



# The Spindle

connecting innovators for development

## Efficiency analysis in disability inclusion projects

People with disabilities are often unemployed. As a result, many of them live in poverty. There are several factors causing this. As people with a disability are often stigmatized and discriminated against, many do not have access to education. It is often assumed that they are not able to perform any work, and sometimes people are reluctant to work with them. Stigmatization and discrimination in their communities also cause loss of self-esteem. Lack of self-esteem causes self-exclusion. It's a downward spiral. This case explains how to analyse efficiency in projects that aim to include people with disabilities.

The Partos Efficiency Lab, November 2017

This case is one of a series of ten that was produced in the framework of the Partos Efficiency Lab. See back cover for more information

### Project at-a-glance

- Project type: Disability inclusion project
- Geographic intervention area: District in an East African Country (population 300.000)
- Project budget: EUR 1,5 million
- Budgeted for end-of-project evaluation: EUR 20,000.
- Project Duration: 5 years:

### Project objective

The project objective is help 1000 people (age group 16-50) with a disability to find employment

### Project approach

Projects focused on inclusion of the people with a disability in economic development are based on a combination of interventions including:

- Empowerment of people with a disability (addressing lack of self-esteem)
- Improve the employability of people with disabilities through (vocational) training, education etc.
- Influencing communities, employers (public and private) and other institutions (including development projects) to stop discrimination and stigmatisation and to initiate joint action to include people with disabilities in economic and social development.

In this project the objective will be achieved through four outcomes:

#### People with a disability take action to enter the labour market

Through coaching and mentoring people with a disability they will develop sufficient self-esteem to take steps to get access to the labour market either as an employee or through self-employment.

Disabled people organisations (DPOs) will be supported with establishing and facilitating self-help groups. In these groups people with a disability can support each other in their efforts to develop self-esteem and find employment.

The project facilitates disabled people organisations (DPOs) to enter in dialogues with local leaders, health workers and rehabilitation workers to engage in a whole range of activities that are all geared to the identification of people with disabilities, rehabilitation and supporting them.

Furthermore, DPOs will be facilitated to engage in mass awareness campaigns. Through making use of good role models the DPOs will show that people with a disability have a lot to offer in the labour market.

#### TVET<sup>1</sup> institutes, in collaboration with NGOs and local government take measures enrol more young people with a disability

The project help TVET institutes to actively reach out to you people with a disability, remove barriers that prevent access to vocational training and train teachers. The programmes also include training in business skills.

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<sup>1</sup> Technical and Vocational Education and Training.

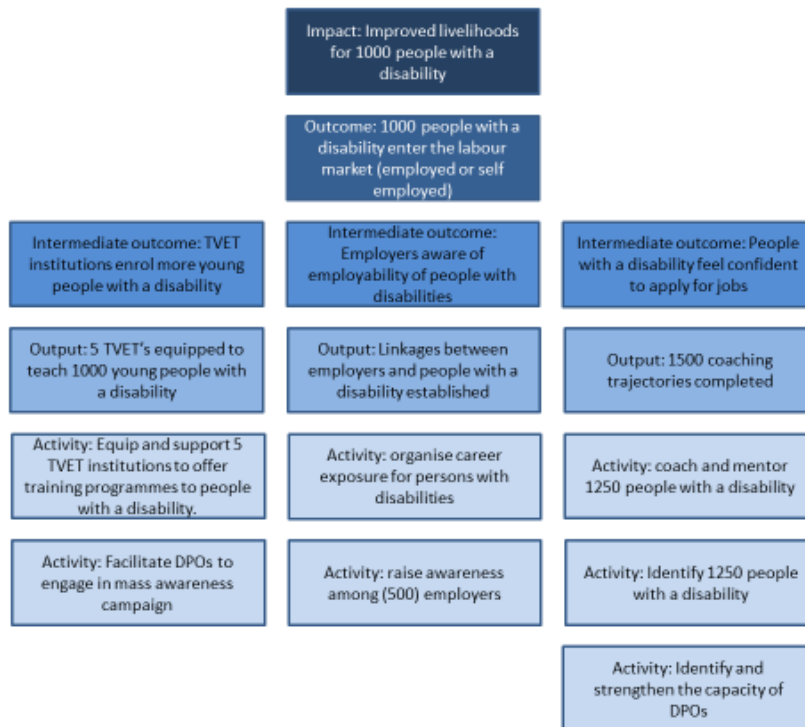
### Employers employ more people with disabilities

The project raises awareness among employers, including the private sector, government and NGOs about measures required to employ more people with a disability. At least 500 employers will be approached including 5 large employers (>250 staff), 55 medium size employers (50<x<250 staff), 190 small employers (10<x<50 staff) and 250 micro employers (<10 staff). The project also organises career exposure for persons with disabilities where they can meet potential employers and find other opportunities how to advance their careers.

### MFIs and Chambers of Commerce deliver more services to people with a disability

The project helps MFIs to improve access to micro finance services for people with a disability. The project also helps the chambers of commerce to reach out to people with a disability who have the potential to start their own business and to coach them in developing and implementing a business plan.

## Theory of Change



### Recommended approaches for assessing efficiency

#### Notes on applicable tools and methods, Markus Palenberg

This note summarizes tools and methods that can be applied to assess efficiency in the disability inclusion project (case #7). It reflects my personal assessment and views.

After brief remarks on the case (Section 1), I discuss applicable tools and methods first for level 2 (Section 2), and then for level 1 (Section 3).

#### 1. Remarks on the case

The project objective is not entirely clear, I assume that it means: 1000 people with disability find a job because of the project (i.e. they would otherwise not have found a job).

#### 2. Level 2 tools and methods

Level 2 tools and methods compare the efficiency of entire aid interventions with alternatives or benchmarks with the purpose of selecting those interventions producing the largest total net benefit with available resources.

Conducted ex-ante, level 2 tools and methods are of interest for:

- Program officers of development organizations who are in charge of project identification and design;
- Funders who need to select projects to which resources will be allocated; and
- Evaluators tasked to evaluate efficiency.

The methods in this group can also be conducted ex-post for accountability and learning purposes, i.e. to verify or correct ex-ante estimates, to improve assumptions for subsequent ex-ante application, and to help project managers improve on operational performance.

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#### Cost-Effectiveness Analysis (CEA) and Cost-Utility Analysis (CUA)

A Cost-Effectiveness Analysis (CEA) can be conducted that estimates (ex-ante) or measures (ex-post) the cost for bringing a disabled person into a job. CEA or CUA (see below) can provide benchmarks that can be compared to other job promotion programs.

As the degree of disability may be an important cofactor, a Cost-Utility Analysis (CUA) could be imagined that weighs bringing a severely disabled person into work higher than a lightly disabled person. Similarly, CUA could differentiate between job quality levels and thus identify benefits associated with bringing targeted people into better jobs, in addition to bringing them into jobs at all. CUA works with composite utility measures, the most prominent example being from the health sector (combining morbidity and mortality into disease-adjusted life years – DALYs – saved). Similar composite quantities can be imagined for the project at hand.

There are two natural challenge for estimating or measuring additional job placement through the program:

- Additional jobs for the targeted group of disabled people should be measured against the counterfactual of people from that group getting into work also without the program; and
- Lost job opportunities for non-targeted people (that would have gotten jobs without the program) should be considered as well as negative effects.

CEA and CUA, as outlined above, is limited in that it doesn't have much explanatory value on how (or why not) outcomes were achieved, something that can be addressed if CEA/CUA is complemented by theory-based evaluation approaches and partial efficiency analysis that track the project's theory of change (see next section).

CEA as described above can usually be conducted in a matter of several days to several weeks and only requires basic economic and financial analysis skills. CUA requirements are similar but slightly superior both in terms of time and skills.

### **Cost-Benefit Analysis (CBA)**

Cost-Benefit Analysis (CBA) can also be applied. CBA could estimate the net benefits, for example in terms of additional expected earnings related to the job promotion program, compared to what would have happened without the program (including job displacement effects mentioned above). When working with easily monetizable outcomes such as jobs created, CBA is probably simpler and more pragmatic than CUA. CBA could also assess the project's net benefits from a societal perspective including, for example, costs to society avoided by empowering disabled people and making them economically self-sufficient.

Generally, with CBA assumptions made when estimating costs and benefits should be clearly explained, especially if some effects are left out (e.g. the displacement or cost-saving effects discussed above), because results can only meaningfully be compared with CBAs conducted for other projects if those assumptions match. In addition, a sensitivity analysis would help to understand the degree to which results depend on quantitative assumptions (e.g. on assumed career length and overall economic development).

Conducting a CBA usually takes several to many weeks and requires advanced economic analysis skills.

### **Multiple-Attribute Decision-Making (MADM)**

Scoring models, a pragmatic method for Multiple-Attribute Decision-Making (MADM) can usefully be applied to the present case at two points in time: before the program to facilitate its design, and sometime after the program (when trainee job data is available) for accountability and learning purposes.

MADM methods and tools facilitate decision-making in the face of incomplete data and uncertainty. As such, they complement rather than replace other methods, i.e. they could, for example, build on results of level 2 analysis outlined above and level 1 efficiency analysis (see next section) or any other evaluative information.

A MADM scoring model calculates total scores for different intervention alternatives based on a set of weighted criteria (see my comments on case #1 for illustration). Scoring models are best used iteratively, i.e. by inviting the adjustment of previously established criteria and weights after initial scoring until the model best reflects available information and data, and the professional opinions, experiences and preferences of those conducting the exercise. The main advantage of this approach is that the decision-making process is transparent to the decision-maker and to stakeholders. It is also systematic in the sense that criteria, weights and scores can be critiqued separately, leading to more informed understanding and decisions. However, the inherent

transparency of this approach can become a caveat if decisions are significantly driven by arguments decision-makers decline to share; something to ascertain before deciding to implement it. In the present case, criteria could be, for example, the relative importance of the project's four components vis-à-vis their respective cost. Within components, scoring could be done to inform design choices if several options exist.

Scoring models usually require several days of analysis time and basic analytical and stakeholder interaction skills.

### 3. Applicable level 1 tools and methods

Level 1 tools and methods identify efficiency improvement potential in one project. While level 2 methods compare the outcome/impact efficiency of different interventions, level 1 analysis focuses on the operational efficiency of a single intervention.

Level 1 tools and methods are often conducted ex-post. They are of interest to:

- Project managers responsible for project planning and implementation;
- Funders and program officers of development organizations who want to ensure that funded projects operate with maximal efficiency; and
- Evaluators tasked to evaluate efficiency.

Methods in this group can also be applied ex-ante (or during implementation) to inform project design and to adjust project approaches and implementation plans.

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Several level 1 tools and methods are useful for evaluating efficiency in the project at hand.

#### **Cost Effectiveness Analysis**

The CEA discussed in the previous section can also be applied project-internally, as partial CEA, for example by benchmarking the cost-effectiveness of the different disabled people organizations with each other. Cost-effectiveness measures for these organizations could e.g. be cost per meeting or cost per meeting participant. Cost-effectiveness could be assessed for participating TVET institutes and, importantly, for participating companies.

#### **Unit costs benchmarking**

Similarly, unit costs benchmarking can be applied in several ways for this project. In project-related procurement of goods and remuneration of teaching and administrative staff can be benchmarked to identify savings potentials. The above-mentioned internal CEA benchmarking is very similar to unit cost benchmarking in terms of methodology, although I would refrain from using that terminology when people are involved.

A principal caveat with unit costs benchmarking is that it does not allow straightforward conclusions about outcome/impact-level effectiveness and efficiency. For example, higher TVET cost per participant may indicate overspending but can also be entirely justified by better training results, including a higher probability of finding a job placement. Therefore, unit cost benchmarking is a useful tool for identifying potential operational (in)efficiencies but needs to be complemented by further analysis before conclusions can be drawn.

Partial CEA and unit costs indicators can also be compared across different projects, but care must be taken that they allow for meaningful benchmarking. On a technical level, this requires that they are calculated with the same protocol. On a qualitative level, it means that they are applied to similar projects under similar conditions.

Benchmarking of unit costs can usually be done in a matter of days (provided required information is available) and does only require basic analytical and quantitative skills.

### **Business case analysis and Financial analysis**

As companies are a critical stakeholder group in this project, business case analysis would be useful. From a company perspective, the "business case" of employing disabled people compared to people without disabilities is likely to be a factor driving private sector decision-making for or against participation in the project. That business case would cover financial analysis, i.e. calculates the net present value (NPV) for employment of a disabled person from a business perspective. In addition, associated non-monetary opportunities and risks can be analysed, for example related to socially responsible company brand image, corporate culture and legal consequences.

While business case analysis from a company perspective provides important information as to private sector incentives for engaging in the project, it should be clearly differentiated from the "development case" the project at hand is principally about: business case analysis can be used to find ways for the project to be effective and efficient also from a business perspective, but it does not cover development outcomes or impacts.

A frequent challenge with financial analysis of private sector players is access to information. Financial analysis of companies requires core business data that companies may be unwilling to share because it may render them vulnerable to competitors or otherwise endanger their reputation or bottom line. One solution could be to develop general, generic business cases together with a group of private sector stakeholders.

Depending on the entity analysed, financial analysis usually requires several days to several weeks in time, and evaluators need to have basic economic and solid financial analysis skills.

### **"Follow the Money" approach**

A simple and straightforward approach for identifying cost saving potential in the project at hand is the "Follow the Money" approach. When applying it, the evaluator systematically disaggregates total project expenditures and, for each budget or expense category, conducts additional analysis to determine whether there is cost-saving (or yield increase) potential. One strength of this approach is that it systematically screens all project expenses. A weakness is, as with all level 1 methods, that it is often difficult to judge outcome/impact-level consequences associated with lower cost options.

Applying the Follow the Money approach requires one to several weeks. Evaluators require basic analytical, financial, and problem-solving skills.

### **Comparative ratings by stakeholders**

A participatory method that can be useful in the present case is to ask or systematically survey stakeholders, in this case the 1250 targeted people, for their opinions on perceived effectiveness and efficiency. A useful way to do this would be to follow a contribution analysis approach, i.e. to ask project participants to score, rank and describe the perceived contribution different project components had to bringing them into a job. Based on these assessments, the evaluator could then estimate cost-effectiveness data along each component to inform future priorities in similar projects.

Care must be taken when interpreting results obtained by comparative ratings because surveyed effectiveness scales are usually skewed with respect to the associated benefits and hence partial efficiencies can only be ranked if one "dominates" the other.<sup>2</sup>

Comparative ratings usually require time for conducting survey with a sample or all targeted stakeholders. In addition, only little time (e.g. several days) is required for conducting the analysis. Evaluators need basic analytical and survey skills.

#### **Data Envelopment Analysis and Stochastic Frontier Analysis**

Although I'm not familiar with these methods, statistical economic analysis such as Data Envelopment Analysis and Stochastic Frontier Analysis may also be useful, for example for comparing the project-related efficiency of employing people with disabilities across all participating companies across multiple criteria.

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<sup>2</sup> For example, options A and B (A perceived to have made a „very strong” contribution to putting a disabled person, option B only “some contribution”, A twice as expensive as B) cannot be ranked, but A and C (“some contribution, same costs as A) can because A dominates C.





