

Impact Brief Series, Issue 6

Mennonite Economic Development Associates

Morocco

The Taqeem (“evaluation” in Arabic) Initiative is a technical cooperation programme of the International Labour Organization and regional partners including Silatech, the International Fund for Agricultural Development and the International Initiative for Impact Evaluation. Taqueem applies an iterative cycle of capacity development, impact research and policy influence to improve evidence on “what works” in youth employment and to support youth employment stakeholders make evidence-based decisions to improve resource allocation and programme design.

The Taqueem Impact Brief Series documents how organizations measure outcomes of their youth employment programmes, the tools that are applied and the findings and recommendations that emerge to assist them in improving impacts and programme design. The organizations profiled in the Impact Brief Series form a Community of Practice, a collaborative approach to building capacity on monitoring, evaluation (M&E) and impact evaluation and foster learning and cooperation among youth serving organizations.

KEY MESSAGES

- The case of MEDA Maroc provides good evidence that close involvement of the implementing organization in the impact evaluation facilitates the implementation of the research project.
- Mobile data collection equipment used efficiently can substantially decrease the required time and resources and increase data quality.
- Ensuring high take-up of the programme is key to a successful study.
- Impact evaluation studies can be small and localized, although tests to determine the extent of external validity should be run before the study begins.



How a mid-sized NGO is partnering with external researchers to carry out the first impact evaluation on youth employment in the country

Background

MEDA Maroc and the “100 Hours to Success” training programme

The Mennonite Economic Development Associates (MEDA) Morocco implements the YouthInvest project, a five-year initiative sponsored by the MasterCard Foundation. The objective of the project is to provide economic opportunities for Moroccan youth through skills and employability training, on-the-job experience, access to finance, and providing support to NGOs and financial service providers in the development of financial and non-financial products. The project comprises four different training programmes, the largest one being “100 Hours to Success.”

“100 Hours to Success” is a programme aimed at youth between 15 and 25 years. It provides them with 100 hours of training in life skills, entrepreneurship, and financial education. The participants of the training are required to open a bank account at Al Barid Bank.¹ After the training, between 5 and 10 per cent of youth receive internship placements. The length of the training programme is three months. Since 2009, approximately 20,000 youth in Morocco have benefited from the training.

M&E system

The monitoring and evaluation (M&E) system at MEDA Maroc depends on a programme wide Performance Measurement Framework (PMF),² a clearly defined set of indicators used to track performance, determine data sources and data collection methods and set targets for achievement. Maintaining the PMF is the responsibility of MEDA Maroc’s M&E Officer who works closely with Extension Officers,³ the main points of contact with project beneficiaries. The PMF includes routine monitoring of programme beneficiaries using qualitative and quantitative techniques as well as periodic evaluations. For instance, a non-experimental evaluation conducted in 2010 surveyed 157 youth to determine the effect of the training on savings behaviour and integration into workforce. Interviews were conducted before and after the training sessions, and impact was estimated by comparing the two observations.⁴

¹ MEDA Maroc negotiated the minimum deposit amount down from 100 Moroccan dirhams (MAD) to 5 MAD.

² Also known as M&E matrix.

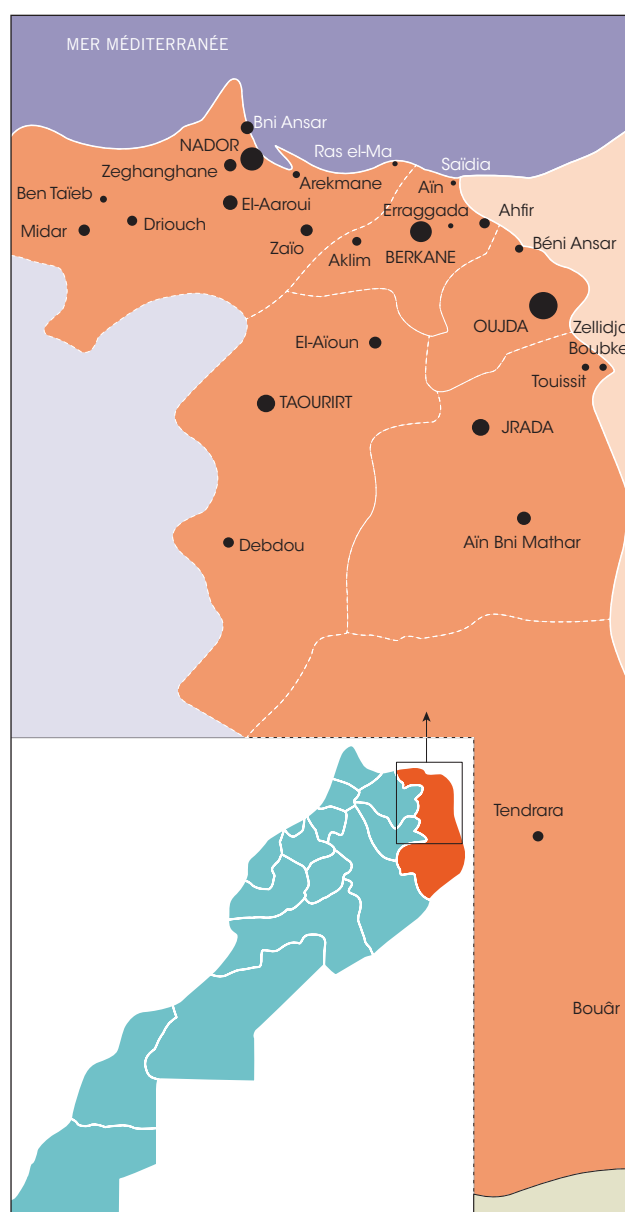
³ Extension officers deliver the training to 100 Hours to Success programme participants.

⁴ The results tend to show that the training had positive effects on the income and the behaviour of the graduates. Nevertheless, as this study does not rely on a counterfactual, we cannot be certain that these changes were caused by the training.

Taqeem support

To further enhance its M&E system, MEDA Maroc wanted to prove the cause-and-effect relationship between its interventions and the outcomes observed by conducting an experimental evaluation, in which they had no experience.

As part of the Taqeem Initiative, MEDA Maroc participated in a series of technical training sessions and consultations with evaluation experts over the course of which the impact evaluation design for 100 Hours to Success was developed. The design included elements such as a revised results chain, evaluation questions, a comparison group identification strategy, a sampling and data analysis plan, as well as a budget. Based on the plan, a detailed concept note was drafted, validated, and later submitted to the International Initiative for Impact Evaluation (3ie), which agreed to fund the study.⁵ For the course of the impact evaluation, MEDA Maroc retained an important coordination and management role. An expert investigation team was assembled; it was responsible for the scientific validity of the study's design as well as the analysis of the data.




Impact evaluation

Design

The study, being conducted in the oriental region in the cities of Oujda, Jerrada, and Taourirt, is the first experimental evaluation⁶ focused on youth employment to be conducted in Morocco. The evaluation seeks to determine the impact of MEDA Maroc's "100 Hours to Success" training programme on youth labour market, education, and savings outcomes.

⁵ 3ie funds impact evaluations and systematic reviews that generate high-quality evidence on what works in development and why. It rarely directly funds implementing organizations.

⁶ Various impact evaluations on youth training, but conducted in other countries, can be found in the Youth Employment Inventory (<http://www.youth-employment-inventory.org/>), such as *Programme for the Promotion of Children and Youth* (Uganda, 2006), and *Tap & Reposition Youth – Savings & Micro-credit for Adolescent Girls* (Kenya, 2005).



The research team chose a randomized controlled trial (RCT) design for the evaluation. In RCT designs, surveyed individuals are randomly divided into a participant and a comparison group. Differences in outcomes between both groups are calculated with the only assumed difference between the two groups being the intervention itself. The study involves a baseline survey (conducted in October and November 2012) and a follow-up survey conducted 12–14 months after the end of the training.

Baseline data collection

An external data collection firm, made up of 16 enumerators and three field supervisors, was hired to conduct the data collection. The questionnaire contained between 100 and 122 questions, and a full questionnaire took about 25–30 minutes to administer. The enumerators were trained in survey techniques and the survey instrument was piloted with a small group of youth and subsequently adapted to ensure the quality and sensitivity of survey questions.

The surveys were conducted in 13 youth centers where MEDA Maroc's trainings are carried out. Youth were invited to the center which was closest to their place of residence. Enumerators carried out the surveys using tablets equipped with Open Data Kit (ODK) survey software.⁷ Questionnaires were uploaded onto the tablets, and responses were then collected electronically. Completed surveys were uploaded onto a central server and responses were aggregated into a format ready for analysis.⁸ This mobile data collection technique saved the team valuable time and resources and greatly reduced the number of errors usually caused by manual data entry. The survey was also complemented by four focus groups.

Randomization and take-up

Over the three-week span of the baseline survey, 1,817 youth were surveyed. A random selection initially placed 600 in the participant group (equaling the number of available spaces in the training programme during the time under study) and 1,217 in the comparison group. The bigger size of the comparison group was decided in order to both increase the power of the calculations (given the fairly small population) and help remediate some of the enrolment take-up issues that MEDA foresaw at the time (furnishing back-up candidates for the participant group). Summary statistics show that randomization was successful in achieving balance across participant and comparison groups.

Nevertheless, despite considerable efforts, the take-up rate of the training proved troublesome: of the 600 youth who were invited to the training, only 340 were in attendance by December 2012. To achieve their objective of 600, MEDA decided to organize a second wave of training. Therefore, a second random selection of 300 youth was taken from the comparison group and brought into the participant group, bringing both into alignment at about 900 individuals each. The second wave of training was completed in August 2013, with a combined total of 505 youth having participated in the training overall.

Baseline findings

A baseline survey taken alone is insufficient to demonstrate any changes on outcomes, not to mention impact, since the treatment has not happened yet. That said, the baseline report provides an extensive descriptive analysis of the population under study. The following key findings emerge from the baseline survey.

⁷ ODK is an open-source software that helps organizations author, collect, and manage mobile data collection.

⁸ The complete datasets are finalized in Excel.

Gender balance

The surveyed population of 1,817 youth is 53 per cent female. As shown in table 1, male programme applicants are younger than their female counterparts. The observed age differential by gender is probably related to higher educational attainment rates by young women in Oujda (and Morocco), while young men are more likely to leave school and seek out employment (and training support for their employment search) at an earlier age. The fact that young women are well represented among participants is a positive finding, since traditionally they are much less likely to engage in activities offered through often male-dominated youth centres.

TABLE 1. Age categories by gender (%)

Age	Male	Female
Total	100	100
15–18	37.6	26.7
19–21	35.7	44.1
22–24	21.2	23.5
25–30	5.9	5.7

Educational attainment

The relative young age of the sample is reflected in the latest level of education attained, as shown in table 2, with 91 per cent of the sample having not yet obtained a higher degree than the Lycee.⁹ With the majority of participants enrolled in some form of professional education (30 per cent) or university (40 per cent), it is also clear that the programme primarily attracts a better educated cohort than the average Moroccan youth population. The analysis also features the data broken down into the participant and the comparison groups,¹⁰ showing no statistically significant differences between both groups.

TABLE 2. Attained level of formal education, by groups (%)

	Primary	College	Lycee	Professional degree	University and above	Total
Total	18.6	29.5	43.1	4.9	3.7	100
Comparison	20.1	28.4	42.2	4.7	4.7	100
Participants	17.2	30.5	44.1	5.2	3.1	100

Socio-economic status

The analysis of the household income, also broken down into both groups, shows that the participant group is slightly biased towards poorer populations, as shown in table 3. The share of those in the

⁹ Lycee corresponds to the last degree before entering university.

¹⁰ Randomizations presented here refer to the second wave of randomization, the one where both groups align to approximately 900 individuals each.

highest two income brackets constitutes 7 per cent of the participant group compared with 10 per cent in the comparison group. While the difference between these two groups is not statistically significant (as per the baseline report), future assessments will have to be mindful about this potential bias. Overall, 83 per cent of the individuals from the sample (26 + 40 + 17 per cent) declare coming from households that have an income smaller than 5,000 Moroccan dirhams per month, confirming that the program also reached lower-income households.

TABLE 3. Household income status (in Moroccan dirhams),¹¹ by groups (%)

	0– 1,500	1,500– 3,500	3,500– 5,000	5,000– 7,000	7,000– 10,000	10,000+	Total
Total	25.8	40.0	16.9	8.8	4.3	4.2	100
Comparison	25.7	38.6	16.6	9.1	4.9	5.1	100
Participants	25.8	41.4	17.2	8.5	3.7	3.3	100

Employment status

Finally, table 4 looks at the current employment status and illustrates that the vast majority of the sampled individuals are still enrolled in some level of education.¹² The education status of the majority should be kept in mind when evaluating employment outcomes: while it was expected on evaluation design that individuals would be enrolling in MEDA Maroc's 100 Hours to Success programme as a bridge in the transition from school to work, the actual transition might take longer for many than expected in that a year from now many might still be in school and only passively searching for employment.

At baseline, 85 per cent of respondents were not active in the labour market (most of them being full-time students). Out of the active individuals (15 per cent of the total), 32.3 per cent were employed and 19 per cent were self-employed. The unemployment rate among this – albeit small – population of active individuals was nearly 49 per cent. Although the participant group is slightly more inclined to be active in the labour market, both groups are largely in alignment, with no statistically significant differences.

TABLE 4. Current employment status, by groups (%)

	Employed	Self-employed	Unemployed	Inactive	Total
Total	4.9	2.9	7.5	84.7	100
Comparison	4.3	2.5	7.3	85.8	100
Participants	5.5	3.3	7.7	83.6	100

¹¹ As of July 2013, 1,000 MAD roughly converts into 116 US dollars.

¹² Despite the fact that most youth are still in school, 58 per cent of sampled individuals claim having already somehow worked in the past.

Lessons learned

Involvement of the implementing organization

The 100 Hours to Success study is a rare case of an implementing organization being actively involved in the impact evaluation processes, although not ultimately responsible for the study, which falls under the responsibility of the investigation team led by academics and impact evaluation experts. In many cases, the implementing organization is left aside from the study. The comparative advantages of having the implementing organization participating actively in the work are many, and include:

1. **Matching project design to data collection cycle:** The timing of data collection needs to coincide with the intervention which is dependent on the work plan of the implementing agency.
2. **Increase take-up:** A high dropout rate can undermine the validity of any study. By carrying out an extensive outreach campaign (phone calls and home visits) and making training schedules extremely flexible, MEDA was able to increase the take-up.
3. **Trust with beneficiaries:** An implementing organization has built-up trust in the communities where they are working and can assist with data collection, especially when trying to collect sensitive information.

Capacity-building in impact evaluation

Many organizations lack expertise and experience in impact evaluation. As in the case of MEDA Maroc, the capacity of implementing organizations to engage in impact evaluations needs to be built. In order to better understand the mechanics of the evaluation, the counterpart at the implementing organization should receive basic training on impact evaluation¹³ ideally complemented by continued coaching to help identify impact evaluation experts and assist throughout the preparation process. Even though an impact evaluation might be mostly conducted by a team of experts and an independent data collection firm, a successful study would not be possible without an enabling environment and the understanding and inputs of knowledgeable focal points in the implementing organization.

Technology

The MEDA Maroc example has shown how the use of mobile technology can significantly increase data quality and reduce costs. The high price of buying mobile devices was well worth the investment. That said, practitioners should reserve enough time to pilot the survey and train the enumerators. The ordering, programming, editing, and connecting of the devices is a time-consuming task.

Dealing with take-up and attrition

High dropout rates are quite common in training interventions. This can introduce bias in the results as those youth that choose to complete the training can be quite different from those that drop out. MEDA faced this challenge during a first wave of training when 38 per cent of selected youth did not show up. Trying to remediate the problem, they decided to organize a second wave of training and randomly

¹³ For instance ILO's Evaluation Clinics (<http://www.ilo.org/global/topics/youth-employment/projects/evaluation/capacity-development/lang--en/index.htm>) and J-PAL's Evaluation Courses (<http://www.povertyactionlab.org/course>).

moved 300 youth from the comparison group to the participant group. While this random selection should help reduce bias in results, certain heterogeneities in the results will not be observed because of decreased statistical power. At the same time, MEDA has been tracking down dropouts to ensure they can be available for the follow-up survey where “intention to treat” analysis can be applied.¹⁴

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Next steps

Tracking youth until the follow-up survey

Given the highly mobile nature of youth in Morocco, there are risks of youth moving away from the programme area and changing telephone numbers and email addresses. As such, MEDA Maroc will conduct an SMS tracking survey in order to maintain accurate contact details for both the participant and the comparison group. The exercise will consist of verifying their contact information (address, email, phone) and receiving an update regarding their employment status mid-way through the study.

External validity

As the study is concentrated in the oriental region of Morocco, there is a concern regarding the external validity of the results. In order to observe whether the findings can be applied to the rest of the country, MEDA will compare their demographic and socio-economic baseline results with the 2009 Moroccan Household and Youth Survey¹⁵ conducted by the World Bank.

Follow-up survey

Originally planned for December 2013, it has been postponed to the start of 2015 because of the addition of a second wave of trainings. Since a follow-up survey in stages was considered too costly, the study team decided to conduct the follow-up survey at the same time for both training cohorts. While this implies that there will be less time for training impact to materialize for those youth that started the training later, it is expected that these differences will not strongly affect the results. Data analysis will be carried out separately for both cohorts, allowing for disaggregated findings.

¹⁴ “Intention to treat” analysis estimates the impact on those intended to be treated rather than on those who actually participated.

¹⁵ See <http://microdata.worldbank.org/index.php/catalog/1546>.