



## THE IMPACT OF THE NNAT CONDITIONAL CASH TRANSFER PROGRAM TO REDUCE CHILD LABOR IN COSTA RICA

Photo courtesy of the Ministry of Labor of Costa Rica



### BACKGROUND

According to the International Labor Organization's estimates, at least 152 million children ages 5 to 17 worldwide are child laborers, accounting for almost 11 percent of the global child population. Almost half of these working children are engaged in hazardous labor that endangers their safety, health, or morals.

Costa Rica is a middle-income country with widespread school access and steady reductions in child labor rates. However, there are youth that continue to engage in child labor and hazardous labor practices, primarily in the agriculture and fishing, construction, manufacturing, domestic work, and street vending industries.

IMPAQ International worked together with the Government of Costa Rica (GCR) to conduct a randomized controlled trial (RCT) of the Working Children and Adolescents (Niños, Niñas y Adolescentes Trabajadores or NNAT) program. The RCT's main goal is to build rigorous evidence to determine if the intervention contributed to the reduction of child labor and hazardous child labor among program beneficiaries. This summary brief presents the program and the main findings of the evaluation.

### THE PROGRAM

The Working Children and Adolescents (NNAT) program is a conditional cash transfer program designed to keep youth in school by replacing their wages from working with a monthly subsidy of approximately \$200. Besides solving the immediate problem of ensuring sufficient family income, the program also targets long-term family income by requiring families to keep their children in school to continue receiving the subsidy. The expected outcomes of the project are twofold: a reduction of child labor outcomes and an increase in school outcomes. It is also expected that well-being and educational aspirations will increase, while children's incomes will decrease. To be eligible for NNAT, youth must:

- Be between the ages of 12 and 15 and working in any occupation (for pay or not for pay) or be between 15 and 16 and working in a hazardous occupation, such as fishing, construction work, operating machinery, or working long or late hours.
- Be included in the Mixed Institute of Social Aid (IMAS) system and qualify under their poverty criteria.
- Provide IMAS with proof of school enrollment.

### PROGRAM NAME

Closing the Child Labor and  
Forced Labor Evidence Gaps:  
Impact Evaluations

Randomized Controlled Trial  
Evaluation of the Niños, Niñas y  
Adolescentes Trabajadores (NNAT)  
Program in Costa Rica

### LOCATION

Costa Rica

### STUDY SAMPLE

551 Children and Adolescents

### TIMELINE

October 2016 - May 2019

### FUNDER

United States Department of Labor,  
Bureau of International Labor  
Affairs (ILAB)

### IMPLEMENTING PARTNERS

- Ministry of Labor of Costa Rica
- Mixed Institute of Social Aid

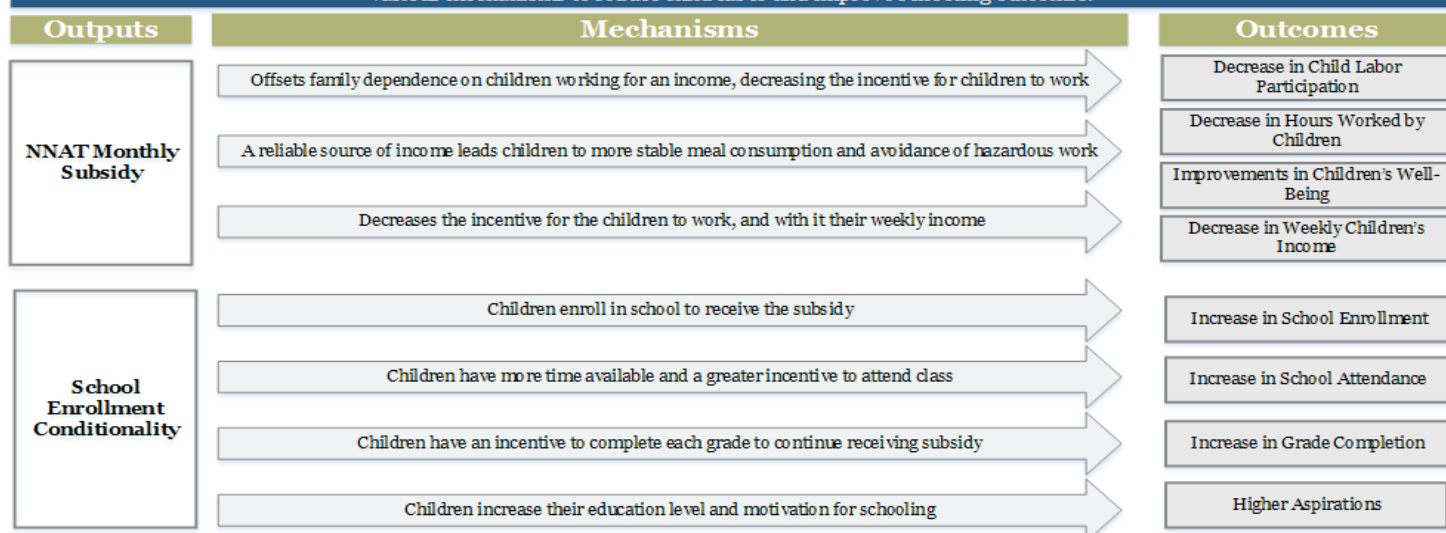
### EVALUATOR

IMPAQ International, LLC.

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## Addressing Child Labor - NNAT Program Theory Logic

The NNAT program has two outputs, the monthly subsidy and the school enrollment conditionality. The outputs are hypothesized to operate through various mechanisms to reduce child labor and improve schooling outcomes.



## RESEARCH QUESTIONS

The evaluation developed five research questions in a quantitative study to address the main evaluation objectives.

### Confirmatory research questions:

1. What are the effects of the NNAT program on labor outcomes for program participants?
2. What are the effects of the NNAT program on school outcomes for program participants?

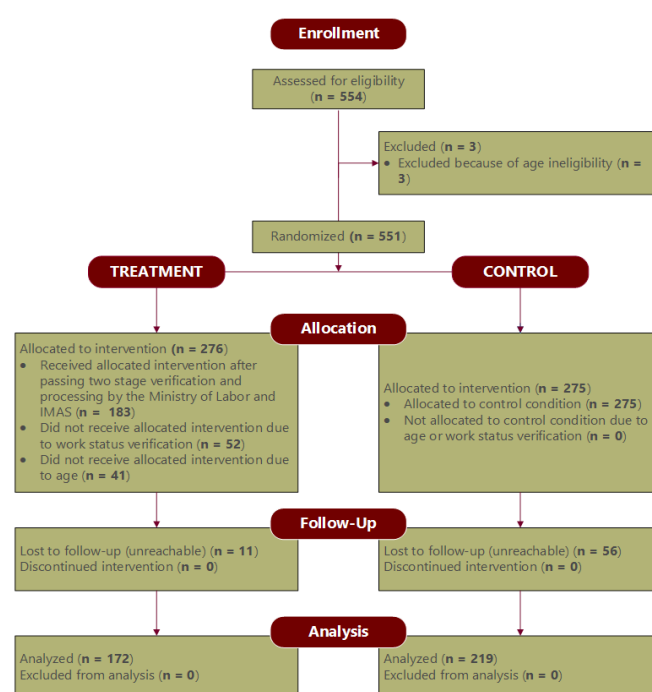
### Exploratory research questions:

1. What are the effects of the NNAT program on the well-being of program participants?
2. What are the effects of the NNAT program on the income of program participants?
3. What are the effects of the NNAT program on the future plans of participants?

## EVALUATION DESIGN

IMPAQ and the GCR collaborated to implement an RCT evaluation of the NNAT program. The random assignment allowed for the most rigorous approach to identify the causal effects investigated through the research questions.

In 2016, IMPAQ and GCR identified a target population of 554 cases of child labor to be randomly assigned to the NNAT program. We conducted a lottery to create a treatment and a control group of similar sizes. The treatment group consisted of 276 cases of child labor, scheduled to receive the NNAT subsidy in 2017. The control group consisted of 275 cases of child labor to receive delayed treatment.



## DATA

IMPAQ designed a project-specific survey that was administered to the target groups at baseline in 2016 and at endline in 2018. The survey instrument's five sections covered personal and socio-demographic information, educational information, work information, workplace conditions, and household chores information.

In addition to the participant survey, IMPAQ also gathered qualitative data through key informant interviews (KIIs) and focus group discussions (FGDs). We integrated the quantitative and qualitative data in order to explain the way that the program leads beneficiaries to change their behavior and to quantify the outcomes produced.



**Participant  
Survey**



**Stakeholder  
KIIs**



**Parent and  
Beneficiary  
FGDs**



## FINDINGS

**Child Labor.** The findings show a reduction in the number of hours children engaged in child labor worked. However, they do not show that participants fully stopped working in child labor.

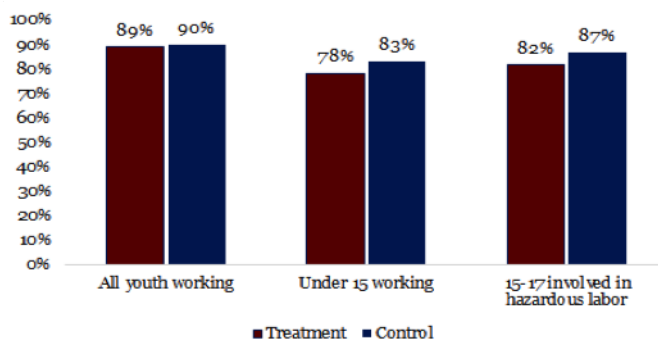
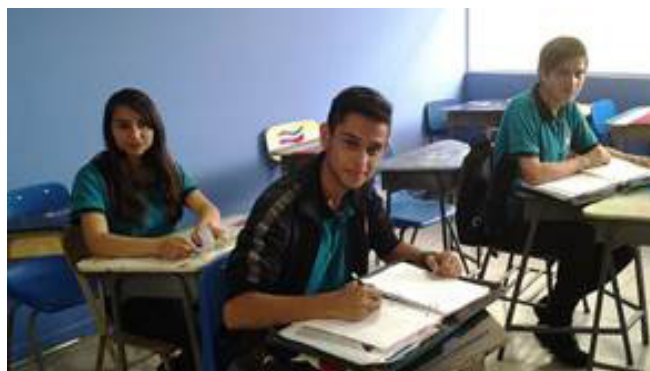
- The estimates from the impact evaluation show that the program participants, aged 12 to 17, are less likely to engage in child labor. However, we cannot establish with certainty that the program leads to children stopping to work as the results are not statistically significant.

- The results show a significant reduction in weekly hours worked by program participants of 4.5 hours. This represents a 25% reduction when considering that the control group averaged 16 hours worked per week during the same period.

- The estimates show an even larger reduction in hours worked by girls. Girls reduced their hours worked per week by 8.3 hours.

- The hazardous child labor estimates are inconclusive, showing both positive and negative effects on the likelihood of engagement in hazardous activities.

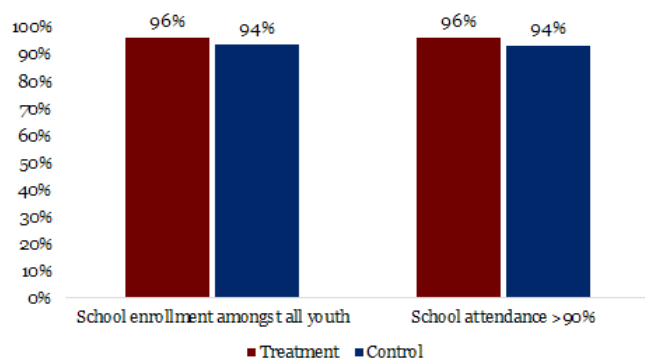
- With a more consistent subsidy disbursement process, we anticipate that the effects on child labor and hours worked would increase.



## School attendance, enrollment, and grade completion.

The project did not lead to improved schooling outcomes.

- The estimates show positive, yet not statistically significant, program effects on school enrollment, attendance, and grade completion.
- The lack of statistically significant effects is not surprising given that enrollment and attendance were high at baseline, as the participating children continued their schooling while working.
- The effects on grade completion were positive as expected, yet not strong enough to be statistically significant.
- Parents expressed interest in keeping their children enrolled in school, while also needing them to contribute financially to the household.



## CONCLUSIONS AND RECOMMENDATIONS

The evaluation of the NNAT program provides promising evidence that a conditional monetary subsidy can reduce the number of hours a child laborer works. It is important to note that a more timely distribution of the transfer is expected to produce larger effects reducing child labor. The findings show that NNAT did not improve schooling outcomes or well-being proxies.

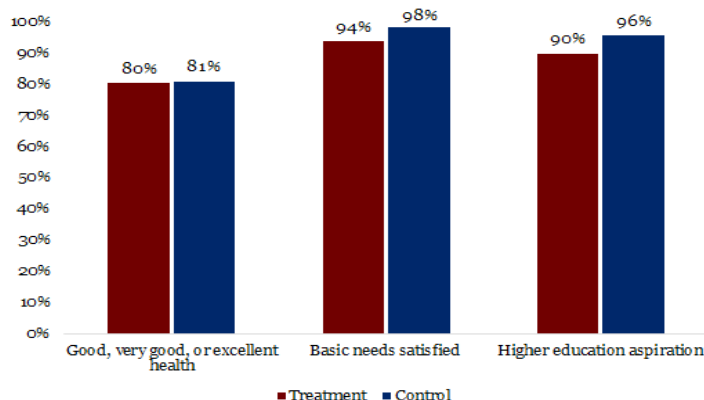
Based on our overall assessment of the quantitative and qualitative data collected during this evaluation, we suggest that future CCT experiments for this population: 1) are complemented with awareness campaigns on the harms and illegal nature of child labor and 2) require a commitment from the children beneficiaries and parents to stop child labor practices completely if selected for the program.

This RCT did not have adequate statistical power to detect differences between subgroups to assess

## Exploratory outcomes.

The effects on well-being and aspirations are not statistically significant. Children's incomes decreased due to fewer hours worked.

- The evaluation found that missed meals were less likely to occur and satisfaction of basic needs was more likely to happen. However, these effects were not statistically significant for the NNAT intervention.
- The estimates show a significant reduction in children's weekly income. We expected this as CCT participants receive less income from working fewer hours.
- The findings show no statistically significant effect on students' aspirations to finish secondary school or pursue higher education, at least after one year of participation.



potentially promising evidence in our exploratory outcomes. Future research efforts should employ greater sample sizes so that the results can be analyzed separately by gender and age level.

Also, with larger sample sizes, we could test different variations in the treatment. For example, we could vary the amount of the CCT to see if a larger cash transfer has a greater effect on child labor or other outcomes of interest.

Other future experiments we suggest include: 1) front loading CCT payments at the beginning of the intervention, 2) back loading CCT payments at the end of the intervention, or 3) varying the amounts of the CCT payments during months when youth are more likely to engage in work during the intervention period. By testing variations in the timing and intensity of payments, we could gain additional evidence on optimal CCT size and delivery.