A skilled workforce is being considered as one of the fundamental requirements for economy’s growth and development. Hence, skill development programs are of top policy importance for developing countries like Bangladesh. With a large youth workforce and the demand for skilled labor in manufacturing industries, Bangladesh has huge scopes in utilizing its youth workforce as a key instrument of growth and development. For example, Bangladesh has been experiencing remarkable growth in the ready-made garments (RMG) industries for the last three decades. It has become an integral and major part of Bangladesh’s economy, which contributes to 16 percent of the GDP (Bangladesh Bureau of Statistics Yearbook 2014) and 81.68 percent of export earnings (Export Promotion Bureau, Bangladesh, 2014). For instance, in 1984 there were some 0.12 million people employed in RMG sector; since then with an average yearly growth rate of 17 percent, current employment in the RMG sector is over 4 million (Bangladesh Garment Manufacturers and Exporters Association, 2014).

A notable feature of the RMG sector is that majority (85 percent) of garment workers are migrants; however, their distribution by source region is rather skewed. For instance, northern Bangladesh is one of the most poverty-stricken regions of Bangladesh where the poverty was 17 percent...
points higher than the rest of the country in 2005 but has the lowest participation rate in the garment industry. Lack of relevant skills and job-related network, as well as inadequate information on RMG industry, have led to such a low participation from northern Bangladesh. Recently, public, private, and industry bodies and NGOs have been providing various forms of training programs to meet the growing demand for skill and address the labor shortage in the RMG industry.

By employing randomized control trial (RCT) technique, this study addresses which component of a successful training program – introduced by a local NGO in Bangladesh -- helps individuals find and secure jobs in the manufacturing sector in general and RMG sector in particular. We provided four different variations of job-related interventions randomly to eligible participants which are the following: i) Day-long job-related information session, ii) One-month long residential skill training, iii) Month-long residential training with financial stipend for migration and forgone income and iv) same as three with one month paid internship (on-the-job training) in a factory located in the capital city (Full treatment). This study aims at finding the impact of different interventions mostly on take-up rate, job success, and continuation. It also seeks whether there is any improvement in the livelihood and in socio-economic characteristics (income and expenditure trend, migration and remittance, education and health indicators, woman empowerment etc.) of the households of the participants.

Evaluation
The interventions were conducted with an active collaboration with a local NGO (Gana Unnayan Kendra (GUK)) in the north-eastern part (Gaibandha) of Bangladesh, one of the poverty stricken areas of Bangladesh. To select our sample for this experiment, we conducted a short survey to recruit eligible participants (eligibility requires that the prospective participant is interested in training if offered an opportunity) from a large population on the basis of age, education and poverty status. After having the list of eligible participants for the study, we randomly assigned each participant to either be in a control group or to receive one of the interventions from the abovementioned four treatments. Before the randomization, a baseline study has been conducted to collect detailed information about the participants and their households. Six months after receiving the intervention, the participants were surveyed again over the phone for a short follow-up survey. A detailed panel survey of each participant was done after one year of the intervention. A second follow-up survey of the participants was done 18 months after the intervention. To track the participants for the purpose of the survey, each participant was given a mobile-phone connection and airtime top-up incentive as a reward for participating in each of these surveys.

Survey Status
Until June 2016, the research team has completed a comprehensive baseline survey, a six-month follow-up survey, a comprehensive panel survey (12 months follow-up) and an eighteen-month follow-up survey. At the baseline, we had a total of 2215 individual surveyed, of which 2150, 2157 and 2078 participants were surveyed in the first follow-up, panel, and the second follow-up survey, respectively.

| Table 1: Attrition rate (percent) at different follow-up surveys |
|---------------------|--------|--------|----------------------|
| Treatments          | First Follow-up | Panel Survey | Second Follow-up Survey |
| Control             | 2.09   | 2.62   | 3.66                 |
| Information only    | 3.36   | 2.76   | 5.73                 |
| Training only       | 2.57   | 1.98   | 6.32                 |
| Training with stipend | 2.17 | 2.17   | 7.31                 |
| Training with stipend and internship | 3.95 | 3.56 | 6.32 |
| Overall             | 2.93   | 2.62   | 6.19                 |

Source: Survey Data.
respectively. The overall attrition rate is less than 5 percent. The attrition rate at each stage of the survey has been presented in Table 1. The overall attrition rate in first follow-up, panel, and the second follow-up survey is 2.93, 2.62 and 6.19 percent respectively. Treatment-wise percentage of attritions is given in the Table 1 above.

Results

We face different uptake rates of the various interventions when offered randomly to individuals, even though these interventions were offered at free-of-cost. While the overall uptake rate of the program is 66.5 percent, there exists significant variation in the uptake rate among the treatment arms, as the uptake rate is high for information only and training with financial stipend group (74.7 percent and 74.5 percent, respectively) followed by on-the-job training (59.9 percent) and training only intervention (56.9 percent). The uptake rate in each treatment group is presented in Figure 1. Once individuals decided to uptake the program, a small percentage of them (5.3 percent) unfortunately did not continue the assigned treatment intervention, hence dropped-out. Figure 1 below has treatment specific dropout information. The main reasons for drop-out were local seasonal labor demand and non-economic issues like backwardness, social taboo, and patriarchy.

A preliminary finding based on the 6 months follow-up data shows that the overall employment rate was 21.8 percent whereby the employability is much higher in the on-the-job training group compared to other treatment interventions (see Figure 2 below).
2). We found that 48.4 percent of those receiving the full package were employed in the RMG sector, a rate higher than that in any other treatment group. By comparison, only 3.3 percent of those in the control group were employed in the RMG sector, compared with 4.4 percent in the information only treatment, 11.3 percent in the training only treatment, and 16.2 percent in the training plus stipend group. A similar pattern of impact is also evident for manufacturing sector. Interestingly, training with stipend intervention also found to be impactful compared with simple training only intervention (Figure 2).

One year after the treatment intervention, the overall employment rate in the manufacturing sector has decreased from the rate found in the first follow-up survey done 6 months after the intervention. After 12 months, the overall employment in any sector was 12.2 percent, given uptake. Although employment in manufacturing and RMG sector has declined in every treatment group (Figure 3) however, the overall pattern remains the same as found in the 6-month follow-up survey.

**Conclusion**

Vocational training programs aimed at rapidly growing sectors have the potential to reduce skills gaps and improve firm productivity. Training may also improve the likelihoods of individuals who are disadvantaged by various socioeconomic conditions. However, vocational programs enhancing skills have often been unsuccessful, because they are not driven by industry-demand and market-linkages, and because they are not well targeted. In this rigorous RCT-based impact study, we show that a training-program offered to women and men from poor rural households in northwest Bangladesh has significant effects on employment in the manufacturing sector in the greater Dhaka area. In this project, eligible individuals were randomly selected into four different treatment arms and a control: a group provided information about employment only; a group provided with information plus training in sewing; a group provided the second plus a stipend while attending training, and a group provided the training, stipend and a month-long paid internship in a factory. Data from follow-up surveys conducted six and twelve months later show a statistically significant and large employment effect of the training program when it is combined with the stipend or internship.

Skill training programs are important measures for sustainable economic growth (UNDP 2015). However, there exists little reliable evidence on the impact of training on improving the labor market standing of the poor in developing countries. Our study is one of the few studies that find a substantial impact of training on employment, albeit only when combined with a stipend and internship program. One reason for the positive finding is the link between industry demand and the training. Initial outcomes from the survey have shown a significant and substantial impact of an on-the-job training program on employment, of the partici-

![Figure 3: Employment rate in Panel Survey (12 months follow-up)](source: Panel Survey Data)
pants. It also shows that training with stipend has also a better impact on the socio-economics status of the participants compared to the simple training program. Among all the treatments, the on-the-job training program is an intervention that creates network and job exposure which has an important lesson for the policy makers.

Figure 4: First Day of Training at Gana Unnayan Kendra (GUK)

Figure 5: Last day of Training at GUK and certificate distribution
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References

Bangladesh Export Promotion Bureau, http://www.epb.gov.bd/


Figure 6: Participant in an internship in a Factory (On-the-job Training)