

## MEASURING EDUCATION'S PATH

## TO PROSPERITY

Tracer Studies for Vocational Education and Training Programmes – a Practical Tool Kit



**HELVETAS**

Together for a better world

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Tracer Studies for Vocational Education and Training Programmes – a Practical Tool Kit

The purpose of this publication is to provide a hands-on manual on how to conduct tracer studies for Helvetas staff, its partner organisations and any other organisation which focuses on vocational education and training (VET) and is interested in evaluating their VET interventions. The goal of a graduate tracer study is to gain information on the relevance and effectiveness of VET programmes which prepare learners to enter into the world of work.

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Helvetas, Swiss Association for International Co-operation, works towards the elimination of the causes of marginalisation and promotes solidarity with the poor in the south and the east. Its mission is to actively contribute to the improvement of the living conditions of economically and socially disadvantaged people in Asia, Africa and Latin America. Currently, Helvetas runs programmes of co-operation in 18 countries. Helvetas was founded in 1955 as the first private Swiss development organisation.

Through such publications, Helvetas contributes to the process of learning through sharing in international co-operation. For more details or comments, please contact:

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## EXECUTIVE SUMMARY

With regard to the current discussion on aid effectiveness it is important that there be a reliable and comprehensive methodology for evaluating the output, outcome and impact of vocational education and training (VET) interventions in order to ensure accountability to donors, local partners, government entities, etc. and to allow comparison between VET interventions in order to improve them.

The purpose of the present tool kit is to provide a self-instructional manual on how to conduct graduate tracer studies for Helvetas staff, its partner organisations and any other organisation which focuses on VET and is interested in assessing their VET interventions.

The goal of a graduate tracer study is to gain information on the relevance and effectiveness of a VET programme which aims to prepare trainees or students for employment or self-employment in order to improve their livelihood and alleviate poverty. A tracer study tracks down a group of graduated trainees who have participated in VET programmes in specific trades and explores their current and past employment activities, any possible effects of the training/studies on their income, their satisfaction with the job, the quality and relevance of training received and the interrelation between their studies/training and work among other factors.

This tool kit is intended as a hands-on manual for tracer studies. The introductory chapter describes the tracer study methodology and is followed by a chapter on Helvetas' previous experiences with tracer studies. Following sections explain step-by-step how to carry out a tracer study. In the planning process, the careful selection of the data sample and a thorough training of interviewers are crucial for a representative tracer study and are therefore described in detail. Four questionnaires are included in this tool kit and the data collected using them can be put into Excel based analysis tools to organise and analyse the gathered data. The different questionnaires and the analysis tools, all available in English, Spanish and French, can be found on the CD-ROM enclosed within this publication. A section about report writing and interpretation also takes constraints into account, e.g. the attribution gap, as the impact of a VET intervention cannot be exclusively attributed to the intervention itself, because many other factors may also influence the desired impact.

Overall, graduate tracer studies have proven to be an effective and efficient instrument for evaluating the output, outcome and impact of VET interventions. However, in addition to the thorough preparation required, data must also be carefully analysed and interpreted taking the respective context and possible mitigating factors into account.

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Trainees of FORJA Haiti, a VET programme supported by Helvetas, learning how to use a mowing-machine

## 1 INTRODUCTION

For many development agencies, vocational education and training (VET) programmes form an integral part of their strategy for poverty alleviation. For example, Helvetas supports VET programmes focusing on agricultural education and on skills development in a wide variety of trades in many different countries. In these programmes, Helvetas puts a special emphasis on disadvantaged young people living in rural or semi-urban areas. The main goal of these programmes is to improve young people's livelihoods and prosperity overall as well as to build capacity and alleviate poverty.

In the ongoing discourse on accountability, cost-efficiency and aid-effectiveness among development agencies and their partners, result-oriented monitoring and reporting of development programmes including VET programmes is becoming more and more important. It remains challenging, however, to determine the impact of these programmes, and the resources available for monitoring and evaluation are often limited. The

present tracer study tool kit offers a carefully devised methodology for evaluating the outcome, impact and relevance of VET programmes in a straightforward and cost-efficient way, taking into account that there may be many other factors influencing the desired impact of a programme than just the VET intervention itself.

This tool kit, which is directed to Helvetas staff, its partner organisations and any other organisation or institution focusing on VET, includes an introductory chapter describing the tracer study methodology, a chapter on Helvetas' previous experiences with tracer studies and an extensive instruction manual explaining step-by-step how to carry out a tracer study along with several questionnaires and Microsoft Excel analysis tools to organise and analyse data gathered from graduates and employers. The CD-ROM enclosed with this publication includes all the questionnaires as well as this document and the analysis tools translated into English, French and Spanish.



**A trainee of FORJA Guatemala, a VET programme supported by Helvetas, at work in a tomato greenhouse during his apprenticeship as part of his agricultural vocational training**



**Graduates of SKILL Nepal, a VET programme supported by Helvetas, in their tailoring studio**

**1.1 WHAT IS A VET PROGRAMME?**

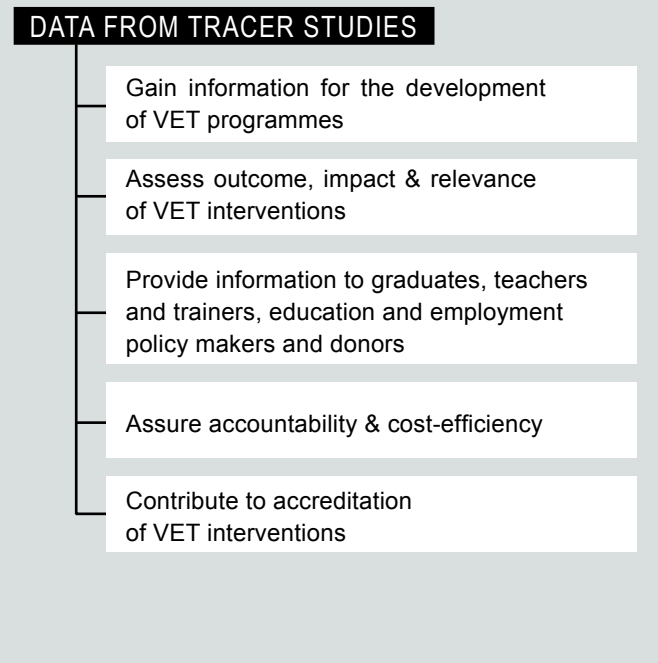
Vocational education and training (VET) programmes help learners to acquire skills, knowledge and attitudes needed to enter into the world of work. VET programmes contribute to poverty alleviation as well as to the social and economical inclusion of marginalised communities. Furthermore, they can play an important role in promoting a country’s economic growth (UNESCO 2008). VET programmes can last from a couple of weeks to several years. Usually, a VET programme is composed of a theoretical and a practical part. In some cases a VET programme also includes an apprenticeship in a business or on a farm where learners gain hands on experiences in their specific vocational field.

**1.2 WHAT IS A GRADUATE TRACER STUDY?**

A graduate tracer study is a powerful monitoring and evaluation instrument to gain information about the relevance and effectiveness of VET programmes. A tracer study tracks down a group of graduated trainees who have participated in VET programmes in specific trades and explores their current and past employment activities, any possible effects of the training/studies on their income, the quality and relevance of training received, the interrelation between their studies/training and work and their satisfaction with the job. Tracer studies also generally provide information on ethnicity, gender and socio-economic background of the graduates in order to assess the poverty alleviation potential and the gender aspect of VET programmes. Scheuren (2004) gives a good introduction to the general characteristics of a survey and addresses special considerations which need to be taken into account when conducting a survey.

Data gathered through tracer studies can be used for a variety of purposes, the most important of which are summarised in figure 1.

**FIGURE 1**



**Different purposes of tracer studies**



### 1.3 WHY A TRACER STUDY TOOL KIT?

To date, Helvetas has important experience with tracer studies which deliver valuable findings on the graduates of the different VET programmes and in some cases on the involved partner organisations and employers of the graduates. However, the coverage as well as the methodologies that have been used so far vary widely.

Consequently, a need has been identified to standardise the methodological procedure of graduate tracer studies. The present tool kit is a self-explanatory, practical guide on how to implement a tracer study and comprises all the necessary instruments for carrying out such a study. This tool kit has been developed with the aim of standardising and facilitating the processes of data collection, analysis and reporting as well as making it possible to compare data within and between different VET projects.

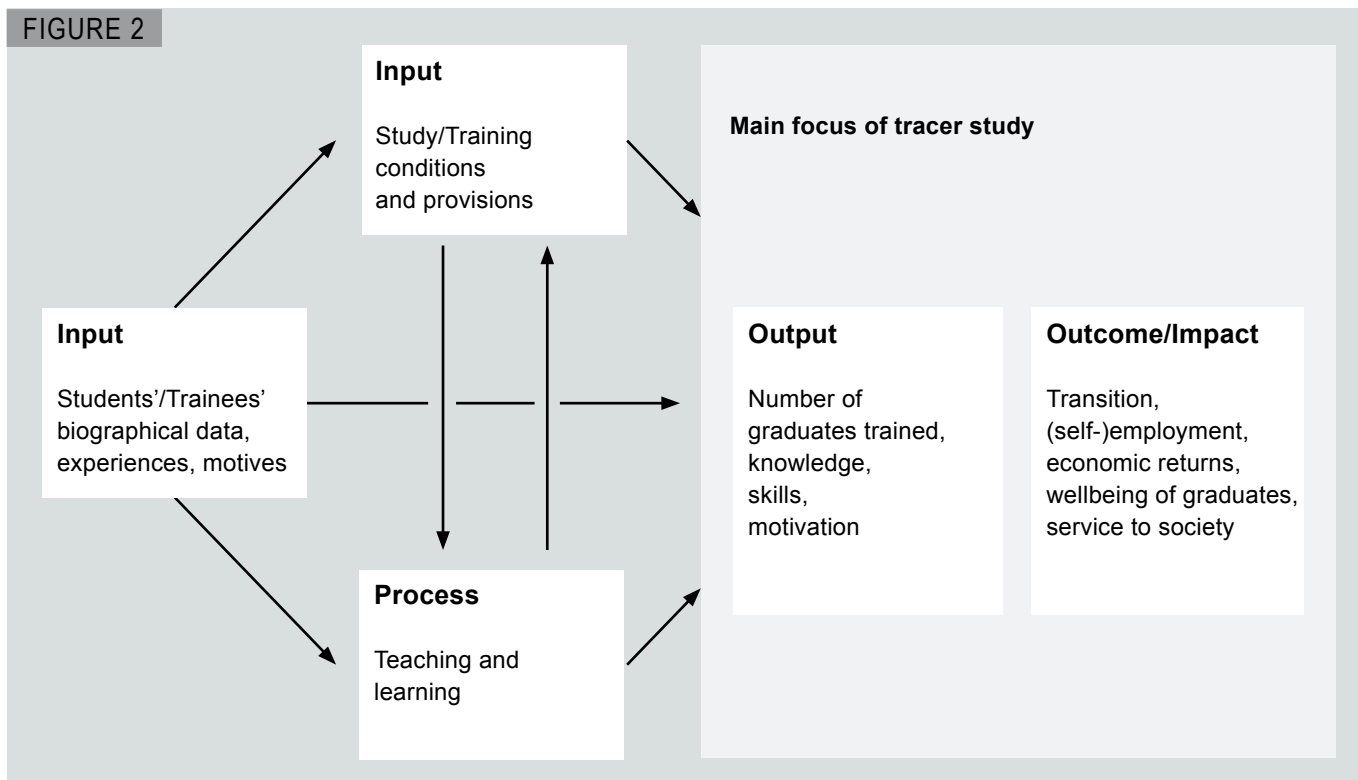
### 1.4 ON WHICH ASPECTS DOES A TRACER STUDY FOCUS?

In order to monitor VET programmes, a coherent set of variables needs to be identified. Figure 2 shows key variables in the evaluation of VET programmes.

As illustrated in figure 2, a tracer study primarily focuses on the outputs, outcomes and impacts of VET interventions. The study is interested in finding out more about the knowledge and skills that graduates acquire during their training/studies and especially the perceived relevance and usefulness of these skills in their professional life. A tracer study further investigates the satisfaction of graduates with the completed training. In addition, a tracer study analyses the transition of graduates to employment, their strategies to find work and the time it takes them to find a suitable occupation. Finally, a tracer study examines the course of activities the graduates pursue from the completion of their training to the time of the interview, the field in which they are presently working, their income and changes in their material prosperity.

However, tracer studies should not be restricted to focus exclusively on the output, outcome and impact variables of VET programmes. Where questions of cost-efficiency and quality control are also of interest, input and process variables need equal consideration. Process variables include, for example, teaching and training methods and contents of curricula. Input variables include the motives which lead graduates to a certain VET programme, their socio-demographic and socio-economic background, their education history and the study/training conditions and provisions among others. All these variables should be evaluated to determine any correlation with the output, outcome and impact of a VET programme.

FIGURE 2



Key variables in the evaluation of VET interventions. The arrows indicate mainly the flow of influence of input & process variables on the output, outcome and impact of VET interventions (adapted from Schomburg 2003).

Which research questions does a tracer study address? A selection of important research questions is given below.

- How do graduates assess the relevance, quality and usefulness of their vocational education and training?
- What is the incidence of employment, self-employment, further education and under/unemployment among graduates?
- What are the economic and social returns on the received training?
- Are the present occupations of graduates related to their vocational training?
- Are there significant differences in labour market outcomes with respect to gender and socio-economic background?
- What is the rate of (international) migration?

## 1.5 WHICH METHODS ARE USED TO CONDUCT A TRACER STUDY?

For this tool kit a mainly quantitative approach has been adopted which uses face-to-face interviews based on structured questionnaires. The tool kit provides detailed instructions on how to conduct such structured interviews and how to analyse the predominantly quantitative data collected (see chapter 4). Structured interviews have the advantage that a large population of graduates and a large amount of information can be compiled and analysed at relatively low costs and that the gathered information can be compared within and between different VET programmes.

If resources allow, it is advisable to complement the data collected through structured interviews with qualitative methods including semi-structured interviews, focus group discussions, individual case studies and observations of teaching and learning processes (see chapter 3).

## 2 HELVETAS' OWN EXPERIENCES WITH TRACER STUDIES

In recent years, Helvetas has gained valuable experience with a variety of tracer studies which delivered important information about the graduates of its VET programmes. However, the methods used for these studies varied significantly and, until now, no standardised methodology of data collection and analysis has been elaborated. The following two case studies, from Nepal and Kyrgyzstan respectively, demonstrate examples of different methodologies used in the past to carry out tracer studies. These methodologies are difficult to replicate and to mainstream on a large scale for the reasons discussed below. Therefore, the present tool kit which offers a standardised, straightforward and cost-efficient methodological procedure of data collection, analysis and reporting has been developed in order to bridge this gap.

### 2.1 TRACER STUDY NEPAL – F-SKILL

Helvetas Nepal has received funds from major donors (SDC and DFID) to technically support a VET programme called F-SKILL. F-SKILL is today a private limited company with the goal to promote and finance employment oriented technical and mobile training for disadvantaged young people. F-SKILL offers its courses through a network of local partners (franchisees) throughout the country to whom it franchises training packages and procedures. All the trainings offered by F-SKILL are demand driven and market led. From 2003 to 2007, F-SKILL trained 7000 young people (F-SKILL 2007).

So far, one tracer study with the overall objective *“to better understand the quality and quantity of outcomes reported by F-SKILL and to assess the impact of F-SKILL training and employment activities”* has been carried out (New ERA 2008). An independent company was commissioned to carry out the study in order to guarantee objectivity of the study. The company applied a mix of four major methods to implement the study including document review, individual interviews, focus group discussions and participatory observation. The graduate interviews, 440 overall, were based on a standardised survey questionnaire.

In addition to interviews with former trainees, extensive interviews were conducted with franchisees, trainers and employers as well as officials of F-SKILL Pvt. Ltd. The study covered among other things the social, economic and ethnic background of the trainees, their motivation, their perception of the relevance and quality of the training, their employment status and satisfaction with the current job, the social and economic returns on the received training (changes in financial wellbeing, health care, food and schooling pattern, etc.) and the main assets and weaknesses of the training.

The F-SKILL tracer study is a very elaborate and comprehensive example of a tracer study combining qualitative and



.....  
**A trainee of AVEP Kyrgyzstan planting seedlings**  
 .....

quantitative data. However, the study's breadth and complexity contributed to high costs, including more than 3000 working hours while also requiring knowledge in sophisticated data gathering and analysis techniques. Therefore, for most VET projects, such a study may not be applicable on a regular basis.

## 2.2 TRACER STUDY KYRGYZSTAN – AVEP

AVEP (Agricultural and Rural Vocational Education) was initiated in 2001 with the objective of offering the young rural population of Kyrgyzstan "an appropriate, progressive, agricultural vocational education based on a range of relevant knowledge, skills and attitudes that incorporates practical and theoretical elements and is oriented towards the market economy". The project was a reaction to the changing socio-economic conditions in the country and was created with the goal of empowering young farmers regardless of gender to meet changing market demands.

In total, three tracer studies have been carried out in the framework of AVEP. Studies in 2005 and 2006 (Willen 2005, Holland 2006) used a mainly qualitative approach and focused not only on graduates but also on villagers who may have been indirect beneficiaries of the programme. These two tracer studies were based on semi-structured interviews, which mainly included open-ended questions. Additionally, participatory observation by the interview team complemented the data collected through interviews. The third tracer study was conducted in 2008 as a part of the development of this tracer study tool kit to test the effectiveness of the structure and methodology.



.....  
**Maya Ramtel, a graduate of a hairdresser/beautician training provided by F-SKILL, in her beauty parlour in Nepal**  
 .....

The results of the first two studies include information on the present employment status and occupation of the interviewed graduates, their expectations before the training and their rating of the relevance of the received education as well as their level of satisfaction with their training. Furthermore, the services which the graduates provide to their communities as well as community members' perceptions of the vocational school were analysed.

On the one hand, the AVEP tracer studies of 2005 and 2006 delivered a comprehensive set of data as a result of the open nature of the questionnaires which allowed the participants to express their views freely. On the other hand, analysing the different sets of mainly qualitative data proved to be challenging and time-consuming. Furthermore, it emerged to be problematic to compare the gathered data as no standardised methodology was applied. For these reasons, the methodology used for the AVEP tracer studies may not be appropriate for many VET programmes. Nevertheless, as mentioned above, semi-structured interviews can be very valuable to complement data gathered through standardised methods.

### 3 TRACER STUDY INSTRUMENTS

The present tool kit includes structured questionnaires directed to graduates, employers and informants (relatives, teachers, etc.) as well as guidelines for case studies and focus group discussions and customised analysis tool files in Microsoft Excel. The CD-ROM enclosed with this publication includes all the questionnaires as well as this document and the analysis tools translated into English, French and Spanish. All the instruments of this tool kit have been created in a way that they can be used for a broad variety of VET programmes (see table 1).

TABLE 1

Tracer study instruments	Sources of information	Type of data	Data analysis
Standardised questionnaires - pre-tracer questionnaire - graduate questionnaire - employer questionnaire - informant questionnaire	Students or trainees, employers, informants	Mainly quantitative	Analysis tools in Excel
Case studies	Graduates, employers, teachers/trainers, etc.	Qualitative	Qualitative data analysis (no tool available)
Focus group discussions (FGD)	Graduates, employers, teachers/trainers, etc.	Qualitative	

Different instruments of the tracer study tool kit



Ismail Sharshiev, a student of AVEP Kyrgyzstan, during a practical class in his agricultural training

### 3.1 STRUCTURED QUESTIONNAIRES

#### 3.1.1 PRE-TRACER STUDY QUESTIONNAIRE

This questionnaire (see Annex) has been designed to generate baseline data on the student's socio-economic and socio-demographic background. It is highly recommended that all students/trainees are interviewed at the beginning of their training or study course using this questionnaire. The data generated through this questionnaire will also be extremely valuable to gain information in particular regarding the motives to enrol in a specific training programme and to calculate the economic returns on VET interventions as well as to verify the answers given in the graduate questionnaire.

#### 3.1.2 GRADUATE QUESTIONNAIRE

The core instrument of this tool kit is the graduate questionnaire (see Annex). This questionnaire will be used for the structured interviews with the graduates who form part of the identified sample (see section 4.2). The design of this questionnaire follows a biographic logic. It is composed of seven different sections which gather information on different aspects of the graduates' lives and careers. As it has been found that interviewees usually tend to be most alert in the middle of an interview, the questionnaire has been designed in a way that the simpler questions are arranged in the beginning and at the end of the questionnaire.

**A. General information** on vocational training or education programme (type of training/studies, duration of different trainings/studies, motives for school or training selection).

**B. Retrospective evaluation of quality and relevance of studies/training and apprenticeship** (curriculum, competence and commitment of trainers/teachers, study conditions, length of studies and apprenticeship, overall satisfaction).

**C. Transition period to employment** (chronology of main activities since graduation, type of activity, strategy to find employment, migration rate).

**D. Current activity** (type of activity, location, duration, sector, satisfaction).

**E. Income** from primary and secondary activities both before and after training.

**F. Relationship between study/training and work** (applicability of skills and knowledge acquired during training/studies).

**G. Biographical data** (age, gender, ethnicity, education history, socio-economic background).

#### 3.1.3 EMPLOYER QUESTIONNAIRE

Whenever possible, the sampled graduate's current employer should be surveyed using the employer questionnaire (see Annex) in order to complement the results gained from the graduate questionnaire. Information given by employers can further be used to validate statements made by the interviewed graduates.

The following complementary inputs can be provided through an employer interview:

- Information about employers' expectations and requirements from the employees.
- Information about the performance of graduates of a specific VET programme.
- Information about personnel and income structure.
- Information about the recruiting procedures.
- Reputation of a specific institution of VET and relevance of its courses for the labour market.

#### 3.1.4 INFORMANT QUESTIONNAIRE

If the graduates themselves cannot be interviewed, for example because they migrated to a remote area or abroad, interviews with someone close to the graduate such as relatives, friends or teachers who are willing to share information on the graduate's career development may be conducted (Ibarguen & Abdul Cader 2005). The informant questionnaire (see Annex) is restricted to factual questions because an informant will not be able to make any statements on the graduate's attitude towards his/her studies/training and occupation.

#### 3.1.5 POSTAL OR EMAIL QUESTIONNAIRE

It is possible to print the graduate questionnaire and mail it to graduates or send an electronic version via email. However, postal or electronic questionnaires should only be mailed to graduates who migrated abroad or live in remote places and if there is absolutely no possibility to meet or call them for an interview. Printed questionnaires are error prone as the graduates may not be used to filling them in. Moreover, it has been found that questionnaires filled in by the graduates themselves may deliver different results than if they were interviewed in person. Therefore, if data gathered from written questionnaires and data gathered from interviews are mixed and analysed together, the findings of the study may be biased.

.....

**Radhika Maka, electronic technician, Nepal**

.....



.....

**Radhika Maka repairing a TV in her shop in Bhaktapur**

.....

Radhika Maka, a mother of two girls, took part in the Advanced Electronics Training offered by the NGO SKILL in 2004. The 27 year old woman, who has completed 10 years of primary and secondary education, grew up on a farm in Bhaktapur in the Kathmandu valley. Before she got married, Radhika's parents rented a room of their house to an electronics technician and the young woman became fascinated by the work he was doing. She loved watching him repair broken TVs. When she heard about the Advanced Electronics Training from her friends it did not take her long to decide that she wanted to participate in the four-month training.

Radhika now runs an electronics repair and maintenance shop in the centre of Bhaktapur together with her husband who was trained by SKILL as an electrician. For the future, she and her husband would like to expand their shop and Radhika is eager to do more training in mobile phone repair and maintenance. She says that through the training she received, she manages to make a decent living and has been able to gradually improve her livelihood. She bought tools for her shop and sends both of her children to school which, she reckoned, might have been difficult if she hadn't received the training. Moreover, she states that her social status in the community has clearly improved. Had she continued selling vegetables in Kathmandu like she had done before the training, people would have made fun of her for not better exploiting her education. But now people are impressed by her occupation and her shop, she states proudly.

### 3.1.6 ANALYSIS TOOLS

The tool kit includes three specially developed analysis tools in Microsoft Excel to process and analyse the structured questionnaires. The three tools are as follows: the Graduate Analysis Tool (which analyses the data collected through both the graduate and informant questionnaires), the Employer Analysis Tool and the Pre-tracer Study Analysis Tool. The procedure for entering and analysing data using the programmes is described in detail in section 4.4.

Even though there is more sophisticated statistical analysis software (e.g. SPSS, SAS) on the market, Microsoft Excel has been chosen for this tool kit because of its widespread availability and familiarity. A good overview and comparison of different software packages, some even free of charge, can be found in United Nations (2005). Such packages could also be used with the information gathered through the questionnaires presented in this tool kit, especially for more complex sampling or further analysis.

### 3.2 CASE STUDIES

A case study analyses the development of a particular person, group, or situation over a certain period of time. In tracer studies, individual case studies serve as in-depth examinations of graduates, employers, training providers or other people with specific roles in a VET programme. With a case study, an individual's subjective point of view can be examined in greater depth. Case studies are specifically appropriate to complement and elucidate the quantitative data gathered through the structured questionnaires with qualitative information and are recommended to be implemented provided that there are enough resources available.

A semi-structured interview with the person under consideration serves as the basis for a case study. This interview can be combined with participant observation. The following questions, partly adapted from New ERA (2008), the institution who conducted the F-SKILL tracer study, may be helpful to construct guidelines for a semi-structured graduate interview:

- What were your and your family's main sources of income before your participation in the training/studies?
- Why were you interested in the training programme/studies?
- Why were you interested in this specific trade?
- What is the most important thing you have learned during your training/studies?
- Was there anything missing in the training programme/studies? If yes, what else should have been included in the curriculum?
- What were the main difficulties you faced while searching for employment/starting up your business?

- In case the graduate is unemployed: For how long have you been unemployed? What do you think are the reasons for your current unemployment?
- Has your social status in your community improved since you have completed your studies/training? If yes, in which way?
- Is your income high enough to sustain yourself and your family?
- What are your plans, dreams for the future?

After completion of a case study, the data gathered during the interview and observations need to be summarised and coded by topic (categorised) and can then be analysed by means of qualitative data analysis, as e.g. indicated by Silverman (2005). Further information about case study methods is also provided e.g. by Yin (2003) and Silverman (2005).

### 3.3 FOCUS GROUP DISCUSSIONS

"A Focus group discussion (FGD) is a group discussion of approximately 6-12 persons guided by a facilitator, during which group members talk freely and spontaneously about a certain topic" (IDRC 2008). FGDs are an interactive way of collecting in-depth information on concepts, perceptions and ideas of a group and are usually applied in combination with other methods such as surveys, individual interviews, observation, etc. FGDs have also been proven to be very useful for validating data generated through structured interviews. The distinguishing mark of an FGD is the capitalisation on the communication between research participants in order to generate data and to uncover topics which would remain unknown without the group interaction (Flick 2007). It is recommended to implement FGDs if a survey team is interested in gathering additional in-depth information and provided that there are enough resources available for this time-intensive method.

It is suggested that the participants of a focus group share similar characteristics, e.g. gender, vocation, age, etc. This is important because in many societies people with a higher social status (usually older and male participants) tend to speak more and to dominate a group. By creating a group composed of similar members, this phenomenon can be reduced (Ibarguen & Abdul Cader 2005). It is further advisable to start an FGD with a warm-up phase or ice breaker game during which all the participants get to know each other and feel comfortable in the group. The facilitator who provides guidance during the entire FGD then introduces the topics and questions on which the group is going to focus. An additional person should be assigned as note taker during the discussion.

In the case of a tracer study the following questions, partly adapted from New ERA (2008), may be helpful to guide an FGD among graduates:

- In what ways has/have your studies/training helped you to improve your vocational skills? What was the most important thing you have learned?
- How has/have your training/studies helped you to become (self-)employed?
- In what ways has your livelihood and that of your family improved after completion of your studies/training?
- Imagine you were the school/training administrator, what kind of improvements/changes would you suggest for the training/studies program (e.g. training methods, school/training facilities, courses offered, apprenticeship, etc.)?
- What are your plans, dreams for the future?

After completion of an FGD the information gathered during the discussion needs to be summarised and coded by topic (categorised) and can then be analysed by means of a qualitative data analysis, as e.g. indicated by Silverman (2005). Further information about FGD is provided e.g. by Kitzinger (1995), Morgan (1997) and Scheuren (2004).

#### Hand embroidery training provided by F-SKILL in Nepal





Ada Ramirez, barefoot veterinarian, Dominican Republic



Ada Ramirez is away on business, medicating a sheep

Ada Ramirez has been trained as a barefoot veterinarian by PROMESA (Proyecto para el mejoramiento de la producción y la sanidad animal). Through this Helvetas project, young women are educated as veterinary assistants with the goal of helping improve animal health and production in rural areas of the Dominican Republic where hardly any veterinarians are active. Ada Ramirez is one of more than 540 female beneficiaries of the project who have been trained since 1999. Through her work in the border area with Haiti, she helps rural small livestock owners, in many cases women, to improve the health of their livestock and, at the same time, their livelihood overall.

**4 HOW TO IMPLEMENT A GRADUATE**

**TRACER STUDY**

The following practical instructions and comments are intended to give guidance through the entire implementation process of a graduate tracer study from the planning phase to report writing. This chapter is mainly based on Schomburg (2003), Ibarguen & Abdul Cader (2005), and Helvetas' own experience of former tracer studies and the testing phase of the tool kit.

A tracer study is usually composed of four major steps which are illustrated in figure 3 and described in more detail in this chapter.

**4.1 PLANNING**

A planning phase should precede every tracer study. The subsequent steps for this phase are described below.

**4.1.1 GOALS OF THE STUDY AND TARGET POPULATION**

Even though the overall goal of a graduate tracer study is given in chapter 1 of this tool kit, specific objectives should be developed in the planning phase of each tracer study which are geared to the local conditions and the specific circumstances of the study or training programme.

The target population of a tracer study includes the total population of graduated trainees who have participated in a specific VET programme. Information about how to define a sample of the target population is given in section 4.2.

**4.1.2 ADAPTATION OF QUESTIONNAIRES**

All the items of the questionnaires which need adaptation for local conditions and specific circumstances of the study or training programme are highlighted. For example, the options for ethnicity of graduates need to be entered in question G 5 of the graduate questionnaire before the questionnaire is translated into the local language, if necessary, and printed.

**4.1.3 TIMETABLE**

It is important to arrange a timetable before implementing a tracer study. Table 2 gives an idea how much time might be necessary for the implementation of a complete tracer study with a sample size of about 100 graduates from the planning phase to reporting. The time specifications given in the table below are based on the assumption that two interview teams each composed of two individuals will be involved in the data collection phase of the study. However, since the coverage of different studies varies widely, depending on the identified sample size and how far apart the graduates are geographically scattered, it is difficult to give a universally valid timetable. Please note that generally there is a risk of underestimating the time necessary for data collection and reporting. For more complex surveys, United Nations (2005) gives good indications for work plans.

**FIGURE 3**



**Implementation process of a tracer study**

TABLE 2

A) Planning	B) Field phase	C) Data analysis and reporting
<b>One to two weeks</b>	<b>Four weeks</b>	<b>One to two weeks</b>
1. Specification of goals, coordination, planning, background information collection, context analysis  2. Questionnaire adaptation  3. Preparation of field phase: Address procurement, definition of tracing methodology, sampling	4. Interviewer recruitment and training  5. Pilot-test  6. Tracing of graduates  7. Data collection through structured interviews, FGDs, case studies and observation	8. Data entry and data editing (quality control)  9. Data analysis (tables, diagrams, graphs)  10. Interpretation of data and report writing  11. Presentation of results, discussion and revision (e.g. workshop)  12. Correction and revision of the report

**Tasks and schedule, including timing of a tracer study**

**4.1.4 SURVEY TIME PERIOD**

It is recommended to conduct tracer studies regularly, ideally annually, but at least at the end of every project phase.

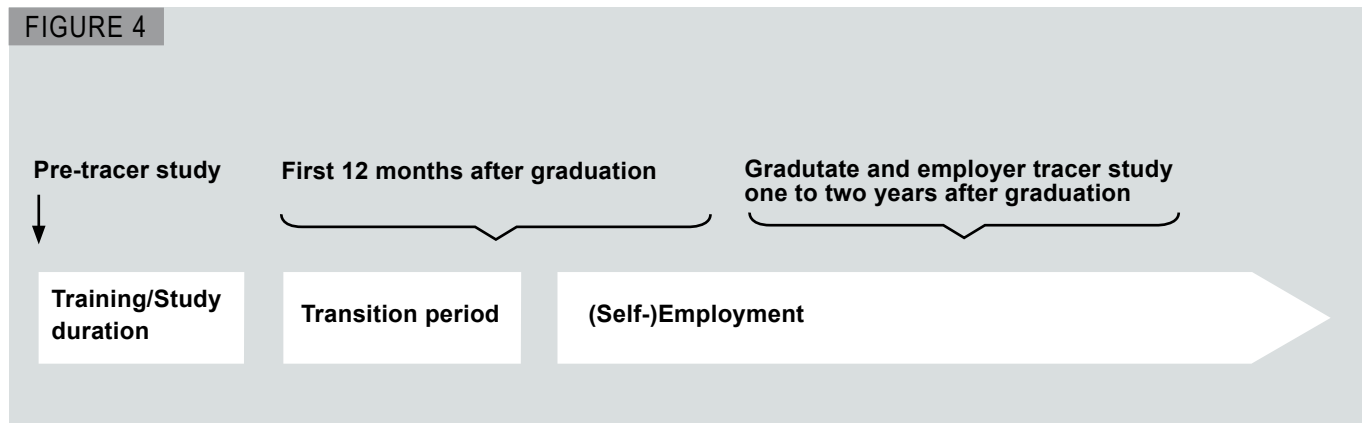
The pre-tracer study should be conducted at the beginning of a training/study programme in order to generate baseline data. In contrast to the graduate tracer study, this study always includes all students /trainees of a specific training or study programme.

The graduate tracer study should, according to our own experiences, be conducted at the earliest one year, but ideally two years after graduation (see figure 4). The test phase of

this tool kit showed that graduates can easily draw conclusions about the usefulness of the skills acquired in the training for their working life, give information about their (self-) employment, but still remember details of the training session remarkably well during this time period.

The first twelve months after graduation are less appropriate for the implementation of a tracer study because graduates interviewed during that early phase of their careers will unlikely be able to make meaningful judgements about the value of their training for their working lives.

FIGURE 4



**Survey time period**

4.1.5 COSTS

Since the size of the sample as well as the costs of material, transport and work force vary from country to country, only the budgetary items are listed in table 3, further indications for complex surveys are also given e.g. by United Nations (2005). At the beginning of a tracer study, it is recommended to calculate the costs. The actual costs of each item will have to be estimated and filled in by the survey coordinator. It is estimated that an interviewer team composed of two individuals can carry out approximately four interviews per day, again depending on the geographical distribution of the interviewees.

4.1.6 BACKGROUND INFORMATION

Apart from the information that will be gathered through the interviews, other sources of information should be consulted whenever possible. For example, graduate statistics of schools and training institutions and personal files of students or trainees have proved to be very useful in other studies. This information should be studied before the field phase and should be shared with the field staff in order to make them familiar with the broader context of the planned study and the background of the individual graduates (Schomburg 2003).



Students of AVEP Kyrgyzstan during a theoretical training course

TABLE 3

Costs of a tracer study				
Task	Unit	Count	Costs per unit (local currency)	Costs per task (local currency)
Planning phase	Hours			
Printing/translation of questionnaires	Questionnaire			
Data collection	Hours			
Logistics				
Data entry and editing	Hours			
Data analysis	Hours			
Reporting	Hours			
Printing of report	Report			
<b>Total costs</b>				

Budget planning form

#### 4.1.7 CONTEXT ANALYSIS AND ATTRIBUTION GAP

In addition to the analysis of background information, it is crucial to acknowledge that every VET project exists within a context, that is its socio-cultural, political, institutional, economic and geographical environment or milieu, which may have a major influence on the outcome and impact of a VET project (Herweg & Steiner 2002). Hence, it is recommended to conduct a context analysis prior to every tracer study.

In this respect, it is important to recognize that whenever long-term impacts of development programmes are of interest, the question of attribution arises. There is a risk in attributing all observed change to the impact of the VET programme itself as there are likely many factors acting simultaneously which influence outcomes over time. This phenomenon is called the 'attribution gap'. In the context of VET projects, other factors apart from the quality of education and training which may also have an influence on the professional success of graduates include the VET policies and VET situation overall in a specific country (e.g. accreditation policies), the economic situation at the time of graduation, employment opportunities abroad, the socio-cultural and economic background of graduates, etc. The tracer study methodology presented here does not include mechanisms to identify what would have been the situation of an interviewed graduate if he/she had not been able to benefit from the vocational education or training investigated by the study. If this is a requirement, a control group not having taken the specific education or training has to be included in the survey in order to detect the direct impact of the VET programme. This procedure, however, is very resource intensive and requires good statistical knowledge.

Overall, one should be careful not to link all observed changes directly to the VET project. The attribution gap needs to be borne in mind while interpreting the data gathered through a tracer study and has to be mentioned in the report. Nevertheless, through tracer studies, findings are generated which can be indicative of the extent that a specific VET intervention contributed to the changes in the lives of the beneficiaries (Ibarguen & Abdul Cader 2005).

#### 4.2 SAMPLING METHODS AND ERRORS

The present chapter gives a very brief and simplified insight into sampling and statistical methods and errors. It is highly recommended to have a detailed look at sampling as it strongly influences the representativeness of a study. Therefore, the study of further literature (e.g. Kalton 1983, Dalenius 1985, United Nations 2005) and the collaboration with a person experienced in statistics is recommended when it comes to sampling and error estimation.

##### 4.2.1 SAMPLE SIZE

A sample of graduates from the total target population usually needs to be defined. Even though the inclusion of the total target population of graduates in the survey would give the most accurate results, this is, due to limited resources, usually only feasible for small populations and generally not necessary. However, the larger the randomly determined sample size, the lower the variance and the more confident one can be that the results appropriately reflect the total target population.

The question of the sample size is generally quite complex, depending on different factors (e.g. type of distribution, variance, total target population, desired confidence). Ideally, an earlier study or tracer study with a similar target population and questionnaire is available. In this case, the variances and types of distribution could be defined and the minimal sample size related to a defined confidence interval could be determined, although variable from question to question.

In the case that no earlier studies or former tracer studies are available, there are certain empirical values for surveys to be used in a very pragmatic way. For dichotomous questions (questions with answers of e.g. yes/no or 0/1), the minimal sample size is recommended to be about 100 (e.g. for income distributions, however, the minimal sample size needs to be greater). Experience has shown that even for very large total target populations, sample sizes of about 400 are sufficient for dichotomous questions. In the case of further separation of the analysis by gender, as is the case in the present tracer study, the sample size should be around 600 to 700 for large total target populations. In table 4, a very pragmatic recommendation concerning the sample size is given.

An even greater sample size is recommended when distinguishing between different trades, although this may be associated with high costs. It is therefore highly recommended to merge similar trades into trade groups and to take into account that in case of a small sample size for a specific trade, the standard error of the mean (see Box 1) might be very large and therefore the small sample size may not well represent the target population of that specific trade. In such a case, it might be wise to choose a separate sample for a specific trade with a greater sample size and analyse it separately in the analysis tool. Please note that in case of analysing it in the same file as the other data, the specific trade would be overrepresented.

.....  
**Luxman Subedi, electrician, Nepal**  
.....



.....  
**Luxman Subedi at work in a small electrician shop in Pokhara**  
.....

Luxman Subedi is 23 years old and lives in Pokhara (Nepal). He fulfilled his childhood dream with a training provided by F-SKILL. The young electrician is now employed in a small shop in Pokhara and is hoping to open his own business once he has developed enough practical skills in his profession.

In general, the gross sample size must be greater than the expected final sample size (net sample size), as some people selected may not participate (so-called 'non-responses'). It is, in any case, extremely important to keep the non-response rate as low as possible as it leads to a systematic error of unknown nature (bias) in the survey and can strongly reduce the representativeness of the study (see e.g. Stahel 2008). In the case of an unexpectedly high non-response rate, an additional sample can be randomly selected, but the interviews and analysis have to be conducted in the same way as the first sample. In addition, the total gross and net sample size and all non-responses, whether from the first or additional sample, have to be indicated in the report as all contribute to the bias.

TABLE 4

Total target population	Rough suggestion for minimal sample size
<110 people	Total target population (inclusion of all graduates)
110 to 7000 people	Sample size $\geq 10\%$ of total target population and $\geq 110$ people
>7000 people	Sample size of $\geq 700$ (to be greater than 700 in case of distinguishing several trades)

Rough indication of minimal sample size in relation to total target population

## BOX 1

### Calculation of the standard error of the mean

The standard error of the mean is an estimate of the expected error in the sample estimate of a population mean and "is based on the premise that the samples selected are chosen with replacement. However, sampling in virtually all surveys is conducted without replacement from populations that are of a finite size  $N$ . In these cases, particularly when the sample size  $n$  is not small in comparison with the population size  $N$  (e.g. more than 5% of the population is sampled) so that  $n/N > 0.05$ , a finite population correction factor is used to define the standard error of the mean. Because this finite population correction factor ( $fpc$ ) is multiplied by the standard error, the standard error becomes smaller when corrected. Therefore more precise estimates are obtained when the finite population correction factor is used." (Bove 2006)

The standard error is based on simple random sampling, for stratification it might be lower and for clustering incorrect.

Finite population correction factor

$$fpc = \sqrt{\frac{N - n}{N - 1}}$$

Standard error of the mean for finite populations

$$\sigma_{\bar{X}} = \frac{\sigma}{\sqrt{n}} \sqrt{\frac{N - n}{N - 1}}$$

$\sigma$  = standard error

$n$  = sample size

$N$  = total target population size

Roberto Saviñón, rural entrepreneur, Dominican Republic



Roberto Saviñón, a young rural entrepreneur, showing his sheep farm

Roberto Saviñón is a graduate of the agricultural VET programme FORJA (Formación de Jóvenes Agricultores) of the Dominican Republic which was initiated by Helvetas in 2001. As part of Roberto Saviñón's studies, he implemented an entrepreneurial micro-project for which he was granted a loan through FORJA. He started his micro-enterprise with six sheep and very successfully enlarged his business to more than 45 sheep within one year and managed to acquire additional credit for horticulture.



## 4.2.2 SAMPLING METHODS

It is crucial to select a sample of the total target population randomly to insure representativeness and reduce bias in the results as much as possible. Random samples normally require a consecutively numbered list of the total target population, from which a sample can be randomly selected, serving as a sample frame (see table 5). Lists of graduates are usually obtainable at the school or training centre.

TABLE 5

No.	Name	Gender	Cohort/ Batch	Address
1	Roberto Gutierrez	male	I	Street Village District Country
2	Alfonso Tapia	male	I	
3	Jessica Hernandez	female	II	
4	Gonzalo Garcia	male	I	
...	...			

### Example of a sample frame

Four sampling methods are described below. While simple or stratified random sampling are strongly recommended for tracer studies, cluster sampling should only be applied in specific cases while quote sampling should be avoided altogether, even though the latter may appear to be very attractive due to low costs.

#### Simple random sampling

In simple random sampling, each person is chosen at random from the total target population and hence every person of the target population has the same chance to be part of the sample and can only be chosen once (sampling without replacement). In order to choose people randomly, a list of random numbers is required as described in Box II.

#### Stratified random sampling

Stratified random sampling is often applied when the target population of a tracer study is composed of different sub-groups (strata) varying significantly in size and mean and when the research team would like to compare different sub-groups and insure that the members of each sub-group are accordingly represented in the sample. In the case of significantly different means between the strata, stratified random sampling also gives a better estimation of the mean of the total sample size. With this method, minorities are also properly represented. Taking e.g. the case of only 10% of plumbers in a sample size of 200, with this method exactly 20 plumbers will be selected, while with simple random sampling, e.g. only 14 might be chosen, so that plumbers would be underrepresented (7% instead of 10%). In a case where plumbers earn

much less than all other professionals of the target population, the indication of the estimated average income would be too high for the target population because plumbers are underrepresented.

In stratified random sampling, the different sub-groups first need to be defined and then a process of simple random sampling needs to be carried out within each sub-group. The sample size of each sub-group is recommended to be proportional to the distribution in the total target population (e.g. in case of 40% women and 60% men in a sample size of 200, 80 women and 120 men should be randomly selected). A distinction between trades and genders is often requested in tracer studies which the Analysis Tools take into account by showing graphs distinguishing between these specific groups. Stratified sampling, especially for trades and gender, is therefore recommended when using the present tool kit.

#### Cluster sampling

It would be cost-efficient to interview several graduates at the same place. Such an arbitrary selection, however, does not allow for assured indications concerning the total target population and may lead to strong bias. A controlled alternative way could be cluster sampling, where the target population is divided into clusters of known, possibly uneven size (see e.g. Stahel 2008). Out of them, a defined number of clusters is randomly selected. Then, either all items, in this case all graduates of the selected clusters, or a random sample is taken out of each selected cluster. This method, however, has a higher error sensitivity than random sampling while the sample size has to be greater than in simple random and stratified random sampling in order to achieve the same reliability. Nevertheless cluster sampling might be worthwhile in specific cases due to lower costs and travel time though statistical expertise is strongly recommended when using this method.

#### Quote sampling

It is not advisable to use so-called 'quote samples' where the interviewer can choose him- or herself a certain number of people out of a stratum with given criteria, e.g. trade and gender. In this case, the sample is not randomly selected and, therefore, severe systematic errors have to be taken into consideration.

**BOX II**

**Creation of a list of random numbers**

Three different ways to carry out a simple random sampling are described in the following.

1. The website <http://www.random.org/sequences/> delivers a list of random numbers where the sequence boundaries, that is, the least and greatest number of the total target population (e.g. 1 and 300 in case the total target population includes 300 individuals), have to be entered. Click the button 'Get Sequence' and the website will generate a list of 300 random numbers. These numbers correspond to the numbers of selected graduates from the sample frame. For example, if your predefined sample size includes 110 graduates then use the first 110 numbers which appear on the list to identify the randomly sampled graduates from the sample frame.

2. A list of random numbers can also be generated in Microsoft Excel with the function =RAND(), as indicated in

figure 5. These numbers range between zero and one and need to be multiplied by the size of the total target population, hence corresponding to graduates of the sample list. Do not press return again or Excel will begin to generate a new list of random numbers. The best way is to copy the random numbers, insert them only as values into a new file and then sort them in order to see if certain numbers appear twice. In such a case, the second instance of a repeated number must be replaced by generating a new list of random numbers and by choosing those values in the same row position where the repeated value was positioned.

3. A time consuming but also effective way of random sampling is to write all the numbers or names of the target population on pieces of paper, to put them into a basket and to shake well. Then to select pieces of paper randomly until the previously defined sample size is reached.

**FIGURE 5**

Number between 1 and value of total sample size	=RAND()		Number assigned to each graduate name in the sample frame, calculated by multiplying the random number by the size of target population
↓	↓		↓
Sample number	Random number	Size of target population	Number of selected beneficiary
1	0.89138358	300	267
2	0.74965686	300	225
3	0.55158103	300	165
4	0.26842491	300	81
...			
110	0.08487975	300	25

**Simulation of random sampling in Excel (adapted from Ibarguen & Abdul Cader 2005)**

### 4.2.3 MAIN SAMPLING AND NON-SAMPLING ERRORS

#### Sampling errors

A sampling error is the error caused by observing only a sample instead of the entire population. Any given quantity, such as an average or percentage, will generally be subject to sample-to-sample variation. These variations can theoretically be expressed as sampling errors. If the observations are collected from a random sample, there exist probabilistic estimates of the likely size of the sampling error for a particular estimator expressed as standard error, variance or confidence intervals. Such values depend on different factors such as the distribution of the data, sampling design, etc. It is important to give the quantification of the sampling error in the report whenever feasible. In the analysis tool, the standard error of the mean for finite populations is quantified for some selected questions (see Box I). In cases where a normally distributed population can be assumed, it is also recommended to calculate confidence intervals, usually with a 95% probability, and to include them in the report. Please note that confidence intervals are not calculated by the Analysis Tools.

#### Non-sampling errors

'Non-sampling error' is a term for the deviations from the true value not related to the sampling process. Non-sampling errors are much harder to quantify than sampling errors. There are various non-sampling errors (non-observation and measurement errors), which can lead to a rise to both bias and variable errors in the survey estimates. These errors should therefore be kept as small as possible. They are briefly described below. A more detailed overview, including how to quantify non-sampling errors, is given in United Nations (2005).

##### *Main non-observation errors*

- Non-coverage error (effect when there are units of the population of interest that have no chance of being sampled for the survey)
- Non-response error (effect of selected people of the sample not willing to participate)

##### *Main measurement errors*

- Questionnaire error (effect of design, topics and wording of the questions)
- Data-collection method error (e.g. through personal interviews or phone interviews)
- Interviewer error (effect of the interviewer on the response, e.g. by adding additional information that may confuse the respondent)
- Respondent error (diverse interpretations of questions because of different experiences and knowledge)

Setting up procedures to quantify these errors is expensive and often difficult but can be very helpful. Overall, survey managers try to keep these errors as small as possible through good planning and survey implementation practices (e.g. testing of survey materials, questionnaires, developing well-defined survey concepts, recruitment of qualified field staff and intensive training programmes as well as clearly written instructions for the field staff).



Pooja Pradhan and Mirjam Macchi testing the tracer study tool kit on a graduate of SKILL in Nepal in 2008

## 4.3 FIELD PHASE

### 4.3.1 INTERVIEWER RECRUITMENT AND TRAINING OF INTERVIEWERS

The success of a tracer study highly depends on the professionalism of the recruited interviewers and the quality of the interviews. It is therefore essential that great attention is paid to the process of interviewer recruitment and training. The following sections provide detailed guidelines how to best organise these processes.

#### Interviewer selection

Interviewers hired to conduct tracer studies should have highly developed interpersonal and intercultural skills. Ideally, they should already have some experience conducting interviews and should be able to engage with people of different backgrounds in an empathetic but neutral manner. Interviewers should also have a secondary-level educational degree and be able to speak and understand the local language. In addition, the team of interviewers should be gender balanced and should consist of representatives from different social groups or minorities whenever appropriate or feasible. Ideally, the interviewers should be independent from the VET programme being studied in order to ensure objectivity of the survey.

The number of interviewers which need to be recruited depends mainly on the selected sample size and time period available. Experiences with tracer studies have shown that interviews conducted by two interviewers give best results. One team member asks the questions while the other one takes notes. In this way, the flow of the interview will not be interrupted and the interviewer can keep eye contact with the respondent, which will make the interview situation more natural and relaxed. However, in case resources for the study are scant, one experienced interviewer will also be sufficient.

#### Interview training course

A thorough interviewer training course lasts between 2 and 3 days and should be composed of the steps described below.

##### *Familiarisation with the tracer study and questionnaire*

As a first step, the recruited interviewers need to be made familiar with the tracer study methodology. The present instructions manual serves as a basis for this step. In addition, background literature, e.g. documents from the school/training centre such as curriculum description, personal files of students, etc. should be consulted during the training phase in order to make the interviewers familiar with the broader context of the planned study and the background of the individual graduates.

In a second step, the interviewers should familiarise themselves with the different types of questionnaires. It is crucial that the interviewers understand the meaning and purpose of every question and understand the structure of the questionnaires in order to get adequate answers. A good way to achieve this is for every interviewer himself or herself to fill in the questionnaire as if he or she was an interviewee while trying to identify any uncertainties or inconsistencies which can then be addressed during the interviewer training.

##### *Practice interview*

In the next step, a practice interview in the form of a role-playing scenario should be carried out where the participants of the interview training course run through the questionnaires in pairs. In this phase of the training, the interviewers learn how to conduct an interview and how it feels to be interviewed. A role-playing scenario has the advantage that the interviewers

not only gain knowledge of how to react to different situations which may arise during an interview, e.g. interruptions, silence or misunderstanding of questions on the part of the interviewee, but also get sensitised to the implications they may have when they go into the field, e.g. what attitude and behavior stimulates or hinders the readiness of the interviewee to share information.

#### *Pilot-test interviews with real-life respondents*

Before real interviews take place, the questionnaires need to be tested with a group of graduates who are not part of the sample, but are volunteering to respond to the questionnaires. This pilot-test forms part of the interviewer training. During this test, all field procedures including logistics, safety measures, tracing methodology, etc. should be tested. These real-life test interviews should be conducted following the interview techniques described in Box III. After these test interviews, the interviewers gather together and discuss any encountered problems.

This test should bring the following points to light

- whether all the instructions to the interviewers are clear,
- approximately how long the interview will take,
- whether there are questions not being understood by the interviewers or respondents and
- whether there are further adaptations needed concerning the questions where options can be adapted.

#### **Possible questions asked by interviewed graduates**

It is important that all the interviewers give the same information to the interviewees. The following questions may arise during an interview situation:

##### *What is this all about?*

The purpose of this study is to gather information on the quality and the relevance of the training programme you completed. We would like to find out whether the training was useful to you and whether you are using the skills and knowledge you gathered during your training. The findings of this study will be very important for the further development and improvement of the vocational training programme from which you graduated.

##### *Can I refuse to participate in this survey or to answer any questions in this interview?*

Yes the interview is voluntary. However, please note that all the information you give to us is strictly confidential and that your participation is very important in order to achieve a high-quality and representative study.

##### *I don't want my former teachers/trainers or my employer to know my answers.*

I can assure you that everything you say will be treated confidentially and that any information we will pass on to your school/training centre will never be connected with your name.

##### *How long does the interview take?*

According to our experience, it should not last more than 45 minutes.

##### *What will happen with the data/information that you are collecting?*

The information we are collecting will be analysed and summarised in a report. This report will serve to inform you, your teachers/trainers, school managers, instructors of the apprenticeship/on the job training, your parents and many others about the performance of the vocational education training you graduated from. All the information given in this report will be presented in an anonymous way. If you are interested, we can send you a summary version of this report.

## BOX III

## Interviewing rules and techniques

### Introduction and closing of interview

Every interviewer should prepare a short introduction before starting with the actual interview. There is a text box at the beginning of every questionnaire with relevant information which should be part of this introduction. The interviewer should avoid reading the prepared introductory text to the interviewee but rather talk freely in order to make the interview situation more relaxed. It is crucial that the interviewers try their best to persuade the selected interviewees to participate in the survey as non-participation reduces the predefined sample size and, what is more problematic, may compromise the representativeness of the survey by introducing a systematic error (see chapter 4.2.3). The achievement of a high response rate is therefore even more important than a large sample size.

In the introduction the interviewer


- introduces himself/herself with name and function,
- explains the objectives and purpose of the study,
- informs the interviewee how long the interview will take approximately, what kind of questions it includes and what will happen with the data gathered through the interview,
- assures that all the collected data will be treated strictly confidentially,
- respects the respondent's right to refuse participation in the tracer study,
- is prepared to answer questions of respondents (see section 4.3.1),
- does not give more information and explanations than necessary and
- follows the rules of interviewing given below.

At the end of each interview, the interviewer thanks the respondent for his/her time and collaboration and informs about the further proceeding of the study and how the respondent can be informed of the findings.

After the interview, the interviewer (team) should go through the completed questionnaire and resolve possible inconsistencies and doubts.

### Rules of interviewing

Some important interviewing rules, adapted partly from Smit (2006), are given below.

- Ask questions in the order they appear on the questionnaire.
- Ask every question in the questionnaire unless there are special indications (e.g. if you are instructed to skip a question or section).
- Instructions are marked with an index hand () and written in italics. Do not read the instructions to the interviewee as they are exclusively directed to the interviewer.
- Questions must be asked even if the respondents have already given the answer during another question.
- Never let the respondent read the questionnaire beforehand or during the interview.
- Wait for the respondent to finish talking before you start to write.
- Don't interrupt the respondent.
- Don't anticipate or assume answers.
- Don't accept "I don't know" without at least probing once.
- Repeat the question if the respondent does not understand.

### Body language and tone of voice

It is essential that the interviewers are conscious of the fact that their behaviour and interaction has an important influence on the respondents. They should therefore adopt a calm, friendly and neutral role and avoid biasing the interviewees. Furthermore, the way questions are asked is probably just as important as the wording of the questions. The interviewer must be aware that an interview should never have the appearance of an exam. The questions should be read in a natural conversational manner in a normal tone of voice. No tone of impatience or judgement should creep into the interviewer's voice.

### 4.3.2 TRACING OF GRADUATES

It can be challenging to find information about the whereabouts of graduates. Schools or training centres should have an address list of their former students. However, these lists may be incomplete. The section below describes different tracing strategies.

#### Tracing methodology

The basis for tracing graduates is the 'where-are-they-now list', a list of all the graduates included in the sample. This list which is usually compiled on the basis of the sample frame (see section 4.2.2) will serve as the main tool for tracing the graduates. The list should include the following information on the sampled graduates: name, type of training completed, parents' names and contact address. Additional helpful information includes cell phone numbers or email addresses if available. Many of the graduates, however, may not live in the locations indicated on this list any more, especially if the time lapse between graduation and the tracer study is long. The strategies below can be useful to locate the graduates in their present physical location and are described in more detail in Ibarguen & Abdul Cader (2005).

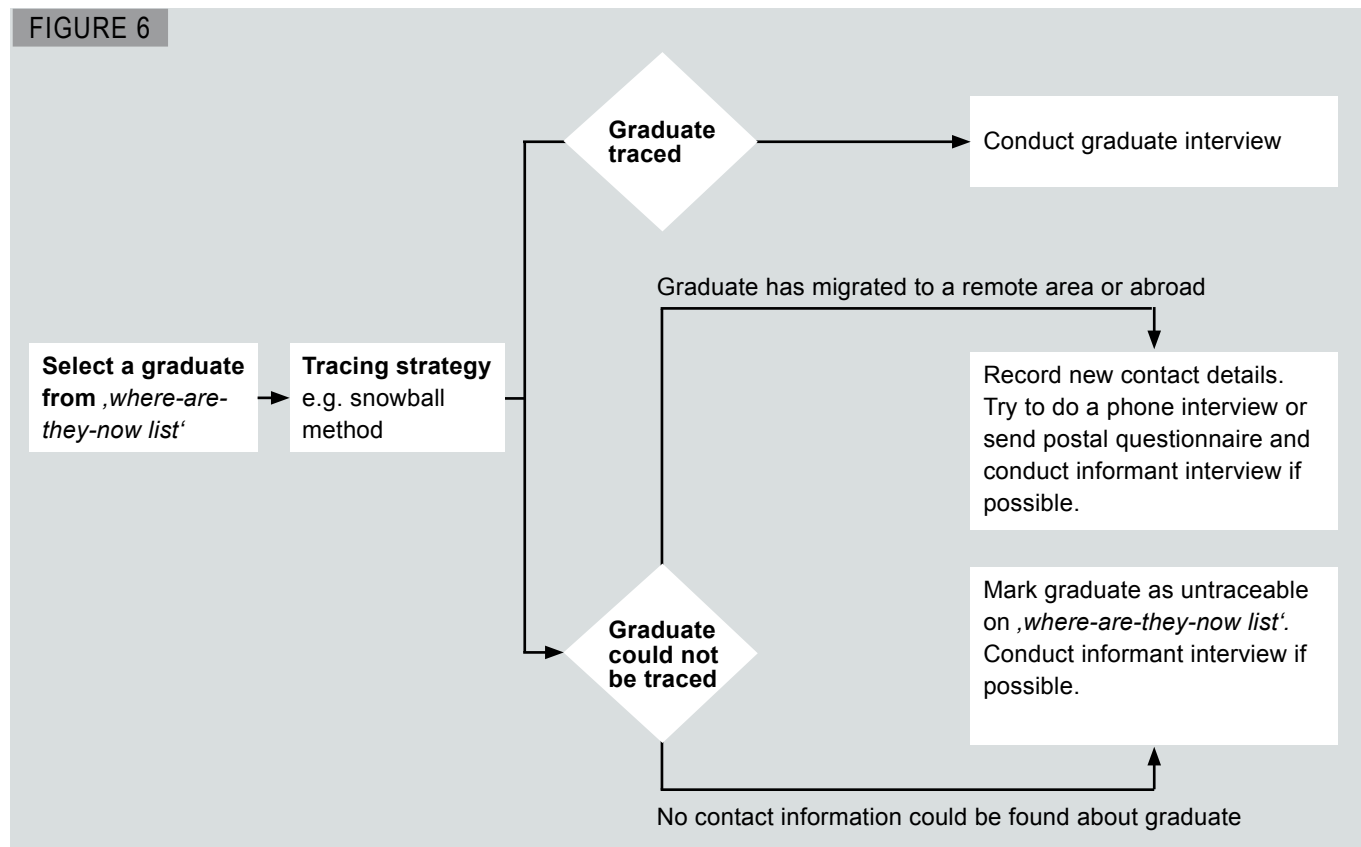
The most common strategy for tracing graduates is known as the snowball method. This method starts with the sampled

graduates whose locations are known and then asks them about the whereabouts of other graduates which also form part of the sample. Former graduates often have the best knowledge about the whereabouts of their peers. Another common way of tracing is to hire former graduates (even non sampled graduates) at the beginning of a study as envoys to find sampled graduates of the same study programme or year of graduation. It is important to remember that only those graduates who belong to the previously defined sample can be included in the study; if other graduates who happen to be around but have not been selected into the sample are included within the survey, the sample will not be random any more and would therefore likely lead to biased findings.

If the above described strategies of tracing are not successful, it may further be promising to contact graduates via possible employers or to place advertisements into local newspapers, requesting the graduates to contact the survey team. Some graduates who migrated may also run a migrant's web page to remain in contact with their families. It may therefore be possible to contact graduates over such web pages. However, again be sure to only include graduates into the survey who form part of the sample.

Figure 6 illustrates the road map for tracing graduates. When tracing graduates, the following three scenarios may arise:

FIGURE 6



**The whereabouts of the graduates can be identified,** either through the 'where-are-they-now list', other graduates or informants such as parents, neighbours, former teachers, instructors of apprenticeship/on the job training, etc. If the traced graduate lives within a reachable distance, conduct a face-to-face interview.

**The graduate has moved abroad or to a remote area.** In this scenario, record the new contact details and try to reach the graduate by phone or send a postal questionnaire. Since it is likely that you will not be able to reach the graduate by phone or mail, be sure to conduct an informant interview in order to gain basic information on the graduate's whereabouts and his/her career development, if possible.

**No information on the whereabouts of the graduate could be found.** In this case, mark the graduate as untraceable on the 'where-are-they-now list' and conduct an informant interview, if possible.

In the case of very low response rates, please refer to section 4.2.1 for details how to cope with this issue.

### 4.3.3 DATA COLLECTION

The data of a tracer study are collected by means of structured interviews and document review and if there are sufficient free resources, by qualitative methods including focus group discussions, case studies and observations (see chapter 3 for detailed information on the different tracer study instruments). It is recommended that, during the data collection phase, the interviewers keep a journal where they note any particularities or special observations which they encounter in the field. These notes can be very helpful when interpreting the data at a later stage. Significant points should also be addressed in the report. During the entire field phase regular meetings should be held with the interviewer team to evaluate and discuss the progress of data collection and other aspects of the survey implementation such as problems with tracing graduates, logistics, or any other issues which may arise during the field phase.

### 4.3.4 SPECIAL EXPLANATORY NOTES ON THE QUESTIONNAIRES

#### Length of the questionnaires

The graduate questionnaire is twelve pages long and the entire graduate interview takes from 30 to 45 minutes depending on whether the graduates did an apprenticeship or not. This time specification implies that the team conducting the interview is familiar with the questionnaire and well trained. The pre-tracer, employer and informant questionnaires are three pages long each and the respective interviews take between 10 and 15 minutes.

#### Filters

The questionnaires are designed in a way that they cover a broad variety of VET programmes and situations of graduates. Hence, there are different filters in the questionnaires which guide the interviewers to the next section depending on the specific circumstances the graduates find themselves in and depending on the type of VET programme under investigation. For example, somebody who is employed full time does not need to answer the section on unemployment or further training or if the analysed training programme does not include an apprenticeship, then the section on the apprenticeship (section B 2 of the graduate questionnaire) can be skipped.

#### Sequence of questions

The sequence of questions of the questionnaires should not be altered, because the questions follow a combinational logic and changing them around could cause problems. For example, there is a risk that certain questions or filters may be overlooked which again may lead to problems with the data analysis tools.

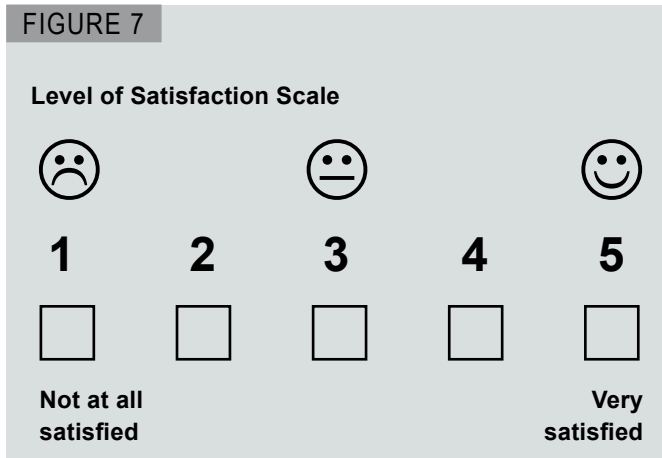
#### Answer scales

The questionnaires of this tool kit include some questions with numeric answer scales. For these questions, a five point scale has been chosen which corresponds with the scale commonly used in survey research. Five point scales have the advantage that they fit to the school grading system of many countries. Furthermore, a five point scale is uneven and therefore fits a normal curve of distribution. It is customary for a score of five to represent the most positive response and for a score of one to represent the most negative, while three represents an intermediate response. For the interpretation of the five point scale, often points 4 and 5 are merged together and points 1 and 2 are merged together whereas point three stands alone (Schomburg 2003). It should be noted that five point scales can have the disadvantage that respondents tend to choose the intermediate response (i.e. score of three). However, during tests of the questionnaires of this tool kit this was not the case.

In order to help respondents answer questions with answer scales, a visualisation of the scales has been included in the enclosed CD-ROM and can be shown to the respondents during the interview (see Fig. 7). Test interviews have shown that for interviewees with a poor educational background it can be difficult to understand such scales. In such cases, questions which include answer scales can be rephrased in a way that will be easier for the respondents to understand and respond.



FIGURE 7



.....

**Example of a visualisation of a five point answer scale**

.....

### Reliability

In order to achieve a high reliability of survey results, questions which measure the opinion of respondents, e.g. the attitude of graduates towards the quality of training, should be queried several times in different ways. In many cases, this fact has been considered in the design of the questionnaires of the tool kit. However, in order to keep the questionnaires simple and concise, this could not be respected for every question of this kind.

### Income verification

#### (Section E of graduate questionnaire)

It can be challenging to verify the income of graduates, especially when they are self-employed. The following rules might be helpful:

- First ask graduates to estimate how much they make per month (tests have shown that many graduates have a very clear idea on how much they make).
- Always verify the income they indicate (see Box IV).
- Make sure that the income is calculated per person and not for the whole business in case the interviewed graduate works with partners.
- Verify the income of employed graduates with their employers if possible.

Please note that with the income verification methods described in Box IV the net income of self-employed graduates is estimated. That is the income that a graduate has after subtracting costs and expenses from the total revenue. However, the different types of costs and expenses may vary from one situation to another. It should therefore be defined before the tracer study is carried out what exactly is included in the net income and should be made clear to the interviewees.

.....

**Prem Lal Napit, hairdresser, Nepal**

.....



.....

**Prem Lal Napit, ex-trainee of SKILL at work in his barber shop in Nepal**

.....

Hairdressing runs in Prem Lal Napit's blood. He was born into a Napit family who are barbers by tradition. However, since haircutting for his family is more of a tradition than a profession, he was lacking the necessary skills to carry on this business professionally. When he heard about the hairdressing training provided by SKILL, he jumped on the bandwagon. Even though he had to travel far to reach the training site, he did not let the distance prevent him from attending the training. He put his heart and soul into the training and was able to learn all the skills necessary for meeting the desires of modern customers.

Immediately after completion of the training, he opened his own haircutting salon in his hometown, Kavre, which he has run very successfully ever since. His shop is always crowded with clients and he manages to earn a decent living. With the income from his salon he was able to contribute to his children's school fees, his brother's college fee and to general household expenses which makes him very satisfied and proud.

(adapted from SKILL 2007)

## BOX IV

## Income verification for self-employed graduates

### Income verification for non-farming entrepreneurs

$$\text{Monthly net income} = t \cdot [(n_1 \cdot c_1) + (n_2 \cdot c_2) + \dots + (n_i \cdot c_i)] + p - e$$

- n = No. of services delivered/items produced per defined unit of time (t)  
 c = Cost per service/item  
 t = Unit of time (no. of days or weeks worked per month)  
 p = Profit achieved from products sold per month  
 e = Expenses (electricity, rent, products bought, etc.) per month

### Example: Hairdresser/beautician

- n = On average 5 haircuts, 2 beauty treatments and 3 massages per day  
 c = A haircut costs 40 on average, a beauty treatment 50 and a massage 30  
 t = The hairdresser works 6 days a week (which equals 24 days per month)  
 p = A profit of 400 on beauty products sold per month  
 e = Costs for rent are 400, for electricity 150 per month (550 total)

$$\text{Monthly net income} = 24 \cdot [(5 \cdot 40) + (2 \cdot 50) + (3 \cdot 30)] + 400 - 550 = 9210$$

### A farmer in Benin with his herd



### Income verification for farmers

Estimating the monthly income of a farmer or agricultural entrepreneur can be very challenging, especially because the income of a farm usually refers to the entire farming household including all its members and it is therefore difficult to estimate the actual income of just one individual. Furthermore, it is often difficult for farmers to estimate the exact amount of their yield and the exact prices achieved for their agricultural products, because these prices vary significantly depending on the local and world market prices as well as on the quality of the products. Furthermore, a wide variety of other costs and liabilities usually arise on a farm. Because of this intricacy, we therefore only recommend conducting an income verification of a farmer/agricultural entrepreneur, if the situation on his/her farm is not too complex. Otherwise, it is advisable to skip the questions E 0 and E 1 of the graduate questionnaire and only ask the remaining questions of section E. However, the decision whether questions E 0 and E 1 are going to be asked or not should be made in the planning phase and followed throughout an entire survey. If an estimation of the net income of a farmer is being made, the following budgetary items should be considered:

- Total value of farming products sold or consumed for own household (livestock & crop production, processed products (e.g. cheese, meat, wool, skin), etc.)
- Direct costs (seeds, fertilisers, herbicide/pesticide, veterinary costs, daily labour, insurance for crops and animals, irrigation water, fuel, fodder, etc.)
- Indirect costs (salaries for workers, costs of own and leased machinery, building costs, rent of payments for land, land taxes, machinery taxes, electricity, etc.)
- Liabilities (loans from others, mortgages, accounts payable, taxes, fees, etc.)
- Additional income from non-farming activities

When estimating the net income of a farmer/agricultural entrepreneur, it is important to take into account that farmers often sustain themselves with their own products. The value of products used for the farm's own consumption, therefore, needs to be considered for the income calculation. Furthermore, the annual net income of the entire farming household needs to be divided by the number of adult family members working on the farm and by 12 months in order to get the graduate's monthly net income. Finally, any additional income from non-farming activities needs to be added. Continuative information on basic farm economics is given e.g. in KSAP (2001).

## 4.4 DATA ANALYSIS AND REPORTING

### 4.4.1. DATA ENTRY AND ANALYSIS

Data collected through structured interviews need to be transcribed from the questionnaires and entered into the appropriate Microsoft Excel analysis tools included on the CD-ROM of this tool kit.

Data from the graduate questionnaires and from the informant questionnaires can both be filled into the Graduate Analysis Tool. Data from the employer questionnaire needs to be transcribed into the Employer Analysis Tool and data from the pre-tracer study questionnaire into the Pre-tracer Study Analysis Tool.

While entering data, the steps below need to be followed.

#### Step 1. Customisation of the Excel Programmes

As a first step, before transcribing the answers from the questionnaires into the appropriate Excel analysis tools, the adaptations which have been made in the questionnaires (see 4.1.2) need to be made accordingly in the analysis tools. For this, follow the steps below to customise the Excel programmes:

- 1) Copy all analysis tools from the enclosed CD onto the local computer.
- 2) Open the *Excel Graduate Analysis Tool* and the *Excel Pre-Tracer Study Analysis Tool*. Make sure you start with the interface **starting sheet**.

#### Please note:

The following steps (3–6) need to be made in both above mentioned tools but **not** in the *Employer Analysis Tool*.


- 3) Open the sheet named **questions and answers**.
- 4) Move to the top left hand corner of this sheet and click the button **open list**.
- 5) Make the appropriate adaptations by typing the list of actual options which you used in the questionnaires into the blank space of the corresponding questions. This applies to the questions A 1 and G 5 of the graduate, informant and pre-tracer study questionnaire. For example for question A 1 you will have to fill in the type of training (e.g. plumbing, hairdressing).
- 6) When finished, click on button **close list**. Make sure that you place the cursor outside the cell where you made the last adaptation, otherwise the list will not close.
- 7) Save file and start with the transcription of interviews.

## Step 2. Transcription of interviews

As a second step, the answers from all the questionnaires need to be transcribed into the corresponding analysis tool in the following way:

- 1) Open the Excel tool making sure to start with the interface **starting sheet**.
- 2) Click on the button **questions and answers**.
- 3) Write the name or identification number of the interviewee into the outermost column on the left-hand side of the table.
- 4) Start entering the answers into the same row in which you entered the name or identification of the interviewee moving question by question from the left to the right.
- 5) For each new questionnaire, begin with the next following row and repeat steps three and four.
- 6) Be sure to save the files regularly.

### Please note:

- The maximum sample size (no. of graduates or employers) which can be filled into the analysis tools is 4000.
- In order to navigate between the different Excel sheets you need to click on the button in the top left corner of each sheet which takes you back to the interface **starting sheet**.
- The graduate analysis tool includes fields where you need to enter the total target population, the portion of male and female graduates of the total target population and the total number of graduates per trade.
- In cells which are marked with the symbol , you need to fill in the qualitative information given by the interviewees.
- Any unanswered question needs to be left blank in the corresponding Excel analysis tool.
- All the answers of one interviewee have to be filled into one and only one row of the **questions and answers** sheet. The row below contains the answers of a different interviewee.
- For the majority of questions there are 'drop-down lists' which include all the possible options of answers given in the questionnaires.
- For the questions which include an answer scale you will have to transcribe the numbers from the scales.

### Tip:

The most efficient way of data entry is to do it in a group of two. One person reads the answers out loud and the other fills them in. Tests have shown that the time necessary to transcribe one graduate questionnaire is approximately 5 minutes.

## Step 3. Data analysis

After all the data from the questionnaires have been transcribed, the Excel analysis tools automatically analyse the data and create a wide range of tables and graphs. In order to analyse the data, the steps below need to be followed:

- 1) Open the interface **Overview of all tables and charts**.
- 2) Click on the button with the corresponding question number to analyse the data of that question. The graphs and tables will be automatically created.
- 3) Choose tables or graphs for your report.

### Please note:

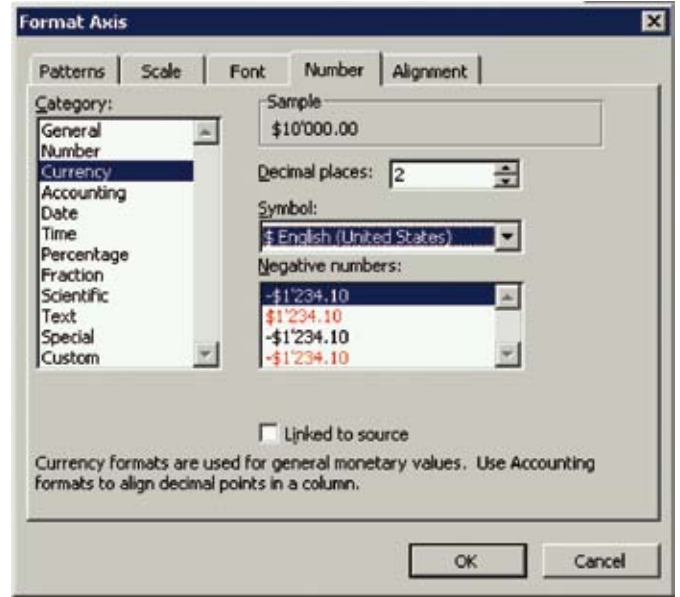
- For almost every question of the questionnaire there is a corresponding table and graph, though in a few cases there is only a table. You may only want to select the graphs and tables which are most suitable for your report.
- Tables usually contain more information than graphs. Since graphs, however, are generally more suitable for visualisation, it is recommended to show mainly graphs, but to use additional data taken from the tables in order to give more in-depth explanations in the text.
- The font, colour, size as well as the titles of the graphs can be changed in the analysis tool before copying them into the report. Please note that it is important to always put the year of the survey and the name of the VET programme or school into the title of the graph so that if the graph is copied and shown in a different context, people will still understand to what the graph refers.
- In order to create graphs which are disaggregated by trade (namely the questions B 1.2, B 1.4, B 2.2, B 2.3, B 2.4, C 1a/b, E 0 and E 1 of the graduate questionnaire), first identify the trade to which the graph refers. The graph for the respective trade will be automatically created. In some graphs (namely B 1.4, B 2.2, C 1, E 0 and E 1 of the graduate questionnaire), the name of the trade to which the graph refers does not appear in the graph. In this case it is crucial to name the trade in the title of the graph to avoid misunderstandings and misinterpretations.
- Gender disaggregated data is displayed in most tables and put into many graphs.
- Since the pre-tracer study questionnaire only includes a fraction of the questions of the graduate questionnaire, only a limited number of graphs will be produced by the Pre-tracer Study Analysis Tool. Data gathered through the pre-tracer study questionnaire serve primarily to verify data gathered through the graduate questionnaire.

**Instructions on how to set the local currency in graphs and tables**

For question E 0 of the pre-tracer and graduate questionnaires as well as question E 1 of the graduate questionnaire, the name of the national currency needs to be entered into the corresponding Excel analysis tool. Please note that throughout the tracer study, all monetary figures need to be indicated in a single, predefined currency. For example, if a graduate is working abroad then his/her wage must be converted into the currency of the study.

In order to set the currency of the study, first create the graph as indicated above in step 3.

- 1) Click with the right mouse button on the values of the y-axis. The window as pictured in figure 8 will pop up.
- 2) Left click on **Format Axis** in the pop-up window shown in figure 8 and the window pictured in figure 9 will pop up.
- 3) Open the interface **Number** as demonstrated in figure 9 and set the Category: to 'Currency'.
- 4) Choose the respective currency of the study from the drop-down list under Symbol:
- 5) Click **OK** and the pop-up window pictured in figure 9 will close.
- 6) The abbreviation of the currency of the study will appear in the y-axis of the graph.

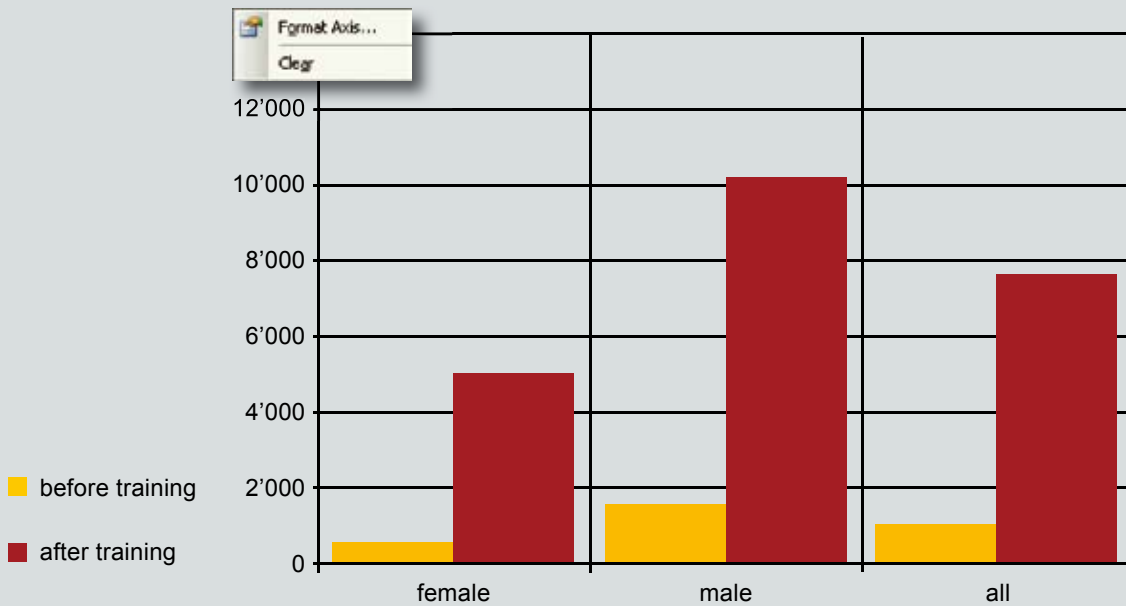


**Figure 9 Setting of local currency in Excel**

**FIGURE 8**

**Monthly income before and after training**

VET programme 'Fiction', 2009



**Formatting of y-axis for currency indication in Excel analysis programme**

#### 4.4.2 INTERPRETATION OF DATA

It is recommended that, unless the survey team has an excellent knowledge of statistics, a person experienced in statistics is called on for supporting the survey team in the interpretation process of the gathered results. Before interpreting the graphs, it is further recommended to go back to the questionnaires and look at the actual questions to which the graphs refer.

When interpreting the graphs which treat the income of graduates before and after training completion (questions E 0 and E 1 of the graduate questionnaire), it should be taken into account that there is always a time span of one year or more between the beginning of the training/studies programme and the tracer study. If as in many countries the inflation rate is high, it is important to acknowledge that the probable observed increase of income can not be uniquely attributed to the VET programme as inflation may have had a significant influence on any observed change. The average inflation rate for the time span between the beginning of the training/studies programme and the point in time of the survey should therefore be indicated in the report. It should further be highlighted that the graphs are not inflation-adjusted.

Certain graphs take specific information from the total survey sample to present information concerning individual trades (e.g. graphs B 1.2, B 1.4, B 2.2, B 2.3, B 2.4, C 1a/b and E 1 of the graduate questionnaire). It must therefore be recognised that this information refers to a sub-sample. In the case

of small sample size, it may not well represent the respective trade population, calling for a cautious interpretation. Nevertheless, these graphs can be used to describe certain tendencies. For example, whether there is a tendency indicating that male hairdressers earn more than female hairdressers (see section 4.2.2). It is further important to recognise that there is always a variety of errors which need to be taken into consideration (see section 4.2.3), discussed in detail e.g. in United Nations (2005).

#### 4.4.3 EXAMPLES OF GRAPHS AND TABLES

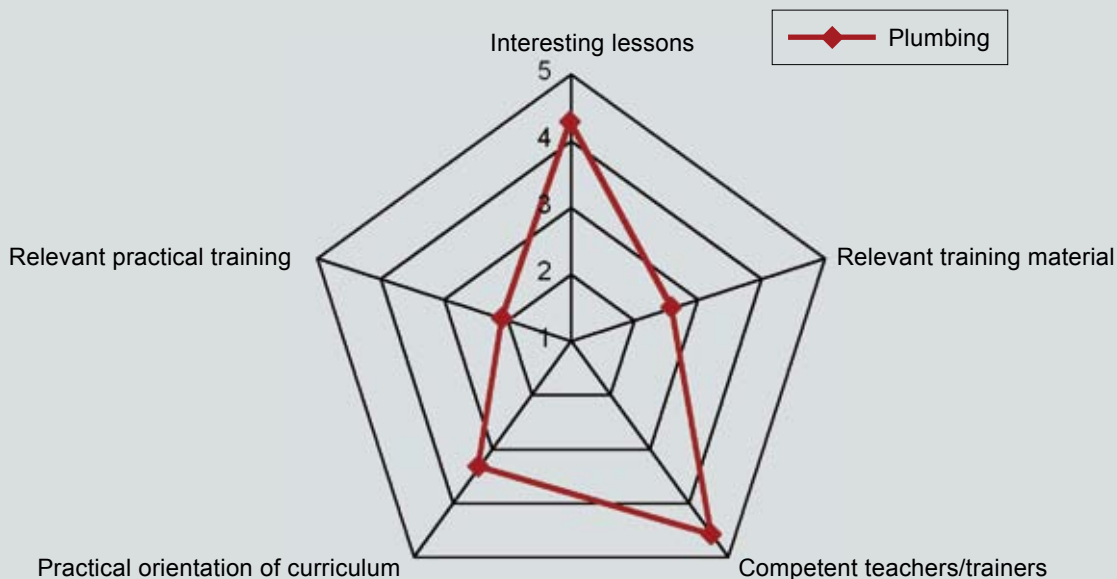
A selection of graphs and tables which can be created with the analysis tools is given below. All of the following are taken from the Graduate Analysis Tool and are based on fictional data.

Figure 10, a radar chart, describes the graduates' rating of the quality of a training course for plumbers. The chart represents responses on a five point answer scale (see section 4.3.4). A score of one represents the most negative response (very poor) while a score of five represents the most positive response (very good). In the fictional situation described, the graduates were very satisfied with their teachers and considered their lessons interesting. However, even though they rated the practical orientation of the curriculum as intermediate to good, the respondents rated the relevance of the practical lessons as poor. Furthermore, they found the training material mediocre. In such a case, it would be important for the survey

FIGURE 10

#### Rating of training quality

VET Programme 'Fiction', 2009  
(1=very poor, 5=very good)



team to reflect on the reasons for these results and, if necessary, recommend improvements of the training programme in accordance with these findings. In this radar chart, the standard error of the mean, which can be taken from the analysis tool, should be mentioned in the report for the different categories. This chart can be created for any type of training.

The bar chart in figure 11 describes the geographical location of graduates before and after completion of a training course. One can see that many of the graduates who used to live in rural areas before the training either migrated to (semi-)urban areas or abroad after completion of their training. The number of graduates living in rural areas decreased significantly while the (semi-)urban population increased slightly and 27% of the respondents moved abroad after graduation. In figure 11, the actual changes in percentages of graduates in each category can be seen, however, it can not be seen whether the ones who moved abroad stem from rural or (semi-)urban areas. This information needs to be taken from the respective table which is also available in the analysis tool.

Figure 12 describes the proportion of female graduates who faced or did not face difficulties in attending a training programme. In this specific case, 43% of interviewed female graduates faced no constraint, whereas 57% faced constraints. The graph further describes the incidence of different types of difficulties that female graduates faced. During the interview, the graduates were asked to name the most impor-

tant difficulty they faced (only one answer was allowed). Like many other graphs in this tool kit, this graph can be created for male and female graduates.

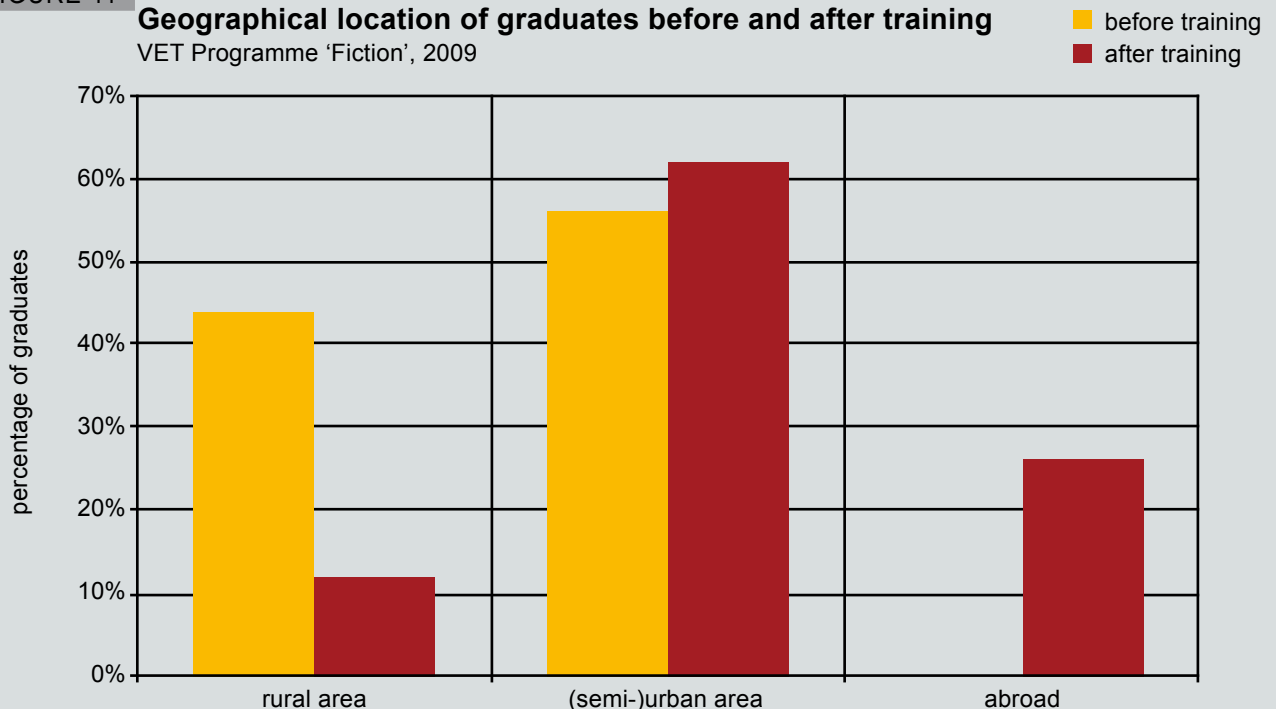
In the fictional case described in figure 12, 'family commitments' was the most named difficulty (more than one out of four), followed by 'accessibility of the training centre' (indicated by 21%). In case such a result appeared in a real-life tracer study, the survey team may choose to recommend specific measures, e.g. to organise day-care for children of trainees during the training course or to offer the training course in a location which is closer to the home of the trainees.

Figure 13 shows the income distribution disaggregated by geographical region among graduates who have been trained as plumbers. From the graph, it is clear that graduates who are active in a rural area earn significantly less than graduates who are active in a (semi-)urban area and less than half as much as graduates who work abroad. Like several other graphs in this tool kit, this graph can be created for different trades.

However, as mentioned in section 4.4.2, during the interpretation of graphs which represent the results of just one trade and not of the total sample, it should be borne in mind that such graphs usually focus on a much smaller sample size and thus the results have a higher variance and may, therefore, be less significant. It is therefore very important to indicate

FIGURE 11

**Geographical location of graduates before and after training**  
 VET Programme 'Fiction', 2009



**Migration of graduates**



the size of the respective sample to which the graph refers in the report, e.g. that in the case above, only 15 plumbers were interviewed.

Figure 14 shows a fictional profile of activities of graduates of a specific programme of VET during the first 18 months after graduation. For simplicity, three months are always merged together. The lines show the incidence of a specific occupational situation among graduates in percent at a specific point in time after graduation. All lines together, at a specific point in time, represent 100% of the graduates who replied to this question. The columns show the percentage of all interviewed graduates (regardless of their occupational situation) who were migrated abroad during a specific period of time. These columns can vary between 0% (meaning that nobody migrated) and 100% (meaning that everybody migrated).

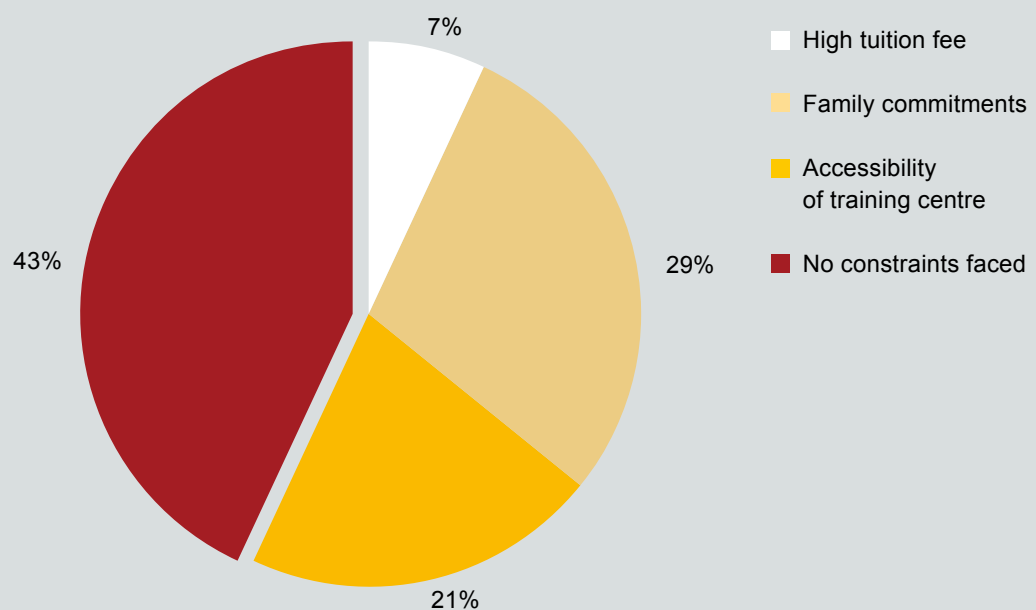
This line diagram can be created for a maximum period of 24 months after graduation. If in a survey, graduates of different cohorts (a cohort is a group of respondents who share some characteristics, e.g. who have graduated in the same year or month) have been interviewed, then the graph will be automatically 'cut off' at the point in time where not all graduates are represented any more. The graph has been programmed in this way in order to make sure that the sample size remains the same from the first to the last month indicated in the diagram. In the fictional example in figure 14 is cut off at 18 months after graduation because for the remaining 6 months not all respondents have given an answer.

During the first 3 months after graduation, more than half of the respondents were unemployed, about 12% were self-employed, about a quarter were wage-employed and about 5% were in further training. In the following months the percentage of self-employed and wage employed graduates gradually increased whereas the percentage of unemployed graduates decreased from almost 60% three months after graduation to about 12% 18 months after graduation. The percentage of respondents in further training increased in the months 6 to 9 after graduation and then decreased again. From 15 months after graduation onwards, nobody was in further training.

Whereas during the first three months after graduation nobody migrated, 6 months after graduation, 10% of graduates were migrated. The migration rate increased to 20% 12 months after graduation and stagnated at this point until 18 months after graduation.

FIGURE 12

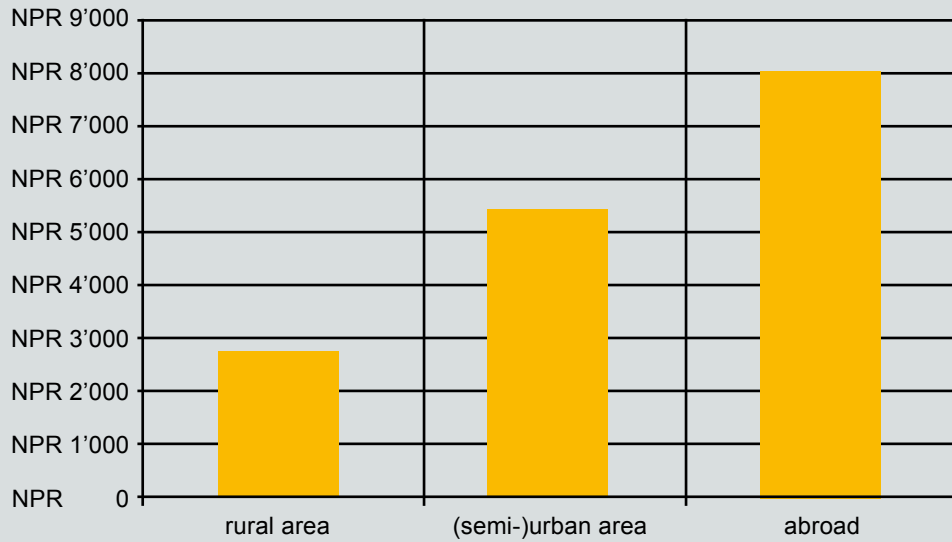
**Main difficulty faced in attending a training (female graduates)**  
VET programme 'Fiction', 2009



Main difficulties faced by female trainees in attending a training

FIGURE 13

**Average monthly income of graduates trained in plumbing**  
VET programme 'Fiction', 2009



**Average monthly income of graduates disaggregated by geographical location**

FIGURE 14

**Employment situation of all graduates after training**  
VET programme 'Fiction', 2009



**Employment situation of all graduates after training**

#### 4.4.4 VERIFICATION OF DATA

If a pre-tracer study has been conducted and baseline data is available, it is suggested to compare the findings of the graduate and informant interviews with the baseline dataset and check if there are any inconsistencies. Verification of data should also be carried out during the data entry process. During this process, the data processor should carefully consider the answers given in the interviews and try to identify possible inconsistencies and incompleteness. However, it should be noted that missing data can not be collected and added retroactively because this would significantly bias the findings of a study. It should further be acknowledged that, even if all the above described measures of data verification are taken, it is impossible to eliminate all sources of bias and that a certain margin of error remains (see chapter 4.2.3).

#### 4.4.5 SET-UP OF REPORT

A couple of recommendations are given below to ease and accelerate the reporting process.

The following sections should be included in any comprehensive tracer study report:

##### I List of abbreviations

##### II Summary

#### 1 Introduction

Cause and objectives of the study

#### 2 Information on the context and the investigated school/training centre and study/training programme

#### 3 Design of the study (description of the methodology used, survey time period, sampling method used and gross and net sample size, tracing methodology, non-response rate and reasons for non-response, indication of attribution gap, encountered problems, etc.)

#### 4 Results

- 4.1 Background information about the graduates (socio-economic background, educational attainments, profession and educational attainments of parents, etc.)
- 4.2 Motives of graduates to study/train at the investigated VET institution
- 4.3 Study conditions at the investigated VET institution (including theoretical classes and apprenticeship/on the job training)
- 4.4 Transition to employment (time needed to find employment, encountered difficulties, activity profiles)
- 4.5 Employment situation of graduates (incidences of employment, self-employment, further education and unem-

ployment among graduates, type of employment, migration rate, reasons for unemployment)

- 4.6 Further education and professional development of graduates
- 4.7 Relatedness of current occupation with completed VET programme
- 4.8 Economic returns on the completed VET programme
- 4.9 Future needs of the VET programme (recommendations for improvements)
- 4.10 Employers' perspective
- 5 **Interpretation/discussion** of main findings (taking into consideration the attribution gap, uncertainties, bias, etc.)
- 6 **Recommendations** (indications for improvements to the VET programme)
- 7 **Conclusion**
- 8 **Literature**
- 9 **Appendix** (copy of questionnaires used, etc.)

#### Please note:

- Like the graduate questionnaire, the index above is based on a biographical logic. That is, the body of the report starts with a section on the socio-demographic and socio-economic background of the graduates and ends with the graduate's current occupation and related issues like the interrelation of their current occupation with their training and the income gained from their current activity.
- Before writing the report, the authors should think about the target audience of the report and adapt its style accordingly. If the report is e.g. directed to graduates, then its contents should not be too complex with respect to difficult technical terminology, etc.
- It is desirable that the tracer study report is illustrated with pictures, individual case studies or graduate portraits in order to personalise the collected information and to loosen the report up.
- For every table or graph used, it should be made explicit to the reader to what the demonstrated percentages and numbers correspond. If only a part of the total population is concerned – e.g. if a pie chart or a diagram only concerns female graduates or a specific trade – this needs to be clearly indicated in the report.
- Finally, there should be a clear division between the results and analysis section. That is, it should be made clear to the reader what the findings of the tracer study are and what your own interpretations of these findings are (Schomburg 2003).

#### 4.4.6 GENDER SENSITIVITY

For some of the questions, it is important that the collected data be analysed in a gender disaggregated way. Only by doing so can conclusions about any significant differences in labour market outcomes with respect to gender or whether women and men have different opinions about the study/training conditions be drawn.

The analysis tool of this tool kit is set up in a way that for many questions, tables and figures are delivered automatically in a gender disaggregated format.

#### 4.4.7 SOCIAL, ETHNIC SENSITIVITY

Since many VET projects are geared to socially and economically disadvantaged people, these characteristics should also be reflected in the report. In the analysis tool a few graphs are disaggregated by ethnic background, and geographical origin of graduates which can be used to underline this fact. However, for technical reasons and in order not to complicate the analysis tool, the number of these graphs is limited.

#### 4.4.8 SOME POSSIBLE CONSTRAINTS

##### **Lack of baseline data**

If there is no baseline data on the socio-economic background of the graduates available it may be challenging to draw conclusions about the improvement of their wellbeing and about the increase of their income after completion of a training programme. Test interviews have shown, however, that the interviewed graduates generally had good memory of their economic situation before the training.

##### **Tracing graduates**

As mentioned above, tracing graduates can be a major challenge, especially if the migration rate among graduates is high and if the time lapse between graduation and the tracer study is long. This may lead to a significant non-response rate and, therefore, high bias of the data (see section 4.3.2).

##### **Biased answers**

The answers the graduates give will be biased if they give responses which do not reflect their real opinion but what they think the survey team would like to hear. It is therefore crucial that the purpose of the survey is made explicit to the participants in the beginning of every interview and that their confidentiality is assured. It is further fundamental that the interview be carried out in a place with privacy to prevent other people from influencing or intimidating the interviewee thereby biasing his/her answers.

instrument which should be integrated into the project cycle management and which helps to improve VET projects overall and specifically the quality and effectiveness of training offers.

## 5 CONCLUSION

The present publication offers a thorough description about how to carry out graduate tracer studies. Graduate tracer studies have shown to be a powerful monitoring and evaluation instrument of vocational education and training programmes. It is therefore recommended to implement tracer studies on a regular basis. Ideally, tracer studies form an integral part of project cycle management; they should be integrated into the phase plan of a VET project. After completion of a tracer study, VET programmes should be adapted and improved in accordance to the findings of the study in order to guarantee employment oriented education and training programmes of high quality.

The data gathered through tracer studies will be essential to give as thorough an accounting as possible of the outcomes, impacts and relevance of VET programmes to donors, education and employment policy makers, school managers, training providers and, not least, to the graduates themselves. Tracer studies will further deliver tangible results which will help to meet the demands of results-oriented monitoring and reporting, and to guarantee cost-efficiency and quality of VET interventions.

## 4.5 ADAPTATION OF THE VET PROJECT

If the results of a tracer study reveal that there are needs for improvement of the analysed VET programme and institution, actions and adaptations should follow the analysis and reporting phase. A tracer study should be regarded as a monitoring

.....  
**Nurbek Kaliev, farmer, Kyrgyzstan**  
.....



.....  
**Nurbek Kaliev in front of his tractor in the field harvesting wheat**  
.....

Nurbek is a farmers' son who grew up in the village Ottuk in Kyrgyzstan, close to the border with Kazakhstan. Even though it had always been clear to him that he wanted to follow in his parents' footsteps, it took him some time to decide which type of education would suit him best. After secondary school his parents suggested that he should study agricultural sciences at the university. However, Nurbek preferred to gain working experiences first and supported his parents on their farm for five years. But after a while, the yields of his parents' farm decreased significantly and they even lost a part of their livestock. So when Nurbek heard about a 'farmers' course' offered at the local vocational school supported by AVEP, he thought that this might be the solution to his problems. The whole training, including a one year apprenticeship, lasted three years. After completion of the training, Nurbek gradually managed to improve his farm thanks to the practical skills and knowledge he acquired during his studies. He first received a loan to buy a tractor and then, three years after graduation, he even bought a combine. He was also able to build a new stable and a farmhouse next to his fields where he now lives with his young family. Today, Nurbek is one of the biggest farmers in the village. For the future, he plans to buy another tractor and a lorry so that he can offer technical and logistical services to other farmers.

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## LIST OF ABBREVIATIONS

AVEP	Agricultural and Rural Vocational Education
DFID	UK Department for International Development
FGD	Focus Group Discussion
FORJA	Formación de jóvenes agricultores
F-SKILL	Franchising Skill & Know-how Imparted at Local Level
ILO	International Labour Organization
PROMESA	Proyecto para el mejoramiento de la producción y la sanidad animal
SDC	Swiss Agency for Development and Cooperation
SKILL	Skill & Know-how Imparted at Local Level
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational Education and Training

## ANNEX-QUESTIONNAIRES

Please use the questionnaires from the enclosed CD-ROM for copying!

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# Pre-Tracer Study Questionnaire

Name: \_\_\_\_\_

School/Class code: \_\_\_\_\_

## A Information about training/studies

### A 1 What are you studying/in which trade do you receive training?

<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____

### A 3 What did you do before you started your studies/training at the (name of training institution)?

*Please choose only one answer. In case the graduate had several different occupations, choose the most important category.*

- Wage/salary employed/working
- Self-employed (also in agriculture)
- In education or professional training
- Without employment (including household work, raising children, unable to work, illness, etc.)

### A 4 How important are the following reasons for your decision to study at the (name of training institution)? The scale of answers ranges between: 1 = not at all important; 2 = not important; 3 = moderately important; 4 = important; 5 = very important.

*Please read scale of answers out loud. For this type of question, a print out of the answer scale can be used as an auxiliary tool. If one of the reasons should not apply to the respondent, please check "not at all important".*

not at all important	1	2	3	4	5	very important	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Training centre is close to home of parents or other relatives
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Low/no tuition fee
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Improve my chances to find (self-)employment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Improve my trade know-how
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Improve my income
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Reputation of the school/training institution
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Friends, relatives studying at the same training institution

Other important reason, please specify \_\_\_\_\_



**A 5a Do you face any difficulties in going to the (name of training institution)?***Give some examples from A 5b.*

- Yes  No

**A 5b If yes, which was the most important difficulty? *Please choose only one answer.***

- Tuition costs are high  Total training is too long  
 Family commitments  The training centre is far away/not easy to access  
 Social pressure/traditional customs (gender, ethnicity, etc.)  
 Other, please specify *✎* \_\_\_\_\_

**A 6 How did you get to know about this training/education programme?***Please choose only one answer.*

- Through friends/family members or acquaintances  
 Through radio news/TV, newspaper, posters/leaflets  
 Through internet  
 Through former graduates  
 Through trainers/teachers of the training institution  
 Other

**E 0 If you worked before starting this course, what was your average monthly income?**

\_\_\_\_\_ Monthly net income in (currency of the survey)

**G Personal Details****G 1 What was your age at your last birthday?***In case the interviewee has difficulties in answering this question, ask for the year of birth.*

\_\_\_\_\_ Age at last birthday

**G 2 What is your (permanent) contact address?**

Street *✎* \_\_\_\_\_ Number \_\_\_\_\_  
 City/Town *✎* \_\_\_\_\_ Zip Code \_\_\_\_\_  
 District *✎* \_\_\_\_\_  
 Country *✎* \_\_\_\_\_  
 Phone/Email *✎* \_\_\_\_\_

**G 3 Where did you live before you started your current training/studies?***The interviewer has to categorise the given answer into one of the three options below.*

- Rural area  Semi-urban/urban area  Abroad

**G 4 Gender *Do not ask!***

- Male  Female

**G 5 What ethnic background do you have?** *Please choose only one answer.*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**G 6 What is the highest level of education you have attained so far?**

*Please choose only one answer.*

<input type="checkbox"/> Never been to school	<input type="checkbox"/> Incomplete secondary education
<input type="checkbox"/> Incomplete primary education	<input type="checkbox"/> Complete secondary education
<input type="checkbox"/> Complete primary education	<input type="checkbox"/> Vocational school or other higher education

**G 7 What is the highest level of education attained by your father?**

*Please choose only one answer.*

<input type="checkbox"/> Never been to school	<input type="checkbox"/> Incomplete secondary education
<input type="checkbox"/> Incomplete primary education	<input type="checkbox"/> Complete secondary education
<input type="checkbox"/> Complete primary education	<input type="checkbox"/> Vocational school or other higher education

**G 8 What is the highest level of education attained by your mother?**

*Please choose only one answer.*

<input type="checkbox"/> Never been to school	<input type="checkbox"/> Incomplete secondary education
<input type="checkbox"/> Incomplete primary education	<input type="checkbox"/> Complete secondary education
<input type="checkbox"/> Complete primary education	<input type="checkbox"/> Vocational school or other higher education

**G 9 What is the main occupation of your father?** *Please choose only one answer.*

- Farmer
- Employed private sector
- Employed public sector
- Self-employed (excluding farmers)
- Unemployed
- Other

**Thank you!**

**References**

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Questionnaires developed in the following Helvetas VET projects: SKILL Nepal; F-Skill Nepal and AVEP Kyrgyzstan.





# Graduate Questionnaire

## Introduction:

Before the actual interview starts, the interviewer should always introduce him/herself and explain the objectives and the purpose of the interview to the respondent. He/She should further clarify that the participation in the survey is voluntary but highly appreciated because a high participation rate in the survey is crucial for the quality of the survey and for the future development and improvement of the VET programme under investigation. Finally, the participant should be informed about the total duration of the interview (about 30 to 45 minutes), the further use of the gathered data and be ensured that all the information will be treated confidentially.

Student Code/Name: \_\_\_\_\_

School/Cohort Code: \_\_\_\_\_

## A Training/Studies

### A 1 In which field/trade did you receive training? *Please choose only one answer.*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### A 2 Where do you currently live?

*The interviewer has to categorise the given answer into one of the three options below.*

Rural area                       Semi-urban/urban area                       Abroad

### A 3 What did you do before you started your studies/training at the (name of training institution)?

*Please choose only one answer. In case the graduate had several different occupations, choose the most important category.*

Wage employed/working

Self-employed (also in agriculture)

In education or professional training

Without employment (including household work, raising children, unable to work, illness, etc.)


### A 4 How important were the following reasons for your decision to study at the (name of training institution)? The scale of answers ranges between: 1 = not at all important; 2 = not important; 3 = moderately important; 4 = important; 5 = very important.

*Please read scale of answers out loud. For this type of question, a print out of the answer scale can be used as an auxiliary tool. If one of the reasons listed below does not apply to the respondent, please check "not at all important".*

- |                          |                          |                          |                          |                          |                          |  |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| not at all<br>important  |                          |                          |                          |                          | very<br>important        |  |
|                          | 1                        | 2                        | 3                        | 4                        | 5                        |  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Training centre is close to home of parents or other relatives |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Low/no tuition fee   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Improve my chances to find (self-)employment                   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Improve my trade know-how                                      |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Improve my income  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reputation of the school/training institution                  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Friends, relatives studying at the same training institution   |


Other important reason, please specify  \_\_\_\_\_

### A 5a Did you face any difficulties in going to the (name of training institution)?


 Give some examples from A 5b.

- Yes  No

### A 5b If yes, which was the most important difficulty? Please choose only **one** answer.

- Tuition costs were high  Total training was too long  
 Family commitments  The training centre was far away/not easy to access  
 Social pressure/traditional customs (gender, ethnicity, etc.)  
 Other, please specify  \_\_\_\_\_

### A 6 How did you get to know about this training/education programme?

 Please choose only **one** answer.

- Through friends/family members or acquaintances  
 Through radio news/TV, newspaper, posters/leaflets  
 Through internet  
 Through former graduates  
 Through trainers/teachers of the training institution  
 Other




## B Retrospective evaluation of quality and relevance of studies and apprenticeship

### B 1 Retrospective evaluation of studies/training

 **Interviewer reads:** What do you think about your school/training centre?

**B 1.1 Were you satisfied with your training/studies?** Scale of answers ranges between: 1 = not satisfied at all; 2 = not satisfied; 3 = moderately satisfied; 4 = satisfied; 5 = very satisfied.

 Please read scale of answers out loud.

- |   |                          |   |                          |   |                       |
|---|--------------------------|---|--------------------------|---|-----------------------|
| not satisfied<br>at all   |                          |   |                          |   | very<br>satisfied     |
|  |                          |  |                          |  |                       |
| 1   | 2                        | 3   | 4                        | 5   |                       |
| <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/>  | Level of satisfaction |

In case you were not/moderately satisfied (scales 1, 2 and 3), please specify why:

 \_\_\_\_\_

**B 1.2 How do you rate the following statements on your training?** Scale of answers ranges between: 1 = strongly disagree; 2 = disagree; 3 = undecided; 4 = agree; 5 = strongly agree.

*Please read scale of answers out loud.*

strongly disagree					strongly agree	
1	2	3	4	5		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		The lessons at the training centre were interesting
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		The supplied training material (manuals, handouts, illustrations) was relevant & useful
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		My teachers/trainers were competent and committed
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		My training included enough practical lessons
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		My practical training was relevant and useful

**B 1.3 How do you rate the study conditions you experienced at your training institution?** Scale of answers ranges between: 1 = very poor; 2 = poor; 3 = fair; 4 = good; 5 = very good.

*Please read scale of answers out loud.*

very poor					very good	
1	2	3	4	5		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Class rooms/training halls (size, light & noise condition, location, temperature)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Equipment, tools, machinery for practical training
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Safety conditions during practical training (safety standards, protection gear e.g. helmet, protection glasses, sturdy shoes, ear muffs etc., where appropriate)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Accommodation and food
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Hygiene and sanitation facilities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Infrastructure of training institution overall

**B 1.4a When did you finish your training/studies?**

*Interviewer needs to calculate and fill in number of months between graduation and time of interview.*

\_\_\_ No. of months ago

**B 1.4b How long was the duration of your training/studies?**

\_\_\_ No. of months

**B 1.4c The total duration of the training/studies was...** *Please choose only one answer.*

too long                                       too short                                       ideal

If you found it too long or too short, please specify why:

*[Handwritten signature line]*

**B 1.5 Looking back, would you...**

...choose the same training/studies again?                                       yes                                       no

...choose the same school/training institution again?                                       yes                                       no

...recommend this training and the school to a friend or family member?                                       yes                                       no

If you would not recommend this course and school to others, please specify why:

*[Handwritten signature line]*

*Please continue with Section B3 if no apprenticeship was included in the investigated training programme.*

## B 2 Retrospective evaluation of apprenticeship

*Interviewer reads: What do you think about your apprenticeship?*

**B 2.1 Were you satisfied with your apprenticeship?** Scale of answers ranges between: 1 = not satisfied at all; 2 = not satisfied; 3 = moderately satisfied; 4 = satisfied; 5 = very satisfied.

*Please read scale of answers out loud.*

not satisfied at all				very satisfied
☹		☹		☺
1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Level of satisfaction

In case you were not/moderately satisfied (scales 1, 2 and 3) please specify why:



**B 2.2 The total duration of the apprenticeship was....** *Please choose only one answer.*

too long                                       too short                                       ideal

If you found it too long or too short, please specify why:



**B 2.3 To what extent do you agree with the following statements?** Scale of answers ranges between: 1 = strongly disagree; 2 = disagree; 3 = undecided; 4 = agree; 5 = strongly agree.

*Please read scale of answers out loud.*

strongly disagree				strongly agree
1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My work during the apprenticeship was interesting & diversified

My instructors were committed and competent in their field

I could take part in decision making about what I had to work on

I received support and supervision by the training institution

**B 2.4 How would you rate the working conditions you experienced during your apprenticeship?** Scale of answers ranges between: 1 = very poor; 2 = poor; 3 = fair; 4 = good; 5 = very good.

*Please read scale of answers out loud.*

very poor				very good
☹		☹		☺
1	2	3	4	5
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Working conditions (noise, dust, temperature, safety at work, etc.)

Tools, material & equipment

Hygiene and sanitation facilities

Number of working hours/day

Accommodation/food

**B 2.5 How long was the total duration of your apprenticeship?**

\_\_\_ No. of months

**B 3 Strengths and weaknesses/suggested improvements**

**B 3.1 What did you like about your training/studies and what did you dislike?**

Strengths (what I liked):

1. ✎ \_\_\_\_\_
2. ✎ \_\_\_\_\_
3. ✎ \_\_\_\_\_

Weaknesses (what I disliked):

1. ✎ \_\_\_\_\_
2. ✎ \_\_\_\_\_
3. ✎ \_\_\_\_\_

**B 3.2 Which key improvements or changes do you suggest?**

Suggested improvements or changes e.g. to training methods, courses offered, apprenticeship, etc.:

✎ \_\_\_\_\_

\_\_\_\_\_

**C Transition to employment**

**C 1a Please indicate your employment situation in the period following graduation.**

*Please check only one appropriate category for each three-month period after graduation of the respondent. If the respondent's employment situation changed during a three-month period or if the respondent was involved in different activities (e.g. studying and working), please check the most important category only. If the completion of the interviewed graduate's course of studies took place more than two years ago, please ignore the remaining months.*

**C 1b Did you migrate abroad during the first two years after graduation?**

*Please check the box if the graduate migrated abroad during the period indicated in the left column.*

C 1a	Period after graduation	In (wage) employment	In self-employment	In training	Unemployed	C 1b	Migrated abroad
	1 <sup>st</sup> year						
	1-3 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
	4-6 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
	7-9 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
	10-12 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
	2 <sup>nd</sup> year						
	1-3 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
	4-6 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
	7-9 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
	10-12 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>



**C 2 How did you try to find the first job after graduation?** *Please choose only one answer.*

- I applied directly to an employer
- I was approached by an employer
- The school/training institution gave me assistance with finding a job
- I used personal connections/contacts (family/friends, acquaintances)
- I started or continued working in my own/parents' business or farm
- Other

**C 3 How long did it take for you to find your first employment/start your own business after completion of your training/studies?**

*Please take also weeks into consideration, but write e.g. 0.25 month, 1.5 months, etc. Please check whether this answer corresponds to the answer given in C 1a.*

\_\_\_\_\_ Duration of seeking (self-)employment (in months)

**C 4 In case you went to school/did a further training after graduation, what kind of training did you do and where did you study/do your training?**

*This question only needs to be answered if graduate answered that he/she was 'in training' in question C 1a.*

Type of training/studies  \_\_\_\_\_

Name and place of training institution  \_\_\_\_\_

**D Current activity**

**D 0 How do you characterize your current employment situation or activity? Are you...**

*Please choose only one answer. In case the graduate has several different occupations, choose the most important category.*

- wage employed? *Please go to Section D 1*
- self-employed (including working on own/family farm)? *Please go to Section D 1*
- in further professional training or academic studies? *Please go to Section D 3*
- without employment? *Please go to Section D 4*

**D 1 Wage employment & self-employment**

**D 1.1 Are you satisfied with your current occupation?** Scale of answers ranges between: 1 = not satisfied at all; 2 = not satisfied; 3 = moderately satisfied; 4 = satisfied; 5 = very satisfied.

*Please read scale of answers out loud.*


not satisfied at all  1   2   3   4   5  very satisfied

Level of satisfaction

In case you are not/moderately satisfied (scales 1, 2 and 3) please specify why:

 \_\_\_\_\_

### D 1.2 In which one of the following vocational fields are you currently employed/working?

 Please choose only **one** answer.

- |   |  |
|---|--|
| <input type="checkbox"/> Agriculture and forestry/fishery   | <input type="checkbox"/> Finance, banking  |
| <input type="checkbox"/> Building and construction trade  | <input type="checkbox"/> Health system and social work                                 |
| <input type="checkbox"/> Transport  | <input type="checkbox"/> Textile & leather (knitting, weaving, tailoring, shoe making) |
| <input type="checkbox"/> Mining   | <input type="checkbox"/> Education   |
| <input type="checkbox"/> Tourism (guide, agency, hotel, etc.)   | <input type="checkbox"/> Electrical trades (house wiring, motor rewinding)             |
| <input type="checkbox"/> Trade (wholesale and retail trade)   | <input type="checkbox"/> Electronics   |
| <input type="checkbox"/> Manufacturing (incl. handicraft, artwork)  | <input type="checkbox"/> Hair cutting, beautician                                      |
| <input type="checkbox"/> Communication  | <input type="checkbox"/> Mechanical trades (metal work)                                |
| <input type="checkbox"/> Public and business administration   | <input type="checkbox"/> Non Governmental Organisation/Civil Society Organisation      |
| <input type="checkbox"/> Maintenance services (refrigeration repair, sewing machine repair, computer repair, village maintenance, etc.) |  |
| <input type="checkbox"/> Other  |  |


### D 1.3 Do you work full time?

- Yes, I am working full-time       No, I am working part-time

### D 1.4 Do you have any further part-time wage or self-employment?

- Yes       No

### D 1.5 How many hours per week are you working on average?

 Ask for the average working hours per day and then ask how many days per week the graduate is working.

(Working hours per week = No. of working hours per day \* No. of working days per week)

- \_\_\_\_\_ No. of working hours per week for my primary occupation  
 \_\_\_\_\_ No. of working hours per week for my secondary occupation (second occupation, side jobs, etc.)  
 \_\_\_\_\_ **Total working hours/week** (incl. self-employment)

### D 1.6 If you live abroad, do you send any money home?

 Please only ask if graduate currently lives abroad.

- Yes       No

 Continue with section **E** if graduate is in wage-employment

 Continue with section **D 2** if graduate is self-employed or works on his/her own or family farm

## D 2 Specific questions to self-employed graduates

 This section is only for graduates who are in self-employment or work on their own or family farm.

### D 2.1 How many people do you employ in your business/farm besides yourself?

\_\_\_\_\_ No. employees

### D 2.2a Did you start your business/farm independently or with a partner/your family?

- Independently       With a partner/my family

**D 2.2b Did you receive credit to start your business and if yes, how much credit did you receive?**


 Please indicate the amount that the graduate received. In case he/she did not get credit write 0.

\_\_\_\_\_ Credit (currency of the survey)

**D 2.3 Did you encounter any difficulties when starting your own business, farm and if yes, what was the main difficulty you encountered?**

 Please choose the most appropriate answer (only **one** answer allowed).

- No difficulties encountered
- Lack of educational background (including technical skills)
- Difficulty to get funding
- Lack of entrepreneurial skills
- Inadequate market conditions (high competition, low demand)
- Location of business not ideal
- Other

 Continue with section **E**.


**D 3 Further education****D 3.1 What are the (major) subject area(s) of your current studies/training?**

 \_\_\_\_\_


**D 3.2 Name and place of training institution/college/university**

 \_\_\_\_\_


**D 3.3 For what kind of degree are you currently studying?**  Please choose only **one** answer.

- Secondary school degree
- Vocational training degree
- University/college degree
- Other, please specify  \_\_\_\_\_

**D 3.4 What do you plan on doing after completion of your studies/training?**

 Please choose only **one** answer.

- Find a job in my home country
- Start my own business/farm in my home country
- Work for my parents' or relatives' farm/business
- Migrate abroad to find work
- Continue with my current job
- Family/household care
- Other

 Continue with section **E**.

**D 4 Unemployment**

**D 4.1 What are the reasons for your current unemployment?**  
☞ Please select a **maximum of two** answers which are most appropriate.

- Job scarcity
- Lack of connectedness/contacts
- Lack of experience, qualifications, skills
- Lack of resources (e.g. financial input capital, tools) for self-employment
- Lack of confidence
- Political problems
- Engaged in child rearing or family/household care
- Social pressure/traditional customs
- Other

☞ Continue with section E.

**E Income from primary and secondary activities**

**E 0 How high was your average monthly income before you started your training?**  
☞ If a pre-tracer study has been conducted, this question can be omitted and the answer can be taken from the pre-tracer study questionnaire.

☞ \_\_\_\_\_ Monthly net income (in currency of the survey)

**E 1 How much is your current monthly income? Please take into account the income from your main occupation and your secondary occupation (if any) and, if necessary, average the value from the last six months.**

☞ If the graduate is wage-employed, he/she can tell or write down his/her net income to the interviewer. If the graduate is self-employed, the net income needs to be verified (a description how to verify the net income can be found in the instruction manual).

☞ Do not ask this question if graduate is currently unemployed, but write 0 into the box below.

☞ \_\_\_\_\_ Monthly net income (in currency of the survey)

**E 2 Do you get any additional payments in kind?**

- Yes
- No

**E 3 Do you receive any additional benefits? E.g. accommodation, food, health care, education for children, etc.**


- Yes
- No

**E 4a Have your living conditions improved, worsened or remained equal after completion of your studies/training?**

☞ Please choose only **one** answer. The interviewer should give examples to the graduate about how his/her living conditions may have been improved. For example, ask whether they have purchased a motorcycle, bicycle, land, animals, radio, television, jewellery, etc.


- Improved
- Worsened
- No difference

**E 4b If your living conditions improved, did you acquire any of the following items?**

 *Multiple response possible, maximum 6 answers.*


- Motorcycle/bicycle
- Land
- Animals
- Television/computer
- Tools and machinery
- Improvement of your house (tin roof, furniture, household appliances, etc.)
- Education for children
- Clothing, jewellery

**E 5a Who is the current main contributor to your household income?**


 *Please choose only one answer.*

- Myself
- My spouse
- Other male household member
- Other female household member

**E 5b Who was the main contributor to your household income before your studies/training?**


 *Please choose only one answer.*

- Myself
- My spouse
- Other male household member
- Other female household member

 For those respondents who are self-employed or wage employed, please continue with Section **F**.

 For those respondents who are in further training or unemployed, please continue with Section **G**.

**F Relationship between study/training and work**

 *This section applies to both, employed and self-employed (including graduates working on their own, family farm).*

**F 1 Is your present job related to your training/studies at the (name of training institution)?**

- Yes
- No

**F 2a How important are the qualifications and skills you acquired during your training course/studies for your present job?** Scale of answers ranges between: 1 = not at all important; 2 = not important; 3 = somewhat important; 4 = important; 5 = very important.

 *Please read scale of answers out loud.*

- | not important<br>at all  |                          |                          |                          |                          | very<br>important |  |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------|--|
| 1                        | 2                        | 3                        | 4                        | 5                        |                   |  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                   | Practical vocational skills acquired during the training                         |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                   | Theoretical vocational skills acquired during the training                       |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                   | Entrepreneurial skills (how to run a business and to treat customers, marketing) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                   | Calculation/mathematics/accounting   |

**F 2b** When you look at your current professional tasks as a whole, to what extent do you use the qualifications and skills acquired during your course of studies? Scale of answers ranges between: 1 = not at all; 2 = barely; 3 = to some extent; 4 = to a high extent; 5 = to a very high extent.

*Please read scale of answers out loud.*

not at all							to a very high extent
1	2	3	4	5			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

**F 3** Have you passed on the knowledge and skills gained during your training/study course to family members, friends or other villagers?

Yes  No

**G Biographical data**

**G 1** What was your age at your last birthday?

*In case the interviewee has difficulties in answering this question, ask for the year of birth.*

\_\_\_\_\_ Age at last birthday

**G 2** What is your (permanent) contact address?

Street	_____	Number	_____
City/Town	_____	Zip Code	_____
District	_____		
Country	_____		
Phone/Email	_____		

**G 3** Where did you live before you started your training/studies?

*The interviewer has to categorise the given answer into one of the three options below.*

Rural area  Semi-urban/urban area  Abroad

**G 4 Gender** *Do not ask!*

Male  Female

**G 5** What ethnic background do you have? *Please choose only one answer.*

<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____

**G 6** What is the highest level of education you attained prior to your studies/training?

*Please choose only one answer.*

<input type="checkbox"/> Never been to school	<input type="checkbox"/> Incomplete secondary education
<input type="checkbox"/> Incomplete primary education	<input type="checkbox"/> Complete secondary education
<input type="checkbox"/> Complete primary education	<input type="checkbox"/> Vocational school or other higher education

**G 7 What is the highest level of education attained by your father?***Please choose only one answer.*

- |   |  |
|---|--|
| <input type="checkbox"/> Never been to school         | <input type="checkbox"/> Incomplete secondary education              |
| <input type="checkbox"/> Incomplete primary education | <input type="checkbox"/> Complete secondary education                |
| <input type="checkbox"/> Complete primary education   | <input type="checkbox"/> Vocational school or other higher education |

**G 8 What is the highest level of education attained by your mother?***Please choose only one answer.*

- |   |  |
|---|--|
| <input type="checkbox"/> Never been to school         | <input type="checkbox"/> Incomplete secondary education              |
| <input type="checkbox"/> Incomplete primary education | <input type="checkbox"/> Complete secondary education                |
| <input type="checkbox"/> Complete primary education   | <input type="checkbox"/> Vocational school or other higher education |

**G 9 What is the main occupation of your father?** *Please choose only one answer.*

- Farmer
- Employed private sector
- Employed public sector
- Self-employed (excluding farmers)
- Unemployed
- Other

**G 10 Would you like to receive a summary report of the results gained through this tracer study?**

- Yes  No

**Thank you!**

Interviewer: \_\_\_\_\_ Place/Date: \_\_\_\_\_

Comments:

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**References**

Schomburg, H., 2003. Handbook for Graduate Tracer Studies. Kassel, Germany. (Available at: [http://www.uni-kassel.de/wz1/proj/edwork/mat/handbook\\_v2.pdf](http://www.uni-kassel.de/wz1/proj/edwork/mat/handbook_v2.pdf))

Al-Samarrai, S. & Bennell, P., 2003. Where has all the education gone in Africa? Employment outcomes among secondary school and university leavers. Institute of Development Studies, Brighton, UK.

Questionnaires developed in the following Helvetas VET projects: SKILL Nepal; F-Skill Nepal and AVEP Kyrgyzstan.



# Informant Questionnaire

## Instructions

This questionnaire should only be used if the graduate himself/herself cannot be interviewed. The interview should only be conducted with a person who has specific knowledge of the current situation of the graduate. In case the informant does not know the answer to a particular question, it is very important that you leave the question blank! If not, this could lead to biased results of the tracer study.

In order that the questions of the *Informant questionnaire* match the questions of the *Graduate questionnaire* and that the answers can be filled into the same analysis programme, the questions below have the same numbers as corresponding questions in the graduate questionnaire, however, they are in a different order. Please be careful when transcribing the data.

## Introduction

Before the actual interview starts, the interviewer should always introduce him/herself and explain the objectives and the purpose of the interview to the respondent. He/She should further clarify that the participation in the survey is voluntary. Nevertheless, it should be highlighted that the participation in the survey is highly appreciated, as it will be beneficial for the future development and improvement of the VET programme being reviewed, from which other young people of the village/town may profit. Finally, the participant should be informed about the total duration (approx. 10-15 min.) of the interview and be ensured that all the information will be treated confidentially.

## Identification

Graduate's Name \_\_\_\_\_

School/Cohort Code \_\_\_\_\_

Name of Informant \_\_\_\_\_

Relationship of informant to graduate

Parent

Relative

Former teacher

Instructor of apprenticeship/on the job training

Other ✎ \_\_\_\_\_

Name of interviewer \_\_\_\_\_

Date of interview (day.month.year) \_\_\_\_\_

## Information on graduate

**A 1 In which field/trade did (name of graduate) receive training at (name of training institution)?**

<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____
<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____

**A 2 In which geographical region does (name of graduate) currently live?**

Rural area                       Semi-urban/urban area                       Abroad



**G 1 What was the age of (name of graduate) at his/her last birthday?**

*In case the interviewee has difficulties in answering this question, ask for the year of birth.*

\_\_\_\_\_ years

**G 2 What is the current contact address of the (name of graduate)?**

Street  \_\_\_\_\_ Number \_\_\_\_\_

City/Town  \_\_\_\_\_ Zip Code \_\_\_\_\_

District  \_\_\_\_\_

Country  \_\_\_\_\_

Phone/Email  \_\_\_\_\_

**G 3 Where did (name of graduate) live before he/she did his/her training/studies?**

*The interviewer has to categorise the given answer into one of the three categories below.*

Rural area  Semi-urban/urban area  Abroad

**G 4 Gender of graduate**

Male  Female

**G 5 What ethnic background does (name of graduate) have?**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Current activity****D 0 Is (name of graduate) currently working?**

- Yes, in wage/salary employment *Continue with question D 1.2*
- Yes, in self-employment *Continue with question D 1.2*
- No, he/she is in further education *Continue with question D 3.3*
- No, he/she is without employment *Interview over! Thank informant for his/her time and collaboration*

**Wage-employment & self-employment****D 1.2 In which vocational field is he/she currently working?**

- |   |  |
|---|--|
| <input type="checkbox"/> Agriculture and forestry/fishery         | <input type="checkbox"/> Finance, banking  |
| <input type="checkbox"/> Building and construction trade          | <input type="checkbox"/> Health system and social work                                 |
| <input type="checkbox"/> Transport                                | <input type="checkbox"/> Textile & leather (knitting, weaving, tailoring, shoe making) |
| <input type="checkbox"/> Mining                                   | <input type="checkbox"/> Education   |
| <input type="checkbox"/> Tourism (guide, agency, hotel, etc.)     | <input type="checkbox"/> Electrical trades (house wiring, motor rewinding)             |
| <input type="checkbox"/> Trade (wholesale and retail trade)       | <input type="checkbox"/> Electronics   |
| <input type="checkbox"/> Manufacturing (incl. handcraft, artwork) | <input type="checkbox"/> Hair cutting, beautician                                      |
| <input type="checkbox"/> Communication                            | <input type="checkbox"/> Mechanical trades (metal work)                                |

- Public and business administration       Non Governmental Organisation/Civil Society Organisation
- Maintenance services (refrigeration repair, sewing machine repair, computer repair, village maintenance, etc.)
- Other

### **D 1.6 Does (name of graduate) send any money home?**

*☞ Only ask if the graduate lives abroad and if the informant is related to the graduate!*

- Yes       No

*☞* The interview ends here if graduate is working

## **Further education**

### **D 3.1 What are the (major) subject area(s) of his/her current studies/training?**

*☞* \_\_\_\_\_

### **D 3.2 What is the name and place of training institution/college/university where (name of graduate) is studying?**

*☞* \_\_\_\_\_

### **D 3.3 Do you know in what kind of education programme he/she is in?**

- Secondary school degree
- Vocational training degree
- University/college degree
- Other, please specify *☞* \_\_\_\_\_

**Thank you!**

## **References**

Schomburg, H., 2003. Handbook for Graduate Tracer Studies. Kassel, Germany. (Available at: [http://www.uni-kassel.de/wz1/proj/edwork/mat/handbook\\_v2.pdf](http://www.uni-kassel.de/wz1/proj/edwork/mat/handbook_v2.pdf))

Al-Samarrai, S. & Bennell, P., 2003. Where has all the education gone in Africa? Employment outcomes among secondary school and university leavers. Institute of Development Studies, Brighton, UK.

Questionnaires developed in the following Helvetas VET projects: SKILL Nepal; F-Skill Nepal and AVEP Kyrgyzstan.



# Employer Questionnaire

## Introduction

Before the actual interview starts, the interviewer should introduce him/herself and explain the objectives and the purpose of the interview to the respondent. He/She should further clarify that the participation in the survey is voluntary. Nevertheless, it should be highlighted that the participation in the survey is highly appreciated, as it will be beneficial for the future development and improvement of the VET programme under investigation, from which the respondents themselves will profit, as the VET programme can be further developed in order to serve the employers' needs. Finally, the participant should be informed about the total duration of the interview (approximately 10-15 minutes) and be ensured that all the information will be treated confidentially.

**Please note:** This interview should be conducted exclusively with the employer himself/herself and the employees/graduates should not be present during the interview!

## A Identification

Employer's Name \_\_\_\_\_  
 Address of employer \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Phone number/email address \_\_\_\_\_  
 Name of interviewer \_\_\_\_\_  
 Date of interview (day.month.year) \_\_\_\_\_

## B Information about business/company

### B 1 How many employees work in your business/company?

\_\_\_\_\_ No. of employees

### B 2 Please specify the vocational field in which your company/business/farm can be best classified. *Please choose only one answer.*

- |   |  |
|---|--|
| <input type="checkbox"/> Agriculture and forestry/fishery   | <input type="checkbox"/> Finance, banking  |
| <input type="checkbox"/> Building and construction trade  | <input type="checkbox"/> Health system and social work                                 |
| <input type="checkbox"/> Transport  | <input type="checkbox"/> Textile & leather (knitting, weaving, tailoring, shoe making) |
| <input type="checkbox"/> Mining   | <input type="checkbox"/> Education   |
| <input type="checkbox"/> Tourism (guide, agency, hotel, etc.)   | <input type="checkbox"/> Electrical trades (house wiring, motor rewinding)             |
| <input type="checkbox"/> Trade (wholesale and retail trade)   | <input type="checkbox"/> Electronics   |
| <input type="checkbox"/> Manufacturing (incl. handicraft, artwork)  | <input type="checkbox"/> Hair cutting, beautician                                      |
| <input type="checkbox"/> Communication  | <input type="checkbox"/> Mechanical trades (metal work)                                |
| <input type="checkbox"/> Public and business administration   | <input type="checkbox"/> Non Governmental Organisation/Civil Society Organisation      |
| <input type="checkbox"/> Maintenance services (refrigeration repair, sewing machine repair, computer repair, village maintenance, etc.) |  |
| <input type="checkbox"/> Other  |  |

**B 3 To which of the following sectors does your business/company belong?**

*Please choose only one answer.*

- Private sector
   
  Informal sector  
 Public sector
   
  Other

**C Recruiting procedures****C 1 How many graduates from (name of training institution) have you employed so far?**

\_\_\_\_\_ Number of graduates

**C 2 How do you/does your company/organisation recruit new employees?**

*Multiple answers allowed!*

- Advertisement of vacancies in newspapers, internet, posters, etc.  
 Direct application by prospective employees  
 Employment agencies  
 Direct contact to training institutions  
 Personal contacts to prospective employees  
 Other, please specify *☞* \_\_\_\_\_

**C 3 To what extent is/are your employee/s required to have knowledge and skills in the following fields?** Scale of answers ranges between: 1 = not at all; 2 = barely; 3 = to some extent; 4 = to a high extent; 5 = to a very high extent.

*Please read scale of answers out loud. For this type of question, a print out of the answer scale can be used as an auxiliary tool.*

- | not<br>at all            |                          |                          |                          |                          | to a very<br>high extent |  |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| 1                        | 2                        | 3                        | 4                        | 5                        |                          |  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | Practical vocational skills  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | Theoretical vocational skills  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | Entrepreneurial skills (how to run a business and to treat customers, marketing) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | Calculations, accounting   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | Soft skills/work ethic (communication, punctuality, team work, etc.)             |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | Vocational skills overall  |

**C 4a Has your business/company hired female employees/graduates in the past?**

- Yes
   
  No

**C 4b Would your business/company in the future employ female employees/graduates?**

- Yes
   
  No

If not, please specify why *☞* \_\_\_\_\_

**D Performance of graduates and reputation of the training institution**

**D 1 How do you rate the following statements on graduates from the (name of training institution)?** Scale of answers ranges between: 1 = strongly disagree; 2 = disagree; 3 = undecided; 4 = agree; 5 = strongly agree.  
*Please read scale of answers out loud.*

strongly disagree				strongly agree	
1	2	3	4	5	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The graduates have thorough theoretical trade knowledge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The graduates have highly developed practical trade skills
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The graduates are willing and eager to learn
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The graduates are hard-working and committed
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The graduates are able to work independently
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The overall performance of the graduates is satisfactory

**D 2a Do you think that the graduates need additional training in their respective vocation in order to do a satisfactory job in your business/company/on your farm?**  
 Yes  No

**D 2b If yes, please specify which additional skills and knowledge are needed.**  
1) \_\_\_\_\_  
2) \_\_\_\_\_  
3) \_\_\_\_\_  
4) \_\_\_\_\_

**D 3 Would you be interested in hiring more graduates from the (name of training institution) in the future?**  
 Yes  No  
If not, please specify why:  
\_\_\_\_\_

**E Income Structure**

**E 1 What is the average monthly income you are paying to a graduate employed full-time?**  
\_\_\_\_\_ Monthly income (in currency of the survey)

**Thank you!**

**References**

Schomburg, H., 2003. Handbook for Graduate Tracer Studies. Kassel, Germany. (Available at: [http://www.uni-kassel.de/wz1/proj/edwork/mat/handbook\\_v2.pdf](http://www.uni-kassel.de/wz1/proj/edwork/mat/handbook_v2.pdf))  
Questionnaires developed in the following Helvetas VET projects: SKILL Nepal; F-Skill Nepal and AVEP Kyrgyzstan.

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## EARLIER PUBLICATIONS

### **Publication No. 1**

“25 Steps to safe water and sanitation”, May 2000.

This publication describes the successful “community orientated stepwise approach”, developed by Helvetas in Nepal in an integrated project which includes the contraction of drinking water and sanitation facilities as well as the introduction of better hygienic practices.

### **Publication No. 2**

“10 key stages towards effective participatory curriculum development”, December 2001.

This publication describes a methodology to improve the quality of education and training through participatory approach. The information builds on the experiences of Helvetas in the Social Forestry Support Programme in Vietnam and other Helvetas-supported projects in Sri Lanka, Nepal, Bhutan, Lesotho and Kyrgyzstan.

### **Publication No. 3**

“Clients First! A Rapid Market Appraisal Tool Kit”, June 2004.

Clients First! Provides the theoretical background and experiences from various Rapid Market Appraisal (RMA) events. RMA is a participatory approach to explore demand and market opportunities. The publication describes the method using practical examples of agricultural products and sums up the RMA lessons learnt in the two Helvetas partner countries Kyrgyzstan and Vietnam.

### **Publication No. 4**

“You pay for what you get. From budget financing to result based payments”, August 2005.

Four case studies, from ex-Soviet Union, Asia and Africa, show how development projects can be financed through payments for the results instead of through funding inputs. The publication describes practical examples, analyses successes, and points out critical issues and suggests preconditions for the transfer of lessons learnt to other contexts. The nature of services, their quantity, quality and price are at the centre of the interest rather than micromanagement issues.

### **Publication No. 5**

“Trail bridge building in the Himalayas. Enhanced access, improved livelihoods”, May 2007.

This publication describes experiences of Helvetas’ involvement in trail bridge building in Nepal and Bhutan. Experiences and learnings gained after four decades of Helvetas’ involvement and financial contribution of the Swiss Agency for Development and Cooperation (SDC) are being successfully replicated in west Asia and Africa.

### **Publication No. 6**

“Sharing power for development. Experiences in local governance and decentralization”, June 2007.

This publication describes means by which Helvetas and its partners have contributed to decentralisation processes and local governance in five selected partner countries: the Philippines, Cameroon, Mali, Vietnam and Guatemala. All decentralisation approaches used by Helvetas have in common the fostering of collaboration between the three society sectors, the state, civil society and the private sector, as well as the provision of support to decentralisation and local governance through concrete projects.



**HELVETAS**

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