January, 2017

Jobs MDTF Grant: Youth Entrepreneurship and Spatial Mismatch in Urban Labor Markets in Ethiopia

Impact Evaluation Strategy

1. Introduction

The Government of Ethiopia is developing the Urban Productive Safety Net Project (UPSNP), as an element of the Urban Food Security and Job Creation Strategy approved on 2015, to support over 4.7 million urban poor living in 972 cities and towns. It is envisaged that this will be achieved over a long-term period through a gradual roll-out plan of different phases. The first phase is set to include big cities that have a population of over 100,000 people, and the World Bank is accompanying the government in its implementation over the period 2016-2021.

In this first phase, the UPNSP will target 11 major cities: Addis Ababa and one city from each region (Adama, Assayita, Asosa, Dessie, Dire Dawa, Gambella, Hawassa, Harari, Jijiga, and Mekele). It is estimated that 500,000 beneficiaries (the poorest 12 percent and about 55 percent of people living below the poverty line in these 11 cities) will be targeted through a gradual roll-out plan during a five-year period. Given the large size of Addis Ababa and the relatively high poverty rates it exhibits, is expected that about three-quarters of the beneficiaries will be from this city. Thus, to facilitate coordination and lower administrative costs, the proposed impact evaluation will be restricted to Addis Ababa.

The project is designed to combat urban poverty in Ethiopia by improving the income of the beneficiaries and establishing urban safety net mechanisms. It is designed around a graduation pathway, building on lessons from safety net implementation in Ethiopia and around the world, including Consultative Group to Assist the Poor (CGAP). Intensive safety net and livelihoods support will be provided to targeted households with the aim of graduating households from the program in three years.

Specifically, in the first year, beneficiaries will receive transfers conditioned on public works. In the second year, conditional transfers will continue and one beneficiary per household (including many youth) will receive livelihoods support comprising training and financial support to increase employability in wage and self-employment. In the third year, beneficiaries will have the option to continue to engage in public works to supplement their employment income and will receive coaching and mentoring services to strengthen their
livelihood activities. A group of labor-constrained beneficiaries will also receive direct unconditioned cash support.

This project is the first of this nature in urban areas in the country, and thus the proposed approach needs to be piloted, evaluated, course-corrected, and expanded as needed. The program will have a larger impact if it learns quickly what works before it is scaled up in project roll-out. It also the first large-scale urban safety net in Saharan Africa, a flagship project that will provide important lessons to other countries in the region (and in the world) that are also interested in expanding safety nets in urban areas. Learning from it through a rigorous impact evaluation is thus an exceptional opportunity.

There are two specific areas in which the impact evaluation will provide valuable lessons: (i) increase knowledge on how to support youth entrepreneurship, and (ii) understand the spatial constraints to employment in urban Ethiopia and how they can be overcome. Testing what factors are most effective in increasing self-employment income and improving the spatial match in the wage labor market will be essential to the success of the project, and to other countries following Ethiopia’s example.

Knowledge of successful approaches to improving self-employment among youth is somewhat limited, especially for programs operating at large scale. Several studies have shown the effectiveness of providing cash-grants to youth to increase their self-employment income (see Blattman and Ralston 2015 for review). However, returns vary considerably among recipients and entrepreneurial ability is a large predictor of success (McKenzie, de Mel and Woodruff 2008). A first-rate rigorous impact evaluation of the project will help to examine how entrepreneurial ability can be identified and used to target the right type of support to beneficiaries. Those with entrepreneurial ability will benefit from cash grants, but those with less entrepreneurial ability will benefit from other types of support (training, support to gain wage employment etc.).

Improving the spatial match in the wage labor market is also essential for the project to be effective. Very little is known about the degree to which labor markets are well integrated across neighborhoods in a large city like Addis Ababa, particularly in the unskilled labor markets in which UPSNP beneficiaries engage. An analysis of whether the public works component of the UPNSP has an effect on non-beneficiaries in the woreda in which the project is implemented, provides insights on the degree to which labor markets in a large city like Addis Ababa are integrated, and how should this be taken into account when trying to understand and reduce unemployment.

Existing evaluations of public works in urban Africa have examined the impact on labor and welfare outcomes of project beneficiaries (Premand et al 2015). The impact of public works on local labor markets has been evaluated for rural India through the analysis of the National Rural Employment Guarantee scheme in India (Berg et al. 2013, Imbert and Papp 2015, Zimmerman 2015) but not in urban areas. A high-quality impact evaluation of the public works component of the UPSNP will help shed light on the short and long-term
effects of a large-scale public works program on the wellbeing of its participants and on the labor markets of the city were they are implemented. In addition, the evaluation work will also provide information on how problems of poor spatial integration can be overcome. Similarly, we propose to test the impact of cash grants for job seekers and increased access to childcare services\(^1\) for women in order for them to overcome the search costs, as well certification of soft skills (such as punctuality, reliability and effort) not easily signaled by unskilled workers when they apply for wage jobs outside of their neighborhood (Franklin 2016 and Abebe 2016). Although several studies have conducted rigorous evaluations of how childcare availability enhances the labor market outcomes of females in Latin America (summarized in Mateo and Rodriguez-Chamussy, 2013), there is little evidence of this in African countries.

This document briefly outlines the impact evaluation strategy proposed to contribute to enhance the targeting of self-employment cash grants, explore how integrated labor markets are in large cities such as Addis, and determine if cash grants can help job seekers to overcome some of the costs of job search in a disperse labor market like Addis (and how this may differ for women depending on the availability of childcare services). It must be noted that the feasibility of some of the proposed interventions (mainly those related to the livelihoods component –support for self and wage employment–), are being discussed together with the project and government team, as its implementation is planned to start by mid-2018.

2. Objective and research questions of the impact evaluation

We propose a high-quality impact evaluation of the UPSNP in Addis Ababa, where three fourths of the beneficiaries reside, with two components. Component 1 will contribute to the growing knowledge on promoting successful productive entrepreneurship among youth by assessing the effectiveness of data-based or community based targeting in providing grants to self-employed youth. Component 2 will contribute to the knowledge on the magnitude of urban spatial mismatch for inclusive employment by: a) exploring the individual and local labor market impacts of large public works programs in cities, and b) analyzing if interventions to overcome search frictions caused by spatial mismatch have a positive effect on the ability of poor households to find and retain a wage job.

\(^1\) Could be through vouchers for example.
Specifically, the *impact evaluation* of the UPSNP will aim to respond the following questions:

**a. Component 1. Youth Entrepreneurship: improving the effectiveness of cash grants**

1. Do self-employment grants have a higher impact on self-employment outcomes when targeted to individuals predicted to have high entrepreneurial ability, when provided to self-selected individuals or when provided to individuals who were selected by members of the community?

A recent body of evaluations has shown the effectiveness of providing cash grants in increasing self-employment income among youth in Africa (see Blattman and Ralston, 2015 for a review). These evaluations have also shown that there is significant heterogeneity in the impact of the grants with some recipients faring much better than others (McKenzie, del Mel and Woodruff, 2008). Providing grants to youth who are ill-equipped to benefit from them is inefficient and other types of support (such as support for wage employment) or complementary support (skills development) may be more effective for these individuals. Conceptually, we would expect cash grants to be most effective when provided to those for whom capital is the binding constraint to increasing self-employment income—i.e. when provided to those who have the required skills for entrepreneurship but are struggling in acquiring capital. However identifying those with the required skills to be successful entrepreneurs can be more challenging. This is also true for this project: the project will provide grants for self-employment along-side entrepreneurship training and mentoring to those who self-select into receiving self-employment support, but not all beneficiaries have equal propensity to be successful entrepreneurs.

**b. Component 2. Spatial mismatch of jobs and workers**

*Public works*

2. Are local labor markets for low-skilled workers integrated across a large city like Addis? Would the availability of a public works program in a local market reduce the overall supply of low-skilled labor, pushing up unskilled wages and/or lowering unemployment?

3. Will female employment be more affected if the types of public works opportunities are more female-oriented, and/or if women are working to begin with?

The project will provide transfers to able-bodied persons in households eligible for project support, conditional on the participation in public works. In the first year of the program, each eligible urban household will be entitled to transfers up to 240 days (for an average household of four members) with a daily transfer paid at marginally less than the market wage rate for unskilled labor. It is expected that public works will have a positive impact on household welfare, given the sizeable direct income from the transfers and the assets they
will help create, and may cause beneficiaries to supply less labor to other work and search less for wage jobs (see Premand et al. 2015). It is thus expected that the availability of public works in a local market will reduce the overall supply of low-skilled labor. If local markets in Addis Ababa are not integrated, this shock to local labor supply will lead to higher unskilled wages and/or lower unemployment among non-beneficiaries. Similarly, it is expected that public works will have a greater impact on female employment, if the types of public works opportunities are more female-oriented, and women are working to begin with.

Wage employment

4. Do providing cash grants to low-income individuals looking for a wage job increases search for jobs outside the local labor market and improves employment outcomes? For women, would increasing the available of childcare improve their labor outcomes?

5. Can the ability to credibly signal soft skills (like punctuality and work effort through certification), improve the employment outcomes of job seekers in markets outside their local market?

High transport costs have been found to limit job search (Abebe et al. 2015) and may also contribute to high turnover among wage jobs located in industrial areas. Female beneficiaries may find the costs of travel for job search particularly high given their caregiving demands. Female labor force participation rates are 13 percentage points lower than male participation rates and one of the most common reasons for not participating is domestic responsibilities. Cash grants to cover the costs of travel for search have been identified as one of the types of support provided for wage employment in the project. However, more than this may be needed to increase job search among women. In addition, as workers travel further from home to seek employment, they are also less able to rely on informal networks to verify their non-technical skills such as punctuality, reliability and work effort. Certification provided by the project on these attributes may help workers secure wage employment outside of local labor markets.

As mentioned above, the impact evaluation team is closely working with the project team and the government of Ethiopia to determine the feasibility of each of the specific proposals of this impact evaluation.

3. Methodology of the impact evaluation

The research questions listed in Section 2 will be answered through rigorous quantitative methods using data at the household and individual level. More specifically, the impact evaluation will take advantage of use the randomized roll-out of the program across woredas with high to medium levels of poverty in Addis Ababa (according to a poverty map
constructed with the Household Consumption Expenditure Survey conducted in 2010/11) in the first two years of the implementation of the program, as well as the gradual implementation of the livelihoods component of the program. As with many safety net programs, the gradual roll-out of the UPSNP will allow the government to set in place the administrative structures, develop the necessary systems, and learn and adjust before operating at scale.

In the following sections, we summarize the details of the methodology for each of the topics proposed in this impact evaluation.

a. Component 1: Youth Entrepreneurship: improving the effectiveness of cash grants

In the second year after entering the program, a group of beneficiary households will also receive livelihoods support in addition to continued safety net support. However, the component will not operate at scale and not all eligible individuals for livelihoods support will receive it during the second year of program implementation. The livelihoods support will be randomly assigned to a group of beneficiary households (treatment group). Those that didn’t receive support in the first year will receive support one or two years later (control group). Beneficiaries will be allowed to choose whether they wish to participate in livelihoods programs either for self-employment or for wage employment. In the case of self-employment support, the program will adopt the lessons provided by the substantial economic literature: cash-grant for entrepreneurship activities should be complemented by business skills training and ongoing supervision at the onset of the activity.

We propose a pilot intervention to help determine if the involvement of the community in targeting these grants (through a ranking of individuals) or the results from a psychometric assessment (which can identify some traits typically associated with entrepreneurial success) can help categorize more accurately which individuals are more successful in developing their entrepreneurial initiative. Beneficiaries will be screened before the random allocation takes place in two ways although this will not affect their selection in any way. First, local leaders and entrepreneurs (or another mechanism where peer assessment takes place) will be engaged to rank all individuals that will benefit from the self-employment grant according to their perceived entrepreneurial abilities to identify who would be selected if community targeting were conducted. Similarly, all beneficiaries will also be ranked based on data from a psychometric test that identifies individual characteristics (for example, education, age, gender, risk attitudes, patience) linked to entrepreneurial success.

Now, comparing the treatment and control groups (randomly defined) for the full sample provides the standard impact of the grants, providing additional evidence on the effectiveness of cash grants in improving the livelihoods of individuals. Analyzing if the

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2 By design, the total number of beneficiaries of the livelihoods component will comprise only 20% of the total number of public works beneficiaries. Also, this 20% will not be reached immediately.
impact is much higher for those who would have been selected based on community targeting or based on the data from the assessment test will determine whether there are benefits of using community or data driven targeting compared to just self-selection among the eligible candidates when providing self-employment grants. The results of the intervention can then inform the roll-out of the cash grants in subsequent years of the UPSNP.

Before the start of the livelihood support (approximately around the end of the first year of the program implementation), a random sample of 5,000 households that are eligible to receive livelihood support (they completed the first year of public works) will be selected for a livelihood intervention baseline survey, a subsample of 1,000 households will complete a quarterly phone survey, and all households will complete a full follow up survey approximately one year later.

b. Component 2: Spatial mismatch of jobs and workers

To determine if local markets in Addis Ababa are well integrated and explore if more female-oriented public works have a greater impact on female employment, the impact evaluation will take advantage of the randomized roll-out of the program implementation during the first three years of operation.

Given the impossibility to cover all potential beneficiaries at once, and considering the benefits of a robust impact evaluation, the government agreed to randomly roll-out the program in Addis Ababa among the woredas with high and medium poverty levels (90 in total) in the first three years of implementation. In November 2016, a public lottery with the participation of the civil society was held in which 35 woredas were randomly chosen for inclusion during the first year of implementation of the program (see Table 1). The randomization was stratified by sub-city (10 in total). It is expected that another 35 woredas (of the remaining 55) within the high/medium poverty category will be randomly selected to offer the program during the second year of its implementation, and the remaining woredas (20 poor and 26 non-poor) will be included in the third year of project implementation. The randomized roll-out allows the impact of the public works (offered to beneficiaries in year 1 of entering the program) on both beneficiaries and non-beneficiaries in treatment woredas to be estimated.

Table 1. Woredas randomly selected for inclusion in year 1 of program in Addis Ababa

<table>
<thead>
<tr>
<th>Subcities</th>
<th>Woredas chosen (woreda #)</th>
<th>Total per sub-city</th>
</tr>
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<tbody>
<tr>
<td>Akaki Kality</td>
<td>1, 11, 3, 9</td>
<td>4</td>
</tr>
<tr>
<td>Nefas- Silk Lafo</td>
<td>2, 5, 6</td>
<td>3</td>
</tr>
<tr>
<td>Kolfe-Karaniyo</td>
<td>15, 11, 9</td>
<td>3</td>
</tr>
<tr>
<td>Gulele</td>
<td>4, 7, 1, 9</td>
<td>4</td>
</tr>
</tbody>
</table>
Impact evaluation surveys are being conducted on a random selection of households in the woredas of Addis Ababa where the project will be rolled out in the first three years of operation.

The first, baseline survey is being collected before the start of program activities, and prior to the selection of beneficiaries. For the evaluation to have adequate power it is important that the sample contains enough households that will be selected to participate in the program. Households that are likely to receive the public works program are being identified using the following methodology: enumerators ask woreda officials to direct them to a poor part of the woreda to increase the probability of finding poor households. A short screening questionnaire of about 15 questions is conducted with each household. The questions used in this screening questionnaire were similar to those covered in the project proxy means test. If this short questionnaire predicts that the household is poor, the full household survey is conducted with that household. Around 25,000 households are screened to obtain a sample of 6,000 households in all 90 eligible woredas. Once the community targeting has been completed in each woreda impacts for those that are beneficiaries can be compared to those that are not beneficiaries (but still predicted to be poor).

Three follow-up surveys will be collected at the end of each of the first three years of project implementation, engaging a 5,000 of the original sample of the baseline. In addition, between the baseline and the year one follow up, a phone survey is planned for the full sample every 3 months. The combination of the phone tracking, detailed respondent information collected at baseline (including multiple phone numbers), and the assistance of woreda officials is expected to help down respondents and reduce rates of attrition.

The sample size of 5,000 households was selected to ensure enough power to detect the labour market effects of the public works program. The effect of the program on log daily wages for private sector work in untreated areas of the city will be estimated. Intra-cluster correlation for wages is low in this setting (1.5%). With 90 clusters, an average of 55 households per cluster, and an average of 1 wage earner per household, we will have 97% power to detect an effect of 5% on wages (0.15 SDs) and 75% power to detect an effect on wages of 3.5% (0.1 SDs). These effect sizes are in line with other studies: Imbert and Papp (2015) find an effect on private daily wages of 4.7% in their study of public works programs in India.
Of the 6,000 households surveyed in the baseline, 5,000 will be re-surveyed in the follow-up surveys. Despite best-efforts, we expect that it will be challenging to accurately determine who will be a project beneficiary. As a result we expect that a sample of 5,000 households would yield too few of the sampled households to provide adequate power for the impact evaluation. For this reason a larger sample of 6,000 households will be interviewed at baseline. All households that become beneficiaries will be included in the follow-up survey, but only a random sample of non-beneficiary households will be revisited.

Employment levels and wages of non-beneficiaries (both of temporary and permanent employment) in woredas where the project is in place in the first year, will be compared with employment levels and wages of those predicted to be non-beneficiaries in woredas of the same sub-city were the project has not been rolled out yet. If there is no difference in changes in wage levels and the employment supply of non-beneficiaries between project and non-project areas, labor markets are well-integrated across space.

The effect of the program on non-beneficiaries will be tested for different types of jobs. Specifically, the impact on manual labor, casual labor, construction and informal sector work will be tested separately from more permanent, formal employment for which labor markets may be more integrated across the city. Another important dimension that will be tested is if market integration varies according to the distance from the business center. It is expected that the closer to the city center; the more integrated the labor market.

Similarly, with enough variation in the types of public works offered by the woredas, it will be possible to determine if there is a higher impact on female labor outcomes for woredas that offered public works more suitable for women. The community (at the woreda/ketena level) will decide which public works would be implemented from a menu that includes urban greener development, watershed management, urban agriculture, environmental cleaning activities and social facilities/services projects. The different projects will be analyzed and ranked as more or less female oriented, depending on the physical activity required and social norms.

In addition, the evaluation aims to identify the impact of specific aspects of the wage support on employment outcomes by offering these randomly to select beneficiaries in the first year. Two such aspects of support are: (i) increasing the availability of childcare for women, and (ii) certification of soft skills such as punctuality, reliability and work effort observed in the first year of the program (in the public works and trainings provided). Further discussions with the implementation agency will determine the exact nature of the support provided in each case, and the overall feasibility of the interventions. Job search and employment outcomes among male and female beneficiaries that receive this support will be compared to male and female beneficiaries that do not (and also to non-beneficiaries), in order to determine the effectiveness of these interventions.
Annex: Content of household survey

The main household survey is being collected using a Computer Assisted Personal Interview (CAPI) application in order to minimize coding errors, and to simplify the collection given the dynamic nature of the questionnaire. The survey will contain data on the following household characteristics in order to answer the key evaluation questions:

- Household roster (including gender, age, relation to the household head, education, migration background, and disability of all household members)
- Household consumption using the method used in the Household Consumption Expenditure Survey (to estimate poverty and consumption growth).
- Self-employment activities and income (including whether engaged in new activity and duration of activity, sector, occupation, costs)
- Wage employment activities and income (including whether engaged in new job and duration of new job, sector, occupation, type of contract)
- Job search activities for all working-age household members (extensive and intensive margins)
- Time-use module for working-age household members
- Household finances (including insurance, savings and participation in iddirs.)
- Household assets
- Module on households shocks: covering unexpected events such as funerals, health and hunger.
- Support received from the program (e.g. number of days worked in Public Works, type of work, timing and amount of Public Works payments, training and guidance received, financial support for livelihood development, any other support)
- Satisfaction with program, specifically asking: a) if the public works provided in the project meet beneficiary needs; b) if direct transfers (if relevant) were received on time; c) the information on entrepreneurship opportunities, availability of wage jobs, and training available to meet identified skill needs was provided; d) reported improvement of skills as a result of training received through the program.
- Perception of availability and return (income in self-employment and wage in wage-employment) from different types of work
- All data should be geo-referenced, taking advantage of the CAPI devices.

In the case of the livelihoods baseline and follow up survey (not collected yet), the content of the survey will be adapted as needed.
References


