Cost-benefit analysis in VSD programs

Exchange between the SDC and experts in VET in international cooperation

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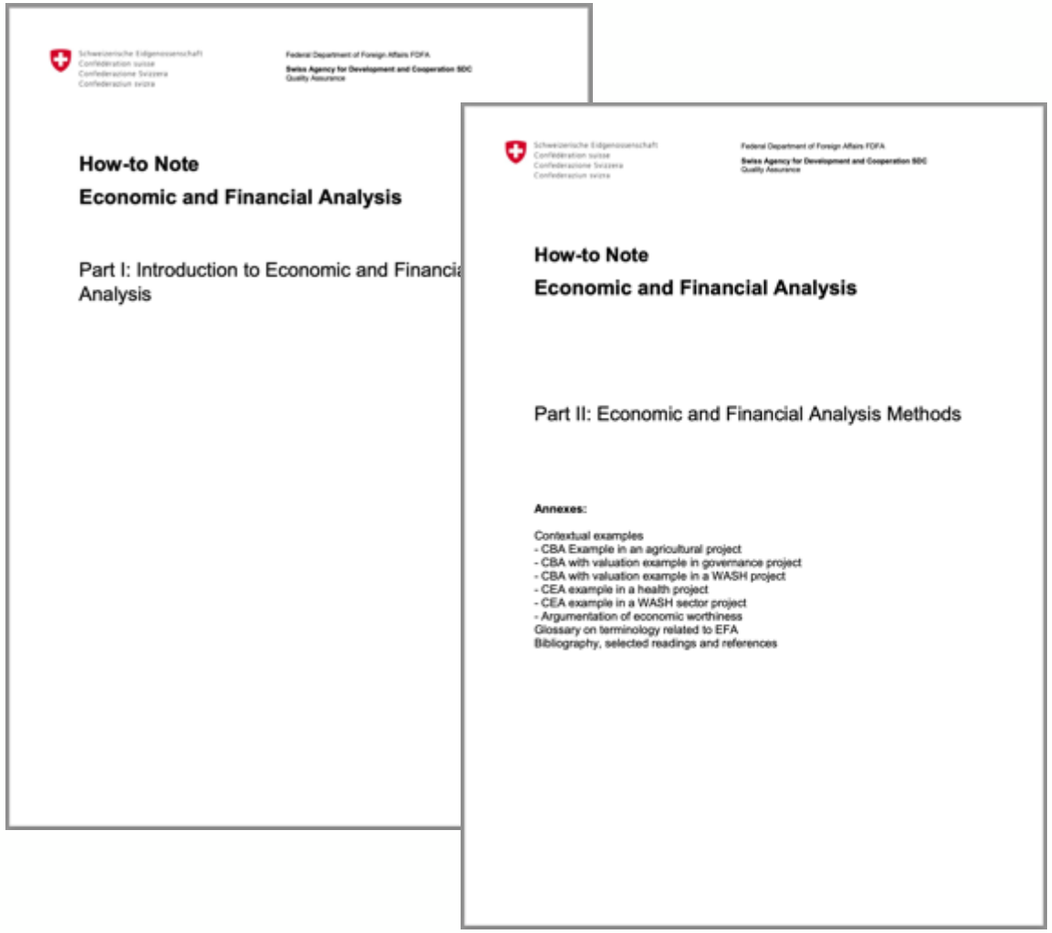
Options to carry out (mandate) an Economic and Financial Analysis (EFA)

The SDC can mandate an EFA to any competent institution or person, including:

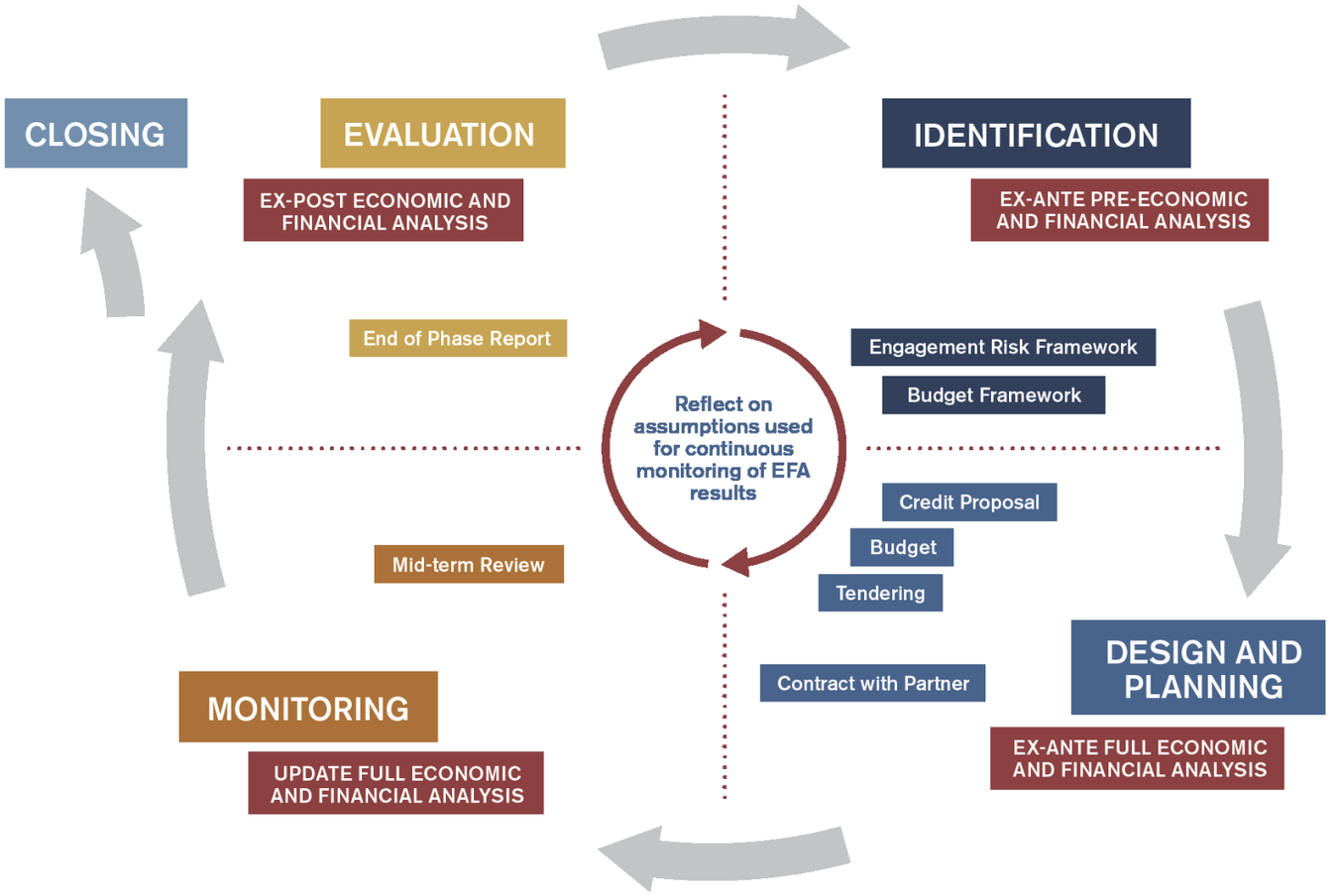
- the project implementing agency itself
- consultant(s) from a local institution
- consultant(s) from an institution that is internationally active
- consultant(s) from one of the three consortia selected by the SDC's quality assurance unit, based on the tender offer and now working under a frame contract for EFA:
  - Helvetas (incl. KEK-CDC as sub-contractor)
  - IKAT-HAFL
  - Vivid Economics
- consultant(s) from the VSD backstopping mandate, i.e. a consortia selected by the SDC's Economy and Education unit based on a tender offer and now working under a frame contact (-> only applicable if it is a short-term support of less than 3 days)

The “new” H2N is comprised of two parts

- Part I provides a **basic understanding** of EFA for all SDC staff.
- Part II provides **practical guidance** for SDC staff who mandate an EFA.



EFA as a continuous process



EFA tools at your disposal

	Project should be rejected / revised	**Project may be accepted**
Net Present Value (NPV)	NPV < 0 (negative)	NPV > 0 (positive)
Internal/Economic Rate of Return (IRR or ERR)	IRR < social discount rate	IRR > social discount rate
Benefit-Cost Ratio (BCR)	BCR < 1 (costs outweigh benefits)	BCR > 1 (benefits outweigh costs)

	Year 0*	Year 1	Year 2	Year 3	Year 4
Investment costs	500 000				
Total additional costs		1 000 000	1 000 000	1 000 000	1 000 000
Total additional benefits		750 000	1 500 000	1 500 000	1 500 000
Residual value of investment					200 000
Net benefits	**-500 000**	**-250 000**	**500 000**	**500 000**	**700 000**

Is the project volume (for the phase in question) less than CHF 6m ?

NO

YES

Are (at least some) of the project outcomes measurable in monetary terms (such as increase in participant's incomes, sales, etc.) ?

NO

YES

Can (at least some) of the project outcomes be valued in monetary terms (e.g., as the target groups would be willing to pay a certain prize for the improved service delivery of the local government)?

NO

YES

Would you like to compare several alternative project approaches leading to the same outcomes?

NO

YES

Do none of the above work for your project?

Cost Benefit Analysis

→ chapter 2.1

Cost Benefit Analysis using valuation

→ chapter 2.2

Cost Effectiveness Analysis

→ chapter 2.3

Argumentation of economic worthiness

→ chapter 2.4

Would you like to analyse the worthiness for a specific stakeholder, or for the whole society?

ONE STAKEHOLDER

SOCIETY

Financial Analysis

→ chapter 1.2

Economic Analysis

→ chapter 1.2

Please note: While EFA is not mandatory for projects with a budget below CHF 6m, it is nevertheless recommended to reflect on a reasonable application of the abovementioned EFA methods – if feasible in your case.

Economic VSD CBA

e+i employment and income network

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Working Aid on Cost-Benefit Analysis (CBA) in Vocational Skills Development (VSD) projects

December 2019

→ Why CBA?

Cost-Benefit Analysis (CBA) is a widely used approach for assessing whether the benefits of a particular action are greater than its costs over a given period of time. A CBA can in principle be done from the viewpoint of a project's individual beneficiary (e.g. a trainee), a project partner (e.g. a training centre) or the whole society. Depending on the viewpoint, the analysis will encompass different costs and benefits. In this note we focus on benefits for a widely defined group of direct and indirect beneficiaries of a project.

The SDC undertakes financial and economic project analyses since 1996. Information on cost-effectiveness of projects and programmes is increasingly in demand and value-for-money has become a buzzword not only among development banks but also in the assessment of credit proposals at SDC's headquarters. In April 2015 SDC's Quality Assurance thus published an updated How-to-Note, on which this introduction is based. Besides this note, an open access e-learning tool has been developed in cooperation with NADEL. For all general (not VSD specific) questions, please refer to these two sources.

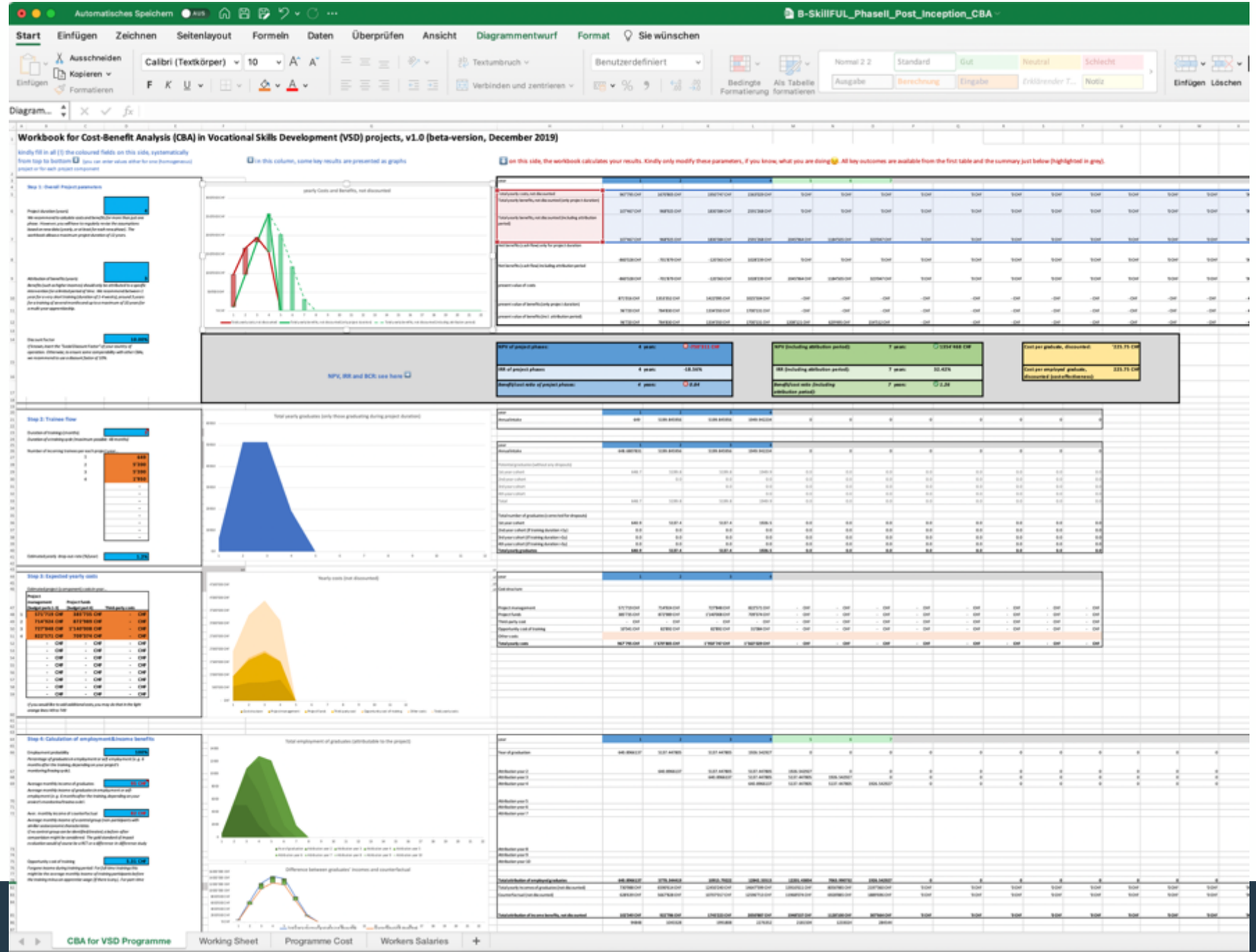
→ CBA in VSD – some basics

The purposes mentioned above do also apply to VSD. In the application and assessment of a new project idea as well as in monitoring and project evaluations we would like to know if the expected benefits from this intervention are greater than its costs *(is the investment worth it?)* – and if there might be cheaper alternatives producing equal outcomes. The tangible benefits of VSD consist primarily of employment and thus of higher incomes for graduates, while costs are mainly borne by the public sector, relating to training expenses such as investments into school buildings, equipment and trainers' salaries. However, there are a few other points that need to be taken into account when considering the rather complex context of VSD projects.

Therefore, this introductory note and the accompanying Excel workbook [Link to Shareweb] have been developed. Their aim is to support SDC program officers, project implementers, consultants and other stakeholders in assessing costs and benefits of VSD interventions, be it in the planning stage of a project (ex ante), for monitoring purposes (ex inter) or as part of a mid-term or end of phase evaluation (ex post).

In focusing on costs and benefits for a large range of stakeholders (e.g. trainees/graduates and their families, training providers and prospective employers), we adopt an approach known as 'economic analysis'[1]. An economic analysis is concerned with all the costs and benefits of

[1] Please have a look at the above mentioned How-to-Note of SDC's Quality Assurance for a better understanding of the differences between an economic and a financial CBA.



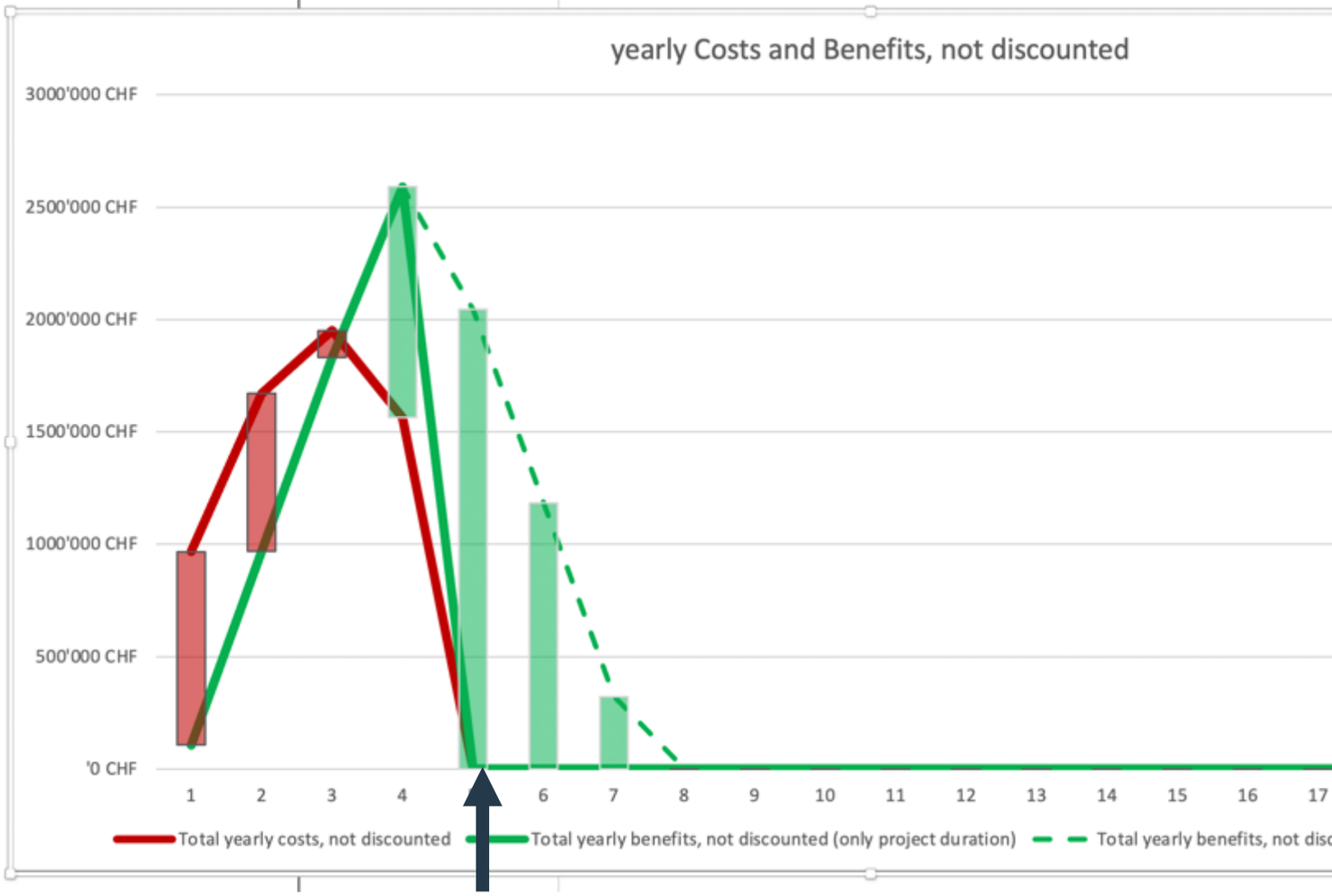
Step 1: Overall Project parameters

Project duration (years) **4**

We recommend to calculate costs and benefits for more than just one phase. However, you will have to regularly revise the assumptions based on new data (yearly, or at least for each new phase). The workbook allows a maximum project duration of 12 years.

Attribution of benefits (years) **3**

Benefits (such as higher incomes) should only be attributed to a specific intervention for a limited period of time. We recommend between 1 year for a very short training (duration of 1-4 weeks), around 3 years for a training of several months and up to a maximum of 10 years for a multi-year apprenticeship.



End of project phase

Financial VSD CBA

Example for a Financial Analysis in Vocational Skills Development (VSD)

The Germany-Pakistan Training Initiative (GPATI), implemented by GIZ, piloted the applicability of a cooperative Vocational Education and Training approach according to the Pakistani context. In this pilot, leading Pakistani and multinational companies like Suzuki, General Tyre and Siemens provided work-based training for different occupations. In order to bring additional companies on board and respond to the often-voiced assumption that participating in Vocational Education and Training results is a loss for private companies, the project in 2019 mandated a **financial Cost Benefit Analysis**.

The analysis compared the monthly training costs incurred by the firms (direct costs) with the productive output generated by the trainees (direct benefits) and the savings on hiring and induction costs when a trainee stays with the company (downstream benefits). The CBA concluded that the five interviewed companies on average saved PKR 462,000 on recruitment costs and thus achieved a net benefit.[1]

More resource and information available on the DCdVET's website: Cost-Benefit Considerations for Companies Engaging in Dual VET (https://www.dcdualvet.org/en/newsletter/dc-dvet-newsletter-august-2021-focus-cost-benefit-considerations-for-companies-in-dual-vet/)

1: Return on investment or an investment without return? A cost-benefit ration analysis of in-company training in Pakistan (https://www.dcdualvet.org/wp-content/uploads/2019_GIZ_Return-on-investment-Build4skills-Pakistan_short.pdf)

Questions up for discussion:

What are your experiences conducting CBAs or other Economic / Financial Analyses (EFAs) for VSD projects?

Do such analyses have an impact on project results? What is needed to ensure that they are useful (and don't just end up in a drawer)?

Have you been using some of the tools presented (new or old SDC How-to-Note on EFA, working aid and excel template for VSD CBAs)? Have they been useful?

- Is there need for more guidance, more standardization? What would you recommend?

Thank you!

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