little empirical evidence on the numeric value of adult equivalencies and economies of scale. Because per capita calculations will result in more generous transfers than adult equivalent calculations, per capita calculations will simply cover the full consumption needs of more beneficiary families. The total value of the transfer can then be calculated by multiplying the individual average consumption gap by the average number of individuals of the benchmark family.

A national program may set *different transfer amounts by geographic or other area*, such as urban and rural, with different poverty indices. The transfers may also be adjusted annually to account for inflation and for regional price index changes. These adjustments may come at the

cost of administrative simplicity, however, and are not necessarily recommended.

Service Delivery

The health care package is delivered by public health posts or contracted out. In addition to basic health services, providers distribute food supplements and training in basic health care, hygiene, and nutrition. In the *Red de Protección Social*, contracted providers are paid a fixed amount to cover the first agreed number of visits and a variable amount for each additional visit.

Monitoring

Health providers record visits and inform the program's executing agency. Families receive a receipt or a health care history for each child. The executing agency maintains an electronic database of the health care history of beneficiaries, which is accessible to health care providers, and compiles a list of families that comply with program conditions and retain eligibility for continued benefits. A local committee is established to supervise service delivery and controllers dispatched to random inspection of local executing units and providers in the field by controllers.

Exit Rules

Families lose eligibility if they fail to comply with program conditions, if their income rises above the established poverty threshold, or, for geographic targeting, if the area no longer meets marginality criteria. Families' poverty status is reassessed every two to three years.

- ***Warning. To avoid underreporting of income by families trying to retain eligibility, the rules (proxies and weights) used to determine poverty status should not be divulged and may be changed periodically. Some poverty indicators, such as nutritional status, are immune to misreporting, so monitoring the nutrition status of children may be a useful means of assessing family poverty level.***

Transparency

Transparency is crucial for maintaining program credibility and preventing corruption, politicization, and clientelism.

Selection of Beneficiaries

Targeting procedures and criteria should be published in the official bulletin of the government and on the government Web page. Although proxy-means testing rules (proxies and weights) should not be divulged to avoid misreporting, procedures should be subject to external auditing. The executing agency should also inform community leaders of the criteria used in the selection process.

The risk of *corruption and political interference* in the selection process is no greater in THDPs than in other government programs. Survey-based targeting systems help avoid discretionary selection of beneficiaries. Controlling selection at the national rather than state or local level is another mitigating mechanism.

Accuracy and fairness require a systematic and reliable mechanism—a *social comptrollership*—for community participation in reviewing and revising selection results. While the involvement of local key informants who know the community well, such as doctors, teachers, and school directors, can be helpful, care must be taken to avoid the discretionality that survey-based targeting systems are designed to prevent. It is also helpful to inform the community at large about the program and to give beneficiaries the right to challenge decisions (Adato and others 2000).

Information for Beneficiaries

Information booklets and presentations at community meetings should provide beneficiaries and nonbeneficiaries alike with complete details about status, rights, and obligations related to program benefits.

Beneficiaries and nonbeneficiaries should be informed that *eligibility is not conditional on voting behavior* or political affiliation. To *ensure privacy*, they should know what information they are required to share and what they are not. In *Progresa*, beneficiaries in each locality elect a *community promoter* to help disseminate infor-

mation and monitor the program. The promoter meets periodically with executing agency staff for training and exchange of information on how the program is operating. The promoter provides a link between beneficiaries and administrators by channeling families' suggestions and ideas to improve service provision.

Delivery of Grants

All transactions are tracked and monitored, reducing the risk of diversion of funds and other resources.

School grants and income support transfers are *distributed through banks, postal offices, and contracted security agencies.*

Impact evaluation mechanisms greatly improve transparency and accountability. *Progresa, PRAF II, Red de Protección Social,* and *Apoyo Familiar* have well-designed *evaluation mechanisms and external evaluators*. The independence of the agency responsible for evaluation is essential for minimizing bias. Independence needs to be established from the start, with the design and implementation of the baseline survey.

Social Monitoring

During program execution, the social control exerted by beneficiaries, particularly mothers, is important. Information is crucial for motivating participants and reducing the risk of discretionary use of funds.

Supply-Side Interventions

Because THDPs are designed to increase the demand for health and education services, governments should plan for increased investments in these sectors. Even where schools and health posts can cope physically with increased demand, the quality of service could suffer. THDPs must either include a supply-side component or coordinate with other programs that do.

In 1997-2000, Mexico's National Council for Educational Development *(CONAFE*) organized more than 70,000 courses for parents associations and more than 210,000 for teachers to improve educational activities. One-quarter of the teachers received a 20 percent bonus for their outstanding school assistance record and extracurricular activities. Parents associations received financial support for classroom maintenance, and some 7,232 new classrooms were built. Education supply-side interventions during this period cost 0.3 percent of GDP, about half the cost of the demand-side component. On the health supply side, the number of doctors and nurses rose and their average pay increased by 26.4 percent and 15.8 percent, respectively. Some 8,783 health units were re-equipped.

Private Sector Providers

Programs should avoid discriminating against private sector provision. Beneficiary children should be allowed to attend private schools, for example. Even though few private providers may be available, scholarships may encourage new entry, thus easing supply constraints and improving options for the poor.

Effects on Local Markets

THDPs are expected to increase the demand for food and other goods. If the supply is inelastic, inflationary pressures in local markets might reduce the net welfare gains of beneficiaries and hurt nonbeneficiaries as well.

Expansion to Urban Areas

Except for *Bolsa Escola* programs in Brazil, THDPs in Latin America have been implemented only in rural areas. From an administrative perspective, program implementation should be easier in urban areas, because of the greater availability of financial intermediaries. Supply-side constrains are also less severe. Targeting, however, poses greater challenges. Because household incomes are more heterogeneous than in rural areas and migration to participating neighborhoods is more likely, household rather than geographic (community or neighborhood) targeting should be done.

Fiscal Sustainability

From an economic standpoint, policymakers need to insure that the THDP investment in human capital, like any other public investment, has a positive net expected value. In other words, the costs of the investment must at least equal the increase in the discounted future stream of earnings of beneficiaries relative to the control group.

While net expected value is difficult to evaluate in advance, *results from pilot impact evaluations* provide useful inputs for making informed decisions about the reasonableness of continuing or expanding the program.

THDP targeting mechanisms should *help governments improve the incidence and cost-effectiveness of social spending*, enabling the same objectives to be achieved with fewer resources.

To maintain macroeconomic stability, most countries will need to *reallocate funds in order to finance a THDP*. Options range from dropping ineffective programs to consolidating the menu of basic preventive health, education, early childhood, and maternal care and nutrition programs or eliminating general subsidies.

Several factors influence costs. Where poverty is widespread and average GDP per capita is low, implementing a THDP on a large scale is probably not feasible. *Costs rise with the number of beneficiaries and decline with the level of poverty*—the poorer the country, the lower the opportunity cost and the smaller the transfer needed to induce investment in human capital. On the supply side, however, needs are greater in poorer countries.

In low- and middle-income countries alike, the *scale of the program will be determined by financial resources.* In most countries, coverage will be smaller than the number of potential beneficiaries. The resources devoted to human capital investment depend on net expected returns of this investment relative to that of other public investments, and not on whether the program can achieve full coverage of the targeted population.

The *financing costs of full-scale THDPs* as a percent of GDP are small in middle-income countries and significant in low-income countries. *Progresa* is financed entirely by the Mexican government. Its cost in 2000 was 0.2 percent of GDP, or 1.9 percent of total social expenditures. Only 4.4 percent were spent on administration. In-kind transfers—including medical visits—represented 18.5 percent of the total cost, and monetary transfers, 77.1 percent. The program covered 2.56 million families or about 40 percent of rural households. In addition, supply-side interventions have ranged between 0.15 percent and 0.18 percent of Mexican GDP yearly since 1997. *Bolsa Escola* started in Brasilia and has been extended to seven states and more than 200 municipalities, benefiting 800,000 children. The program is financed largely by the federal government and executed by local governments. Extending *Bolsa Escola* to 10 million children would cost about 0.36 percent of GDP, or 1.2 percent of the public sector budget in Brazil. The federal government has recently allocated US$800 million to finance the first stage of this expansion of the program. Full coverage by the *Red de Protección Social* in Nicaragua would cost between 2 percent and 2.2 percent of GDP, or 6 percent of public expenditure (excluding supply-side interventions). Reallocating resources going to food programs (2 percent of GDP) would be sufficient to cover these costs.

Public and Private Donors

THDPs are easily adapted to incorporate external donor financing. The transparency and accountability in the design and implementation of these programs and recent positive impact evaluation results should boost donor confidence in the programs. Providing scholarships to poor student is not new, but doing so within a comprehensive framework of investing in children and measuring results is.

Impact Evaluation and Expected Results

Impact evaluation is an indispensable tool for assessing whether a program is achieving its objectives. Impact evaluations at intermediate stages of a program can uncover important lessons for improving the effectiveness of program design and execution. While impact evaluations can be time and resource intensive, the costs are small relative to the scale of most programs, and the returns in increased effectiveness of social spending and greater accountability are high.

For most THDPs, evaluation of targeting mechanisms and program impact has been carefully designed. That enables policies to be judged not on the basis of some speculative assessment but through a quantitative analysis of their impacts, costs, and benefits. While evaluation is costly, it also produces tremendous efficiency gains by guiding governments' and donors' decisions on future resource allocations.

IMPACT EVALUATION DESIGN

Selecting the Design

Impact evaluations compare a treatment group (program beneficiaries) with a control group (nonbeneficiaries), using either an *experimental or a quasi-experimental design*. *Experimental design* is the most robust. Program beneficiaries and nonbeneficiaries are selected randomly within the target population. Randomization ensures that there are no systematic differences in the observed characteristics between program participants and the control group. Data on both groups must be collected before (baseline survey) and after (follow-up surveys) the program. The impact of the intervention is assessed by subtracting the mean outcomes of the treatment group from the mean outcomes of the control group before and after the intervention. Accurate impact evaluation also uses multivariate regression techniques to control for individual observable and unobservable characteristics.

Randomizing beneficiaries is feasible and offers an ethically sound basis for proceeding (all targeted individuals have the same probability of being selected) when budget constraints require rationing of program benefits. Even when the programs are national in scale and aim for 100 percent coverage, institutional capacity and testing often require that coverage be expanded gradually. Phased coverage provides an opportunity for random assignment of targeted individuals to control and treatment groups. Individuals assigned to control groups at an early stage of program implementation become beneficiaries at a later stage. Optimally (if often politically unfeasible), control groups should not be aware of future benefits, to avoid affecting their expectations and behavior.

Progresa in Mexico used an experimental design impact evaluation system. Communities rather than individuals were randomized to avoid social tensions within communities. As a result, all groups of individuals of interest may not have been randomly assigned because of possibly uneven distribution of groups across communities.

Experimental methods can also be used to evaluate program components and synergies among components. Evaluating components requires the development of multiple beneficiary groups, each with access to different benefit packages. This greatly increases the insights that may be gained from evaluation. *PRAF* in Honduras uses an impact evaluation system that assesses supply and demand interventions separately and jointly.

Quasi-experimental methods are used when programs were developed before an evaluation system was put in place. Methods range from comparing beneficiaries before and after the program (reflexive comparison), to comparing beneficiaries and nonbeneficiaries by either artificially creating a control group that resembles

the group of beneficiaries (matching each beneficiary with one or more observationally equivalent nonbeneficiaries), or using regression methods based on instrumental variables. These methods suffer from selection bias and difficulty controlling for external factors that have affected the changes in monitored outcomes. Care should thus be taken in interpreting results.

Setting Up an Impact Evaluation System

Some of the steps to follow in *setting up an impact evaluation system* include the establishment of an evaluation team, assessments of targeting efficiency and outcomes, quantitative indicators, qualitative analysis, general equilibrium analysis and tests of different service packages.

An *evaluation team* should be involved from the early stage of the project to support identification and design by

- helping to develop a consistent and monitorable logical framework, including objectives, inputs, outputs, timing, performance indicators, risks, and underlying assumptions (see logical framework annex);
- supporting the development and implementation of the targeting methodology;
- working with the statistical office to ensure that the baseline and follow-up surveys appropriately sample the population and include all relevant questions for program evaluation;
- supervising data collection, training and contracting of the interviewers, and quality control; and
- supervising lottery selection of families into control and treatment groups to ensure transparency.

The evaluation system should be able to *assess targeting efficiency and short- to long-term outcomes.* Additionally, it might assess the operational efficiency of the program. Most of the instruments and data used for evaluation become important operational tools for monitoring program implementation. The final outcome of an impact evaluation should be a clear analysis of the cost-effectiveness of the program, which is indispensable for assessing its sustainability.

Program administrators and evaluation team members should work together to develop a *list of quantitative indicators* divided into short-term (1-2 years), medium-term (2-3 years), and long-term (3 years or more) measures. The indicators can be defined separately for any group of interest (gender, age, and ethnic background). The list should be tailored to the specific program (see logical framework annex).

Qualitative analysis can complement the quantitative analysis to assess difficult to measure outcomes, such as THDP impact from the medium to the long term on the empowerment of some member of the family relative to others, intra-household violence, and community cohesion.

A full-scale program with national coverage might include *analysis of the general equilibrium effects of the program* (for example, change in returns to education). This type of analysis is being carried out for *Progresa*, with its extended national coverage.

During a pilot phase, administrators may want to *test different service packages*, for example, to measure the relative effectiveness of education and health interventions, the transfer amount required to achieve a certain increase in enrollment, or the relative effectiveness of supply and demand interventions. The costs of impact evaluation, however, will increase with each experiment.

EXPECTED RESULTS

Evaluating Targeting Efficiency

Evaluation results of the targeting mechanism for *Progresa* in Mexico and preliminary results for *PRAF II* in Honduras and *Red de Protección Social* in Nicaragua are available. A preliminary comparison of their targeting efficiency suggests that all three succeed in targeting extremely poor households with children subject to a high prob-

ability of stunting (IFPRI 2000). The *Red de Protección Social* in Nicaragua is most effective at targeting the most vulnerable, drawing 55 percent of its beneficiaries from the bottom income quintile. *Progresa* draws 40 percent and *PRAF I* draws 43 percent.

Progresa uses a *two stage targeting mechanism.* In the first stage, localities are selected through geographic targeting based on a marginality index. The method is very successful in selecting localities with the highest concentration of poor families—better even than a theoretically superior method that selects localities using an index based on families' consumption expenditures. There is almost no undercoverage, but leakage is quite high. In a second targeting stage, families are selected by household income and other socioeconomic characteristics within the selected localities, using discriminant analysis. At this stage, targeting works better at identifying extremely poor households but is more likely to fail to identify households that are moderately poor. Considering the targeting costs, the two-stage procedure is viewed as more efficient for reducing the incidence and depth of poverty than simple geographic targeting.

PRAF II rejected means test targeting. Benefit leakage of 40 percent and undercoverage of 15 percent were not thought to justify the high administrative costs of household targeting.

The *Red de Protección Social* used *geographic targeting* based on a marginality index. Within selected localities (*comarcas*), virtually all households (97.5 percent) are eligible to receive the transfer except households that report owning a vehicle or a farm of more than 14 hectares.

Evaluating Impact

Results are available only for *Progresa*. Most results reported here reflect impact two years into program implementation (a few cover only eight months) using intermediate indicators, such as enrollment rates or visits to health centers, rather than final indicators, such as years of schooling or child mortality rates (IFPRI 2000).

In two years, the share of households living in *poverty* (headcount) fell by 8 percent in *Progresa* localities. Measures of poverty depth and severity improved even more, implying that extreme poverty was greatly reduced. The poverty gap dropped by 30 percent and the severity of poverty index by 45 percent. These are the direct impacts of *Progresa* and do not include increased future earnings of beneficiary families.

Progresa increased *enrollment rates* for grades 3 to 6 by 0.7 to 1.1 percentage points for boys and 1.0 to 1.5 percentage points for girls, depending on methodology used. For grades 7 to 9, enrollment increased by 3.5 to 5.8 percentage points for boys and 7.2 to 9.3 percentage points for girls. These figures indicate that *Progresa* reached about a third of children not previously enrolled. *Average years of schooling* increased by 0.66 year, which will translate into an estimated 8 percent increase in permanent future earnings for these children. *School attendance* still falls during the harvest season, particularly for boys and for children whose work force participation cannot easily be substituted for by increasing the labor supply of adults in the household.

Preventive health care visit rates grew faster in *Progresa* localities than in control villages, with a significant increase in nutrition monitoring visits, immunization rates, and pre-natal visits (Gertler 2000). The number of pre-natal visits in the first three months of pregnancy increased by 8 percent.

Two years into the program, 0-5 year old children in *Progresa* localities experienced 12 percent fewer incidences of disease than children in control villages. Among adults, *Progresa* beneficiaries had 19 percent fewer days of illness than nonbeneficiaries. As a result, the number of in-patient hospitalizations was lower in *Progresa* localities.

Receiving the nutrition supplement regularly was estimated to boost the annual *mean growth of children ages 12 to 36 months* by 16 percent (or 1 centimeter) and to increase children's height by about 1.2 percent. This is a potentially

important effect, which could increase lifetime earnings by between 1.4 and 2.9 percent.

Eight months into the program, *Progresa* families had increased their consumption of milk and milk derivatives by 33 percent; bread, 32 percent; meat, 24 percent, and fruits and vegetables, 19 percent relative to consumption in the control group. After two years, average *food consumption and caloric intake* increased by about 10 percent in *Progresa* families compared with the control group.

Eight months into the program, *Progresa* families had increased their spending relative to the control group by 58 percent on children's clothing and 39 percent on shoes. Spending on children's clothing and shoes also rose by a statistically significant amount as a share of total family expenditures. Consumption of tobacco and alcohol did not increase relative to the control group.

Progresa reduced *boys' remunerated labor force participation* by 25 percent in the age group 12-13 years. No statistically significant effects are recorded for other age groups. *Progresa* does not appear to create negative incentives for *adult labor supply*. Data show no reduction in labor force participation rates for men or women.

Progresa increases women's decisionmaking role in the family, particularly on decisions affecting children. Women report that they are more likely to speak to other mothers about house-related issues, are more comfortable speaking out in groups, have become more educated through health and nutrition training, and have more control over household expenditures.

Progresa beneficiaries have organized themselves to carry out new activities. For example, groups of women rented a vehicle to facilitate collecting their transfers. A new range of small productive activities has also emerged in *Progresa* localities.

Affecting Institutional Structures and Social Sector Policies

THDPs are expected to influence institutional structures and social sector policies and expenditures. Adoption of an integrated approach *increases coordination among line ministries* (education, health, and other social sectors) and the program executing agency. This coordination is beneficial to social policy formulation and consistency. If a THDP substitutes for programs shown by analysis to be ineffective, implementation of a THDP can help to develop a unified framework for targeted interventions.

In many countries, particularly in Latin America and the Caribbean, the geographic allocation of supposedly targeted social sector programs does not match the regional distribution of poverty. THDPs, with their robust targeting, facilitate the *more efficient allocation of targeted public expenditures* across regions (urban and rural) and municipalities. Consider Mexico. Between 1994 and 2000, the regional distribution of poverty changed little: the rural poor made up 60 percent of the total (Levy 2000). In 1994, before *Progresa* started, only 39 percent of food subsidies were targeted, and 31.4 percent of the subsidies went to rural areas. With *Progresa* the situation changed dramatically. Now more than 95 percent of food subsidies are targeted, and 76.4 percent of food-related transfers go to rural areas. The total amount of resources disbursed remained practically unchanged.

The integrated approach of THDPs *stimulates coordination among international lenders and donors*—multilateral, bilateral, and NGOs. This may result in substantial efficiency gains, particularly in countries and sectors where government and donor interventions overlap on both the demand and supply sides.

Country Conditions

Country conditions should be analyzed to determine whether a THDP could adequately respond to the particular situation. Country-specific conditions include the nature and distribution of poverty and the nation's institutional capacity and local organization.

NATURE AND DISTRIBUTION OF POVERTY

Pockets of Poverty and Other Appropriate Conditions

Given the targeted nature of THDPs, the presence of well-confined pockets of poverty will help implementation. *Other appropriate conditions* include the existence of low-income families with low education levels, high labor earnings to total income ratio, little or no asset ownership, high fertility rates, high incidence of malnutrition, delayed school enrollment, low school attendance, and high dropout rates. In these families, children often contribute to the family's monetary and non-monetary income. The presence of segments of the population whose *demand* for education, health, and nutrition is *constrained by lack of resources* is also an appropriate condition for the implementation of targeted human development programs.

TARGETING

Widespread Poverty

Widespread poverty within a country should not preclude a THDP option. Critics argue that when poverty is widespread, there are *no obvious criteria for selecting program beneficiaries.* By the same argument any intervention (road or school construction, water and sanitation programs) that fails to reach all the poor in a country should be questioned as well. Poverty reduction policies can be successfully implemented even when coverage is limited.

A legitimate concern is *where to begin a program,* given available resources. If the objective is to reduce the depth and severity of poverty, programs should target the poorest of the poor. If the objective is to reduce disparities between genders or ethnical groups, programs should target the disadvantaged group. A prerequisite is the availability of good quality data—census data and national household expenditure and income surveys. Developing targeting mechanisms that are technically robust and cost-effective becomes a priority.

Institutional Capacity and Local Organization

THDP implementation requires a certain amount of institutional and administrative capacity and local organization. *Institutional and administrative capacity* is needed to design, implement, and maintain appropriate targeting, training, monitoring, and evaluation procedures.[4] *Local organization*, with the active involvement of representatives of beneficiary and non-beneficiary families (school councils, local committees) is necessary to promote households' active participation and ownership of the program. That kind of participation is essential for achieving permanent behavioral change, strengthening social control and ensuring transparency and monitoring.

[4] *Progresa* in Mexico and *PRAF-II* in Honduras have already built this capacity. Other countries are building it, for example Nicaragua.

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Annex Logical Framework for a Targeted Human Development Program

Narrative Summary	Key Performance Indicators[5]	Monitoring and Supervision	Critical Assumptions and Risks
Overarching Objective Reduce Poverty	Incidence, depth and severity of consumption poverty	Survey data Poverty assessment	
THDP Development Objectives Increase the human capital and earnings capacity of poor families.	Education level Illiteracy rates Life expectancy	Survey data	*(THDP Development Obj.s to Overarching Objective)* Macroeconomic growth and stability Medium-term fiscal commitment
Project Outputs 1. Increase in average schooling and school performance	1.1 Net enrollment rates 1.2 Attendance rates 1.3 Average years of schooling 1.4 Rate of functional literacy 1.5 Children's average time allocated to work leisure and study 1.6 Repetition and dropout rates 1.7 Standardized test scores	1.1 Children's school attendance record by teachers. 1.2 Attendance certificates 1.3 External supervisors' random checks records 1.4 Test scores results 1.5 Executing agency's beneficiary database 1.6 Survey data 1.7 Beneficiary database 1.8 Impact evaluation team's reports	*(Outputs to Development Objectives)* Supply side interventions: building of schools, ensuring quality of education services, ensuring teachers presence in the classroom Coordination between line ministries
2. Improvement in health and nutritional status	2.1 Maternal and infant mortality rates 2.2 Morbidity and incidence of child malnutrition 2.3 Number of medical prenatal visit in the first three months of pregnancy 2.4 Number of birth assisted by qualified personnel 2.5 Number of control visits for growth and development for infant and children 2.6 Vaccination coverage 2.7 Incidence of malnutrition	2.1 Providers' records 2.2 Medical records 2.3 Beneficiary database 2.4 Survey data 2.5 Anthropomorphic data 2.6 Impact evaluation team's reports	Supply side interventions: availability of health posts, presence of medical staff, availability of drugs and vaccines, quality of service

[5] Baseline and targeted values should be shown, with the latter divided into values expected at mid-term, end of project and full impact.

Narrative Summary	Key Performance Indicators	Monitoring and Supervision	Critical Assumptions and Risks
3.1 Improve consumption levels and patterns	3.1 Share of food expenditure on total family's expenditures 3.2 Changes in the consumption of milk, meat, bread, fruit, vegetables and basic staples 3.3 Number of products which enter family's consumption basket 3.4 The share of cloth, shoe and school util expenditures for kids relative to total family expenditures 3.5 Family's consumption of tobacco and alcohol 3.6 Changes in the family pattern of expenditures and asset accumulation 3.7 Private transfers received	3.1 Survey data 3.2 Impact evaluation team's reports	
4.1 Ensure targeting efficiency	4.1 Undercoverage and leakage rates 4.2 Cost-benefit of different types of targeting	4.1 Survey data 4.2 Impact evaluation team's reports	
Project Components	*Input:*		*(Components to Outputs)*
1. Education component	$ __ million	1.1 Banking check issuance records 1.2 Executing units' records and audits	Efficient targeting Coordination between ministries Transparency
2. Health and Nutrition Component	$ __ million	2.1 Beneficiary database 2.1 Providers contracts and disbursements 2.2 Executing units' records and audits	
3. Impact Evaluation Component	$ __ million	3.1 Bidding documentation 3.2 Impact evaluation contract	

Contact Information

Brazil (Bolsa Escola)
Cristovam Buarque, Missão Criança, Brazil (email:cbuarque@brnet.com.br)
Alvaro Cubillo, IDB
Guilherme Sedlacheck, World Bank

Colombia (Apoyo Familiar)
Pablo Adam, IDB
Mauricio Cárdenas, former Director of the National Planning Department, Colombia
Jesus Duarte, IDB
Amanda Glassman, IDB
Maria Teresa LaFourie, Director, Project Executing Unit, Department of the Presidency, Colombia
Manuel Salazar, Project Director, National Department of Planning, Colombia
Miguel Székely, IDB

Honduras (Programa de Asignaciones Familiares (PRAF))
Carola Alvarez, IDB
Rafael Flores, IFPRI

Mexico (Progresa)
Jere Berhman, University of Pennsylvania
Daniel Hernandez, former Director, Progresa, Mexico
Santiago Levy, Mexico
Immanuel Skoufias, IFPRI
Petra Todd, University of Pennsylvania

Nicaragua (Red de Protección Social)
Carlos Lacayo, Technical Director, Emergency Social Investment Fund (FISE), e-mail:fiseclm@ns.tmx.com.ni
Emma Monin, IDB
Ferdinando Regalia, IDB
Maria Eugenia Zavala, IDB