

EVALUATION REPORT

Evaluation of the “Knauf Training Initiative Phase I and II”

On behalf of DEG Impulse gGmbH

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Notice: This document has been prepared for DEG Impulse gGmbH in close cooperation with the responsible counterparts at DEG Impulse gGmbH and Knauf International GmbH. However, it reflects the views only of the authors.

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Content

List of Tables	II
List of Figures.....	II
Acronyms.....	II
Executive Summary	IV
1. Introduction.....	1
1.1 Background	1
1.2 Evaluation Object.....	2
1.3 Evaluation Objectives.....	3
1.4 Evaluation criteria and key questions	3
2. Evaluation methodology	4
2.1 Data collection	4
2.2 Data analysis	5
2.3 Limitations and coping strategies	5
3. Results	6
3.1 Relevance	6
3.2 Coherence	12
3.3 Effectiveness	14
3.4 Efficiency	22
3.5 Impact	26
3.6 Sustainability.....	33
4. Conclusions and recommendations	34
4.1 Conclusions	34
4.2 Recommendations	37
5. Annex.....	39
5.1 Evaluation matrix	39
5.2 List of documents.....	43
5.3 Further literature	46
5.4 List of interviewees	47
5.5 Data collection instruments.....	47
5.6 Validated Results Model	52

List of Tables

Table 1: Evaluation criteria and key questions.....	3
Table 2: Distribution of stakeholders addressed by gender and country	4
Table 3: Projected CAGR by KTI implementing country	7
Table 4: Target-performance comparison of quantitative output indicators for phase I (source: Final Report, 02/2023)	15
Table 5: Target-performance comparison of quantitative output indicators for phase II (source: 3. Interim Report, 03/2024)	16
Table 6: Set-actual cost ratio, costs per trainee and trainee ratio by country, phase I	23
Table 7: Prices of comparable short-term trainings.....	24
Table 8: Implementation status according to reporting (sources: interim and final reports, and feedback from DEG Impulse).....	25

List of Figures

Figure 1: Aggregated assessments of TC, instructor and curriculum (sources: immediate surveys, phase I countries, n = 3,708)	9
Figure 2: Aggregated assessments of TC and instructor (sources: immediate surveys, phase II countries, n = 1.351).....	10
Figure 3: Training assessment by TC staff (n = 24)	10
Figure 4: Share of female participants (source: training surveys, n = 2,743).....	17
Figure 5: Assessment of increased competences (six-months-after survey, all participants, phase I). 20	
Figure 6: Assessment of applicability of trained skills (six-months-after survey, all participants)	21
Figure 7: Application of trained skills (six-months-after survey, all participants).....	21
Figure 8: Additionality of the KTI (adapted wording from DCED, 2014)	29
Figure 9: Assessment of benefits at target group level by TC staff (n = 20)	31
Figure 10: Job increase after training (six-months-after survey, all graduates)	31
Figure 11: Found a job after training (six-months-after survey, all graduates)	32
Figure 12: Job increase due to training (six-months-after survey, self-employed only).....	32
Figure 13: Supposed risks by online survey respondents (n = 24)	34

Acronyms

AWE	Agency for Business & Economic Development
BMZ	German Federal Ministry for Economic Cooperation and Development
BSS	Business Support Services
DEG	Deutsche Investitions- und Entwicklungsgesellschaft
DeGEval	German Evaluation Association
EFTA	European Free Trade Association
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
KfW	Kreditanstalt für Wiederaufbau
KTI	Knauf Training Initiative
MoU	Memorandum of Understanding
OECD DAC	Organization for Economic Co-operation and Development’s Development Assistance Committee
PPP	Public-Private-Partnership
PwDs	Persons with Disabilities
SDG	Sustainable Development Goals

TC(s)	Training Center(s)
ToC	Theory of Change
ToR	Terms of Reference
TVET	Technical Vocational and Educational Training
VTI	Vocational Training Institution

Executive Summary

DEG Impulse is a 100 percent non-profit subsidiary of Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG), which in turn is a wholly-owned subsidiary of KfW Group. With the Business Support Services (BSS) and develoPPP programs, as well as through services provided by the Agency for Business & Economic Development (AWE) and the Helpdesk on Business & Human Rights, it provides companies with advisory and funding solutions for their investments in developing and emerging countries. DEG Impulse uses the develoPPP Classic program to support measures by well-established enterprises that wish to operate in developing and emerging countries on a long-term basis and thereby shape their business involvement in a sustainable manner. One of the projects under develoPPP Classic is the “Knauf Training Initiative” (KTI) in its phase I (2018-2023) and phase II (2021-2026). Knauf is one of Europe’s leading manufacturer of gypsum-based construction materials and also specialized in production of isolating materials and cement products.

The main objective of the KTI is the *establishment of training centers (TCs) to improve the technical qualification and employability of young people, students and skilled workers in the field of drywall construction and related products*. Through the TCs, both practical and theoretical modules imparting comprehensive knowledge regarding the application of drywall construction techniques are provided to installers, architects/civil engineers, academic staff and unemployed people. The KTI is to provide people with the possibility of completing a training, which in turn should lead in the long-term to sustainable career prospects.

CEval GmbH was commissioned by DEG Impulse to evaluate the KTI, in its phase I (2018-2023) and phase II (2021-2026). The evaluation assesses the relevance, coherence, effectiveness, efficiency, impact and sustainability of the KTI, identifies methodological lessons learned and conclusions resulting from the findings, and provides evidence-based, actionable recommendations for DEG Impulse and Knauf. Furthermore, the evaluation integrates a gender perspective, in order to address the initiative’s effects on gender mainstreaming and women empowerment. Eventually, the evaluation investigates the additionality of the initiative, i.e., the extent to which further and/or more impacts were achieved through the financial support of DEG Impulse.

The evaluation followed a mixed-methods case-study design, collecting primary data through individual and group interviews in Germany and three target countries (i.e., Egypt, Algeria and Mexico), as well as a semi-standardized online survey among TC staff in countries not visited. Secondary data, including monitoring reports, training materials, and TC survey data, were analyzed through a desk study. The evaluation team conducted interviews with TC staff, stakeholders, and beneficiaries, ensuring appropriate representation of diverse target groups.

The data analysis involved qualitative content analysis using the software MaxQDA, as well as a descriptive statistical analysis of quantitative data from the surveys, with disaggregation by gender and country where possible.

Key findings

Relevance

- ✓ The construction sector in the target countries is experiencing steady growth, which is accompanied by a significant lack of skilled workers, particularly in specialized crafts like dry-wall installation. This skills gap is attributed to inadequate professional training opportunities and outdated regulatory frameworks. The trainings provided by the KTI are deemed as an adequate response to these skills and knowledge gaps, as confirmed by the high demand for the courses and the positive feedback from trainees and graduates.

- ✓ The training content and its didactical preparation are assessed as comprehensive and well-structured, with a good balance between theoretical and practical components. They are customized to the diverse target audience and continuously adapted based on feedback. However, some trainees and graduates suggest further adjustments, such as increasing the proportion of practical demonstrations and incorporating more cross-disciplinary and soft skills.
- ✓ The concept and design of the initiative are considered appropriate in relation to the long-term objectives of the German Development Cooperation and Knauf. The Competency-Based Training (CBT) approach, the accessibility of the trainings, and the collaboration with industry partners are seen as relevant for the professional development of the participants. However, the lack of accreditation of the courses by national authorities is identified as a potential limitation for the trainees' job opportunities.

Coherence

- ✓ The KTI is generally aligned with the strategic objectives of the develoPPP Classic program, as it aims to establish TCs to improve the technical qualifications and employability of young people, students, and skilled workers in the field of drywall construction and related products. This aligns with the program's focus on skills development, job creation, and innovation through technology transfer to promote sustainable economic growth in the Global South.
- ✓ However, the initiative's contributions to direct and indirect job creation are plausible but not measurable due to external factors rooted in the respective national socio-economic and political frameworks. The TCs are willing to strengthen their training capacities through partnerships with other educational institutions, German organizations, and construction companies, but these synergies are not yet sufficiently institutionalized and have been further impeded in phase I by administrative hurdles and COVID-19.
- ✓ The KTI is in line with the national strategies of the partner countries to satisfy the industry's demand for a qualified workforce and improve the employability of young and unskilled individuals. While the partner countries' strategic objectives and development plans do not explicitly mention further education in the construction sector, the anecdotal references gathered during the case study visits indicate that the initiative is considered a valuable instrument, particularly for (re-)integrating low-skilled youth from precarious backgrounds into society and providing them access to economic activities.
- ✓ The TCs do not appear to be actively collaborating with other donor organizations or embedded in local structures and relevant donor-funded activities in the implementing countries. They rather seem to operate independently, without any sign for coordination or alignment with other development initiatives.

Effectiveness

- ✓ In phase I, the initiative has largely overachieved its targets for the number of TCs and trainees, with some countries performing better than others. However, the data on job creation lacks clarity and reliability. The initiative was successful in disseminating its training content beyond the TCs, with several MoUs signed with universities and vocational institutions.
- ✓ For phase II, the implementation is also on track, with the number of established TCs and vocational institutions integrating drywall training exceeding the targets at current state. The initiative is reaching the intended target groups, primarily installers, technicians, consultants, and students, though the participation of women, youth, and Persons with Disabilities (PwDs) is still limited in several countries.
- ✓ The quality of implementation has been challenged by various logistical, operational, and coordination issues, which the TCs have addressed through adaptability and creative solutions.

The monitoring system, however, has significant shortcomings, including methodological issues with the (immediate) participant and (six-months-after) graduate surveys, lack of reliable data on job creation, and inefficient reporting processes.

- ✓ The training staff are generally considered to have strong technical expertise, but some concerns were raised about their pedagogical and didactical skills. The TCs collaborated extensively with various stakeholders, particularly academic and non-academic education institutions, private companies, and industry associations, which has yielded benefits in terms of training venues, materials, and expertise.
- ✓ The training participants reported significant increases in their knowledge and skills, leading to improved work efficiency and quality. The trainings have also supported the personal development of participants, especially underprivileged youth and those without formal education. However, the extent of these positive outcomes varies across countries.

Efficiency

- ✓ The available resources generally met the TCs' needs, though, according to some respondents, certain activities like marketing and facility maintenance could require more funding. While the overall resource allocation was deemed positive, a few respondents noted inefficient or untimely utilization of funds, which hindered the achievement of objectives.
- ✓ Regarding the input-output ratio, the analysis shows significant variations across countries in the set-actual cost ratio and costs per trainee, ranging from 108 Euros to 2,535 Euros per trainee. This finding is not entirely satisfactory, as the vast differences cannot be fully explained by the countries' economic frameworks. On average, however, the costs per trainee appear to be in the usual range for comparable short-term construction trainings.
- ✓ The set-actual trainee ratio also exhibits considerable variances, with some countries outperforming their targets while others fell short. Successful partnerships with vocational training institutions (VTIs) and among the TCs seem to be key factors for efficiency, whereas bureaucratic obstacles pose a burden.
- ✓ At the midpoint of phase I, most activities were behind schedule, particularly in teacher training, cooperation with VTIs, and promotional efforts. Again, by the end of phase I, most targets were fulfilled, except for the full establishment of partnerships with VTIs. In phase II, the situation is mixed, with some countries on track and others lagging considerably.
- ✓ The potential to achieve the KTI's objectives with fewer resources remains unclear. The available information suggests, however, that the overall strategy is valid. Nevertheless, there may be room for cost optimization, such as through more efficient marketing efforts.

Impact

- ✓ Regarding the long-term objectives of developPPP, the KTI contributes to improved access to resources, building structures and awareness-raising, but requires strategic support to engage with governmental agencies. While the environmental impact of drywall construction is debated, studies suggest it offers slightly better performance compared to traditional materials.
- ✓ The KTI fulfills the essential conditions for additionality, as Knauf would probably not implement the initiative in all countries in the same manner without the public subsidy. However, the initiative does not exploit its entire potential for additional results, as no financial leverage effects were identified.
- ✓ The initiative's contribution to SDG 4 targets appears plausible, as the trainings provide inclusive and equitable access to quality technical and vocational education. Its contribution to SDG 8 targets is also plausible, particularly in terms of improving employability and reducing the proportion of youth not in employment, education, or training. However, its benefit for

women appear to be limited due to their lesser participation in the trainings in several countries.

- ✓ The majority of interviewees regard the training as having a positive impact on the employability of participants, allowing them to differentiate themselves, demonstrate their capabilities, and potentially negotiate better terms. However, the employment and income effects are not always straightforward, as the training may not lead to immediate increases in wages or income, and its acceptance by employers needs to be strengthened. The six-month-after surveys provide mixed results, with considerable differences between countries in terms of job acquisition and income increases, both for employed and self-employed graduates.

Sustainability

- ✓ The majority of TC representatives believe that their centers require external funding to survive, and their ability to diversify partnerships, explore alternative funding sources, and Knauf's strategic commitment are crucial factors. While some interviewees consider course fees as a viable revenue source, others doubt the willingness of people to pay for training not recognized by government authorities, highlighting the importance of formal accreditation for financial sustainability.
- ✓ Potential challenges include political and socio-economic factors, such as changes in government or international collaboration strategies that could restrict foreign investments, as well as security concerns in certain regions. Staff fluctuation is also considered a risk, as the TCs have experienced the loss of trainers, which they were able to compensate so far but view as a potential long-term threat.
- ✓ Interestingly, the interviewees do not perceive a lack of interest from potential trainees as a challenge, in contrast to the online survey results, where a third of respondents see this as a potential risk. The survey respondents attributed this to insufficient marketing, changing industry demands, increased competition, poor training quality, lack of political support, and being an unaccredited organization. To address this, half of the survey respondents report implementing counter-measures, such as awareness-raising activities, intensifying cooperation with workers' organizations, and improving quality assurance, with only one respondent considering cost reduction measures.

Recommendations

- ✓ Firstly, the significant differences in efficiency between countries, as measured by input-output ratios, costs per trainee, and the ratio of planned to actual trainees, should be thoroughly investigated, also to identify best practices and areas for improvement. This would enable mutual learning and ultimately enhance the overall efficiency of the initiative.
- ✓ Secondly, the monitoring system of the initiative must be strengthened to ensure the validity and reliability of the data, including addressing methodological issues with the surveys, the lack of reliable data on job creation, and inefficient reporting processes. The survey design needs to be improved to receive consistent data on employment and income effects, as well as on gender-differentiated impacts.
- ✓ Thirdly, the initiative should further enhance its contribution to SDGs 4 and 8 by improving the accessibility and inclusiveness of the trainings, particularly for women and persons with disabilities, and increasing the participation of underrepresented groups through targeted outreach and awareness-raising efforts. The gender-specific barriers and challenges faced by women in the construction sector should also be analyzed and addressed.
- ✓ Fourthly, the training content and delivery should be reviewed to better match the diverse needs and profiles of the target groups, with a focus on adjusting the theory-practice ratio and integrating more cross-disciplinary and soft skills, especially for young and unskilled

workers. Additionally, the pedagogical and didactical skills of the training staff should be further developed to enhance their communication, presentation, and teaching abilities.

- ✓ Finally, the post-training support provided to graduates by the TCs, e.g. by organizing show-case events/job fairs, establishing online graduate directories, providing technical guidance, and helping graduates connect with the construction sector, should be strengthened.

1. Introduction

The present report contains the main findings of the evaluation of the Knauf Training Initiative (in the following abbreviated with KTI or “the initiative”) as well as the thereof derived conclusions and recommendations. The CEval GmbH was mandated by DEG Impulse to conduct this evaluation between March and September 2024 by means of a case-study design, including primary data collections in Germany and three target countries, i.e., Algeria, Egypt and Mexico. The evaluation was implemented by a four-headed team, consisting of Dzoara Santoyo (CEval GmbH, Germany, Mexico), Mongi Bedoui (National Consultant, Algeria), Tamer El-Fouly (National Consultant, Egypt), led by Dr. Stefan Silvestrini (CEval GmbH).

The remainder of this report is structured as follows: After a summary of the background and the object of the evaluation, the evaluation objectives and criteria are briefly outlined (further details see Inception Report and Analysis Matrix in Annex 5.1 of this report). Chapter 2 describes the evaluation methodology and its data base. In chapter 3 the evaluation results are presented, structured according to the OECD DAC criteria, Relevance, Coherence, Effectiveness, Efficiency, Impact and Sustainability. Chapter 4 summarizes the key conclusions and recommendations deriving from the previously presented findings. In the annex of the report the evaluation matrix, the lists of documents and interviewees are provided as well as the applied data collection instruments and the initiative’s reconstructed results model.

1.1 Background

DEG Impulse is a 100 percent non-profit subsidiary of Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG), which in turn is a wholly-owned subsidiary of KfW Group. With the Business Support Services (BSS) and develoPPP programs, as well as through services provided by the Agency for Business & Economic Development (AWE) and the Helpdesk on Business & Human Rights, it provides companies with advisory and funding solutions for their investments in developing and emerging countries. DEG Impulse enables companies to implement these investments efficiently and effectively, thereby promoting social and ecological transition in the private sector while supporting development policy goals as defined by the Sustainable Development Goals.

Through develoPPP, which was set up by the German Federal Ministry for Economic Cooperation and Development (BMZ) over 20 years ago, the BMZ supports socially and environmentally responsible transformation in the private sector and offers financial and technical support for companies operating in developing countries and emerging-markets for innovative projects that create long-term benefits for the local population. develoPPP is implemented by two experienced partners in German development cooperation: DEG Impulse and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

DEG Impulse uses the develoPPP program to support measures by well-established enterprises (develoPPP Classic¹) as well as aspiring start-ups (develoPPP Ventures²), that wish to operate in developing and emerging countries on a long-term basis and thereby shape their business involvement in a sustainable manner. These may be companies looking to pilot an innovative technology, raise the standard of their supply chains or invest in a sustainable training program. Supported projects can be located in very different sectors and thematic areas and range from the training of local experts and piloting of innovative technologies and demonstration plants to the sustainable expansion of supply chains and the improvement of environmental and social standards.

¹ Enterprises need to be either based in the European Union, in a member state of the European Free Trade Association (EFTA) or a country on the OECD DAC list.

² This program is implemented only in selected countries and is only eligible for registered start-ups located in these countries.

The develoPPP Classic funding instrument aims at already established companies that want to invest sustainably in a developing or emerging country and expand their business activities locally. Suitable projects that are related to this entrepreneurial activity and at the same time relevant to development policy can receive technical and financial support of up to two million euros if the company contributes at least half of the costs.

What all develoPPP Classic projects have in common is that they combine a long-term business interest with a sustainable developmental benefit; this means, besides achieving a long-term business objective, it is important that the develoPPP projects also generate sustainable benefits for the local people.

1.2 Evaluation Object

One of the projects under develoPPP Classic is the Knauf Training Initiative (named in the following: “KTI” or “the initiative”), currently implemented in its second phase. Knauf International GmbH is one of world’s leading manufacturer of gypsum-based construction and insulation materials. Knauf International GmbH (project implementer) is a 99.99 percent subsidiary of Gebr. Knauf KG, a holding company bundling the group’s international business worldwide.

The main objective of the KTI is the *establishment of training centers (TCs) to improve the technical qualifications and employability of young people, students and skilled workers in the field of drywall construction and related products.*

More specifically, Knauf aims to build stationary and mobile (so-called “caravan”) TCs, which provide both practical and theoretical training modules imparting comprehensive knowledge regarding the application of drywall construction techniques. Thereby, mobile TCs are used for conducting trainings and road shows outside the cities where stationary TCs are located in order to reach target groups in remote and rural areas. The initiative is to provide people with the possibility of completing a training, which in turn should lead in the long-term to sustainable career prospects. Target groups of the trainings are installers, architects/civil engineers, academic staff and unemployed people.

By building up drywall construction knowledge and publicizing the product range in the target countries, a comprehensive “know-how transfer” to builders, planners and users of the products should be ensured. As such the initiative aims to address the existing lack of adequately skilled workers in the field of drywall as well as other gypsum-based construction materials to indirectly serve Knauf’s interest of expanding its business operations in the targeted country by making adequately trained workers available.

The duration of phase I was originally three years from March 2018 to February 2021, but was extended to February 2023 (due to COVID-19 among others) with a final project budget of 4.8 Mio Euros³. It was implemented in seven countries, including Algeria, Egypt, Iraq, Ghana, Kenya, Nigeria and Tanzania. Phase II started in July 2021 and will run for four years until June 2026 in nine countries, i.e., Brazil, Colombia, Honduras, India, Mexico, Mongolia, Morocco, Philippines and Vietnam. The total budget of phase II is 12.375 Mio Euros. Over 34,500 people are to be trained during phase II, and the objective is to continue training with over 14,000 people annually (and, therefore, for all TCs of phase I and II in total 21,800 annually) after the project duration. While Knauf International was the sole project partner in phase I, in phase II, Knauf Gypsum Philippines Inc., USG Mexico S.A. de C.V., Knauf Gypsum LLC (Mongolia) and CMPE SA (Morocco) are also involved as project partners (all of them are Knauf subsidiaries or joint ventures).

³ Of which 2.15 Mio are from public share and the remainder is private share.

1.3 Evaluation Objectives

The evaluation focuses on both phases of the KTI, thereby assessing the impact of phase I and the state of implementation of phase II. Being one of the longest and largest projects funded under develoPPP Classic, the primary objective of the evaluation is mutual learning by Knauf and DEG Impulse for further project implementation and beyond. Moreover, evaluation findings should also provide accountability to the BMZ.

In the past only few evaluations of develoPPP projects were conducted. Thus, the evaluation is eventually expected to generate methodological lessons learned and recommendations for future evaluations of large-scale develoPPP projects.

1.4 Evaluation criteria and key questions

The evaluation criteria and their respective key evaluation questions are applied following the evaluation standards of the German-speaking Evaluation Association (DeGEval) and the BMZ guidelines on the evaluation criteria.

In particular, the evaluation

1. assesses the relevance, coherence, effectiveness, efficiency and (long-term) impact of the KTI,
2. assesses the sustainability of the initiative’s results, and
3. identifies methodological lessons learned and conclusions resulting from the findings and provides evidence-based, actionable recommendations for DEG Impulse and Knauf and their future engagement, as well as for future comparable large-scale evaluations of such projects.

Table 1: Evaluation criteria and key questions

Criterion	Evaluation question
1. Relevance	1.1 To what extent do the training centers and trainings provided respond to an existing skill and knowledge gap in target countries? Are trainings appropriate to address a skill and knowledge gap of students?
	1.2 Is the concept and design of the KTI appropriate in relation to anticipated long-term objectives?
2. Coherence	Internal coherence
	2.1 To what extent is the initiative in line with strategic objectives of BMZ and develoPPP Classic?
	2.2 To what extent are there potential synergies of German cooperation in the partner countries? Are they known and used?
	External coherence
3. Effectiveness	2.3 To what extent is the KTI in line with interests of the partner country?
	2.4 Are trainings sufficiently embedded into local structures and aligned with relevant other donor funded activities in the region?
	3.1 To what extent have objectives and milestones been achieved so far? Is the current progress in the implementation ongoing as planned?
	3.2 How is the quality of implementation?
4. Efficiency	3.3 To what extent does the initiative so far achieve its objectives at target group level (knowledge and skills increase, capacity development at TCs)?
	3.4 To what extent can any unintended effects be observed?
	4.1 How well were resources/inputs provided by Knauf and DEG Impulse allocated?
	4.2 To what extent were inputs used economically in relation to achieved outputs?
5. Impact	4.3 To what extent were outputs achieved timely and within the anticipated timeframe?
	4.4 To what extent could the objectives of the initiative have been achieved with less resources or support from public sources?
	5.1 To what extent does the KTI contribute to the long-term objectives of develoPPP?
6. Sustainability	5.2 To what extent does it plausibly contribute to SDGs 4 and 8 in the countries?
	5.3 To what extent does the initiative contribute to better employment of graduates and quality of vocational education in the sector?
	6.1 To what extent are the training centers and trainings likely to be continued after the end of the funding?

In addition to the evaluation criteria, the evaluation integrates a gender perspective, in order to address the effects of the initiative on gender mainstreaming and women empowerment. Eventually, the additionality of the initiative is investigated, i.e., the extent to which further and/or more impacts were achieved through the financial support of the DEG Impulse.

2. Evaluation methodology

The evaluation followed a mixed-methods case-study design. Thereby, the evaluation team collected primary qualitative data by means of individual and group interviews in Germany as well as in the three above-mentioned target countries. In addition, the team implemented a semi-standardized online survey among TC staff (country managers, TC coordinators, trainers and administrative staff) in countries that were not visited, in order to broaden the database, and ultimately increase the representativeness of the evaluation results. Furthermore, secondary (monitoring) data provided by DEG Impulse and Knauf, including interim and final progress reports, training manuals and materials, project budget plans, invoices, feedback reports of trainers, (immediate) participant and (six-months-after) graduate online survey data, and Memoranda of Understanding (MoUs) with Vocational Training Institutions (list of documents see 5.2) were subject to a desk-study. Eventually, the evaluation team undertook a review of relevant online available literature on the topic (list of further literature see 5.3).

2.1 Data collection

Whereas the international consultants interviewed DEG Impulse and Knauf staff in Germany, the national experts liaised with the country managers, TCs coordinators and further stakeholders in the three case-study countries. The latter were also responsible for arranging and conducting the interviews in the local language, adapting the questions according to the needs of the actors involved (e.g. explain the purpose of the evaluation, rephrasing and providing examples), as well as transcribing the interviews. During the on-site visits, they investigated the dynamics between stakeholders, reviewed official documents/resources in the original language, and compiled their results in writing.

The national experts also interviewed private and public sector partners and local government authorities as well as the TC’s beneficiaries (students, installers, workers in the construction sector and public in general). Concerning the latter, they paid attention to an appropriate representation of females and males, Persons with Disabilities (PwDs), and unemployed as well as of different ages, in order to assess the direct impacts of the trainings on diverse target groups. The following table provides an overview of the distribution of stakeholders reached during the on-site visits:

Table 2: Distribution of stakeholders addressed by gender and country

Type of Stakeholder	Number of people interviewed, distributed by gender					
	Algeria		Egypt		Mexico	
	Female	Male	Female	Male	Female	Male
Implementers						
✓ Country manager/commercial director				1	1	
✓ TC coordinator		1		1	2	
✓ TC trainers/instructors		2		4		4
✓ TC administrative staff/assistants				1	1	1
Trainees/graduates						
✓ Students			1	1	1	1
✓ Installers; construction workers		4	1	13		3
✓ Architects /engineers			1	2		
✓ Other companies/associations	5	9	2	3	2	2
✓ Trainees/graduates (public in general)					3	2
Partners Private sector						
✓ Private universities						4

✓ Contractors				1		
✓ Associations/Chambers				1	2	1
✓ Distributors					1	4
Partners Public sector						
✓ VTIs, public universities	1	1		2	1	2
✓ NGOs						1
✓ Local government authorities	1				2	
Total	7	17	5	30	16	25

The guidelines created based on the evaluation matrix served to structure the interviews (discussed and approved during the inception phase), in order to ensure the comparability of interview data across different members of the evaluation team (interview guidelines see 5.5.1).

Lastly, since the case studies were limited to on-site visits in three countries and given the brevity of the feedback reports provided by the TCs instructors, the findings were complemented by the results from the online survey (survey questionnaire is attached as a separate annex to this report). The project implementer (Knauf) provided the contact information and the evaluation team created a general link to the survey, sent via email to all key staff of the TCs. To avoid double entries (one person answering the survey on behalf of more than one person), the evaluation team programmed the link to enable a one-time access from an IP address only. In total, the survey yielded 24 completed questionnaires, i.e. 12 from country managers, 2 from TC coordinators, 6 from trainers and 4 from administrative staff.

2.2 Data analysis

Primary data from (virtual/on-site) individual/group interviews, and own notes taken during on-site visits as well as secondary data, such as country reports, internal communication, contracts, project plan and descriptions, underwent a qualitative content analysis. For this, the evaluation team developed a coding scheme based on the evaluation matrix, and coded the and analyzed the data using the software MaxQDA.

Online sources (websites, PDFs, statistical data etc.) were analyzed with the aid of AI-tools such as SciSpace PDF-chat and ChatGPT 4o. While with the latter the evaluation team retrieved further background information on the implementing countries (e.g., country development plans, research studies), with the former it investigated the content of corresponding documents and further studies (cf. also 5.3) efficiently.

Quantitative data obtained from the results of the trainees’ satisfaction survey (i.e., the immediate and six-months-after surveys conducted by the TCs), as well as data from the standardized online survey conducted among TC staff, and other statistics underwent a descriptive statistical analysis (i.e., calculation of frequencies and shares, correlation analysis) with MS Excel and IBM SPSS. Where possible and meaningful, data was disaggregated by gender and country.

2.3 Limitations and coping strategies

The main limitation of the evaluation is that it is still an **ex-post facto design**, as **baseline or comparison group data is not available**, which would have allowed to include the so-called counterfactual state that would be necessary to calculate a treatment effect as in a rigorous impact evaluation. This also means that the evaluation results, as robust they may be, can only be deemed as valid for the countries where the data was collected.

During implementation, the evaluation team dealt with some practical challenges that may affect the explanatory power of the results discussed in the following and which therefore should be kept in mind when drawing conclusions:

- ✓ **Dependency on identifying and contacting potential key informants:** For this, the evaluation team relied mostly on the contact information provided by the TC directive staff in the three case-study countries. This limited having a wider range of stakeholders (e.g., other government agencies, unemployed people or women). During the onsite visits, the evaluation team offered the possibility to interview any potential key stakeholder that could be reached.
- ✓ **Low response rate in online survey:** The evaluation team contacted the key staff more than once and extended the timeframe to complete the survey. It was also communicated clearly that any information provided would be treated anonymously, and that participation was voluntary.
- ✓ **Difficulty to reach staff at the TCs:** In Egypt, there was a delay in the appointments due to holidays at the time of evaluation. The national experts offered some key persons to be interviewed by telephone in order to obtain relevant information. However, this also represents a limitation by the inability to conduct face-to-face interviews.
- ✓ **Language, gender and cultural barriers** hindered the retrieval of information, especially during the online survey. It took more time to complete the questionnaire in countries where English is not the official language. The assumption that the staff had a good proficiency in the language, proved to be not valid for all countries.
- ✓ **Ensuring a balance in gender participation informants:** The underrepresentation of female key informants (especially in management positions in Algeria and Egypt), also limited retrieving information about the context-related factors that hinder/boost female participation in the drywall trainings as well as their participation in the construction sector.

3. Results

In this chapter we present the key results according to the OECD DAC evaluation criteria Relevance, Coherence, Effectiveness, Efficiency, Impact and Sustainability. Throughout the different sections we discuss the cross-cutting issues of Gender and the Disadvantaged (e.g., youth, PwDs, minorities) wherever applicable, while the Impact section includes a discussion of the aspect of Additionality.

3.1 Relevance

The assessment of the relevance of the KTI bases on the extent to which the trainings respond to existing skill and knowledge gaps in the target countries (3.1.1) and are appropriate to address these gaps at student level (3.1.2). Furthermore, the appropriateness of the concept and design of the initiative to pursue the long-term development objectives of the German Development Cooperation and Knauf's economic objectives is scrutinized (3.1.3).

3.1.1 To what extent do the training centers and trainings provided respond to an existing skills and knowledge gap in the target countries?

The extent to which the trainings respond to an existing skills and knowledge gap in the target countries depends on the **demand for qualified workers in the construction sector** in these countries and their **skills and knowledge level**, particularly among the students, the unemployed and the professionals.

As regards the **demand of a qualified workforce**, according to recent studies (e.g., Kirchberger, 2020), the construction sector experiences a steady growth in many developing regions, fostered by shortages of housings and infrastructure in particular. Besides corruption and limited access to financing, a significant lack of skills constitutes one of the key constraints to its further development. The underlying causes of that lack are seen primarily in inadequate professional training opportunities, which specifically limit the ability of smaller and medium sized enterprises (SMEs) to remain

competitive, as well as in outdated regulatory frameworks impeding the development of suitable training programs. Ultimately, the skills gap does not only affect the growth and productivity of the sector but also the quality of constructions themselves (ibid.).

This analysis holds true for the three case study countries, Algeria, Egypt and Mexico, too. According to a trend forecast from May 2024⁴, in Algeria, after a recession in 2023, the construction sector is expected to grow by almost three percent in the course of this year, followed by an expected average growth rate of more than four percent until 2028, mainly due to investments in renewable energy, industry in general and housing. As regards the latter, the Algerian government committed itself to payment appropriations for the construction of 460,000 housing units. Local authorities and education experts (Int A04, 06, Int X) expect that this growth entails an increase in the demand for qualified workers in the sector, not at least also for drywall installers.

The situation in Egypt, the third-largest market for construction industries in the MENA region, is comparable with an estimated compound annual growth rate (CAGR) of over eight percent until 2029⁵. Likewise, representatives from the Chamber of Construction of the Federation of Egyptian Industries (FEI), private companies as well as education experts (Int E04, 07, 10, Int Y) confirm an increasing demand of an adequately qualified workforce in the construction sector with specialized skills in various crafts, including drywall installation, amongst others.

The Mexican construction sector is also about to gain momentum after a heavy economic downturn owed to the COVID-19 pandemic in the early 2020s, with an impressive backlash of +15.6 percent turnover in 2023 (CEESCO, 2024). The recovery finds its expression also in the size of its workforce, which has grown on average by 4.4 percent since May 2020, according to the latest official national statistics⁶. Not surprisingly, most respondents (Int_M02, 03, 06, 10, 12, 13, 16, 18, 19) agree that the current demand in qualified workers increases considerably, causing increasingly problems for private enterprises and owners in the execution of building projects. While some, however, also state that the demands are yet higher in traditional crafts (brick wall, wood constructions etc.), drywall systems are deemed to have great potential particularly in the public sector, such as for building malls, hospitals and offices, due to their lower installation costs.

While in the course of the evaluation it was not possible to conduct an in-depth analysis concerning the workforce demands for all other KTI implementing countries, a rough review of accessible online sources drafts a similar picture for the others. As the following table shows, projections indicate a substantial growth rate of the construction sector in all countries ranging from 2.7 percent in Tanzania to a whopping 13 percent in Vietnam.

Table 3: Projected CAGR by KTI implementing country

	Projected CAGR	Projection until	Source
Phase I countries			
Ghana	5.6 %	2027	https://oxfordbusinessgroup.com/reports/ghana/2024-report/construction-real-estate/constructive-initiatives-infrastructure-development-recognised-as-an-important-driver-of-economic-growth-for-the-country-overview/
Iraq	4.9 %	2028	https://www.globaldata.com/store/report/iraq-construction-market-analysis/
Kenya	7.2 %	2027	https://www.globenewswire.com/news-release/2024/01/09/2806049/0/en/Kenya-Construction-Industry-Analysis-Forecast-Rapid-Growth-and-Emerging-Opportunities-in-Building-and-Infrastructure-Sectors-with-CAGR-of-7-2-During-2023-2027.html
Nigeria	3.1 %	2028	https://www.globaldata.com/store/report/nigeria-construction-market-analysis/
Tanzania	2.7 %	2029	https://www.mordorintelligence.com/industry-reports/construction-sector-in-tanzania-industry

⁴ Cf. <https://www.marketresearch.com/GlobalData-v3648/Algeria-Construction-Size-Trends-Forecasts-37639345/> [09.08.2024]

⁵ <https://www.mordorintelligence.com/industry-reports/egypt-construction-market/market-size> [09.08.2024]

⁶ https://www.inegi.org.mx/app/indicadores/?ind=720504&tm=6#D720504_12 [09.08.2024]

Phase II countries			
Brazil	7.5 %	2032	https://www.imarcgroup.com/brazil-construction-market
Colombia	6.5 %	2025	https://www.researchandmarkets.com/reports/5438086/construction-in-colombia-key-trends-and
Honduras	-	-	no data available
India	6.0 %	2029	https://www.mordorintelligence.com/industry-reports/india-construction-market
Mongolia	4.5 %	2027	https://www.marketresearch.com/GlobalData-v3648/Mongolia-Construction-Size-Trend-Sector-35669887/
Morocco	3.7 %	2028	https://www.researchandmarkets.com/reports/5758715/morocco-construction-market-size-trends?utm_source=GNE&utm_medium=PressRelease&utm_code=j85hhc&utm_campaign=1928521+-+Morocco+Construction+Industry+Report+2023&utm_exec=chdomsai
Philippines	7.1 %	2028	https://www.researchandmarkets.com/reports/5767966/the-philippines-construction-market-size?utm_source=GNE&utm_medium=PressRelease&utm_code=xhxvmk&utm_campaign=1951452+-+Philippines+Construction+Industry+Report+2024%3a+Market+to+Expand+by+7%25+in+Real+Terms+in+2024%2c+Supported+by+Government%27s+Focus+on+Infrastructure+and+Energy+Developments+-+Forecasts+to+2028&utm_exec=chdomspi
Vietnam	13.0 %	2027	https://vir.com.vn/vietnams-construction-industry-expected-to-rebound-108362.html

Although these numbers must be seen in light of the respective national inflation rates, and although they reflect the complex construction sector at large with its multitude of trades (including road, railway as well as energy and water supply construction, amongst others) and not residential or commercial – let alone drywall – construction in particular, the overall trend is evident. The sector is a thriving factor for the economic development in all developing regions, which, due to its labor intensity, brings along increasing quantitative (i.e., in terms of number) and qualitative (i.e., in terms of qualification) workforce demands, as most of the above-cited publications emphasize.

Concerning the **skills and knowledge level** of the workforce in the construction sector, unfortunately, open online sources do not provide much country-specific insights. However, the interview results of the three country case-studies give some clues in that regard. Unequivocally, the respondents confirm substantial deficits of construction students but also professionals, particularly with regard to up-to-date knowledge about interior design (Int_A08, E01, 05, 07, 09, M02, 15, 16, 18, 19), insulation and energy efficiency (Int_A04, 05, 08, M10), product specifications (Int_A09, E04) as well as work safety (Int_A03), and general sectorial knowledge (Int_E06). According to a number of interviewees, these gaps are associated with a general bad reputation of construction workers, leading likewise to comparatively low wages, precarious employment as well as under- and unemployment.

Considering the developments of the construction sector at large and comparing the low educational attainment level in that sector mentioned by the interviewees with the training curricula (cf. 3.1.2 and 3.3.3 for further details), one can conclude that the trainings depict an adequate response to the skills and knowledge gap in the target countries. This conclusion is corroborated by the findings from the online survey, in which nine out of ten respondents state that the training courses are in demand or even high demand. The only question that remains is to what extent the number of people reached by these trainings accounts for a significant share of the overall need for qualified workers.

3.1.2 Are trainings appropriate to address a skills and knowledge gap of students?

The evaluation team assesses the appropriateness of the trainings to address the students' skills and knowledge gaps on the basis of the **content conveyed** and its **didactical preparation** in view of the initiative's target groups.

According to the manuals received, the trainings cover a **wide range of topics** from general company and product information, technical data, installation techniques and procedures to practical examples and case studies. The manuals contain practical examples, two- and three-dimensional info

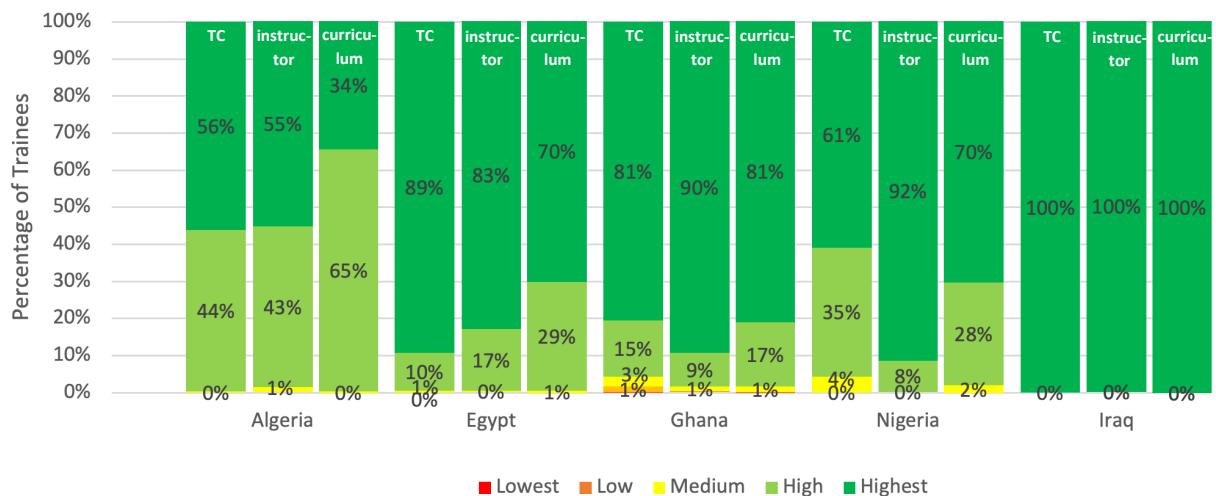
graphics as well as pictures of sample applications, and labor situations. Moreover, some presentations contain links to further information sources such as online instruction videos on YouTube.

From a layman’s perspective, the content appears to be very comprehensive yet structured logically and going from general to specialized knowledge. The trainers (Int_A05, E04, 09, M03, 16) as well as trainees and graduates (Int_A08, E05, 06, M01, 05, 14) confirm this assessment, and the latter group wish for more demonstrations and practical exercises to be included. It is important to note, however, the very prominent presentation of solely Knauf products and the accentuation of their advantages in comparison to other gypsum-based building material. The manuals leave the impression of being rather sales brochures (which they are probably based upon) than actual teaching aids.

In Algeria, Egypt, Iraq, Mongolia, Vietnam and all Latin American countries, the training material is available in the respective national language using the appropriate character sets. In all others it is available in English, which, however, constitutes the lingua franca in the respective countries. Unfortunately, the material does not provide any information on the **didactical preparation** of the trainings. Thus, the assessment of its quality relies on the feedback gathered from trainees and self-assessment of the trainers. As regards the former, besides interview data also results from graduate surveys of the training centers is available.⁷

As shown in the two figures below, the aggregated assessments of the adequacy of the training staff and instructors’ performance, as well as for the training facility and curriculum (phase I only), and for the training at large and the interest to attend further trainings (phase II only) provide an exceptionally positive picture for implementing countries of both phases of the initiative.⁸

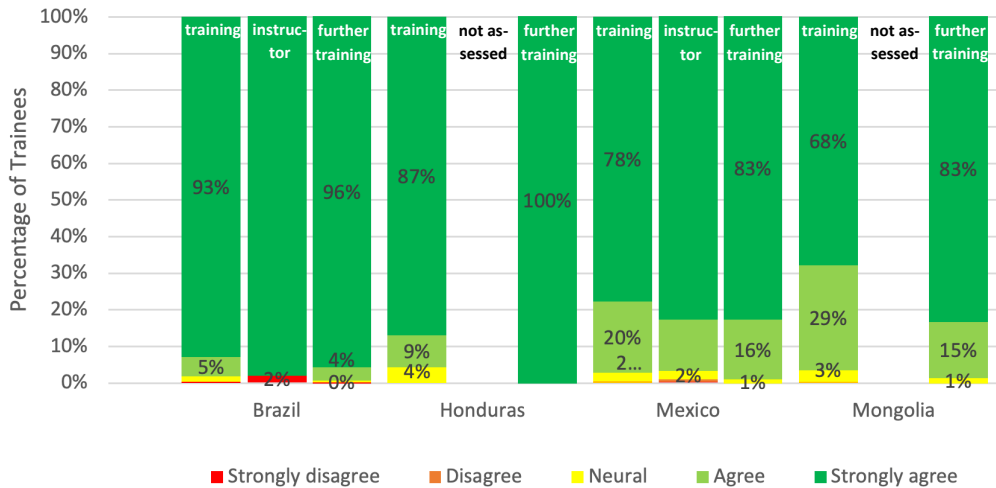
Figure 1: Aggregated assessments of TC, instructor and curriculum (sources: immediate surveys, phase I countries, n = 3,708)



⁷ According to the information from TC coordinators, these surveys were conducted immediately after the trainings. The aggregated assessments of the mentioned three dimensions base on a comparative analysis of the arithmetic means of the graduates’ assessments of several criteria on a five-point scale ranging from 1 = lowest to 5 = highest. Thereby, the aggregate assessment of the *adequacy of training facility* bases on the assessments of a) the equipment of the TC, b) the condition of the machines, tools and materials used during the training and c) the cleanliness of the TC. The aggregate assessment of the *instructor’s performance* bases on the assessments of a) the specialist knowledge of the instructor, b) the clarity of his/her explanations, c) the quality of the teaching methods, d) the possibility to interact with the instructor, e) the participation of the trainee group, f) the ability of the instructor to answer all questions and the relevance of the practical examples. The aggregate assessment of the *training curriculum* bases on the assessments of a) the course structure, b) the concreteness with which the topics were treated, c) & d) the theoretical and practical parts of the course, e) the adequacy of the technical content, f) the duration of the course, g) the extent to which the course met ones expectations, h) the applicability of the provided skills, i) the willingness to attend further KTI courses and j) ones likeliness to recommend the course to others. In all three dimensions each criterion was weighted equally.

⁸ Based partially on aggregated assessments. Scales from “lowest” to “highest” and “strongly disagree” to “strongly agree” represent worst and best possible ratings of assessment criteria. It is important to note that the figures are only comparable to a limited extent, as different questionnaires were used in phases I and II and these also differed between the countries in phase II (cf. 3.3.2 for further discussion of quality of the data collection instruments).

Figure 2: Aggregated assessments of TC and instructor (sources: immediate surveys, phase II countries, n = 1.351)

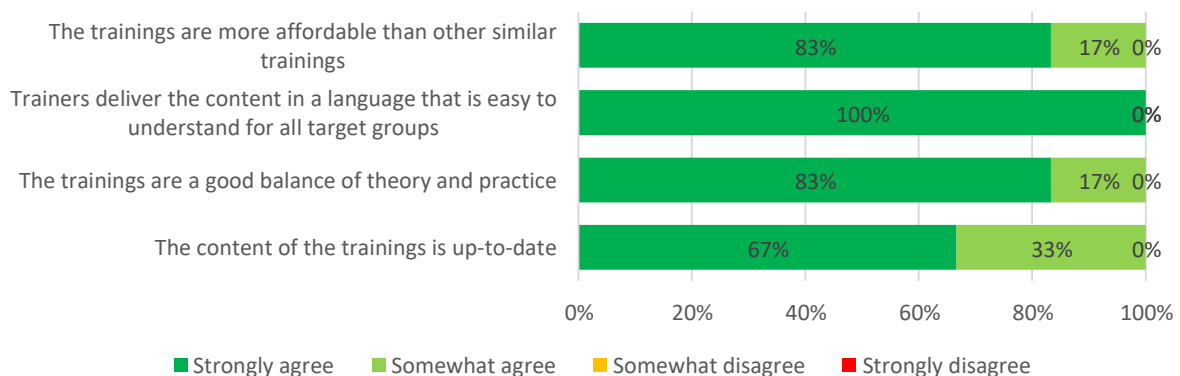


Although the reliability of the results of these surveys is questionable due to methodological deficits, as further discussed in 3.3.2, they are well in line with the findings from the interviews with the trainees, teachers and TC coordinators.

Several interviewees in all three case-study countries highlight the **customized, flexible and well-balanced course delivery** that they consider to be suitable for a diverse target audience in the construction sector, such as: housewives, unemployed, sales staff, consultants, architects and students (Int_A02, 03, 07, E01, 02, 04, 09, M01, 03-05, 14, 16, 18). These trainings would allow even those interested without a construction background, to gain a comprehensive understanding of drywall installation processes. Moreover, the **good balance between theoretical and practical components**, with an emphasis on hands-on learning and demonstrations, appears to be adequately tailored to the needs of both, supervisors focusing more on theory, and installers requiring more practical training. TC staff state furthermore that they actively solicit feedback from trainees to make adjustments to the courses, and have adapted content continuously to specific needs and requests of their target audience (e.g. adding more demonstrations, new products and systems, cost estimation, customer relationship management). In this respect, the courses appear to be a useful and necessary supplement to formal training programs at governmental vocational institutions.

Once more, the results from the online survey, (which the evaluation team conducted in the course of the evaluation among coordinators, managers, trainers and administrative staff of TCs in all implementing countries), support the qualitative findings from the interviews in the three case study countries, as the following figure shows:

Figure 3: Training assessment by TC staff (n = 24)



The very high approval ratings to all statements also speak for the representativeness of the likewise positive results obtained from the case study on this matter.

Moreover, all survey respondents declare that the **trainings address existing qualifications gaps** in the construction sector in their country, either because there are no comparable trainings available or if there are, they are considered as not to being enough to meet the demands of the industry.

Despite this overall positive assessment, the trainees and graduates but also some trainers raise critical aspects (Int_A03, 05, 07, 08, E01, 02, 04, M01, 02, 11, 14). While apparently the TCs make an effort to adapt the course content and pedagogical approach to their heterogeneous target groups, several interviewees still indicate a need for **adjustment of the theory-practice ratio** in order to match it to the participants' profiles, and for an increase in the duration and number of practical demonstration sessions. Some consider certain theoretical aspects to be less useful and without a direct link to practice. From the teachers' side, the **integration of more cross-disciplinary and so-called soft skills** as well as **safety standards** is a crucial aspect of the curriculum, particularly for young and unskilled workers with low education levels. Moreover, some perceive the focus on Knauf products only as not appropriate since they are more expensive in comparison to other building material, and thus not affordable.

As regards the **heterogeneity of the target group**, the analysis of the so-called “six-months-after survey” data, which is conducted by the TCs in the frame of their results monitoring (cf. 3.3.2 for further discussion) reveals some remarkable differences in their composition between the countries.⁹ For Algeria, Egypt and Ghana the participants rather consist of professionals than unemployed people, as almost all graduates declare that they had already a job when they attended the training. In contrast, in Iraq, Kenya and Tanzania, only between a sixth and half of the respondents say so, indicating that in those countries the share of young and unskilled may be larger. Unfortunately, the survey data does not contain any personal data that would allow to confirm or refuse this assumption.

3.1.3 *Is the concept and design of the initiative appropriate in relation to anticipated long-term objectives?*

The appropriateness of the initiative's concept and design has to reflect equally the **long-term objectives of develoPPP**, which funded it partially, and the **strategic objectives of its implementing partner Knauf**.

develoPPP aims to promote **sustainable economic development** by skills development, job creation and innovation through technology transfer with the help of private and public sector actors and therewith to improve the working and living conditions in partnering countries (BMZ, 2023).¹⁰ Moreover, the projects should not only have a development effect but should also create an added value for the partnering companies (beyond their core businesses). The long-term objectives of Knauf lie primarily in **exploring and developing new markets** to secure and extend its worldwide leadership in the field of gypsum-based construction systems by promulgating its product portfolio and safeguarding the availability of qualified installers, distributors and consumers (Int_D02). Thereby, the TCs play a crucial role as hubs to spread expert knowledge in the target countries.

The KTI follows a **Competency-Based Training (CBT)** approach, combining a comprehensive and practice-oriented curriculum, implemented in state-of-the-art facilities and tailored to different audiences, adapting continuously to evolving needs of the construction industry (Int_A03, 04, 07, E01, 02, M02, 03, 10, 11, 13). The trainings are easily accessible (i.e., short duration, usually free of charge) and implemented in collaboration with industry partners, such as distributors and contractors (Int_A03, 08, E01, M05, 11, 14) (see also Figure 3 above).

⁹ To the date of the evaluation only six-months-after survey data was available for phase I countries, except for Nigeria.

¹⁰ Cf. <https://www.developp.de/en/funding-opportunities/developp-classic/>, <https://www.bmz.de/de/themen/privatwirtschaft/developp-17062>, <https://www.deginvest.de/Unsere-Lösungen/develoPPP/index-2.html>, <https://www.giz.de/en/worldwide/114689.html> [09.08.2024]

Because of these features, participants consider the **trainings as relevant** for their professional development, i.e. for improving their qualification and therewith their job opportunities (Int_A04, 08, 09, E01, M05, 10, 15). As regards the latter, however, the respondents mention that the **training alone may not suffice to find a (better) job** in the construction industry, let alone to become successfully self-employed (cf. 3.3.3 and 3.5.3 for further details). This is mainly due to the lack of accreditation or at least recognition of the courses by the national authorities, which many deem essential. However, there are also external factors beyond the scope of the initiative such as particularly un- or de-regulated employment markets in the implementing countries, which cause construction workers to be in precarious employment.

The online survey results indicate that lacking accreditation/recognition could be a wide-spread problem in many implementing countries, since more than half of the respondents declare that the training certificates are not recognized by any governmental entity. The reasons for this might be lacking interest and capacities of the authorities and the fact that the topic is too new so that there are no experts available who could review the courses. Also, since the courses range from half-day workshops to four-day seminars, it will be difficult to find suitable accreditation schemes, not to mention that it is questionable if the shorter ones qualify for any advanced training accreditation at all.

In contrast, the training concept and the broad involvement of key sector-relevant stakeholders (cf. 3.3.2 for further details) appear to be particularly beneficial for Knauf's objective to emerge in new markets in the Global South. Knauf and TC representatives as well as regional sector experts confirm that the initiative aims to professionalize the construction workforce through the trainings. Moreover, they suppose that it contributes to creating awareness, strengthening business relationships, and increasing brand loyalty. As a result, many interviewees agree that Knauf gains a competitive advantage in the partner countries' construction sector through the initiative (Int_D02, A01, 05, 08, E01, 02, M02, 06, 09, 13).

3.2 Coherence

In order to assess the **internal coherence** of the KTI, we look at the extent to which its objectives match the strategic objectives of the develoPPP Classic program and the extent to which the potential synergies of German cooperation in the partner countries are known and used. The initiative's **external coherence** is assessed against the exploitation of its synergy potentials in the partner countries and the extent to which it is in line with their strategic interests.

3.2.1 *To what extent is the KTI in line with strategic objectives of develoPPP Classic?*

As outlined in the introduction the main objective of the KTI is to establish TCs to improve the technical qualifications and employability of young people, students and skilled workers in the field of drywall construction and related products. Such qualifications and employability are deemed as essential prerequisites for gaining an adequate income, which again is one necessary condition for decent livelihoods. This intervention logic (cf. Annex 5.6) is very much **in line with the strategic objectives of the develoPPP Classic program**, in which skills development is one line of action besides job creation and innovation through technology transfer in order to develop markets, strengthen resilience and ultimately to promote sustainable economic growth in the Global South. Furthermore, the initiative entails significant innovation potential through transferring knowledge about state-of-the-art construction techniques to the implementing countries.

These characteristics indicate that the KTI is geared well towards the program's strategic objectives. However, as we discuss further in section 3.5.3, its contributions to (direct and indirect) job creation are comparatively neglectable, due to external factors rooted in the respective national socio-economic and political frameworks. In sum it can be concluded that the KTI is generally in line with the

strategic objectives of developPPP Classic but it does not serve each of its impact pathways equally (for further discussion cf. 3.3 and 3.5).

3.2.2 *To what extent are there potential synergies of German cooperation in the partner countries? Are they known and used?*

The interviewees' responses from all three case study countries indicate that the TCs are willing to **strengthen their training capacities through partnerships** with other educational institutions such as universities and vocational schools (Int_A01, 04, E01, 07, 10, M02, 06) but also with other German organizations – GIZ is mentioned frequently in that regard – and construction companies. In Egypt, the commercial director agrees with other sector experts that offerings and outreach could be expanded by collaborating with governmental institutions and NGOs, for instance on job placement (UNIDO, Pathfinders), improving training content and exploring opportunities to accredit the training program. Apparently, some show interest in sharing knowledge and exchanging experiences between the TCs in different countries (Int_E01, M02 + 9 online survey respondents), which however, is not yet sufficiently institutionalized and was lately even further impeded by COVID-19 related travel restrictions.

Speaking about **ongoing collaborations** with other stakeholders in the construction sector and the synergies leveraged by these, the statements, however, become rather vague and names of concrete partners rare. Nevertheless, the respondents provide a few examples such as Dakinsan (a Turkish company) who provides internships for trainees and training support for the TC in Algeria, or the ElSewedy Technical Academy in Egypt, which the TC approached to receive accreditation. In Mexico, the TCs apparently are in talks with the Instituto de Capacitación de la Industria de la Construcción (ICIC), the further education institute of the Mexican Chamber of the Construction Industry (CMIC), to become an 'official' training provider. Furthermore, there are several industry partners (sto, a German plastering company, and a not further specified local refrigeration chamber producer) with whom the TCs closed an agreement for mutual trainings and knowledge exchange. Eventually, the TC in Mexico City collaborates with the local Human Rights Division and the Prevention Center of the Center for Adolescent Release Measures, a directorate of the Mexican Federal Ministry of Justice, in a reintegration program for juvenile criminals. Eventually, the TC reports to collaborate with hotel and hospitals associations, as well as with an NGO called Youth Building Communities (JCC), which works with disadvantaged and vulnerable youth who have no access to formal education, to disseminate information about training courses and schedules.

3.2.3 *To what extent is the KTI in line with interests of the partner country?*

During an intensive online search of the strategic objectives and development plans of the initiative's implementing countries, we could only retrieve little information regarding their interests in further education in the construction sector, let alone in the field of drywall installations. Nevertheless, the anecdotal references gathered during the case study visits at least indicate that the **KTI is in line with national strategies** not only to satisfy the pervasive demands of the industry for a qualified workforce, but also to improve the employability of the young and unskilled.

As already discussed in section 3.1.1, in all the initiative's countries, the **construction sector thrives and contributes significantly to economic development**, and several governments have planned large infrastructure projects as well as significant investments. At the same time, these **countries experience an increasing skills gap** not limited to, but also in the construction sector (e.g. Algeria: Lassassi & Sami, 2023, also¹¹; Egypt: IOM, 2017: 36ff, India¹², Philippines¹³, Tanzania: NACTE, 2020:

¹¹ <https://www.giz.de/en/worldwide/133681.html> [09.08.2024]

¹² <https://www.thehindubusinessline.com/news/national/labour-shortage-plagues-india-as-demand-for-skilled-workers-spike/article68355123.ece> [09.08.2024]

¹³ <https://www.jcvassociates.ph/post/hard-hats-harder-challenges-the-hurdles-faced-by-construction-consultancy-firms-in-the-philippines> [09.08.2024]

34ff, Vietnam¹⁴), fostered by demographic developments, labor migration and changing qualification requirements. This mismatch stipulates countermeasures by the national governments, which, however, primarily focus on **improvements within the formal (vocational) education system**, as in Algeria (see above), in the Philippines (NEDA, 2023: 54ff) or in Tanzania (Ministry of Financing and Planning, Tanzania, 2021: 24ff), just to name a few. Yet, what happens beyond this policy field, unfortunately, remains hidden to the external observer as this is not made explicit in government publications.

It is, therefore, difficult to assess if an initiative that acts outside ‘the system’ is in line with the partner countries’ interests or not. At least the statements of local authorities’ representatives in Algeria and Mexico (A06, M06) speak in that direction. However, they consider the trainings not primarily as a means to satisfy labor market demands, but more as a social measure to support socially disadvantaged groups. From their perspective, the **KTI is a valuable instrument particularly for (re-)integrating low-skilled youth from precarious backgrounds** into society and providing them access to economic activities to make a living. Thereby, they consider the **collaboration with the private sector as an important factor of success** for integration, which several other interviewees confirm (Int_A03, E01, M02, 17).

This finding is interesting, as it casts a slightly different light on the KTI. In some implementing countries, it appears that particularly government stakeholders regard the initiative not so much as a business-oriented intervention, but rather as a socially oriented one.

3.2.4 *Are trainings sufficiently embedded into local structures and aligned with relevant other donor funded activities in the region?*

Neither the findings from the interviews nor the results of the document analysis provide any evidence that the KTI collaborates with donor organizations other than DEG Impulse in the implementing countries (Int_A02, 03, E01, 03, M02). While in Egypt Knauf tried to establish contact with the GIZ, it was apparently not successful, since it could not identify mutual interests. Other than the implementing partners and further stakeholders already mentioned, the interviewees do not mention donors or local organizations. The initiative appears not to be active in any donor groups or other relevant networks.

3.3 Effectiveness

The assessment of the KTI’s effectiveness bases on the extent to which it is implemented according to plan (3.3.1), the quality of its implementation (3.3.2), the extent to which it has achieved its objectives at target group level (3.3.3), and on the extent any (positive or negative) unintended effects can be observed (3.3.4).

3.3.1 *To what extent have objectives and milestones been achieved so far? Is the current progress in the implementation ongoing as planned?*

For assessing the extent to which the initiative’s implementation is running according to plan, the evaluation team compared the actual values of the **output indicators** with their target values. Since the KTI project description¹⁵ clearly specifies who should be reached with the trainings, we took into account the empirical data from the three case studies and the online survey concerning the **composition of its target groups**.

¹⁴ <https://rapid-asia.com/news/future-labour-skills-vietnam/> [09.08.2024]

¹⁵ According to the project description, the “target groups of the training centres are: installers and applicators (25-70%) architects, civil engineers (10-30%), academic staff and students of vocational training schools (10-25%), and unemployed people (10-30%)”, cf. 01_Annex 1b_ProjectDescription.docx.

According to the latest available reports, there are **six indicators** to measure the goal achievement of the initiative, which refer to a) the number of established Training Centers, b) the number of trainees, c) the number of created jobs, differentiated between direct and indirect jobs and self-employment, d) the number of Knauf staff capacitated (only for phase I) and e) the number of vocational training institutions (VTIs) that integrate drywall building in existing curricula or training offers. Each indicator includes a target value that should be achieved until the end of the funding period.

As shown in the following tables, according to the Final Report from February 2023, the achievement of the output indicators varies considerably between -67 and over +5,000 percent for phase I:

Table 4: Target-performance comparison of quantitative output indicators for phase I (source: Final Report, 02/2023)¹⁶

	Algeria	Egypt	Ghana	Iraq	Kenya	Nigeria	Tanzania	Total		Ratio
								Target	Actual	
a) # of TCs	2	2	1	1	1	1	2	9	12 ¹⁷	+33 %
b) # of trainees	2,449	3,651	2,750	289	1,737	199	5,254	13,150	16,329 ¹⁸	+24 %
c) # of direct jobs ... indirect jobs ... self-employment	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	420 780 780	140 ¹⁹ 40,000 ?	-67 % +5,028 %? ?
d) # of capacitated Knauf staff	6	7	2	n.a.	2	6	4	29	27	-7 %
e) # of VTIs integrating drywall building	3 (1)	(6)	3 (1)	0	(1)	(1)	3 (2)	5	6 (12) ²⁰	+20 % (+140 %)

For the actual values of the number of TCs, trainees, capacitated Knauf staff and VTIs the report provides country specific data (which, except for the number of trainees and hired staff was verified during the document analysis). The total number of direct jobs created could be confirmed by examining the number of contracts as evidence of hiring staff or personnel. It remains, however, unclear how the initiative calculated the number of 40,000 indirect jobs created and what empirical source(s) it bases upon. Also, the reported total number of trainees may overestimate their actual number since interested persons are allowed to participate more than once. Moreover, the numbers for the different countries may not be comparable due to the different content and duration of the courses, ranging from half-day introductory workshops to advanced four-day seminars, differing target groups, as well as the fact that some trainings took place in mobile caravans while others were conducted in stationary training centers.

Irrespective of these figures, the significant overachievement of the number of TCs and trainees speaks for KTI’s effectiveness in phase I in establishing training capacities. Moreover, the successes and (at the date of the report) still ongoing activities for the integration of drywall building in the curricula and training offers of other VTIs suggest that the initiative was able to disseminate its knowledge beyond the walls of the TCs. In February 2023, six Memoranda of Understanding (MoUs)²¹ with universities and non-academic training institutions were concluded and another six were under

¹⁶ For some indicators, actual values in the summary differ from those reported in the individual country tables. In case of doubt, own calculations based on the country tables were undertaken (e.g., number capacitated Knauf staff, number of direct jobs created).

¹⁷ Including four mobile (vans) TCs.

¹⁸ Own calculation based on data from country presentations. The interim report from February 2023 states that 17,000 persons were trained (p. 3), which would equal an overachievement of 29 percent.

¹⁹ Based on interim report, as no country specific data was available. The numbers in the country columns only represent the number of hired trainers

²⁰ Number of training institutions with whom MoUs were already signed, number in parentheses indicate further pending MoUs.

²¹ While the conclusion of an MoU is not empirical evidence for the actual integration of drywall training content in existing curricula or training offers, the evaluation team tends to accept this as the ‘next best’ proxy indicator. On the one hand, it can be assumed that an educational institution will only make such an effort if it has a serious interest in cooperation. On the other hand, from the available MoUs it is clear that the cooperation is geared towards an exchange of content and the expansion of the respective training programs in the direction of drywall construction.

negotiation. Thereby, the case study findings strongly support the documentary data. Despite administrative challenges (e.g., hierarchical procedures), several TC staff and coordinators (Int_A03, E03, 05, 07, 08) report successful partnerships and collaborations with universities, vocational institutions, and construction companies. According to them the partnerships yielded several benefits such as on-site trainings, short-term trainings for students, and the exchange with academic staff. Only the accreditation/recognition of Knauf trainings by academic institutions or government authorities has not yet materialized.

The successes of the KTI in disseminating its training contents are also true for phase II, as shown in the table below:

Table 5: Target-performance comparison of quantitative output indicators for phase II (source: 3. Interim Report, 03/2024)

	Brazil	Colombia	Honduras	India	Mexico	Mongolia	Morocco	Philippines	Vietnam	Total		Ratio
										Target	Actual	
a) # of TCs	2	1	1	1	3	1	0	2	2	19	13	-19 %
b) # of trainees	1,608	0	?	?	3,270	878	0	?	1,200	34,557	21,707	-37 %
c) # of direct jobs	3	0	7	?	8	2	0	5	2	46	27	-41 %
... indirect jobs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10,367	?	?
... self-employment	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5,184	?	?
d) # of VTIs integrating drywall training	1	0	1	1	1	1	0	1	2	6	8	+33 %

Even though at the date of the 3. Interim Report the initiative’s implementation was only about half-way through, the related indicator was already overachieved by a third. The Mexico case study findings confirm this positive result in so far, as two partners (Universidad Regiomontana and the Center for Scientific and Technological Studies at the National Polytechnical Institute) declare that they just recently started to cooperate with the TC by conducting joint workshops for students and exchanging with teaching staff. Also, the progresses made in terms of the number of training centers and trainees suggest that the implementation of phase II is on track, given its remaining term of more than two years in March 2024.

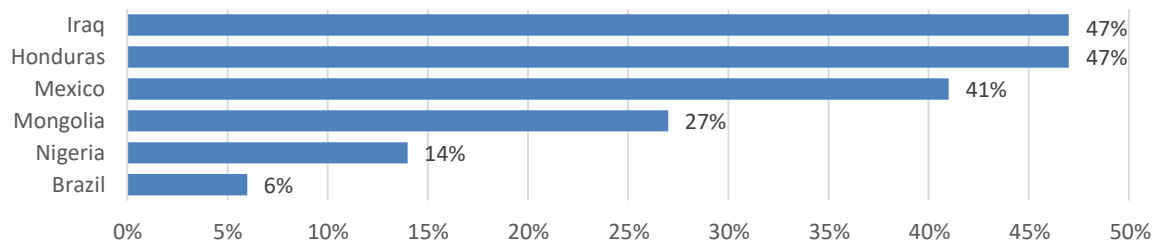
Concerning the **composition of the trainees**, the feedback from the TC staff and the background information gathered from the participants of the trainee and graduate group interviews allows to conclude, that the initiative reaches the ‘right’ persons. It turns out that most are installers, technicians, consultants and other professionals involved in construction and interior design as well as students, particularly from faculties of engineering, fine and applied arts. These interview findings are well in line with the results of the online survey, in which eight respondents state to be working with practitioners (architects, engineers, self-employed etc.), followed by four mentioning unskilled people and three unemployed persons as their target groups. Persons with Disabilities (PwDs), youth and women in particular are, however, only referred to once as training participants.

As regards the latter, at least the interviewees in Mexico indicate that women’s participation in construction-related activities is still relatively limited, especially in hands-on, physically demanding roles on construction sites (Int_M01, 06, 09, 10, 13). According to them women are more involved in administrative, supervisory, or cleaning positions. However, there would be signs of growing interest, particularly among younger generations to gain practical, hands-on experience.

The findings further suggest that particularly the TCs in Mexico are making an effort to engage and empower women in the construction sector (Int_M09, 13). They have organized specialized events and training programs as well as courses aimed at women, PwDs, and other vulnerable groups. These initiatives seem to be well-received, with a high number of interested female participants. It, however, also appears that women are interested in learning about drywall installation, not for profes-

sional purposes but for potential application in their homes. The personal data from the training surveys reveal furthermore, that the factual share of women in trainings still lacks behind expectations, at least in some countries as the following figure shows:

Figure 4: Share of female participants (source: training surveys, n = 2,743)²²



As can be seen, only in Iraq, Honduras and Mexico the gender balance among the participants is almost equal, whereas in Mongolia roughly about a quarter of the participants are female, and in Nigeria it is only every seventh. In Brazil women represent a mere 6 percent of the trainees.

3.3.2 How is the quality of implementation?

For assessing the quality of the initiative's implementation, we look at how the responsible staff dealt with **challenges and deviations from the initial planning**, the **quality of its monitoring and reporting system**, the **qualification of its training staff** and the **involvement of key stakeholders**. The basis for the assessment are interview findings and results from the online survey.

The following shows a summary of the unforeseen challenges reported by the interviewees:

Logistical and operational challenges

- ✓ The TC in Mexico navigated successfully through a complex bureaucratic process to obtain the required permits, which took much time, effort and patience (Int_M02).
- ✓ In Egypt, the TC mastered similar challenges in getting the needed licenses to renovate and restructure the TCs, especially in Assiut and Alexandria, which nevertheless caused several months delays (Int_E01).

Impact of the COVID-19 pandemic

- ✓ In Mexico, the TC had to pivot to online trainings during the COVID-19 lockdowns. Once these were relaxed, the TCs gradually moved to a hybrid format of online and in-person courses (Int_M02-04).

Coordination and communication challenges

- ✓ The TC in Mexico addressed the lack of effective dissemination and promotion by starting with training their own corporate fellows, which helped raising awareness within the organization (Int_M04).
- ✓ In Egypt, the restructuring and changes in top management led to uncertainty and disruptions in operations, with the TC team having to adapt to the new direction and procedures (Int_E01, 08).
- ✓ In Algeria, the training function became more closely linked to commercial objectives and the company's strategic goals, which allowed for better targeting of the training budget (Int_A01). Thereby, additional qualitative components were introduced to improve the trainings.

²² Unfortunately, only the surveys in the countries listed in the figure contain gender data. In all others only the names are mentioned. While the surveys only reflect the feedback from a sample of the trainees (as participation was apparently voluntary), we provide the figures based on the assumption that there is not gender related participation bias, i.e., that the probability for male and female trainees to participate in the surveys was equal.

Overall, the TCs had to rely on their adaptability, problem-solving skills, and collaboration with various stakeholders to address the challenges they faced. The interview findings indicate that the teams responded with creative solutions where possible. Nevertheless, some challenges, such as bureaucratic obstacles and the pandemic delayed the implementation of the initiative.

Again, the online survey results corroborate the interview findings: Almost half of the respondents (11 out of 24) state to have experienced challenges during the planning of the initiative, which caused delays in its implementation. The reasons mentioned comprise the impacts of the COVID-19 pandemic (5 cases), lacking or delayed permits and other rental problems (5), increased costs, partly due to inflation (4), and insufficient human and/or technical resources (4). However, apparently only a few of these challenges required substantial adaptation of the planned activities, such as the virtualization of trainings due to COVID-19 regulations (3), and the introduction of a new training format (1 case).

Implementation-related challenges comprise lack of or low interest from the target group (6), lacking stakeholder engagement (5), budget constraints (3), poor internal communication (2), general organizational issues (turnover, low productivity, poor management, etc.) (2). Measures reported to counteract low target group interest comprise door-to-door visits, information dissemination (flyers, participation radio programs, advertisement in newspaper), collaborations with VTIs and product vendors, and providing tailored trainings and on-site trainings. For improving stakeholder engagement, internal communication and curing organizational issues, the TC set up frequent team meetings, direct communication channels (e.g., WhatsApp, emails) and feedback mechanisms. Moreover, one respondent mentions that it was necessary to (re)distribute roles according to the skills of the team members.

As discussed, the initiative's **monitoring and reporting system features some significant shortcomings** which should be remedied during the second phase in order to receive reliable data for its ex-post assessment. We summarize the shortcomings, partly based on expert assessment and partly on interview findings in the following:

- ✓ The **participants and graduate surveys feature several methodological deficiencies**:
 - Firstly, to the date of the evaluation survey data is **only available for nine of the 16 countries**. Secondly, data collection tool was revised for the second implementation phase making **results between phases incomparable**. Thirdly, for phase II the **data collected is only partly comparable between countries** as in Mexico apparently a different questionnaire is being applied.
 - The **surveys are not anonymized**. Since the participants have to fill in their names in the questionnaires, they could be inclined to give a positively biased feedback, either due to social-desirability or expecting rewards or negative consequences depending on their responses.
 - Apparently, the **six-months-after survey questionnaire is not comprehensible** to all participants, as a systematic error in answering patterns reveal. The following two questions to the filter-question "Were you employed when you attended the training?" are mutually exclusive, i.e., only one of them should be answered. The question "[...], are you able to make more money because you attended the course?" should only be answered if the answer to the filter question was "yes" and the question "[...], were you able to find a job with the skills you acquired in the course?" should only be answered if the answer to the filter question was "no". As the sum of answers for both questions exceeds the total number of answers for the filter question, we conclude that several participants must have answered both questions instead of just the one that was applicable for them.

- ✓ As discussed in the previous section, the **interim and final reports lack information**, particularly as regards the number of indirect jobs created. Furthermore, several sources specified in the reports are not disclosed while others refer to the report itself (job creation, VTIs adopting drywall trainings). Moreover, whereas according to the reports, the number of trainees and created jobs should be proven by the (i.e. this) ex-post evaluation, it turned out that this was not viable due to missing contact data. Moreover, the data sources do not provide entirely consistent data, for instance figures country presentations do not always match corresponding figures in data tables.
- ✓ From the interviews, the team concludes that the **TCs struggle with time-consuming reporting requirements**, which involve various data collection tools and entering data into multiple systems, providing photographic evidence, and compiling feedback surveys (Int_E01, 04, 06, 09, M03, 04, 15-17). This seems to be inefficient, as many express the desire to streamline the reporting process. Besides, the necessity for transferring data manually increases the risk for errors, and thus impairs the reliability of the monitoring data. In that regard the **TCs wish more guidance and feedback**, and also suggest ideas for improving the process, such as using incentives to increase survey response rates.
- ✓ The written feedbacks from DEG Impulse to Knauf (e.g., Vermerk_ZB1_Knauf.docx) confirm that those responsible at the TCs are having a **hard time to comply with the reporting requirements**. According to the provided email communication, DEG Impulse staff repeatedly casts doubts about the validity of the information provided and requests missing supporting documents (e.g., trainer feedback reports, description of activities, invoices instead of contracts).

Most interviewees consider the **training staff** to have strong technical expertise and knowledge of drywall systems and products (Int_A01, 03, 07-09, E01, 09, M03, 11, 17). The trainers are commonly described as knowledgeable, approachable, and able to create an engaging learning environment. Many have backgrounds in construction, engineering, architecture or related fields that provide them with the necessary technical background. However, there are some concerns about the trainers' pedagogical and didactical skills. Several interviewees mention a lack of formal pedagogical competencies. Some trainees noted issues with the trainers' ability to manage participation, provide feedback, and adapt to the heterogeneous skill levels of the participants. To address this, the TCs in Mexico, for example, implemented a train-the-trainer program to develop the trainers' communication, presentation and teaching skills. Also, there is an exchange between trainers who have more hands-on experience (for the practical sessions) and trainers with a more technical background (for the theoretical sessions), in order to provide input, complement each other, and reduce any possible deficiencies during the trainings.

The TCs collaborate with numerous **stakeholders** on various aspects, such as with universities and other vocational schools to provide access to students, host training sessions, and give feedback on training content (Int_E08, M10, 19), construction industry associations and chambers to disseminate information about the trainings (Int_M02, 12), construction companies and distributors for gathering their clients and employees as trainees (Int_M13, 15, 18), civil society organizations to connect with youth participants (Int_M07), and also local authorities for potential collaborations (Int_A06, E02, 09).

As regards the relevance of these different stakeholder groups, the online survey results indicate that academic and non-academic education institutions play by far the most significant role (mentioned by about two thirds of the respondents), followed by private companies and other professionals, and business associations (both mentioned by about half of the respondents). In contrast, only every fifth respondent mentions to collaborate with government institutions.

The interviewees describe the communication and interaction between the TCs and these stakeholders generally as positive, with regular meetings, scheduling of activities and information sharing. However, the TCs also note some challenges, such as capacity constraints, bureaucratic obstacles and difficulties in formalizing agreements, particularly with universities and government institutions. Nevertheless, the benefits of external stakeholder involvement appear to outweigh these challenges. Several interviewees confirm that through collaborations they could obtain training venues, materials and expertise, as well as further participants. Accordingly, many TC staff indicate their interest in continuing and expanding collaborations and improving communication with stakeholders, especially to promote the trainings, explore new target groups and adapt the training content and delivery to meet the needs of a wider audience (Int_A06, E02, 04, 08, M02, 10, 13, 19).

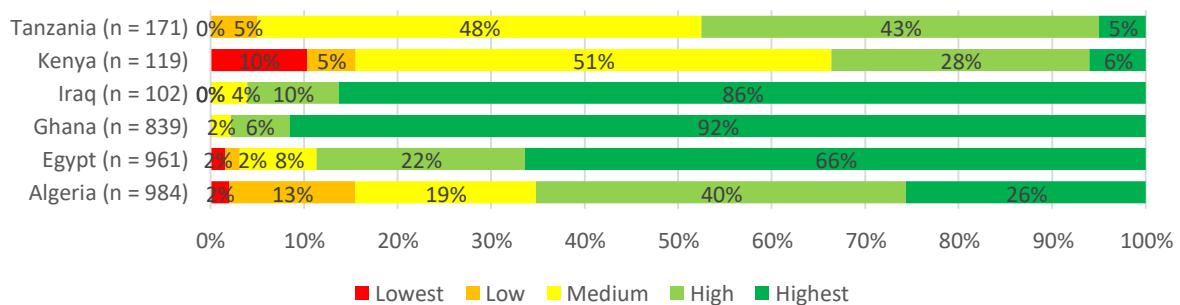
3.3.3 To what extent does the project so far achieve its objectives at target group level (knowledge and skills increase, capacity development at TCs)?

The evaluation team assesses the goal achievement at target group level on the basis of the feedback from the trainees and graduates during the interviews as well as on the aggregated assessments from the six-months-after survey. These allow for a more complete understanding of their self-perceived increase in knowledge and skills and the added value of the training for their professional development.

At large, the training participants, including installers, engineers, supervisors and students, view the training as highly beneficial and impactful for their career (Int_A07, 09, E06, M05, 11, 13, 14, 17). In that regard, they point out the increased knowledge about installation techniques, technical specifications of products and theoretical backgrounds for proper application. Many interviewees declare that the trainings allowed them to identify and avoid mistakes in their previous practices, leading to more efficient and higher-quality work. Especially students, valued the opportunity to engage in practical, hands-on activities during the trainings, which, according to their own statements, complemented their theoretical knowledge they learned at university. Eventually the trainings helped to bridge the gap between different stakeholders, such as engineers, consultants and installers, by enabling them to “speak the same language” and improve coordination.

The interviewees’ feedback matches the assessments of increased competences in the six-months-after survey by phase I participants²³ well, as the figure below shows.

Figure 5: Assessment of increased competences (six-months-after survey, all participants, phase I)



On average, more than two thirds of the respondents rate their competence increase as “high” or even “highest”. However, the figure also shows considerable differences between the feedback gathered in the different countries. On the one hand, almost all respondents in Ghana and Iraq give full approval, and at least nine out of ten respondents in Egypt. On the other hand, only two thirds in Algeria are of this opinion and in Tanzania not even half of the respondents, in Kenya only roughly a third, respectively. Since it was not possible to explore the reasons for these differences during the

²³ For phase II of the KTI no sufficient six-months-after survey data is available for a quantitative analysis.

evaluation (as no primary qualitative data could be collected in these countries) and the consequences for the future operations of the TCs in these countries could be severe, it is highly recommendable to follow up on this issue and take appropriate countermeasures (e.g., revise/adapt training content to specific needs in the respective regions).

As regards the added value of the trainings in terms of the practical applicability of the learned knowledge and skills, the interview findings draw a positive picture (Int_A07, E01, 10, M06, 12, 13). All graduates confirm that they already made use of the learnings in their daily work, may it be for improving installation quality and efficiency (see above), reducing installation time or just being able to understand the differences between materials and brands. To this effect, contractors emphasize the trainings’ impact on Knauf’s brand positioning and customer loyalty. Beyond knowledge and skills increase, the trainings appear to support the participants’ personal development, especially of underprivileged youth and those without formal education. Some interviewees declare that the certification gives them a sense of pride and professionalism.

Again, the six-months-after survey results complement the interview findings, however, with the same response pattern as outlined above. As the following two figures show, in Iraq, Ghana and Egypt the overwhelming majority assesses both, the applicability of the trained skills and their factual application positively, whereas the responses from Egypt, Algeria and Tanzania are somewhat more diverse.

Figure 6: Assessment of applicability of trained skills (six-months-after survey, all participants)

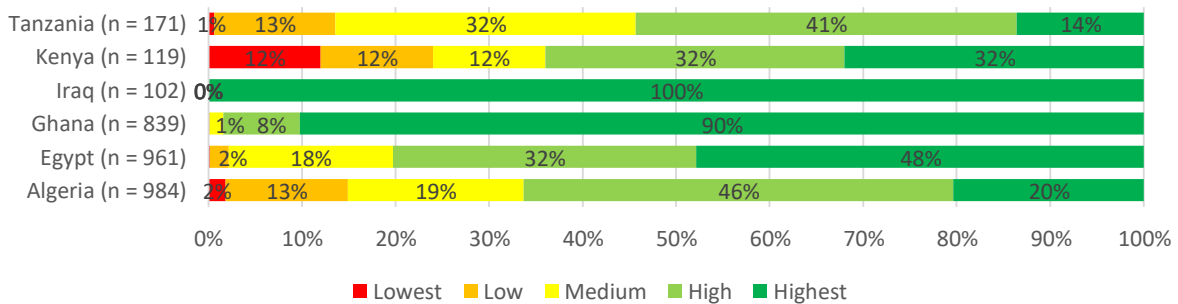
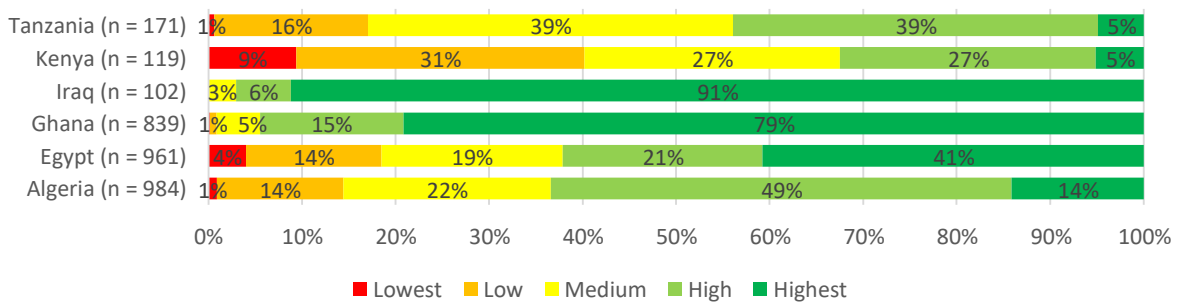


Figure 7: Application of trained skills (six-months-after survey, all participants)



It is striking that in Kenya only a third of respondents reports to have applied the skills learned during the training. Thus, what has been recommended above applies here as well. The causes for these comparatively negative results should be further investigated in order to improve the added value of the trainings for their participants. Even if the causes are beyond the sphere of influence of the initiative (e.g., no application due to no job opportunities), the KTI should undertake appropriate countermeasures (e.g., relocation of TCs) to ensure its effectiveness.

3.3.4 To what extent can any unintended effects be observed?

While the project was effective in various respects, there were hardly any unintended results. We summarize the few ones we detected, as follows:

- ✓ In 2023, the Mexican TC provided trainings to victims of the Hurricane Otis in Acapulco to enable them to rebuild their homes and businesses (3. interim report, Int_M16). Since the participants of these trainings do not necessarily belong to the initiative's target groups, and as this was apparently a spontaneous response to an acute crisis, these trainings can be regarded as a contribution transitional aid, which was not planned .
- ✓ As several trainers declare, the initiative did not only reach professional installers and youth and unemployed who want to become installers, but also persons (particularly women, see above) who were just generally interested in drywall installation for their private purposes, i.e., for renovating their homes by themselves. Since the training content was not designed for such laymen, this could also be regarded as an equally positive and negative side-effect. On the one hand it is positive, as it saves costs at individual level, and on the other hand it is negative, as this may take away working opportunities for professionals.
- ✓ Interviewees in Mexico state that they have heard of participants who intend to migrate to the United States or Canada after the training, as the demand and wages for skilled workers are supposed to be considerably higher there, which is seen as a window of opportunity to increase income.
- ✓ Another, yet rather theoretical side-effect at impact level is the initiative's potential contribution to the reduction of the energy consumption of housings and therewith, at least indirectly, of the emission of greenhouse gases. Several interviewees state that drywall constructions are more energy efficient than traditional brick-wall constructions due to their better insulation characteristics. However, in the course of the evaluation it was not possible to conduct a product life cycle analysis in order to confirm or refute assumption (see also 3.5.1 for further discussion of the initiative's potential environmental impacts).

3.4 Efficiency

For assessing the efficiency of the KTI, we looked at the **resource allocation**, the **economic use of the inputs in relation to the achieved outputs**, the **timeliness of their achievement** in relation to the overall implementation schedule of the initiative, and the question **if its objectives could have been achieved with less resources**.

3.4.1 How well were resources/inputs provided by Knauf and DEG Impulse allocated?

Most interviewees confirm that the **available resources met the TCs' needs** and that the budget was generally sufficient to cover the necessary expenses (Int_A01, 03, E02, 04, 08, 09, M02, 17). However, the TCs staff also notes that some activities could require more funding, such as marketing, outreach and dissemination activities to increase the target groups' awareness about available trainings. According to them, operational costs, e.g. for refurbishing training facilities and maintenance of training equipment (e.g., air conditioning, water filters, wall repainting), as well as for obtaining necessary government permits for the TC operations are not sufficiently budgeted for. Particularly the expenses for the latter appear to be significantly higher than expected by some in the beginning.

Some interviewees also suggest to allocate more funds towards trainer development, diversifying training offerings and strengthening partnerships with VTIs. A few note that the funds were not being utilized efficiently or in a timely manner, which hindered the ability to achieve the intended objectives in the given timeframe (cf. 3.3.2). Others add that inflation and exchange rate fluctuations diminished the actually available amount in comparison to what was initially planned for. On the other

hand, the majority indicates a proper allocation of the resources, and does not see any major areas for improvement in how they could have been used.

The results of the online survey confirm this overall rather positive assessment of the resource allocation, as four out of five survey participants confirm that all planned activities could be implemented with the received funds.

3.4.2 To what extent were inputs used economically in relation to achieved outputs?

The **allocation efficiency** refers to the input-output-ratio of a given intervention, that is in this case the relation between the budget spent on the KTI and its achievements at output level, measured by the output indicators specified in 3.3.1. However, due to lacking reliable country specific data on (direct and indirect) jobs created, we only compare the costs of the initiative with the number of achieved trainees only. Furthermore, we compare the actual number of trainees and costs with the planned number of trainees and estimated costs at the beginning of its implementation. Since for phase II no final figures are available, the analysis is limited to the first phase.

As the following table shows, the countries feature considerable differences in both, the set-actual ratio of trainees and costs, and the costs per trainee.

Table 6: Set-actual cost ratio, costs per trainee and trainee ratio by country, phase I²⁴

	Algeria	Egypt	Ghana	Iraq	Kenya	Nigeria	Tanzania	Total
Start of trainings	03/2021	01-12/2022	04/2019	12/2019	08/2019	12/2021	07/2018	
Estimated total costs	1,885,500 €	1,407,940 €	668,850 €	699,900 €	240,000 €	674,550 €	566,250 €	6,142,990 €
Actual total costs	263,328 €	993,101 €	866,713 €	732,707 €	191,799 €	470,469 €	598,477 €	4,116,594 €
Set-actual cost ratio	-86 %	-30 %	+30 %	+5 %	-20 %	-30 %	+6 %	-33 %
Costs per trainee	108 €	272 €	315 €	2,535 €	110 €	2,364 €	114 €	252 €
Planned no. of trainees	1,200 ²⁵	3,000	1,000	600	500	800	1,000	13,500 (8,100)
Factual no. of trainees	2,449	3,651	2,750	289	1,737	199	5,254	16,329
Set-actual trainee ratio	+104 %	+22 %	+175 %	-52 %	+247 %	-75 %	+425 %	+21 %

Looking first at the **set-actual ratio of costs**, the vast difference in Algeria strikes the eye, which stands in contrast to the in comparison relative proportionate variations of +/-30 percent in all other countries. The documentation, however, reveals that the implementation in the country was significantly behind schedule at the date of the final report, in addition to switching to the mobile caravan to provide rapid training, which at least could partly explain this finding.

However, against this backdrop, the high number of 2,449 trainees reported (2023-02 Overview Algeria.pdf) astonishes even more. Dividing the actual expenses, as specified in the country specific annexes of the final report, by the also therein reported total number of trainees, the costs per capita range between 108 Euros (in Algeria) and 2,535 Euros (in Iraq), which is over 22-times more. While we can safely assume that the countries differ considerably in their economic frameworks (e.g., wage and price levels, inflation rates), this cannot explain these vast differences. Also, the statistically significant inverse correlation between the number of trainees and the per capita costs²⁶ – which is plausible, as unit costs typically decrease by the number of units due to economies-of-scale effects – does not constitute an entirely satisfactory answer. As mentioned (cf. 3.3.1), unfortunately, no further information on course durations, sizes and mode of delivery in the different countries is available which would allow a more in-depth analysis of this finding.

²⁴ Sources: Final Report, 02/2023, Annex 3_Calculation-Knauf-G0096.xlsx, country presentations. Set-actual ratio is calculated as the actual total costs divided by the estimated total costs minus one (hundred percent). The costs per trainee is calculated as the actual total costs divided by the number of trainees.

²⁵ According to a contract amendment this number was increased to 2,100 (cf. 3. Vertragsergänzung Sept 2020.pdf). However, in the interim and final reports, still 1,200 is mentioned as target.

²⁶ I.e. the more trainees, the lower the per capita training costs. A one-sided (since the direction of the relation is known) correlation analysis of the total number of trainees and the per capita training costs yielded a Pearson correlation coefficient of -0.787 with p < 0.05.

Despite this surprising finding, the **average costs per trainee** of all countries appear to be in the usual range for comparable short-term trainings in the construction sector, as a quick online search reveals. The following table provides an overview of three academic and non-academic training providers, based on published prices, recalculated in Euro at current exchange rates for 24 hours of training²⁷:

Table 7: Prices of comparable short-term trainings

Price in EUR	Hours	Price per 24h	Provider: Source
649 €	64	243 €	University of Cape Town: https://uct.ac.za/continuing-education/partners/2u-edx/construction-management
183 – 274 €	30	146 – 219 €	Occupational Safety and Health Administration: https://www.hsestudy-guide.com/osha-30-hour-construction-training-course/
42 €	3 (unit)	336 €	Fresno City College: https://www.fresnocitycollege.edu/academics/divisions/applied-technology-division/construction.html

Although the content of these trainings may differ from the KTI trainings, the figures indicate that their average per capita costs are quite similar to the prices charged by commercial training providers.

The **set-actual trainee ratio** shows again considerable variances between the countries. Looking into the interim reports, the information provided give some explanations on their causes. While in Iraq the start of trainings had to be postponed due to the unstable security situation and COVID-19, in Nigeria apparently the search for a suitable training facility and struggles with local authorities added to the delay of the implementation process, which ultimately decreased the number of trainees until the end of the reporting period.

In contrast, the out-performance of Tanzania is rooted in successful partnerships with sector associations (i.e., Architects of Tanzania, Engineers Registration Body and the Tanzania Institute of Quantity Surveyors), which allowed the TC to hold workshops for their members. In Ghana, the TC also managed to carry out trainings at partnering VTIs, such as the Kanesie Senior Technical Highschool, the Tema Technical School, and several centers at the National Vocational Training Institute. The team in Kenya was able to minimize the delays induced through COVID-19 by switching to online seminars. Furthermore, we suppose that the collaboration between Kenya and Tanzania in developing training manuals and marketing activities contributed to the efficient implementation of the initiative in both countries.

Overall, it appears that the successful collaboration with vocational training providers and among the TCs increases the initiative's efficiency, whereas particularly bureaucratic obstacles pose a burden to it.

3.4.3 To what extent were outputs achieved timely and within the anticipated timeframe?

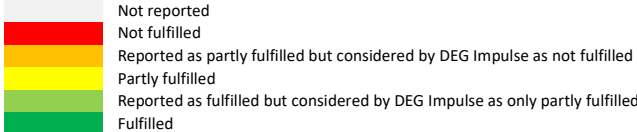
In order to assess the timeliness of the initiative's implementation, we compare the target achievement in the different countries as documented in the interim and final reports with the schedule outlined in the initial project plans²⁸.

²⁷ According to the interview findings the trainings have an average duration of three days, which corresponds to 24 training hours.

²⁸ I.e., 02_Annex2_Project Plan-rev3-fin.docx for phase I and 03_Annex 3_Project Plan_amended version B-clean for phase II. Since Morocco just joined in February 2024, it is not included.

Table 8: Implementation status according to reporting (sources: interim and final reports, and feedback from DEG Impulse)

Country	Phase I						Country	Phase II		
	Report	1. IR	2. IR	3. IR	4. IR	FR		1. IR	2. IR	3. IR
	Period under review	04/18-05/19	06/19-03/20	04/20-03/21	04/21-03/22	04/22-02/23		07/21-01/22	02/22-02/23	02/23-02/24
Algeria	I. Project Coordination						Brazil			
	II. Establishment of TC									
	III. Training material development									
	IV. Teacher training									
	V. Knowledge transfer (trainings)									
	VI. Cooperation with VTIs									
	VII. Promotional activities									
Egypt	I. Project Coordination						Colombia			
	II. Establishment of TC									
	III. Training material development									
	IV. Teacher training									
	V. Knowledge transfer (trainings)									
	VI. Cooperation with VTIs									
	VII. Promotional activities									
Ghana	I. Project Coordination						Honduras			
	II. Establishment of TC									
	III. Training material development									
	IV. Teacher training									
	V. Knowledge transfer (trainings)									
	VI. Cooperation with VTIs									
	VII. Promotional activities									
Iraq	I. Project Coordination						India			
	II. Establishment of TC									
	III. Training material development									
	IV. Teacher training									
	V. Knowledge transfer (trainings)									
	VI. Cooperation with VTIs									
	VII. Promotional activities									
Kenya	I. Project Coordination						Mexico			
	II. Establishment of TC									
	III. Training material development									
	IV. Teacher training									
	V. Knowledge transfer (trainings)									
	VI. Cooperation with VTIs									
	VII. Promotional activities									
Nigeria	I. Project Coordination						Mongolia			
	II. Establishment of TC									
	III. Training material development									
	IV. Teacher training									
	V. Knowledge transfer (trainings)									
	VI. Cooperation with VTIs									
	VII. Promotional activities									
Tanzania	I. Project Coordination						Philippines			
	II. Establishment of TC									
	III. Training material development									
	IV. Teacher training									
	V. Knowledge transfer (trainings)									
	VI. Cooperation with VTIs									
	VII. Promotional activities									
Vietnam							Vietnam			

Caption:


For phase I the table shows that approximately at half time (i.e., reporting period of the 3. Interim Report, 04/20-03/21), except for Ghana and Tanzania, in all countries most activities were clearly behind schedule. In particular the targets related to teacher trainings, cooperation with VTIs and promotional activities were only partly or not fulfilled in most cases. As already discussed, the reasons therefore are mainly the impacts of the COVID-19 pandemic and the therewith associated social distancing regulations, and lengthy administrative processes (e.g., permissions, leasing) that that were underestimated by many.

It is all the more remarkable that at the end of phase I most objectives were achieved, with only the cooperation with VTIs in five of countries left to be fully accomplished. Again, it appears that not only establishing MoUs but also putting them into practice, in terms of knowledge transfer, joint trainings and adopting content require more efforts than planned.

As regards phase II, the situation looks quite similar with yet even bigger differences between the implementing countries. As shown in the last column, while in Brazil, Mongolia and partly in India, things appear to go as planned, the other countries lag considerably behind. However, these differences may be explained by the longer period in which the individual countries joined the initiative, ranging over a period of more than two years, i.e., between November 2021 (Honduras) and February 2024 (Morocco). The report narratives, however, allow the assumption that all phase II countries are so far on track with by trend less delays as the phase I countries. Yet, it is too early for a final verdict on the implementation timeliness, given the fact that the initiative's term is almost another two years.

3.4.4 To what extent could the objectives of the KTI have been achieved with less resources or support from public sources?

While it was not the purpose of the evaluation to conduct an in-depth financial analysis, the results discussed in 3.4.1 and 3.4.2 suggest that the **resources were spent efficiently**. The available offers, contracts, invoices and further documents give **no indication for overpayment or racketeering** by any means. Moreover, none of the interviewees could imagine alternative approaches to convey the skills and knowledge to the initiative's target groups or to significantly increase their number with the given funds, maybe except for allocating more to marketing efforts, as mentioned above. So, while the overall strategy of the initiative appears to be valid for achieving its objectives, it remains unclear if there is a nameable potential to decrease the costs in detail, for instance by choosing other rental agencies or equipment providers.

As regards the availability of other public sources, according to the interviewees statements and survey results that will be discussed in the Sustainability Chapter (3.6) there is no indication that such sources are available to implement the KTI in the same way as it is implemented to date.

3.5 Impact

The impact of the KTI is assessed on the basis of its **contribution to the long-term objectives of the develoPPP program** (3.5.1), the **extent to which it plausibly contributes to SDGs 4** (ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all) **and 8** (promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all) in the countries (3.5.2) and to **better employment of graduates and the quality of vocational education in the sector** (3.5.3).

3.5.1 To what extent does the initiative contribute to the long-term objectives of develoPPP?

The long-term objectives of the develoPPP program comprise:

- a) creating and securing good employment for employees, measured in the number of employees whose employment situation has improved through improved quality of work and the number of jobs directly created with local companies and suppliers,
- b) increasing and/or diversifying available local income and/or resources, measured by the number of people in the target group whose annual income rose by at least 20% by comparison with the situation at the start of the intervention,
- c) improving access to resources, services and products relevant to development, measured by the number of beneficiaries/consumers reached whose access was improved,
- d) protecting natural resources, measured by the tons of CO₂ and liters of water saved, as well as hectares of forest, protected areas etc. protected/rehabilitated,

- e) building structures and raising awareness for local companies, institutions, politicians and the professional public, measured by the number of local actors cooperated with/who were provided with content.²⁹

Since the aspects under a) and b) are discussed in section 3.5.3, the following analysis will be limited to the KTI's contribution to improved access to resources, protecting natural resources as well as building structures and awareness raising. Furthermore, the aspect of additionality of the initiative is scrutinized.

Ad c) As regards access to resources, KTI represents an educational service that is offered at no charge to its target groups. Thereby, the trainings are designed for a wide audience, including women, youth, PwD, as well as unskilled and unemployed persons. Since it does not require any formal qualification, certificates or other prerequisites, it can be considered as a **low-threshold service** that in principle is accessible for almost anyone who is interested in drywall construction. The accessibility of the trainings is limited only by the geographical distance within which potentially interested participants can reach it in a reasonable time and at a reasonable cost. Furthermore, as already discussed in section 3.3.3, the trainings are relevant to the personal (professional) development of their target groups. The initiative's target groups development again is relevant – at least on a small scale – for the economic development of the partner countries, as they are representatives of the countries' workforce. Eventually, as alternative training services are scarce to non-existent in the implementing countries (cf. 3.2.2), the initiative can be considered an improvement of the access to developmentally relevant services for up to date roughly 21,000 persons.

Ad d) The question about the extent to which the initiative has contributed to protecting natural resources is by far more difficult to answer, as it requires a thorough understanding of the overall environmental balance of drywall constructions in comparison with traditional construction techniques, such as brick-wall or wood-based building. While it was not possible in the frame of the evaluation to conduct an in-depth comparative product lifecycle analysis of the different techniques, we gathered at least some hints through a brief online search for research publications on the issue. The studies found (Martins, 2024; Samad & Yahya, 2016; Tae et al., 2011) indicate that at large, gypsum-based building material offer a **slightly better environmental performance** compared to traditional materials. Their advantages include less use of raw materials, and thus of natural resources (particularly in comparison to concrete and brick-wall materials), reduced waste generation³⁰ through prefabrication and recyclability, and better thermic insulation characteristics, which again decreases the energy use of buildings and ultimately their carbon footprint. On the downside, the extraction of gypsum and the prefabrication of construction modules are considered to be more energy intensive than manufacturing processes of traditional components. While the use of recycled gypsum and more energy efficient production facilities (e.g., powered by solar or wind energy) are supposed to improve the eco-balance of drywall construction in the future, at present it remains debatable if the advantages outweigh its disadvantages on the whole. Moreover, recent studies (Rodrigo-Bravo et al., 2024) yet presume that other alternatives, such as sustainably sourced wood or composite materials, based on recycled polymeric waste, feature an even higher environmental potential.

Ad e) As already discussed under Relevance (3.1), the TCs reach out to various stakeholders in the public and private sector in order to achieve their goals, i.e., to gain trainees, to improve the trainees' chances to get a job, and to include drywall trainings in curricula of other VTIs. The outlined achievements indicate that these outreach activities were mostly successful in terms of raising awareness among the target groups, construction companies and academic and non-academic training provid-

²⁹ Cf. <https://www.developpp.de/en/funding-opportunities/developpp-classic/>, <https://www.bmz.de/en/>

³⁰ It has, however, also noteworthy in that regard, that in many countries such as Mexico drywall construction waste is considered special waste which cannot be disposed of with regular waste but requires a special permit and is thus quite costly to dispose of.

ers, as evidenced by the number of participants, collaborations and MoUs (cf. 3.2.2). Solely **governmental agencies appear not to show the desired interest** or have not been approached adequately. Based on the TC staffs’ feedback, it also remains questionable whether they have the power and capacities to convince this stakeholder group on their own. The findings rather give the impression that the **TCs require strategic support** in this regard, may it be from Knauf Germany, DEG Impulse or the BMZ directly to approach policymakers at the “right” level and win their support.

A final aspect, that we specifically examined is the aspect of **additionality of the KTI**, i.e., the extent to which further and/or more impacts were achieved through the financial of the DEG Impulse. In order to decide if an intervention features additionality, the Donor Committee for Enterprise Development (DCED, 2014) has developed a decision-making flow chart, containing eight questions that should be answered by yes or no. The answers to these questions suggest that whereas the initiative fulfills the essential conditions for additionality, it does not exploit its entire potential for further additional results, as the following table outlines.

Table 9: Analysis of the additionality of the KTI (based on the DCED criteria).

Questions (adapted to the KTI)	Answers
1. Does Knauf have insufficient funds to self-finance the project?	Yes and no. On the one hand, according to the feedback from Knauf staff and based on the publicly available business data about the company, in principle it has the financial means to implement the initiative by its own. On the other hand, the country units themselves do not have the funds to finance a TC.
2. Does Knauf lack the knowledge or competencies to design and/or implement the KTI in a way that maximizes poverty-reducing or other development impacts?	No , Knauf has the professional expertise to design and implement the KTI in the same way as it is currently implemented with the support of DEG impulse. Knauf does neither receive nor require any other support than the budget support in order to achieve its development impacts. ³¹
3. Would Knauf be unwilling to implement the KTI without the public subsidy because of a perceived negative balance of costs/risks and benefits?	Yes , Knauf would at least not implement the KTI in all countries where it is currently active. According to its representatives, the support from the German government was key to the decision to invest also in countries with lesser economic development growth potential and fragile conditions (e.g., Iraq, Tanzania). While it was also stated that Knauf will most likely continue with its world-wide training efforts, the feedbacks suggest that without the support the decision where to invest would follow more strictly economic priorities.
4. <i>Knauf cannot access other financial support required for the implementation of the KTI.</i>	<i>Not applicable.</i>
5. The KTI does not displace other companies already operating in the market, or that are ready to undertake the same project without public support.	No (at least not in the three case study countries) , according to several interviewees (Int_A01, 02, 04, 05, E01-03, 09, 10, M04, 06, 07, 14, 16-18) no other companies provide comparable trainings with particular focus on drywall installations. While in Algeria and Mexico a few (Int_A02, 04, 05, M02, 06, 09) report that other construction-related trainings are available ³² , they are considered to be rather general and theoretical and thus not really comparable with the Knauf trainings. However, for the other countries, the online survey results indicate that in India (Saint Gobain), Kenya (MRM, Crown Paints) and Mongolia (company not mentioned) other private-financed trainings are available. Unfortunately, it could not be further investigated to what extent these trainings are comparable with the KTI and if the initiative compromises the efforts of the funders of these other trainings.
6. The financial support of the KTI does not duplicate other donor-funded support.	Yes , since Knauf is a German for-profit-organizations there is no evidence for funding opportunities of the initiative through other donor organizations.

³¹ The knowledge or competencies of a company to design and/or implement an intervention is actually a requirement to receive DEG support because it must be fully implemented by the company. If a company is not able to implement it, it can apply for the GIZ model which supports the company with technical assistance instead of direct funding.

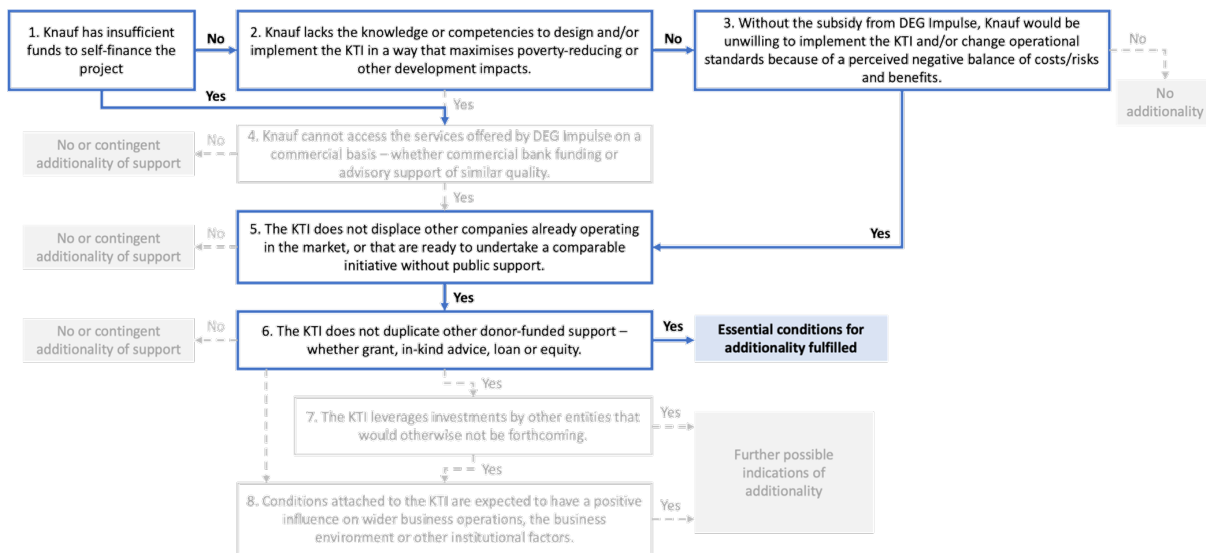
³² E.g., in Mexico: <https://icic.org.mx/catalogo-de-cursos/ec0409-construccion-de-muros-y-plafones-a-base-de-placas-de-yeso-en-interiores-2/> [09.08.2024]

7. The financial support of the KTI leverages investments by other entities that would otherwise not be forthcoming.	No , neither the empirical data nor the provided documents give any indication for investments of other entities that was leveraged by the initiative.
8. The co-financing of the KTI is expected to have a positive influence on wider business operations, the business environment or other institutional factors for Knauf.	No , no evidence could be found that the co-financing has any effect on the business operations of Knauf, its environment or other institutional factors. Due to the neglectable volume of the initiative in comparison to the total turnover of the company such effects can also not be expected.

Based on these findings, we conclude that the **KTI fulfills the essential conditions for additionality**. Though, while the last aspect can be ignored, given the size of Knauf, the fact that no financial leverage effects could be identified leave **some room for improvement**, as the acquisition of further funding would not only improve the allocation efficiency of the KTI but also increase its outreach, e.g., in terms of number of TCs, trainings and participants.

The following flow-chart illustrates the pathway to the answers above:

Figure 8: Additionality of the KTI (adapted wording from DCED, 2014)



3.5.2 To what extent does the project plausibly contribute to SDGs 4 and 8 in the countries?

Since the limited magnitude of KTI’s impacts does not allow a causal analysis – in the sense of a counterfactual attribution or contribution analysis – at the level of high-aggregated developmental impacts, the extent to which the initiative contributes to SDG 4 and 8 bases on an examination of the plausibility of causal relations between its objectives and relevant SDG targets.³³

As regards SDG 4 “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”, contributions appear plausible to targets

- ✓ 4.3 “[...] ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university”,
- ✓ 4.4 “[...] substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship”, and
- ✓ 4.5 “[...] eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations”.

³³ Cf. https://sdgs.un.org/goals/goal4#targets_and_indicators and https://sdgs.un.org/goals/goal8#targets_and_indicators [09.08.2024]

Ad 4.3: As outlined in the previous section, the trainings are easily accessible without any educational qualifications or other technical requirements. Moreover, they are free of charge and some are even offered to PwDs. Due to their short duration, the trainings are also within reach for working people and persons with other commitments, such as childcare or caring for relatives. Since the trainings are also confirmed to be of high quality by their participants and graduates (cf. 3.1.2), **KTI's contribution to target 4.3 appears plausible.**

Ad 4.4: Having largely confirmed the relevance of the conveyed knowledge and skills for the professional development of the trainees (cf. 3.3.3), the evaluation team **confirms the plausibility of a contribution of the initiative to this target.**

Ad 4.5: While the above-mentioned easy accessibility of the trainings speaks for a plausible contribution of the KTI to this target, we need to acknowledge that women and PwD only constitute a small fraction of the participants (cf. 3.3.1). While **in principle we consider the initiative suitable to contribute to this target, we also conclude that its actual achievements in this regard to be rather limited** (see also following section).

Concerning SDG 8 “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”, the initiative may plausibly contribute to targets

- ✓ 8.5 “[...] achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value” and
- ✓ 8.6 “[...] substantially reduce the proportion of youth not in employment, education or training”.

Ad 8.5: While it is plausible that the conveyed knowledge and skills are of benefit for the graduates, the **trainings have a limited impact on their actual employment and income**, due to other external factors beyond the control of the initiative, that we discuss in the following section.

Ad 8.6: Since the trainings are originally planned towards unemployed and unskilled youth, its **contribution to this target appears plausible**, albeit, due to its size, the initiative is **not expected to make a ‘substantial’ contribution**, at least not at national level.

3.5.3 *To what extent does the project contribute to better employment of graduates and quality of vocational education in the sector?*

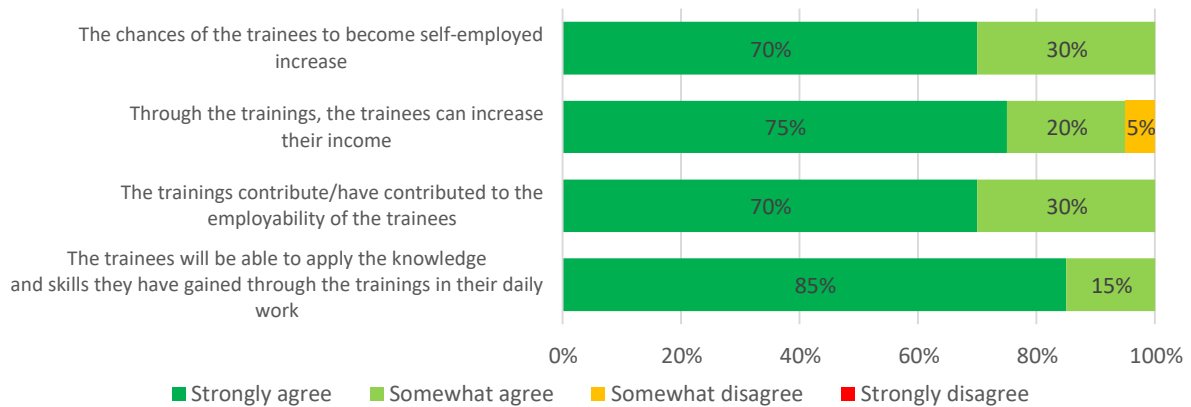
The majority of the interviewees regard the training to have a **positive impact on the employability** of the participants (Int_A01, 03, 04, 06-09, E01, 05, 10, M02, 05, 07, 09-11, 13, 14, 17, 18). Many highlight that the acquired knowledge and skills are usually appreciated by employers and clients and thus allow participants to differentiate themselves, demonstrate their capabilities, and betimes also to negotiate better terms and charge more for their services. The responses suggest, furthermore, that the training may not only have the potential to improve the chances for negotiating higher wages, but also to make **graduates feel more confident** in their jobs and protected from the risk of unemployment. However, employment effects are not always straightforward. Some interviewees indicate that a training may **not necessarily lead to immediate increases in wages or income**, especially if employers do not value or recognize the certificate. There are also concerns about the need to strengthen the initiative and its positioning in the labor market to ensure its acceptance by employers. The trainings are therefore considered more suitable for securing existing employment relations and safeguarding one's own employability than getting a (new) job in the first place (see also 3.1.2).

While the impact on dependent employment and income remains somewhat unclear, some responses suggest that the **training can support self-employment**, especially for installers, since contractors may be more willing to hire certified and skilled workers (Int_A4, 06, M05, 18). In addition,

the support from distributors and other ecosystem partners apparently facilitates access to construction material and financing for setting up a business.

Once more the **results from the conducted online survey corroborate the interview findings**. As the following figure shows, the majority of respondents are convinced that the trainees will be able to apply the knowledge and skills they gained through the training in their daily work and that it contributes to their employability and chances to become self-employed. Yet, one respondent does not agree that the training has the potential to increase the trainees’ income.

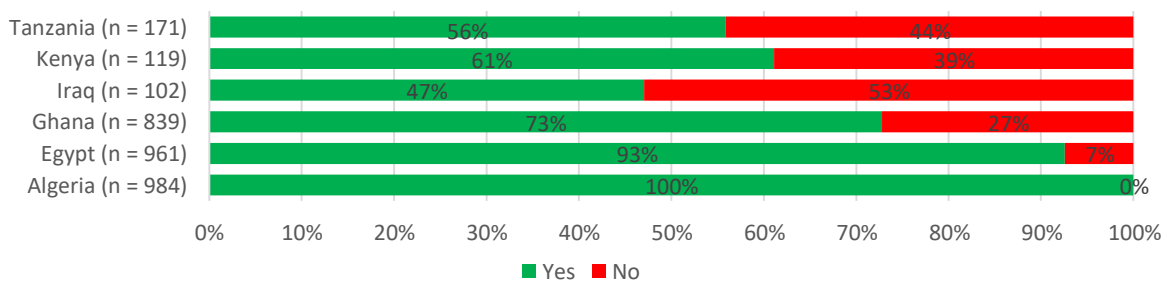
Figure 9: Assessment of benefits at target group level by TC staff (n = 20)



Eventually, the six-month-after surveys, conducted by the TCs provide additional information on the income and employment effects of the KTI, which can be summarized as follows:³⁴

As the following figure shows, while in Algeria all respondents of the six-months-after survey who were already employed during the training state to have increased their income afterwards, in Egypt this is confirmed by about nine out of ten and in Ghana by three quarter of the respondents. Eventually, in Kenya only less than two thirds, and in Iraq and Tanzania only about half of the respondents were able to do so.

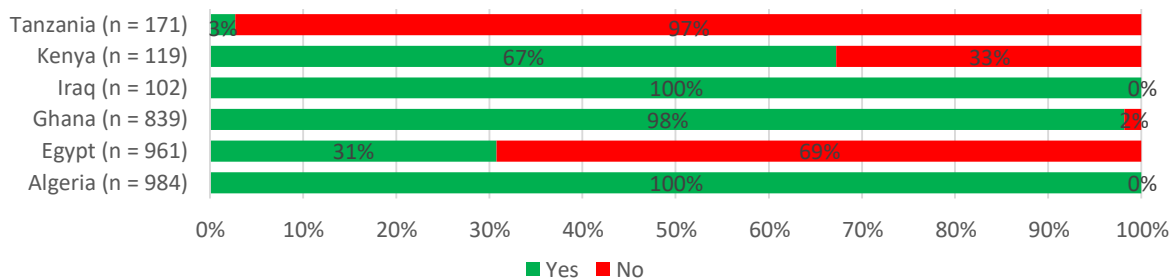
Figure 10: Job increase after training (six-months-after survey, all graduates)



Of those who declared not being employed at the time of the training, apparently in Algeria, Ghana and Iraq almost everyone (between 98 % and 100 %) found a job afterwards, while in Kenya only two thirds and Egypt only less than a third succeeded to do so. After all, hardly any graduates in Tanzania seem to have managed to become employed after the training, as shown in the following figure.

³⁴ Since information on the sex of the participants was not collected in all surveys, unfortunately, no gender-disaggregated analysis can be undertaken.

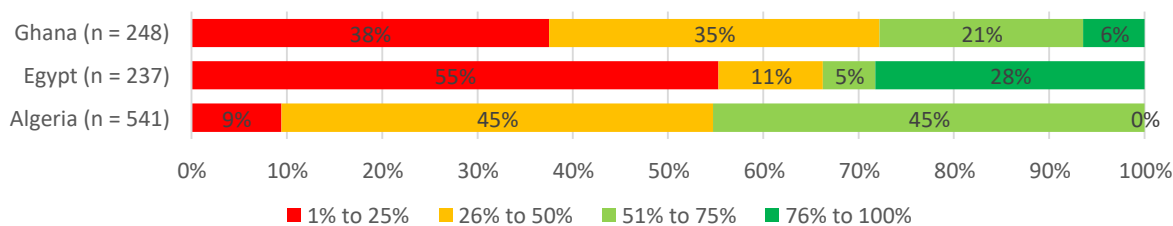
Figure 11: Found a job after training (six-months-after survey, all graduates)



While such remarkable differences between countries are not entirely impossible – since socio-economic frameworks and answer behaviors may be likewise diverse – in light of the rather homogeneous results concerning the other questions and the already discussed flaws in the survey design (cf. 3.3.2), the figures should be viewed at least with a slight skepticism. Nevertheless, they at least suggest that apparently acquired **knowledge and skills are not a sufficient condition for finding a job** after all.

As regards self-employed (e.g., installers, contractors) graduates, the six-months-after survey reveals that they believe to have gained a **market advantage** from the training, and most of them state that they noticed an **increase of jobs**. However, the amount by which their number has changed, again varies considerably between the three countries for which aggregated survey data is available, as the following figure shows:

Figure 12: Job increase due to training (six-months-after survey, self-employed only)



While in Algeria for nine out of ten respondents, jobs have increased between 25 and 75 percent, in Egypt this is only true for every sixth, whereas for more than half the increase is rather small ($\leq 25\%$) and another quarter reports a considerable upturn of over 75 percent more jobs. In Ghana again, the amount of job increase varies more evenly over the entire sample, with over a quarter of the respondents stating that it makes more than 50 percent.

As regards the student participants, the six-months-survey results provide a likewise heterogeneous picture. While in Algeria, apparently all of those who do not study anymore are in employment now, in Ghana this is the case for roughly 80 percent, and only for a third of the respondents in Egypt. Again, these results need to be interpreted carefully due to the methodological deficiencies of the surveys discussed before.

Coming back to the interview findings, two further aspects deserve closer attention: the support of the graduates by the TCs after the training and gender differences in the above-mentioned findings. Unfortunately, for both aspects the six-months-after surveys do not provide any additional information.

Firstly, we conclude that the TCs' **post-training graduate support varies considerably between the three case-study countries** (Int_A01-04, E01, M17, 18). While in Algeria little to nothing is known about any measures after the trainings that would help the graduates in their further development, in Egypt and Mexico the TCs apparently make an effort, e.g., by organizing public showcase events, providing giveaways and access to special prices, as well as technical support on demand. Interviews findings indicate that in a few cases graduates were specifically recommended to construction companies who were in search for staff.

Since graduate support is considered essential to increase working opportunities, the initiative should systematize the support to graduates in all implementing countries, and invest resources to enhance long-term employment effects, e.g., by achieving formal certification of the trainings, helping graduates to connect and become established in the construction sector, and providing continuous technical and managerial guidance.

Secondly, as regards gender differences, besides the already discussed underrepresentation of female training participants (cf. 3.3.1), we can depict little about the employment impacts on women in particular. However, at least sector association representatives in Mexico are of the opinion that in the younger generation is rethinking traditional role models and that there is an increase of interest among women in the construction sector. However, such rethinking is apparently still incipient, as also the results of the evaluation's online survey suggest. Therein, still a fifth declares that men benefit more than women from the training, mainly because construction is deemed to be a male-dominated industry, in which women only play a minor role and usually occupy other positions that do not imply greater physical effort, such as supervision or cleaning.

3.6 Sustainability

The evaluation team assessed the sustainability of the KTI is on the basis of the **ability of the TCs to continue** with their operations after the funding has come to an end, what **risks** they could face in that regard, and which **mitigation strategies** the TCs have in place to tackle these risks. Since these three aspects have a close interconnection are closely interweaved, we discuss them together in one section.

The majority of TC representatives indicates that their **center is not self-sustainable and requires Knauf's long-term commitment** to be survivable. (Int_A01-04, A06, E08, 09, M02, 12, 18). In that regard, the interview findings in the three case-study countries are well in line with the results from the online survey, in which two thirds of the respondents declare that the TC will only be able to continue its operations with the financial support provided entirely by Knauf, while the remaining ones are confident to do so either on the basis of own revenues or the cooperation with other private sector partners.³⁵

About the extent to which **course fees** are a viable approach to generate such revenues, again the interviewees disagree. While some deem it possible, others doubt that people would be willing to pay for a training that is not legally recognized by government education authorities. In that respect, some consider **formal accreditation as key for achieving financial sustainability**. Another idea mentioned by interviewees in Mexico, is to form a Civil Society Organization and with this enable the receipt of donations, which is seen as another possible financing strategy. However, this may also have legal implications, since Knauf as the funding agency is a for-profit organization.

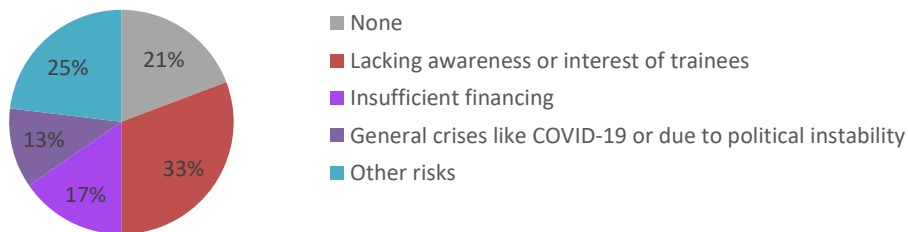
Beside financial risks, potential **challenges are seen in the political and socio-economic frameworks** under which the TCs operate. While at local level disruptions, for instance caused by a change of government, are regarded as minor challenges (e.g., that ties to authorities need to be reestablished), at national level danger is seen if international collaboration strategies should change, so that foreign investments would be restricted. Also, the security situation in certain implementing regions causes concerns by some respondents (Int_M16).

³⁵ To that effect, it must be mentioned that Knauf does not consider the TCs as profit-centers or being self-sustainable. It also shows no sign to withdraw from the initiative any time soon. So, at least for the foreseeable future lacking funding does not appear to be a real threat for the TCs. We discuss the issue of funding anyway since it is part of the analysis grid.

Eventually, at institutional level, **staff fluctuation is considered as another risk** that could jeopardize the TCs existence. Most of them have already experienced a loss of trainers, who were either promoted within Knauf or looked for a job elsewhere. While currently all agree that these losses could be compensated successfully so far, the issue is considered as a potential threat in the long-term.

Interestingly, none of the interviewees from the TCs mentions a lacking interest of potential trainees as a challenge for the TCs.³⁶ Apparently, their representatives in the three case-study countries are confident to be able to attract training participants. This finding contrasts the results from the online survey in which a third of the respondents supposed this as a potential risk, as the following figure shows:

Figure 13: Supposed risks by online survey respondents (n = 24)



Potential causes for this lacking interest are thereby seen in insufficient marketing of the trainings and changing demands of the industry, but also in an increased competition, poor training quality, lacking political support, and being an unaccredited organization. In order to avoid this risk, half of the respondents report to work on counter measures, mostly consisting of awareness raising activities (5 cases, e.g., Social Media campaigns), intensifying cooperation (e.g., with workers' organizations) to increase number of trainees (4 cases), and improving quality assurance (4 cases). Only one respondent states to consider cost reduction measures to increase the financial efficiency of the TC.

Further risks mentioned by the survey respondents, such as insufficient financing and political instability, again reflect the interview findings well and do not reveal additional aspects for the analysis.

4. Conclusions and recommendations

In the following, we summarize the main conclusions and recommendations. The conclusions follow the analysis criteria, whereas we group the recommendations according to the key addressees of the evaluation, DEG Impulse, Knauf and the TCs.

4.1 Conclusions

On Relevance

- ✓ The trainings provided by the KTI respond to an existing skills and knowledge gap in the construction sector in the target countries. This is evidenced by the projected growth of the sector in these countries, which is expected to lead to an increased demand for qualified workers.
- ✓ The trainings are appropriate to address the skills and knowledge gaps of the target groups, including students, unemployed, and professionals. The training content and delivery are well-designed and tailored to the diverse audience. However, some critical aspects relate to the need to further adjust the theory-practice ratio, integrate more cross-disciplinary and soft skills, and address the focus on Knauf products only.

³⁶ However, some stakeholders in Mexico (an NGO in Mexico City and a university in Monterrey), worry about the lack of interest, especially among the youth.

- ✓ The concept and design of the initiative are appropriate in relation to the long-term objectives of the German Development Cooperation and Knauf's strategic goals. The trainings contribute to skills development, job creation, and market expansion for Knauf. However, the lack of accreditation of the training courses by national authorities is a concern, as it may limit the recognition and impact of the trainings on the participants' job opportunities.

On Coherence

- ✓ The objectives of the KTI are generally in line with the strategic objectives of the developPPP Classic program, as it focuses on skills development and knowledge transfer, which are core elements of the program. However, its contributions to indirect job creation are questionable due to lacking empirical evidence therefore.
- ✓ The TCs are willing to collaborate with various stakeholders, such as other educational institutions, German organizations, and construction companies, to strengthen their training capacities with regard to exploring new target groups, adapting training content and delivery to a wider audience, improving the trainees' chances to get a job, and including drywall trainings in curricula of other VTIs. However, concrete examples of such collaborations and synergies leveraged are rare.
- ✓ It is difficult to assess whether the KTI fully aligns with the strategic interests of the partner countries, as there is limited publicly available information on their interests in further education in the construction sector in particular. However, some local authorities view the initiative as a valuable social measure to support socially disadvantaged groups and facilitate their (re-)integration into the labor market, rather than primarily as a business-oriented intervention.
- ✓ The KTI does not appear to be sufficiently embedded into local structures or aligned with other donor-funded activities in the implementing countries. The initiative does not seem to collaborate with other donor organizations or be active in relevant networks.

On Effectiveness

- ✓ The KTI is largely effective in achieving its objectives at output level, particularly in establishing TCs and increasing the number of trainees.
- ✓ The initiative is apparently also successful in disseminating its training content beyond the TCs. It further engages with private companies and industry associations, which help to expand the reach and impact of the trainings.
- ✓ At target group level, the initiative has been effective in increasing the knowledge and skills of participants, with the majority reporting high or highest levels of competence increase and practical applicability of the trained skills. It, thereby, generally reaches its intended target groups, including installers, technicians, consultants, and students, though the participation of women, youth, and PwDs is more limited.
- ✓ The monitoring system has significant shortcomings, including methodological issues with the participant and graduate surveys, lack of reliable data on indirect job creation, and inefficient reporting processes.
- ✓ The training staff are generally considered to have strong technical expertise, but there are concerns about their pedagogical and didactical skills.
- ✓ So far, the initiative had a few unintended positive effects, such as through trainings to victims of natural disasters, reaching individuals interested in drywall installation for personal use, and potentially contributing to energy efficiency and emissions reduction, though the latter cannot be empirically confirmed.

On Efficiency

- ✓ Most interviewees confirm that the available resources meet the TCs' needs and the budget is generally sufficient, though some activities like marketing, outreach, maintenance, and obtaining government permits could require more funding. There are also suggestions to allocate more funds for trainer development, diversifying training offerings, and strengthening partnerships with VTIs.
- ✓ The allocation efficiency shows considerable differences between countries in terms of set-actual cost ratio, costs per trainee, and set-actual trainee ratio. The average costs per trainee appear to be in the usual range for comparable short-term construction trainings, though the vast differences between countries remain unexplained.
- ✓ The successful collaboration with vocational training providers and among the TCs is a key factor for efficiency, while bureaucratic obstacles pose a burden. The initiative's implementation faced delays, particularly in the first half of phase I, mainly due to the COVID-19 pandemic and administrative hurdles. Nevertheless, most targets were fulfilled by the end of phase I.
- ✓ There is no indication that the objectives of the initiative could have been achieved with fewer resources.

On Impact

- ✓ The KTI contributes to the long-term objectives of the develoPPP program through a) improving access to development-relevant resources, services and products, b) raising awareness among various stakeholders, though more support may be needed to engage government agencies, c) fulfilling the essential conditions for additionality, though it does not fully exploit its potential for additional results.
- ✓ The initiative plausibly contributes to SDG 4 (quality education) and SDG 8 (economic growth and employment), as it contributes to equal access to technical/vocational education, increasing relevant skills, and to targets on full employment and reducing youth not in employment, education or training. However, its impacts are limited in scale.
- ✓ Whereas the trainings are considered to improve the employability of graduates, the effects on actual employment and income are mixed. In that regard the survey results vary considerably across countries, suggesting that the training is not a sufficient condition for finding a job.
- ✓ Post-training graduate support by the TCs is inconsistent across countries and leaves room for improvement.
- ✓ Gender differences in participation and benefits are observed, with women being underrepresented and facing more challenges in a yet male-dominated construction sector.

On Sustainability

- ✓ The majority of TC representatives believes that their centers require external funding to be viable. The TCs ability to diversify partnerships, explore alternative funding sources, and Knauf's strategic commitment are crucial factors in that regard.
- ✓ Potential challenges include political and socio-economic factors, such as changes in government or international collaboration strategies, as well as security issues in certain regions. Another threat is seen in staff fluctuation, with trainers being promoted within Knauf or leaving for other jobs, although up to date these losses could be compensated.
- ✓ Interviewees do not see a lack of interest from potential trainees as a challenge, which contrasts with the online survey results where a third of respondents saw this as a potential risk. Causes for lacking trainee interest include insufficient marketing, changing industry demands, increased competition, poor training quality, lack of political support, and being an

unaccredited organization. Respondents report working on countermeasures such as awareness raising, intensifying cooperation, and improving quality assurance.

4.2 Recommendations

Directed at DEG Impulse

- ✓ **Investigate the reasons behind the significant differences in efficiency between countries:** The causes for the considerable differences in the input-output ratio, costs per trainee, and the ratio of planned to actual trainees should be scrutinized under consideration of the different modalities (e.g., stationary vs. mobile, 0.5 to 4-day duration) and heterogeneity of the target groups in order to identify best practices and areas for improvement for mutual learning and ultimately to enhance the overall efficiency of the initiative.
- Support Knauf and the TCs in connecting with German TVET projects:** In order to widen the initiative's potential target groups, DEG Impulse could support Knauf and the TCs in establishing connections with other German bilateral TVET projects (i.e. by liaising with KfW and GIZ country directors, project managers etc.). It could be checked for instance if it is possible to integrate KTI trainings in existing vocational training schemes or at least to advertise for them in the frame of the respective projects.

Directed at Knauf

- ✓ **Improve the monitoring and reporting system:** The significant shortcomings in the initiative's monitoring system must be addressed in order to improve data validity and reliability, including methodological issues with the immediate and six-months-after surveys, the lack of reliable data on job creation, and the inefficient reporting processes. Amongst others, the total number of training participants (disaggregated by gender, age, employment status etc.) by type of training (i.e., half-day, two- or three-day training) should become clear as well as if participants overlap between trainings (i.e., if one attends more than one training). Moreover, the design and implementation of the surveys need to be improved to ensure consistent data on employment and income effects and an in-depth analysis on gender-differentiated impacts of the trainings should be undertaken. In light of the challenges during the online survey outlined in the methodology section, it should also be considered to translate the monitoring instruments into the local languages in order to avoid misunderstandings during data collection and analysis. This will help to ensure the initiative's access to high-quality data to assess its performance and impact, and thus to develop further.
- ✓ **Enhance the initiative's contribution to SDG 4 (quality education) and 8 (decent work and economic growth):** It should be sought to further improve the accessibility and inclusiveness of the trainings, particularly for women and persons with disabilities and for ways to increase the participation of underrepresented groups, such as through targeted outreach and awareness-raising efforts. Gender-specific barriers and challenges faced by women in the construction sector should be analyzed and addressed.

Directed at the Training Centers

- ✓ **Continue to adapt the training content and delivery:** In order to better match the diverse needs and profiles of the target groups, the theory-practice ratio should be rethought to better suit the participants' backgrounds and more cross-disciplinary and soft skills should be integrated, especially for young and unskilled workers. Moreover, the reasons for the comparatively inferior ratings of the competency increase, as well as the applicability and application of knowledge in Algeria, Kenya and Tanzania should be investigated and addressed. The findings speak for the necessity to adapt the curricula and didactics of the trainings more to local needs.

- ✓ **Enhance the pedagogical and didactical skills of the training staff:** While the training staff are generally considered to have strong technical expertise, there are concerns about their pedagogical and didactical skills. The initiative should continue and potentially expand the train-the-trainer program to further develop the trainers' communication, presentation, and teaching abilities.
Strengthen the post-training support provided to graduates by the TCs: The graduate support measures should be systematized and enhanced across all implementing countries, such as by streamlining showcase events, providing technical guidance, and helping graduates connect with the construction sector. Particularly helpful in that regard could be for instance conducting job fairs for graduates to support them getting in touch with distributors and construction companies or creating an online directory on the TCs website with graduate profiles that is accessible for potential employers and contractors who are in search of drywall construction workers. Moreover, accreditation/recognition of the trainings by national authorities should be sought. To that end it may be considered to involve the BMZ/embassy to establish contacts at political level.
- ✓ **Explore opportunities to further leverage additional funding and resources:** Ways to acquire additional funding or co-financing to increase the outreach and impact of the trainings, such as by leveraging investments from other entities should be sought for. In particular, governmental agencies should be strategically approached in order to receive accreditation and recognition of the training courses, as this could help to improve the impact on participants' job opportunities.

5. Annex

5.1 Evaluation matrix

Criterion	Evaluation question	Indicator/Subquestions	Countries	Method	Source(s)
1. Relevance	1.1 To what extent do the training centers and trainings provided respond to an existing skills and knowledge gap in target countries? Are trainings appropriate to address a skill and knowledge gap of students?	<ul style="list-style-type: none"> ✓ Unemployment, migration diversification of jobs and VT are acknowledged as prioritized areas of action for BMZ in the countries ✓ Availability/lack of qualified workers in the construction sector ✓ Existing skills and knowledge gaps among students, unemployed and professionals in this sector 	<p>Phase I: Egypt, Tanzania, Iraq, Ghana, Nigeria, Algeria, Kenya</p> <p>Phase II: Mexico, Brazil, Honduras, Colombia, Mongolia, Philippines, India, Vietnam, Morocco</p>	<ul style="list-style-type: none"> ✓ Interviews ✓ Document analysis ✓ Descriptive statistical analysis 	<ul style="list-style-type: none"> ✓ Business associations and leaders ✓ DEG & Knauf ✓ project staff ✓ BMZ country profiles documents (priority) ✓ Official job market statistics and of growth in the construction sector
	1.2 Is the concept and design of the project appropriate in relation to anticipated long-term objectives?	<ul style="list-style-type: none"> ✓ Description of concept and design ✓ Needs orientation 		<ul style="list-style-type: none"> ✓ Document analysis ✓ Interviews ✓ Descriptive statistical analysis 	<ul style="list-style-type: none"> ✓ Project plan & project description ✓ Interviews with DEG and Knauf project staff ✓ Interviews with TC staff ✓ Online survey TCs staff
2. Coherence	Internal coherence	<ul style="list-style-type: none"> ✓ Fitness of the strategic objectives of BMZ, develoPPP and the project 		<ul style="list-style-type: none"> ✓ Document analysis 	<ul style="list-style-type: none"> ✓ Progress reports ✓ Project plan & project description ✓ BMZ strategy papers
	2.1 To what extent is the project in line with strategic objectives of BMZ and develoPPP Classic?	<ul style="list-style-type: none"> ✓ Assessment of comparable projects/programs in the construction sector ✓ Identification of relevant actors (national/ international) ✓ Assessment of existing cooperations and synergies 		<ul style="list-style-type: none"> ✓ Document analysis ✓ Interviews 	<ul style="list-style-type: none"> ✓ Progress reports ✓ Chambers of industry and commerce / other actors of construction sector ✓ Interviews with TC staff and implementing country partners
	2.2 To what extent are there potential synergies of German cooperation in the partner countries? Are they known and used?				

Criterion	Evaluation question	Indicator/Subquestions	Countries	Method	Source(s)
		<ul style="list-style-type: none"> ✓ Identification of unexploited synergies 			<ul style="list-style-type: none"> ✓ Interviews with DEG Impulse and Knauf
3. Effectiveness	<p>External coherence</p> <p>2.3 To what extent is the project in line with interests of the partner country?</p>	<ul style="list-style-type: none"> ✓ Fitness of the strategic objectives/development plans of the partner countries and the project 		<ul style="list-style-type: none"> ✓ Document analysis ✓ Structured observation 	<ul style="list-style-type: none"> ✓ Progress reports ✓ Notes ✓ Interviews with government representatives ✓ Interviews with VTE institutions/authorities
	<p>2.4 Are trainings sufficiently embedded into local structures and aligned with relevant other donor funded activities in the region?</p>	<ul style="list-style-type: none"> ✓ Description and assessment of the embedding into local structures ✓ Assessment of relevant other funded activities in the region ✓ Identification of synergies and potentials for conflict 		<ul style="list-style-type: none"> ✓ Document analysis ✓ Interviews 	<ul style="list-style-type: none"> ✓ Project description ✓ Project plan ✓ Government representatives (?), business associations and leaders
	<p>3.1 To what extent have objectives and milestones been achieved so far? Is the current progress in the implementation ongoing as planned?</p>	<ul style="list-style-type: none"> ✓ Achievement of KTI project output indicators 		<ul style="list-style-type: none"> ✓ Document analysis ✓ Interviews 	<ul style="list-style-type: none"> ✓ Project description, project plans of phase I and II ✓ Progress reports ✓ Feedback report of staff
	<p>3.2 How is the quality of implementation?</p>	<ul style="list-style-type: none"> ✓ Timeliness of project implementation ✓ Deviations from the project concepts ✓ How is the quality of the monitoring system? ✓ Personnel /staff qualifications ✓ Are stakeholders involved appropriately? 		<ul style="list-style-type: none"> ✓ Document analysis ✓ Interviews 	<ul style="list-style-type: none"> ✓ Curricula (training manuals) ✓ Structured observation ✓ Progress reports ✓ Interviews ✓ Feedback report of trainees (6 month after training survey) ✓ Online survey of TC staff
	<p>3.3 <i>Additional question suggested by the evaluation team: To what extent does the project so far achieve its objectives at target group level (knowledge and skills increase, capacity development at TCs)?</i></p>	<ul style="list-style-type: none"> ✓ Knowledge and skills gained ✓ Professional use and added value for trainees/graduates (e.g. applicability) 		<ul style="list-style-type: none"> ✓ Document analysis ✓ Descriptive statistical analysis 	<ul style="list-style-type: none"> ✓ Feedback report of trainees (immediate and 6 months after training surveys)

Criterion	Evaluation question	Indicator/Subquestions	Countries	Method	Source(s)
	3.4 To what extent can any unintended effects be observed?	✓ Unintended positive/negative effects that have been observed by stakeholders		✓ Document analysis ✓ Interviews	✓ Progress reports ✓ DEG & Knauf staff ✓ TC staff ✓ Other stakeholders (VET institutions; government representatives, contractors)
4. Efficiency	4.1 How well were resources/inputs provided by Knauf and DEG Impulse allocated?	✓ Allocation of resources (human, financial, etc.) were appropriate		✓ Document analysis ✓ Interviews	✓ Budget plans ✓ Audit documents (if available) ✓ DEG and Knauf staff ✓ TC staff
	4.2 To what extent were inputs used economically in relation to achieved outputs?	✓ Were the costs of the project accordingly allocated & used compared against the results obtained? ✓ Target achievement (5 specific objectives)		✓ Document analysis ✓ Interviews	✓ Progress reports ✓ Budget plans ✓ Audit documents (if available) ✓ DEG and Knauf staff ✓ TC staff
	4.3 To what extent were outputs achieved timely and within the anticipated timeframe?	✓ Targets were achieved during the planned implementation period (5 specific objectives)		✓ Document analysis ✓ Interviews	✓ Progress reports ✓ DEG & Knauf staff
	4.4 To what extent could the objectives of the project have been achieved with less resources or support from public sources?	✓ How/what was the response if dealing with cost overruns		✓ Interviews ✓ Document analysis	✓ DEG & Knauf staff ✓ Budget plans
5. Impact	5.1 To what extent does the project contribute to the long-term objectives of devaloPPP?	✓ Achievement of devaloPPP target indicators in implementing countries (meta-indicator)	Phase I: Egypt, Tanzania, Iraq, Ghana, Nigeria, Algeria, Kenya	✓ Document analysis	✓ devaloPPP monitoring system
	5.2 To what extent does the project plausibly contribute to SDGs 4 and 8 in the countries?	✓ Development of SDG 4 and 8 indicators at regional/national level		✓ Document analysis	✓ Regionally disaggregated national SDG statistics (if available)
	5.3 To what extent does the project contribute to better employment of	✓ Share of surveyed trainees who reported finding job opportunities /being employed		✓ Interviews ✓ Descriptive statistical analysis	✓ Stakeholders (contractors, companies)

Criterion	Evaluation question	Indicator/Subquestions	Countries	Method	Source(s)
	graduates and quality of vocational education in the sector?	(disaggregated information by sex and age)			<ul style="list-style-type: none"> ✓ Government representatives?? ✓ Trainees' feedback reports (immediate and 6-month post-survey)
6. Sustainability	6.1 To what extent are the training centers and trainings likely to be continued after the end of the project?	<ul style="list-style-type: none"> ✓ Risks that might jeopardize the results? ✓ Mitigation strategies designed by project staff against factors that jeopardize the sustainability of the results 		<ul style="list-style-type: none"> ✓ Interviews ✓ Structured observation ✓ Online survey 	<ul style="list-style-type: none"> ✓ DEG and Knauf staff ✓ TCs staff ✓ Other stakeholders (VTE)

5.2 List of documents

Phase I: Interregional Africa (concluded)

- ✓ Annex 1a. Project Cover sheet
- ✓ Annex 1b. Project description (Originally)
- ✓ Annex 2. Project Plan, revised and final
- ✓ Annex 3. Calculation Knauf G0096
- ✓ Annex 7. Reporting, 28 February 2023
- ✓ Training centers Phase 1, October 2022
- ✓ Contract amendment, September 2020
- ✓ Endorsement Knauf
- ✓ Cover sheet - End of Phase I
- ✓ Minutes of Meetings

Egypt (Cairo, Asyut, Alexandria)

- ✓ Overviews
- ✓ Invoices
- ✓ (4. Interim) Trainers' feedback
- ✓ Collaboration protocol with university
- ✓ 2020, 2021 Cairo (immediate survey 2020; after 6 months survey)
- ✓ 2022 Asyut TC (immediate survey; after 6 months survey)
- ✓ 2022 Cairo TC (immediate survey; after 6 months survey)

Tanzania (Dar es Salaam)

- ✓ Overviews
- ✓ (2. Interim) Audit and Invoices
- ✓ (2. Interim) Train the trainer seminar
- ✓ (2. Interim) Status on local partnerships
- ✓ (2. Interim) Mkt Actions
- ✓ (3. Interim) Feedback trainees (2020)
- ✓ TZ + KE TC 2021 Strategy
- ✓ (4. Interim) TC Attendees
- ✓ (4. Interim) conducted training report sept. 2021
- ✓ (4. Interim) Oct. 2021 Veta training report

Iraq (Erbil)

- ✓ Overviews
- ✓ Invoices
- ✓ GIZ feedback (question for project activities targeting jobseekers)
- ✓ Participants list GIZ training Dec 2021-Jan22
- ✓ Training report GIZ
- ✓ GIZ contract (consultant contract for freelance experts)
- ✓ Participants aquapanel, drywall
- ✓ Training of trainers reports
- ✓ Proposal letters
- ✓ Training plan

Ghana (Accra)

- ✓ Overviews
- ✓ Invoices
- ✓ Trainees List 2019 & 2020
- ✓ Training manuals (drywall basics, systems)
- ✓ MoUs & other partnership agreements
- ✓ Progress reports
- ✓ (2. interim) Training Aquapanel, AMF, Knauf Insulation
- ✓ (3. interim) reports of training
- ✓ 2020 Trainee List
- ✓ 2020, 2021 & 2022 Trainee databases

Nigeria (Lagos)

- ✓ Overview
- ✓ Progress reports (communication)
- ✓ Invoices
- ✓ Manuals (board ceilings, drywall, etc.)
- ✓ Trainee databases 2021, 2022
- ✓ Reporting of training the trainee
- ✓ Reports of trainings
- ✓ Offer letters
- ✓ Agreements with VT schools
- ✓ Promotional materials and videos

Algeria (Setif and mobile caravan)

- ✓ Overview
- ✓ Invoices and caravan invoices, rental
- ✓ Training Manuals (basic courses, advanced courses, aquapanes, plaster, prez)
- ✓ Training reports 2021,2022
- ✓ Training program
- ✓ Contracts
- ✓ 2021 and 2022 reporting training caravan
- ✓ Support marketing caravan
- ✓ Training requests from institutions
- ✓ Promotional materials
- ✓ Internal reporting communications

Kenya (Nairobi)

- ✓ Overviews
- ✓ Van invoice and invoices
- ✓ Feedback forms courses (2.,3. interim)
- ✓ Feedback report
- ✓ Training reports
- ✓ TZ + KE TC 2021 Strategy
- ✓ TC Strategic action plan
- ✓ MoU with other institutions
- ✓ Modules

Phase II (ongoing)

- ✓ developPPP Agreement – Knauf
- ✓ develop-Knauff Amendment
- ✓ Annex 2. Project description
- ✓ Annex 3. Project plan
- ✓ Annex 4. Calculation
- ✓ Annex 8. Reporting – 1st and 2nd interim report
- ✓ AW-developPPP – 1st interim report
- ✓ Supplemental E-Mail communications
- ✓ AW- G0185 Knauf – Vermerk, 2^o interim report

Mexico (Mexico City, Guadalajara, Monterrey)

- ✓ Overviews
- ✓ Invoices
- ✓ Manuals
- ✓ Contracts and job descriptions
- ✓ Reports of trainings (Trainers)
- ✓ Feedback reports (trainees' satisfaction)
- ✓ Training Overview and reports
- ✓ Agreements with VT schools or other relevant institutions
- ✓ MoUs, other partnerships
- ✓ Promotional materials and communication strategy

Brazil (São Paulo, Belo Horizonte)

- ✓ Overviews
- ✓ Invoices
- ✓ Training manuals (aquapanel, drywall) & modules
- ✓ Contracts and job descriptions
- ✓ Training reports (Trainers)
- ✓ Feedback reports (trainees' satisfaction survey)
- ✓ Training Overview and reports
- ✓ Agreement SENAI (training agreement)
- ✓ Agreements with VT schools or other relevant institutions
- ✓ Promotional materials and communication strategy

Honduras (San Pedro Sula)

- ✓ Overviews
- ✓ Rental agreements, Invoices, tools
- ✓ Training manuals (aquapanel, light system)
- ✓ Contracts, team training
- ✓ Training reports
- ✓ Feedback reports (Knauf's trainees' and trainers' satisfaction center survey)
- ✓ Agreements with VT schools, universities and training requests
- ✓ Promotional materials and communication strategy
- ✓ Internal communications

Mongolia (Ulaanbaatar)

- ✓ Overviews
- ✓ Invoices, purchased equipment
- ✓ Training manuals (curved surfaces, dry mixes, dry construction, fire resistance, warm wall)
- ✓ Contracts, team trainings
- ✓ Training reports (Trainers)
- ✓ Feedback reports (Knauf's trainees' and trainers' satisfaction center survey)
- ✓ Cooperation agreements with VT schools, universities
- ✓ Promotional materials and communication strategy
- ✓ Internal communications

The Philippines (Manila, 2 mobile vans)

- ✓ Overviews
- ✓ Invoices, purchased equipment
- ✓ Installation Manuals
- ✓ Training manuals (ceiling, drywall, etc.)
- ✓ Trainings lists 2022 & 2023
- ✓ Contracts, team trainings
- ✓ Training reports (Trainers)
- ✓ Memorandum of Agreement Cooperation agreements with VT schools, universities
- ✓ Events reports

India (mobile trainings by van)

- ✓ No documentation

Colombia (Medellín)

- ✓ Overview (1)

Vietnam (Ho Chi Minh, Hanoi)

- ✓ Overview
- ✓ Invoices
- ✓ Manuals

Morocco (Tanger, Agadir, 2 mobile vans)

- ✓ No documentation

5.3 Further literature

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5.4 List of interviewees

→ *To be prepared (information from national consultants missing).*

5.5 Data collection instruments

5.5.1 Interview guidelines

For DEG Impulse, Knauf staff and develoPPP (project monitoring) managers

1. Background and context

- ✓ Please describe your role and responsibilities in the DEG-Knauf Training Initiative.

2. Relevance

- ✓ How were the countries included in the KTI selected? (the rationale behind the selection)
- ✓ Can you briefly describe the type of activities performed during the execution of the KTI?
- ✓ To what extent do you consider that the KTI stands out? Can you explain what is the uniqueness of the KTI?
- ✓ Do you consider that the KTI is meeting a demand or existing need in the construction sector in the operating countries/regions?
- ✓ Do you know if there are other TCs or private/public (educational) institutions in the region or the country offering similar training courses for the construction sector?

3. Coherence

- ✓ Are other relevant stakeholders involved in the designing/reviewing the overall content of the training materials (i.e. training materials, manuals, modules) or involved in activities carried out by the TC which are aimed at the target groups?
- ✓ Have any collaborations emerged with other potential partners (e.g. other funding agencies, or even some other German partners/companies that are also operating in the region?) as a result of the implementation of the KTI?

4. Effectiveness

- ✓ Did the project (in its both phases) run according to plan? This is, did the KTI project start on time and with the initially foreseen activities and the initially agreed financial, human and technical resources?
- ✓ If the project faced a delay in its start: Can you please describe what caused the delay? Or in which country/ies the start was delayed?
- ✓ Have there been any relevant changes in the planned activities either before or on the run that needed to be addressed between DEG Impulse and Knauf? If yes, which ones?
- ✓ Have there been any relevant changes between Phase I and Phase II (related to activities and objectives; not on the different countries selected).
- ✓ Have any challenges arisen before the start or during the operations of the project? If yes, can you tell us which ones and how were they addressed by DEG Impulse / Knauf?
- ✓ Are there any relevant partners collaborating in this initiative that have joined during the implementation of the KTI (e.g. educational institutions, private companies, construction chambers, local government agencies)?
- ✓ What has been the overall experience so far regarding the monitoring and reporting of activities of the TCs and the results at country level? Do you have an example of a TC that has had a good practice?
- ✓ Do you consider that the monitoring and reporting system is adequate and reflects the progress made so far (for both phases)?
- ✓ How has been the interaction and communication channels between the TCs (implementing partners), Knauf and DEG Impulse? Is there something that can be improved in this regard?
- ✓ Did any regional/local educational/labor authorities have been involved in the planning and designing of the training materials (modules, manuals)? If not: what is the reason for this?
- ✓ Have the training materials been accredited/reviewed by other relevant stakeholders? If not: what is the reason for this?
- ✓ What have been the most important or relevant milestones achieved by the project?
- ✓ Does the TCS get feedback from other TCs located in the same region/continent? Is there room for exchange of experiences? If so, how is this done?
- ✓ Do you consider that through the training offered they have greater knowledge and skills and are more competitive in the construction sector?

5. Efficiency

- ✓ Do you consider that the amount of funds allocated to the project was adequate in order to develop all/most the activities planned and thus be able to achieve the project’s objectives. Do you have an example?
- ✓ Have there been any elements/aspects that have taken more resources (financial, human) that could have been better used for other activities? If yes, can you describe briefly?
- ✓ What was the influence (either positive or negative) of these aspects in the overall implementation and operation of the TC?
- ✓ Do you see any room for improvement? This is, do you have any suggestions to make either an activity/process run better?

6. Impact

- ✓ Do the TCs in the country have contact or perform any follow-up activities to keep contact with the former trainee graduates? If not: what is the reason behind this?
- ✓ Do the TCs in your country has any follow-up strategy to offer any kind of support (i.e. consultation, access to special resources, directories) to the graduates in order to continue their capacity development?

7. Sustainability

- ✓ Which aspects/risks (political, financial, institutional, environmental) could jeopardize the operation of KTI in the countries?
- ✓ Has Knauf elaborated a plan to address the main risks that the TCs might face at the short-term / long-term?
- ✓ What would happen if the TC could no longer operate after the funding comes to an end? (Question only applicable to TCs of Phase II)
- ✓ Do you have any comments or suggestions that you consider are relevant for the evaluation team?

For TC country managers

1. Background and context

- ✓ Please describe your role and responsibilities in the TCs and please provide a brief description of the country’s TCs objectives and main target groups.

2. Relevance

- ✓ Can you briefly describe the type of activities performed and courses that are offered at the TCs?
- ✓ To what extent do you consider that the KTI stands out? Can you explain what is the uniqueness of the KTI? (to explore if the initiative has been contextualized)
- ✓ Do you consider that the KTI is meeting a demand or existing need in the construction sector (in your country/region)?

- ✓ Do you know if there are other TCs or private/public (educational) institutions in the region or the country offering similar training courses for the construction sector?

3. Coherence

- ✓ Are other relevant stakeholders involved in the designing/reviewing the overall content of the training materials (i.e. training materials, manuals, modules) or involved in activities carried out by the TC which are aimed at the target groups?
- ✓ Have any collaborations emerged with other potential partners (e.g. other funding agencies, or even some other German partners/companies that are also operating in the region?) as a result of the implementation of the KTI?

4. Effectiveness

Start and implementation

- ✓ How were the TCs launched? Did the initiative run according to plan? This is, did the KTI project start on time and with the initially foreseen activities and the initially agreed financial, human and technical resources?
- ✓ If the TC faced a delay in its start: Can you please describe what caused the delay?
- ✓ Have there been any relevant changes in the planned activities either before or on the run that needed to be addressed? If yes, which ones?
- ✓ Have any challenges arisen before the start or during the operations of the TC? If yes, can you tell us which ones and how did you address them?

Dissemination and outreach

- ✓ How has the TCs positioned itself in the construction sector? Is there a dissemination plan to publicize the TC and its activities?
- ✓ How do you reach your target audiences?

Collaborations and partnerships

- ✓ Are there any relevant partners collaborating in this initiative that have joined during the implementation of the KTI (e.g., educational institutions, private companies, construction chambers, local government agencies)?

Monitoring and reporting

- ✓ What has been the overall experience of the TCs so far regarding the documentation, monitoring and reporting of activities and results at country level?
- ✓ Do you consider that the monitoring and reporting system is adequate and reflects the progress made so far in the TCs in the country?
- ✓ How has been the interaction and communication channels between the TCs (implementing partners) and the funding partner?
- ✓ Is there something that can be improved in this regard?

Accreditation

- ✓ Did any regional/local educational/labor authorities have been involved in the planning and designing of the training materials (modules, manuals)? If not: what is the reason for this?
- ✓ Have the training materials been accredited/reviewed by other relevant stakeholders? If not: what is the *reason for this*?

Achievements

- ✓ What have been the most important or relevant milestones achieved by the TCs in the country?

Feedback and interactions (within TCs)

- ✓ Does the TCS get feedback from other TCs located in the same region/continent? (Latin America, Africa). Is there room for exchange of experiences? If so, how is this done?

Feedback (from trainees and graduates)

- ✓ In your opinion, what is the overall experience/feedback received from the trainee graduates?
- ✓ Do you consider that through the training offered they have greater knowledge and skills and are more competitive in the construction sector?

5. Efficiency

- ✓ Do you consider that the amount of funds allocated to the TC in the country was adequate in order to develop all/most the activities planned and thus be able to achieve the objectives of the KTI? Can you provide us with an example?
- ✓ Have there been any elements/aspects that have taken more resources (financial, human) that could have been better used for other activities? If yes, can you describe briefly?
- ✓ What was the influence (either positive or negative) of these aspects in the overall implementation and operation of the TC?
- ✓ Do you see any room for improvement? This is, do you have any suggestions to make either an activity/process run better?

6. Impact

- ✓ Do the TCs in the country have contact or perform any follow-up activities to keep contact with the former trainee graduates? If not: what is the reason behind this?
- ✓ Do the TCs in your country has any follow-up strategy to offer any kind of support (i.e. consultation, access to special resources, directories) to the graduates in order to continue their capacity development?

7. Sustainability

- ✓ Which aspects/risks (political, financial, institutional, environmental) could jeopardize the operation of the TCs in the country?
- ✓ Have you elaborated a plan to address the main risks that the TCs might face at the short-term / long-term?
- ✓ What would happen if the TC could no longer operate after the funding comes to an end? (Question only applicable to TCs of Phase II)

- ✓ Do you have any comments or suggestions that you consider are relevant for the evaluation team?

For trainees and graduates

Interviewer instruction

- Please outline briefly the **purpose of the interview and the evaluation** in general.
- Please make clear that you are **not affiliated with the training center or with Knauf** but that you are an **independent consultant** not related in any way to the KTI.
- Please assure the interviewees that all provided information will be treated **anonymous** and according to standard **data protection regulations** (if necessary, please refer to country specific regulations).
- Please adapt **tense of the questions** according to the group of interviewees, i.e. if they are current trainees or graduates.
- Please note the **current occupation, age and gender** of the respondent(s).

- ✓ How did you get to know about the training course on drywall construction?
- ✓ Why did you apply for that course? What do you want to achieve with the training? What are your professional goals?
- ✓ Can you tell us which are/were the requirements for enrollment (e.g. in terms of previous knowledge, education)?
- ✓ Do/did you have to pay any sort of registration/tuition fee? Is/was it feasible for you to cover these fees (considering your current financial situation)?
- ✓ Please describe the type of course/training you take/took. → Ask about duration, topic etc.
- ✓ How do you rate the adequacy of the course to acquire new knowledge/skills, e.g. in terms of its design, content, mix of practice and theory, duration, selection of trainers?
- ✓ How do you rate the adequacy of the facility's tools/equipment? Is there anything that needs to be improved from your point of view? In which condition are/were they?
- ✓ Can you briefly describe what sort of learning materials (manuals etc.) you received for the training? How do you rate their quality in terms of content, format and comprehensibility? Is there anything that needs to be improved from your point of view?
- ✓ Which content/topic do/did you find most useful? Which content/topic is/was least useful?
- ✓ How do you rate the level of the training? Do/did you have any problems following its contents? If so, which are/were most difficult for you to understand?
- ✓ What is/was your overall experience with the trainers? Do/did they have the necessary didactical competencies? How do you rate their overall training approach, practice orientation, expertise and knowledge?
- ✓ Can you tell us to what extent do you consider that what you have learned (so far) has increased your knowledge and skills? In which areas were you able to improve your knowledge and skills?
- ✓ How relevant are the knowledge and skills gained during the training for your work?
- ✓ After participating in the training, how do you rate your chances to get a job in the construction sector? Do you think that you were able to increase your chances? Do you plan to become self-employed in the (drywall construction) business or do you plan to get employed by a company? Please briefly explain why.
- ✓ How realistic is it that you will be able to acquire tools/equipment in the future similar to those used during the training (considering their costs, availability, frequency of use)?
- ✓ Is there anything else you want us to consider when assessing the training initiative? Are there any challenges, issues or potentials that should be considered?

For other stakeholders

Interviewer instruction

- Please outline briefly the **purpose of the interview and the evaluation** in general.
 - Please make clear that you are **not affiliated with the training center or with Knauf** but that you are an **independent consultant** not related in any way to the initiative.
 - Please assure the interviewees that all provided information will be treated **anonymous** and according to standard **data protection regulations** (if necessary, please refer to country specific regulations).
 - Please take note of the **name, affiliation and position** of the respondent.
- ✓ Please outline your relevant technical background/expertise. If you/your entity are/is collaborating with the Knauf Training Initiative, please describe your (entities) role and responsibilities, if not, please describe your otherwise involvement with the initiative.
 - ✓ How do you assess the initiative in terms of its added value for the vocational training and construction sector? What makes it different to other training offers in the country/region?
 - ✓ To what extent do the initiative's trainings meet existing demands in the construction sector?
 - ✓ Do you know other training centers or private/public (educational) institutions in the country/region offering similar training courses in the construction sector?
 - ✓ To what extent you consider that the training is suitable for the further development of professionals in the construction sector?

- ✓ How do you rate the training's impact on the employability/competitiveness of the graduates? (To what extent) does it improve their chances at the labor market? Please justify your assessment.

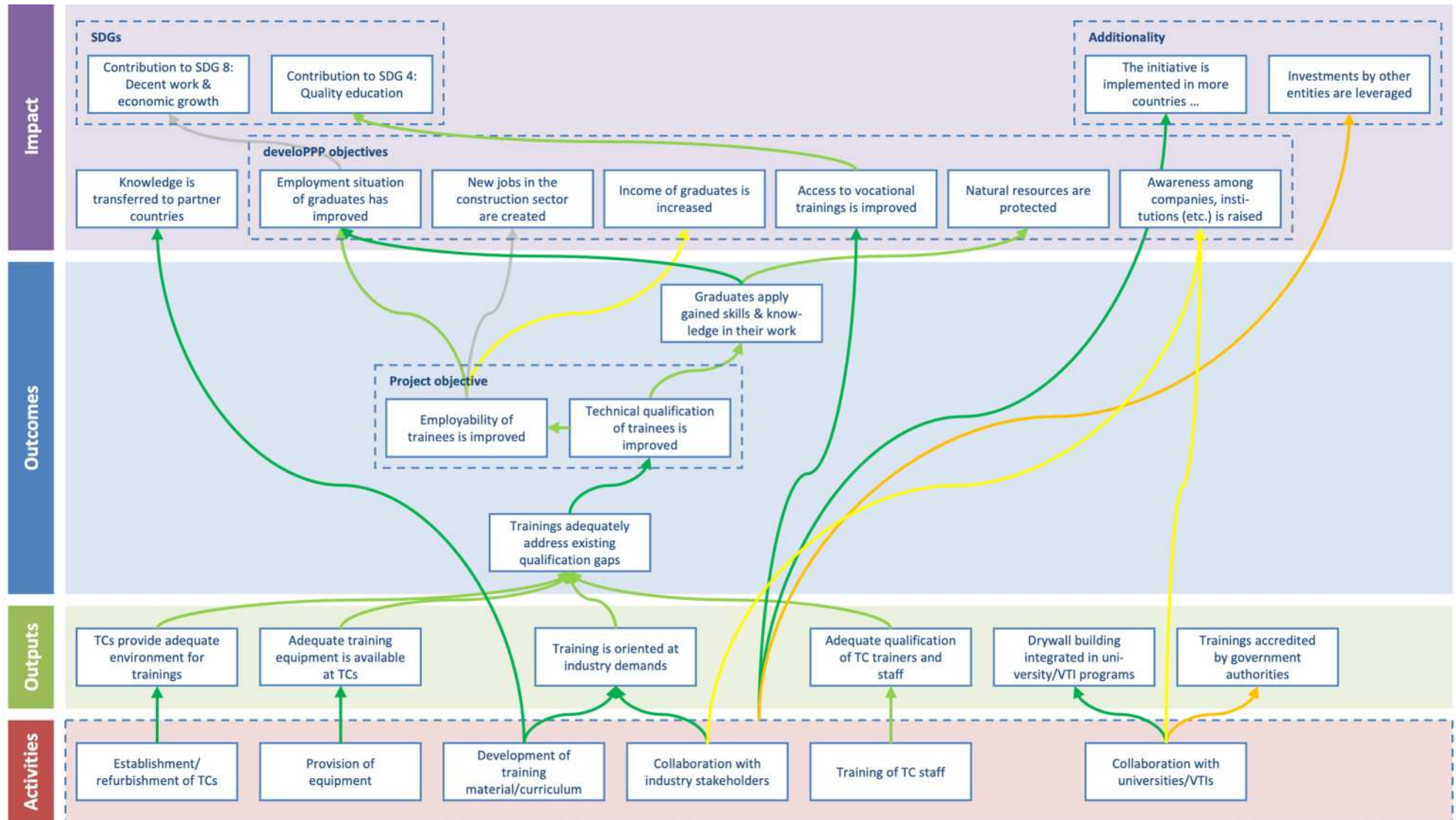
Please select from the following questions as applicable:

- ✓ In which way do you/does your entity collaborate with the training center/ with Knauf (e.g. in developing training materials, providing expertise)?
- ✓ How do you assess the collaboration with the training center/ with Knauf? Did you experience any challenges? If so, which and how did you overcome them?
- ✓ Have there been any relevant changes in the planned activities with your entity either before or on the run? If yes, which ones?
- ✓ How do you assess the interaction and communication with the training center? Is there something that can be improved?
- ✓ Has any collaboration emerged with other potential partners (e.g. other funding agencies, or even some other German partners/companies that are also operating in the region) as a result of the implementation of the KTI?
- ✓ Do you consider that the amount of funds allocated to the initiative was adequate to achieve its objectives?
- ✓ Do you know if the training center(s) offer any support (i.e. consultation, access to special resources, directories) to the graduates for their further professional development?
- ✓ Which aspects/risks (political, financial, institutional, environmental) do you think could jeopardize your cooperation with the training center?
- ✓ Do you think that the training center will be able to operate after the funding comes to an end? How would this affect your collaboration with the training center?
- ✓ Do you have any comments or suggestions that you consider are relevant for the evaluation team?

5.5.2 *Online survey questionnaire*

→ See separate Annex "KTI Online Survey Questionnaire.pdf"

5.6 Validated Results Model



Hypothesis				
Output level				
Activity (cause)	Output (effect)	Level of confirmation	Database	Sec.
Establishment/refurbishment of TCs	TCs provide adequate environment for trainings	Confirmed	Observation, monitoring data	3.1.2
Provision of equipment	Adequate training equipment is available (at the TCs)	Confirmed	Monitoring data	3.1.2
Development of training material/curriculum	Training is oriented at industry demands	Confirmed	Document review, trainees, trainers, monitoring data	3.1.2, 3.3.2
Collaboration with industry stakeholders			TC staff, other stakeholders	3.2.2
Training of TC trainers and staff	Adequate qualification of TC trainers and staff	Largely/rather confirmed	Trainees, graduates, monitoring data	3.1.2, 3.3.2
Collaboration with universities/VTIs	Drywall training content included in university/VTI programs	Confirmed	TC staff, document review	3.3.1
	Trainings are accredited/recognized by government authorities	Not confirmed	TC staff, document review	3.1.3
Outcome level				
Activity/output (cause)	Outcome (effect)	Level of confirmation	Database	Sec.
TCs provide adequate environment for drywall trainings	Trainings adequately address existing qualification gaps	Largely/rather confirmed	Trainees, graduates	3.1.2
Adequate training equipment is available (at the TCs)				
Adequate training material/curriculum is available				
Adequate qualification of TC trainers and staff				
Trainings adequately address existing qualification gaps	Technical qualification of trainees is improved (main project objective)	Confirmed	Trainees, graduates, monitoring data	3.3.3
Technical qualification of trainees is improved (main project objective)	Graduates apply gained skills & knowledge in their work	Largely/rather confirmed	Trainees, graduates, monitoring data	3.3.3
	Employability of trainees is improved (main project objective)	Largely/rather confirmed		3.3.3
Impact level				
Activity/output/outcome (cause)	Impact (effect)	Level of confirmation	Database	Sec.
Employability of trainees is improved (main objective)	Employment situation of graduates has improved (develoPPP long-term objective a)	Largely/rather confirmed	TC staff, graduates	3.5.3
	New (indirect) jobs in the construction sector are created (develoPPP long-term objective a)	No sufficient data	-	3.3.2
	Income of graduates is increased (develoPPP long-term objective b)	Partly confirmed	TC staff, graduates	3.5.3
Development of training material/curriculum	Knowledge is transferred to partner countries	Confirmed	Document review	3.2.1
All activities	Access to vocational trainings is improved (develoPPP long-term objective c)	Confirmed	TC staff, trainees, document review	3.5.1
	The initiative is implemented in more countries than it would have been without subsidy (additionality)	Confirmed	Knauf staff	3.5.1

	Investments by other entities are leveraged (additionality)	Not confirmed	TC staff, document review	3.5.1
Access to vocational trainings is improved (develoPPP long-term objective c)	Contribution to SDG 4 (inclusive and equitable quality education and promote lifelong learning opportunities for all)	Largely/rather confirmed	Expert assessment	3.1.2, 3.5.1
Employment situation of graduates has improved (develoPPP long-term objective a)	Contribution to SDG 8 (sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all)	No sufficient data	Expert assessment	3.5.1
Graduates apply gained skills & knowledge in their work	Employment situation of graduates has improved (develoPPP long-term objective a)	Confirmed	Document review	3.5.1
	Natural resources are protected (develoPPP long-term objective d)	Largely/rather confirmed	Document review	3.5.1
Collaboration with industry stakeholders	Awareness among companies, institutions, politicians and the professional public is raised (develoPPP long-term objective e)	Partly confirmed	TC staff, document review	3.5.1
Collaboration with universities/VTIs				
Assumptions				
There is a demand for qualified workers in the construction sector.		Confirmed	Country and sector statistics	3.1.1
There is a knowledge gap (concerning drywall installation) among construction workers.		Confirmed	TC staff, sector experts	3.1.1, 3.2.3
No other suitable training possibilities for the initiative's target groups are available.		Largely confirmed	TC staff, sector experts	3.1.1, 3.2.2
There are jobs available in the construction sector for drywall installers.		Partly confirmed	Country and sector statistics	3.1.1