Proposal to evaluate the Conditional Cash Transfer program (AVANCEMOS) used in Costa Rica to maintain students in secondary education

Submitted by the International Center for Economic Policy on Sustainable Development of the National University of Costa Rica

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Research plan to analyze a Conditional Cash Transfer (CCT) program in Costa Rica (AVANCEMOS) for keeping students in Secondary Education. Using experimental economics techniques the research will attempt to define the matching of candidates, the internal use of money, inflection points and risk optimization of beneficiaries. Presented for evaluation of the PEP-NET for possible funding under the PIERI call for proposals.
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1) Abstract
AVANCEMOS is a Conditional Cash Transfer program in place in Costa Rica. It is currently in its second year of execution. So far, only evaluations of indirect incidence have been used (simple comparison of grant obtainers versus secondary education enrollment). The project attempts to determine the adequacy of the selected candidates, the use of the income, risk adversity and propensity, inflection points for decision making regarding the decision to study or not to study. The research structure is oriented towards advancing the use of experimental economics for policy and program evaluations, with a possibility of accompany and advice on future improvements of AVANCEMOS or to foster CCT programs for horizontal cooperation. It is based on two field work data gatherings on the current secondary education pupils, as to apply experimental economic methods.

2) Aims
Conditional Cash Transfer (CCT) Programs have become popular in Latin America as effective social protection tools with specific objectives of increasing income for the poorest (and reducing the likelihood of child labor), as well as increasing the participation of persons in human-capital creation activities.
Costa Rica began in 2006 with a pilot program for the implementation of CCTs for promoting secondary education and the reduction of child labor. The results showed interest by recipients, as well as technical feasibility. In 2007, the project was installed jointly by 7 public organizations, amongst which are the Ministry of Housing and Human Settlements (MIVAH), as head of the social cabinet, the Mixed Institute for Social Aid (IMAS), as coordinator of poverty-mitigation programs, and the Ministry of Education (MEP), through the schools and the National Scholarship Fund (FONABE, fund belonging to MEP).

The program, in few words; beneficiaries must apply through the central information system of IMAS to analyze their socio-economic level, through a uniform information file. This is done through the IMAS offices or through the Scholarship Boards at the school level. The basic criteria are three: Poverty in socio-economic terms, having between 12 and 21 years of age, and being inscribed in a school. The scheme offers a monthly income which increases with the grade in secondary education the beneficiary participates in. The money is now transferred to the household, even though there are proposals to transfer it directly to the child. The following table shows the monthly transfers., taking into account that.

<table>
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<th>Educational Level</th>
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<td>7th Grade</td>
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<td>10th Grade</td>
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<tr>
<td>11th Grade</td>
<td>₡45,000,00</td>
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<tr>
<td>12th* Grade</td>
<td>₡50,000,00</td>
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</table>

* 12th grade of education is only in technical schools

Source: AVANCEMOS brochure

So far, this year (first year of functioning) there are more than 93,000 beneficiaries of the program. If only one child per household enters this program, this represents 31% of the poor households. The impact of the program has been deemed as very positive by various ministers, but has not yet been evaluated.

**a) Study overview**

The overall purpose of this research is to evaluate the performance of this (relatively new) Program with respect to targeting and the amount given. In this sense, three experiments will be carried out. For each experiment, fieldwork will be executed. The results these provide, more than determining the coverage and overall impact of the program, will aid in determining whether it is playing a significant role or not in the study decision, if the amounts are correct, and what is the risk-propensity of the students. The risk propensity will aid in determining whether people are risk-averse or risk-prone and which of the scenarios (study vs not to study) is considered risky.

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Furthermore, it will assess, through simulation, what are the inflection points for the participants in AVANCEMOS, as well as a control group not in it.

The overall impact of the study will be twofold. On the one hand, it will be an application of experimental evaluations for national programs in Costa Rica, and on the other, it will help the decision makers of AVANCEMOS through evidence-based decisions refine/reorient the program. For this, through the fieldwork and data analysis, the idea is to systematize the process as to aid in future replication/improvement of these evaluations.

b) Main research questions and core research objectives

As was mentioned in the section above, the guiding purpose of this research would be to determine the targeting strategy of the AVANCEMOS Program, the adequacy of the amounts and the preference formation of different groups. Furthermore, it aims to determine, within those that “qualified”, if the program is a crucial element in staying in school. Finally, related to the question on whether AVANCEMOS is a crucial element, is the amount given, in the sense of it being adequate with respect to the decisions made.

This means that the research has objectives aimed at refining the applicability of experimental methodologies in the evaluation of national policies, complemented with some diffusion objectives, since the research group deems as important the actual execution as well as the diffusion of the method and results to policymakers.

In this sense, the core questions are:

1) Is the program able to keep children from poor households in school until they finish secondary education?

2) What is the impact of this additional income on the propensity to work (or remain working) for children?

3) Is the program reaching the intended population?

The sample population will be chosen by analyzing the SIPO\(^1\) database and the FONABE database, according to simple averages and regression analysis of beneficiaries of AVANCEMOS or non-beneficiaries in SIPO. On this base, a “propensity score matching” experiment will be carried out by a survey, as well as lottery experiments in school communities.

The end results will serve to refine the analysis of programs based on difference in difference estimations (D&D). The other experimental technique we will use is individual decisions in risky situations experiments (EEx), and conjoint analysis (CA). The main idea of using the D&D is to be able to match families that are in the AVANCEMOS program and families that are not in the

\(^1\) Sistema de Identificación de la Población Objetivo, (Target Population Identification System). The System used by the Social Aid Institute to gather a digital file card for the applicant household. The FONABE database is held separate, but is vastly similar in the relevant information for the AVANCEMOS program. The Research Unit has had verbal confirmation of being able to access the required information for the sample selection.
program. The results of this part of the study are the effect (positive or negative) of being part of the AVANCEMOS program. The CA is a technique in which the agent selects amongst several attributes and scenarios, the selection of these scenarios will reveal the preferred attributes of an agent related to a specific subject. After that we will make an EEx to assess the moment in which the family is willing to let the student work instead of study. We will attempt to reveal the behavior and the decision making process of the families under scarcity and uncertainty.

3) Background and policy relevance

The first question to address is as to why use experiments to determine the adequateness of a program with reference to personal or family decision-making process. The answer to this question lies in two directions. Firstly, experimental economics allows to gather data with reference to causality, this means that, more than data on total coverage of the AVANCEMOS, and whether there was a rise in secondary education enrollment or graduation, it will directly detect whether the program is the cause for the decision to stay in school or not, and the extra money is a “boon”. Related to this, the use of framewked field experiments will allow to

Secondly, a comment on econometrics by Leamer (1993), he criticized that often econometric techniques can be used to fit the results and models to the research purpose or agenda. Thus, this means that it reports the results of the one technique that fitted the econometrists purpose, without clarifying the other methods. Through experiments and simulations, and a direct report on it, the results lend itself less to data processing selection. That is why experimental and quasi-experimental methods are considered the most appropriate (Skoufias, 2004).

The examples of CCT programs for education in Latin America show the growing interest in these programs. They are considered through popular and political opinion, as effective instruments for reduction of child labor and increasing human capital (Rawlings & Rubio, 2003; Handa & Davies, 2006). Specifically, if one would conceptualize the needs-attending schemes as solving immediate necessities (“food”, “housing security”, “giving the fish”), creating capabilities (“learn to farm”, “become more employable/entrepreneurial”, “learn to fish”), and creating opportunities (“access to land”, “promoting the setup of enterprises”, “giving access to water bodies”) they tend to address the first two, which are, in education terms, dependent on the access to schooling.

This means that a thorough research which aims to define clearly the causality of school attendance thanks to the program (instead of just looking at grants given and overall schooling rate) will give clear signals on the expected results and some determining factors in the demand of secondary education by school-age population.

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2 However, in the same vein, Roth (1994) made the same comment regarding experimental economics, on which he warns that reports on experimental economics, on the important dimensions, should not diverge from the way the research is conducted.

3 This conceptualization of the purposes of social security are not only conceptualized in quality of life studies (ECLAC, 2006), but also can be reinterpreted as short-term needs (necessities) and long term needs (opportunities and capacities).
Furthermore, it will become clearer if the low secondary school enrolment that originated the program (to go or not to secondary education) was because of demand constraints (work, cost of study, distance) or supply (lack of schools or teachers). The relevance of this question is with regard to social protection and promotion schemes. The answer to this question is, in the case of Costa Rica, clearer than for other countries, as, geographically speaking, the schooling system is present in most corners of the country, and however, supply-restrictions need to be explored to determine their impact.

Finally, for diffusion in non-academic circuits, such as governments, Development NGOs and Multilateral agencies, the usefulness of this research is for three reasons:

1. Economic reasons: The answers to the questions will aid in the reorienting/refining actions deemed necessary by decision-makers of AVANCEMOS. To the degree that the University has a good degree of relation with the authorities the provison of information will not be an obstacle.

2. Social Reasons: The actual reporting aids not only in the refining, but also in social accountability, as it aids in the understanding of the program and its effect on the societal level. The Research Group will consider the diffusion of results among key actors such as political parties, authorities, other academic units, and conferences.

3. Political Accountability: Credibility, if the program is evaluated, it will reinforce the role of government, and will aid in breaking with any partisan decision/political cycles, even though this has not been the norm in Costa Rica. Furthermore, as the evaluation is carried out by a University, no sectarian interests are expected by the audience.

On another vein, for the whole field of economics and economic research, the interest is also in attempting to promote experimental evaluation within the country and in the region for policy and program evaluation. In this sense, it is necessary to make explicit that the research group has linkages to various research groups, both inside and outside the University.

4) Methods

The assessment of the impact in this project is based on experimental methods. The actors involved in the experiment design are already part of the national program and what the research team will do is to select a randomized sample of them to be able to understand how the program has been working.

For the researchers the Government has develop the actual experimental environment by selecting some agents based on some characteristics (using SIPO and FONABE) and giving actual money to implement the program. Through the use this experimental setting where we can find students with the same characteristics but not receiving the money from the program.

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4 An example of this non-partisan, non-electoral cycle, one could mention the preservation of labour law, social security and other achievements gained before the revolution of 1948.
The research group is not the one making the money transfer to them; we are trying under some experimental techniques to assess the impact of the social policy. To accomplish this evaluation there is a need to carry out surveys and do field-work.

The sample of this survey will be random sample, based in the SIPO and FONABE, and after selecting the students from there we will go to the Secondary school to select others with the same characteristics but not in the program. Our sample then will be random and we will have at least two groups for the experimental techniques, one the treatment (participant of the CCT program) and the control (not in the program).

To perform the experimental techniques we will need a questionnaire divided by experiment and taking into account the socio-economical attributes of each family. We will ask for the expenditure and income scheme of the household as well. The basic structure of the questionnaire will be: 1. Socio-economic attributes; 2. Income and expenditure distribution intra household; 3. Family perception of the program; 4. Lottery games and risk control questions and; 5. Scenarios of preferred characteristics of the program.

Because the main source of information will be the questionnaire we will make some workshops with students in AVANCEMOS, teachers and families to understand the main features and critical control points of the program, as well as to calibrate the preferred characteristics' value by the families.

As described before, the intervention will focus on analysing and evaluating if the program is able to keep children from poor households in school until they finish secondary education, what will yield valid information about the effectiveness of the program.

It becomes also relevant to complement the previous phase with that the impact of this additional income on the propensity to work (or remain working) for children, as a way to evaluate the incentives given to children to continue in educative system.

At the end the overall project will contribute to understand if the program is reaching the intended population, and for any room for improvement.

The population that will be included in this research is composed by the students of secondary level in some Costa Rican Communities.

Experiments have been used for many centuries to understand the behavior of the economic agents, but not until recent time these experiments and games have been systematized and systematically used to explain complex issues related to human behavior. In the early time of experiments they were used to develop war strategies and as a learning tool for the higher ranked people in society. Nowadays this technique has been widely spread in the academic and professional world with good results.

There are several branches of experiments; Davis and Holt (1993) mention market experiments, game experiments and individual-choice experiments. There are three general categories for experiments use (Kagel and Roth; 1995) Theory testing. Such experiments are intended to feed back into the theoretical literature. Practical empirical includes experiments

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studying the effects of variables about which existing theory may have little to say. Often these experiments are variations of early experiments. And the last category is the policy makers, these experiments tend to breach the gap between experiments and policy makers. The characteristic feature is that the experimental environment is designed to closely resemble, in certain respects, the naturally environment that is focus of interest for the policy purpose at hand.

For this project we intent to use three experimental methods to evaluate the AVANCEMOS program, and reveal the incentives to be in the school or to find a job. For this porpoise we will use D&D, EEx and CA.

**a) Difference in Difference**

The central issue on impact evaluation schemes\(^5\) resides on being able to answer the following question: What would have happened to a participant household if they would not have participated? This hypothetical situation is known as the counterfactual, and the way it is constructed is a key feature for correctly analyzing the impact of a program or policy. The data gathering, thus, must be done through household surveys.

*The main objective to use this technique is to determine the impact of AVANCEMOS in the household life (income intra-household distribution and possibility to maintain children at secondary education)*

Formally, the objective of the impact evaluation of a program (in our case, participating in the CCT program) is to determine the expected change on participant’ households (D=1) in terms of some variables of interest (Y):

\[ E(Y_1 - Y_0 | X, D = 1) \]

where \(Y_1\) and \(Y_0\) are the post-program household’s outcomes under “treatment” and “no-treatment” states, respectively; and \(X\) is a vector of household or parcels characteristics. Given that the outcomes of participant’ households can only be observed under the “treatment” state \(E(Y_1 | X, D = 1)\), the principal problem consists in estimating the counterfactual or “non-treatment” state for these households \(E(Y_0 | X, D = 1)\).

To solve this problem a comparison group has to be used (D=0), with households which have not participated in the program but possess similar characteristics (X). This comparison group can only be observed under the “no-treatment” state \(E(Y_0 | X, D = 0)\).

In practice then, we are not exactly calculating the difference for treated households when changing from the “no-treatment” to the “treatment” state \(\Delta = Y_1 - Y_0\). But we consider the outcome of each comparison household as an approximation of \(Y_0\) on the treated household.

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\(^5\) The explanation of the technique has been taken and from Ruben, Fort and Zúñiga.Arias (2007) Proposal for the impact assessment of fair trade for Costa Rica, Perú and Ghana. Founded by Solidaridad.
There are three widely used estimators in the literature of impact evaluation: the before-after estimator, the cross-sectional estimator, and the difference-in-difference estimator. To better understand each of them we will rely on the following figure:

From this figure we can see that the impact of the program on the treated group would be equal to (A-B). As B is unobserved by construction, the estimators differ basically in the way they approximate to B.

i. The before-after estimator (A-E)
   • Assumes that the pre-treatment situation of the treated is a good approximation for the situation they would have had post-treatment if not-treated (B).
   • Needs to assume no other changes in the time between pre and post treatment that affected their behavior.

ii. The cross-sectional estimator (A-D)
    • Assumes that the no-treatment state (D) is a good approximation for what would have been the situation of the treated without the program (B).
    • If changes in the economic environment between the pre and post treatment time equally affect the treatment and comparison group, this estimator will not longer have the problems of the before-after estimator. But, if the probability of being treated is related to the post-treatment result the assumption that we rely on for constructing this estimator will not longer be valid. Instrumental variables can be used in this case to correct the problem.

iii. The difference-in-difference estimator (A-E) – (D-F)
    • Assumes that the change in the situation of the no-treated (D-F) is a good approximation of the change that would have had the treated under this period if they wouldn’t have experienced the program (B-E).
    • An advantage of this estimator is that in case it exist a selection bias due to non-observable characteristics, and it is constant over time, then the double difference allows us to correct it.
A potential disadvantage will be that not necessarily the path that follows the results of the treated in the pre and post program situation if they wouldn’t have been treated is equal to the results of the non-treated.

b) Economic experiment

We will focus on the individual choice behaviour experiments. The best know of these is due to Allais (1953) who observed a certain kinds of risky choices could not be squared with utility theory (Kagel and Roth, 1995). In the same vein the author mention that these observations did not materially impede the adoption of utility maximization as the primary vehicle for modelling individuals in economic theory. The preference reversals can be explain as the problem of what price to charge when selling and what price to pay when buying. Agents will tend to ask for the higher price during selling but willing to pay a lower price during buying, nevertheless this agent might be the same agent. It is the dichotomy between, consumer and citizen.

Through fieldwork, we will develop a standard lottery game, engaging various households at the same time, to obtain the risk preferences related to being part of the AVANCEMOS program or not. Also we will look for the opportunistic behaviour and the free rider in the same way (using a lottery game). It is understood that students getting the subsidy are not using it for study expenses nor are still students.

The main objective is to identify the different risk perceptions of the families to determine the propensity or perceived value of education (expenditure or investment).

We will use standard lottery games to assess the risk perception of the family (i.e. select between these two options, A: 0.99 to win $4; and 0.01 to lose $1 or B: 0.33 to win $16 ; and 0.67 to lose $2). We will ask direct questions about their own risk perception and we will use these to control the experiment result. After the experiment the results of the experiment will be use as an input variable to determine the effect on the family income, the perception of the program, the possibility of keeping the student at the college and the perception of education as an investment or an expenditure among other things.

c) Conjoint Analysis

Conjoint analysis has been used to determine the most desired level of each feature include in the study; e.g. quality, transaction cost. Choice simulators allow designers to explore the impact of different decisions on sales, profits and segmentation. It has proven to be a valuable tool for developing new commodities (Choi et al, 1994; Green et al, 1991 and Moore et al, 1999). Conjoint analysis gives us a realistic measure of the individual attributes that affect consumer preferences. Conjoint analysis has proven to be a popular way to estimate the value that consumers associate with particular product features/attributes. Conjoint analysis allows companies to form benefit segments and make design trade-off decisions among various features (Moore et al, 1999). The same authors stress that conjoint analysis has been used to develop an optimal configuration for new product, in this sense we
will be able to use it to develop the optimal configuration for the incentives for the AVANCEMOS program.

We believe that the Adaptive Conjoint Analysis (ACA) software is suitable in the research. “(ACA) is PC-based software for conjoint (trade-off) analysis. The term "adaptive" refers to the fact that the computer-administered interview is customized for each respondent. Data are analyzed as the interview progresses, and we choose questions likely to reveal the most about the respondent's values in the shortest time. ACA is an excellent alternative to full-profile conjoint when you have a large number of attributes.

Sawtooth Software shows that ACA has two essential capabilities. First, it lets the researcher design a computer-interactive interview and administer the interview to respondents. The interview can consider many attributes and levels, paying special attention to those the respondent considers most important. Questioning is done in an “intelligent” way; the respondent's utilities are continually re-estimated as the interview progresses, and each question is chosen to provide the most additional information, given what is already known about the respondent's values. Respondent utilities are available upon completion of the interview.

Second, ACA lets the researcher simulate respondent preferences for new or modified products. The ACA simulator can be used to explore “what if” scenarios, such as changes in pricing, product formulation, or marketing activities. The researcher describes a group of hypothetical products by specifying each product's level on each attribute.

The main objective to use this technique is to identify the most value attributes valued by the user of the program and the opportunity cost of them to be part of the program.

In the moment we determine the opportunity cost of being part of the program we will be able to indicate the monetary value for a family to keep the student in the program.

As part of the clarification of the methodological strategy we have develop a figure where we framed the main attributes, processes and information flows of the research.

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6 It is important to notice that another branch of knowledge that will be use but not explain right now is the institutional economics approach in which we might use among the principal agent theory among other issues.
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d) Expected Empirical Problems

The main challenge faced by the project is to collect as many valid data as possible. The logistics of this will be assumed by the research team due to its experience on it. However there is always a problem with the unexpected items that arise from managing the survey teams. This will be mitigated by positive reinforcement of these teams to increase their desire to deliver good work. The positive reinforcement will be both monetary as well as management-wise. The access to the government databases might take some negotiations, which are currently under way, but the expected outcome is expected to be positive. Even in case of privacy-related concerns on the database, these can be circumvented by “numbering” instead of naming beneficiaries.

e) Human subjects concerns

As the experiments this proposal carries are related to revealing preferences only, there is no expectancy of any risk regarding alterations of lifelong decisions beyond what the subjects of the experiments learn themselves from the experiments regarding their own choices. Furthermore, with the household survey, it will be submitted to an ethical review board from another academic unit within the University, as is required by University standard procedures.

f) Gender and Ethnic population concerns

There is no risk associated with the project, as there is actually a gender-equalizing aspect to AVANCEMOS. So far, there is a slightly higher propensity for women to participate in it. The research will attempt to determine what the causality for this is.

5) Consultation and dissemination strategy

As the program is run by a joint board of the Ministry of Housing (as rector of the Social Sector), the Ministry of Education, the Mixed Institute of Social Assistance, and the National Scholarship Fund, there will be interviews with the departments in charge of monitoring and reporting on AVANCEMOS.

Furthermore, as the research attempts to refine the data that is gathered on the subject of inflection points, risk adversity/propensity and matching, they will also serve the aforementioned departments.

Once results are accepted by PEP-NET, there will be meetings with key decision makers in AVANCEMOS (The Minister of Housing –head of the social cabinet,-the vice minister of social affairs –head of the AVANCEMOS monitoring unit-, Minister of education, and the Director of Fonabe). These will be to present the findings and accompany through advice these decision makers in their actions on AVANCEMOS.

Furthermore, the research unit will disseminate the results within the university and other academic entities, as well as in civil-society groups, panels and conferences dealing with the promotion of secondary education, human capital creation or policy advice to which it can be
invited as well as distributing brochures (physical and electronic) on the research to generate interest in it.

6) The study team

a) PhD Keynor Ruiz. Principal investigator, male. During the latest years, Keynor has emphasized on social impact analysis, as well as the analysis of the labor market. In the first area (social impact analysis) he has emphasized in ex-post and concurrent evaluations of programs led by local development agencies. Some of these have been analysis of the Cooperative Promotion Institute (INFOCOOP), the mixed Institute of Social Assistance (IMAS), the Federation of Municipalities of the Chorotega region (12 municipalities), amongst others. Regarding labor economics, the interest has been mainly centered on the labor institutions and their role in the creation of learning capabilities and competences in the labor force, as well as the promotion of public-private partnerships for education and training.

Both due to the vastness of his experience, as well as his proven ability to coordinate and delegate the tasks, Keynor has been selected by consensus of this team to function as the principal investigator.

b) PhD Guillermo Zúñiga, male. Guillermo has obtained his Doctors degree in development economics. In his research he has applied experimental approaches and simulation games through participative methodologies. Current interest areas are Development economics, more specifically, local development, institutional economics, and interdisciplinary research approaches.

c) MSc and PhD Cand Randall Arce, 33 years of age, male. Randall has experience at large with interdisciplinary methodological approaches. His areas of expertise in research and lectures are related to local economic development, information economics, competitiveness and rural economics.

d) MSc. Mauricio Dierckxsens, 32 years of age, male. Mauricio has been involved in policy proposal and evaluation on labor economics, as well as the role of human capital in development, especially in developing countries. This focused on government or private business association policy and program recommendations for the creation of human capital and employment opportunities, with consideration for traditionally marginalized population groups (female, indigenous and Afro-Caribbean population).

e) Lic. Gabriela Gamboa, MSc. Cand in Rural Development Studies, 29 years, female. Gabriela has worked in university related social extension programs, group coordination, community-based actions and massive training programs for capability building in traditionally marginalized population groups.

This intermixed group is a convergence of three aspects: Two researchers with vast experience in social economics (labor, innovation, and human capital) with familiarity with experimental economics and evaluations, two researchers with intensive research undertaken with experimental approaches and simulations, as well as familiar to social economics, and one researcher familiar with community action, massive trainings and extension activities.

The teams’ relation with IMAS, MEP and MIVAH will allow us to have collaboration from the AVANCEMOS Program regarding the information databases (the identification of the schools
with and without participation in AVANCEMOS. Their role of these institutions on the research will be limited in the research, as it will consist of granting access to information.

Currently, some members are involved in the following projects: Keynor Ruiz and Mauricio Dierckxsens: “Public Private Partnerships for Education and Training”, funded by the OAS and “Learning Capability Building and Labor Market Institutions in Costa Rica”, funded by the Universidad Nacional. Guillermo Zúñiga: “Impact-Assessment of Fair Trade, case study Costa Rica”, funded by Solidaridad-Netherlands; Randall Arce and Guillermo Zúñiga: “Accompaniment for Rural Communities for Capacity Building at the (micro) business level”.

For further information on the researchers, PEP-NET has already the curriculum vitae for the research team.

Keynor will hold the overall supervision as well as being involved in the interpreting of results and policy recommendations. Mauricio will be involved in carrying out the surveys and data analysis and policy recommendations, as well as will support in the administration of the project. Gabriela will lead the organization of workshops, head the design of the survey approach and lead the extension to the schools to participate in the surveys, as well as interpreting the viability of extending these CCT schemes. Guillermo and Randall will be the leaders in the execution in the methodology and carrying out the surveys, as well as interpretation and analysis. Due to the recognition of the team’s abilities, there are few disputes expected, however, in case of content disparities, meetings will be held to discuss these, and new contents devised by consensus. Work-related, if a deficient performance is detected, the team, through absolute majority (4 out of 5) can remove a member and incorporate another. The financial and accounting management will be done by an external unit of the university.
## 7) Timeline

### Timeline of Activities and Results. Evaluation of CCT Program in CR

| Activities                                      | 07-08 | 08-08 | 09-08 | 10-08 | 11-08 | 12-08 | 01-09 | 02-09 | 03-09 | 04-09 | 05-09 | 06-09 | 07-09 | 08-09 | 09-09 | 10-09 | 11-09 | 12-09 | 01-10 | 02-10 | 03-10 | 04-10 | 05-10 | 06-10 | 07-10 | 08-10 | 09-10 | 10-10 |
|------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 Survey and experimental design               | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27    | 28    |
| 2 Test Survey                                   | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27    | 28    |
| 3 Baseline Survey                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 4 Presentation Survey/design implementation    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 5 Baseline data Analysis/depuration of database |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 6 Second Interim Report                         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 7 Changes to Second Interim Report              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 8 Follow up survey                              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 9 Draft Final Report                            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 10 Changes to final Report                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 11 Final Report                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 12 Working paper                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

Notes: XX Means official Hollidays. 15 days mid year ("winter" vacation) and 1 month at the end of the year and beginning of year (summer vacation). The schedule does not show the December ’10 presentation.
8) **Budget**

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References

- Economic Commision for Latin America and The Caribbean (2004): Cohesión social: inclusión y sentido de pertenencia en América Latina y el Caribe. ECLAC, Chile