

Net Benefits of Companies

Projection of Costs and Benefits for Companies in the Dual VET-Apprenticeship Programme in Nepal



Authors and Institution/University:

Thomas Bolli, Johanna Kemper, Mahesh Nath Parajuli, Ursula Renold, Binayak Krishna Thapa

KOF Swiss Economic Institute, ETH Zurich

School of Education and School of Arts, Kathmandu University

Corresponding author: bolli@kof.ethz.ch

Policy Briefs, December 15. 2019;

LELAM-TVET4INCOME PROJECT - R4D-Employment Module

Projection of costs and benefits for Companies in the Dual VET-Apprenticeship Programme in Nepal

A new Dual VET-Apprenticeship programme in Nepal faces the challenge that companies have no experience regarding the benefits and costs of providing apprenticeship places. This uncertainty represents a potential barrier to convincing companies to participate in the programme. Therefore, this project presents an estimate of projected benefits and costs for companies, thereby providing preliminary first empirical evidence for the net benefit of companies.

The Dual VET-Apprenticeship in Nepal

This project analyses the Dual-VET Apprenticeship that started in September 2018 as part of the Enhanced Skills for Sustainable and Rewarding Employment (ENSSURE) project. This formal Technical and Vocational Education and Training (TVET) programme lasts for 24 months. The first three months consist of classroom education. The following 20 months combine four to five days of workplace training per week with one day of classroom education per week. Finally, the last month consists of classroom education. The Dual VET-Apprenticeship leads to a certificate equivalent to the Technical School Leaving Certificate (TSLC). The 181 apprentices starting a Dual VET-Apprenticeship in 2018 to become trained technicians in mechanical engineering and 52 technicians in electrical engineering in States 1, 3 and 5.

New Projection Approach

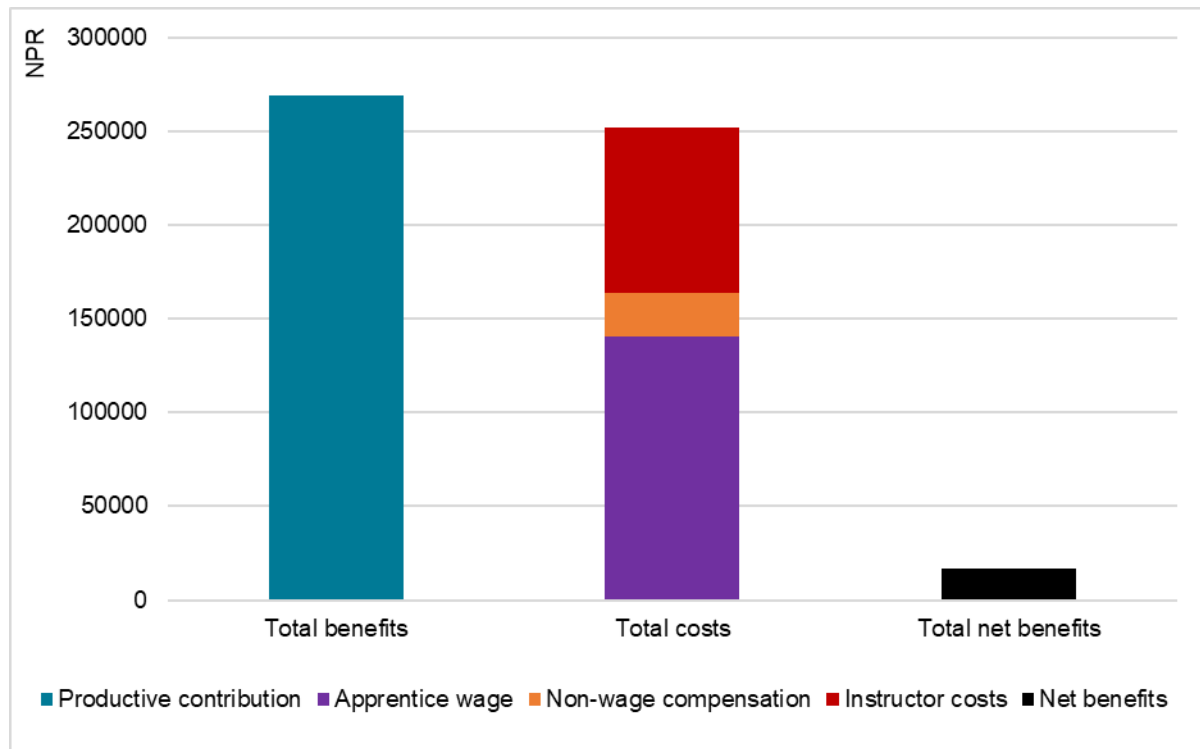
The project applies a new approach that allows to project expected net benefits for companies at an early stage of the implementation. This approach makes several simplifying assumptions based on the literature on calculating net benefits in an accounting framework (see, e.g., Muehleemann and Wolter, 2014). Hence, the projection approach focuses on estimating the productive contribution of apprentices during the programme duration. The approach contrasts these benefits with costs in terms of apprentice wages, non-wage compensation (such as food) and instructor costs arising from instructors training apprentices rather than doing their usual work. The information to estimate these benefits and costs stem from a phone survey among companies in April and May 2019.



Companies make a small net benefit

Figure 1 shows that the results estimate the productive contribution of apprentices of the 24-month period to about 270'000 NPR. Apprentice wages represent the most important cost component accounting for 56% of total costs. Non-wage compensation only represents 9% of total costs and instructor costs amount to 5% of total costs. Comparing total costs of about 252'000 NPR suggests that companies make a total net benefit of 17'000 NPR.

Figure 1: Total Benefits, Costs and Net Benefits of Companies in Nepal



Notes: The figure shows the total benefits, apprentice wage, non-wage compensation, instructor costs and net benefits of the Dual VET-Apprenticeship in Nepal over the 24-month period. N~40

Companies provide training places for a Dual VET-Apprenticeship if they expect to make a net benefit from doing so. Therefore, it is important for policy makers to structure the programme in a way that companies make a net benefit. Apprentice wages represent important lever to ensure a net benefit for companies. In the Dual VET-Apprenticeship of Nepal, apprentice wages amount to at least 3'300 NPR per month. This appears to be reasonable as companies voluntarily pay an average apprentice wage of 5'300 NPR per month. The programme duration is another important determinant of net benefits, since the productivity of apprentices remains relatively low in the beginning, but increases over time. Hence, the duration of 24 months is another key determinant of why companies make a net benefit, allowing them to provide apprenticeship places.

These very first findings suggest that policy makers have structured the programme in a way that can motivate companies to provide apprenticeship places. However, if companies

have no experience in providing apprenticeship places, they might be sceptical about providing apprenticeship places. Hence, understanding the benefits and costs of companies is particularly important for a new Dual VET-Apprenticeship programme. Therefore, these empirical results empower schools to communicate companies the most likely benefits based on empirical evidence.

Policy Implications

Analysing the costs and benefits of companies that provide training places for the Dual VET-Apprenticeship programme in Nepal suggests that apprentices produce more value for the companies than incurring costs in terms of apprentice wages, non-wage compensation and instruction costs. Although this investigation is not yet based on a full survey, the preliminary results may indicate that it is worth investing further in this programme. Hence, participating companies make a net benefit from providing apprenticeship places. Hence, decision makers should retain the characteristics of the programme that create incentives for companies to provide apprenticeship places.

This study shows that the Dual VET-Apprenticeship programme in Nepal produces more values for the companies than incurring costs, giving a net benefit to companies for providing apprenticeship places. This finding shows that the Dual VET-Apprenticeship could be a viable approach for developing a skilled workforce in Nepal. This means that the government (at all levels of governance) need to work for creating an environment that favours the Dual VET-Apprenticeship programme. Federal government could develop the necessary legal and institutional provisions, norms and standards, and other support systems. State and local governments could develop facilitating mechanisms that promote the Dual VET-Apprentice programme at implementation level. All these efforts need to try to attract companies by convincing them with research or evidence-based information that investing in apprentices is actually a benefitting project for them. Involving companies in the whole process of Dual VET-Apprenticeship programme is also important. Companies also need to come forward and accept their roles and responsibilities in promoting the programme.

Although the initial findings represent only a small number of companies, the results are encouraging. It would be very important if more companies could be attracted to dual education so that one day a comprehensive survey could be carried out on a larger number of companies to gain further insights.

This Policy Brief is based on

Bolli, T., Kemper, J., Parajuli, M.N., Renold, U., & Thapa, B.K. (2020). Projection of Net Benefits for Companies in the Dual Vet-Apprenticeship Programme in Nepal, *LELAM Working Papers*, 12, <https://r4d.tvet4income.ethz.ch/publications/working-paper-series.html>.

Financed by:



Swiss Programme for Research
on Global Issues for Development



FONDS NATIONAL SUISSE
SCHWEIZERISCHER NATIONALFONDS
FONDO NAZIONALE SVIZZERO
SWISS NATIONAL SCIENCE FOUNDATION



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC

References

Muehleemann, S., & Wolter, S. C. (2014). Return on investment of apprenticeship systems for enterprises: Evidence from cost-benefit analyses. *IZA Journal of Labor Policy*, 3(1), 25.

Authors

Thomas Bolli

KOF Swiss Economic Institute, ETH Zurich

bolli@kof.ethz.ch

Johanna Kemper

KOF Swiss Economic Institute, ETH Zurich

kemper@kof.ethz.ch

Mahesh Nath Parajuli

School of Education, Kathmandu University,

mahesh@kusoed.edu.np

Ursula Renold

KOF Swiss Economic Institute, ETH Zurich

ursula.renold@kof.ethz.ch

Binayak Krishna Thapa

School of Education, Kathmandu University

binayak.thapa@ku.edu.np

Links

<https://r4d.tvet4income.ethz.ch/>

Disclaimer

Part of this research was funded by SDC, the Swiss National Science Foundation and the SDC Nepal.

Financed by:



Swiss Programme for Research
on Global Issues for Development



FONDS NATIONAL SUISSE
SCHWEIZERISCHER NATIONALFONDS
FONDO NAZIONALE SVIZZERO
SWISS NATIONAL SCIENCE FOUNDATION



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC