



Handbook on Labour Market Analysis

Status: Final report
DATE: 24 November 2016

Glossary of terms and abbreviations

Demand for labour	The total demand for labour, i.e. all existing jobs and vacancies.
DGET	Directorate General of Employment and Training
Employed	Persons that are employed as a salaried worker or are self-employed
EU	European Union
GDP	Gross Domestic Product
ILO	International Labour Organisation
Inactive persons	Persons outside the labour force, i.e. without a job and not looking for work
ISIC	International Standard Industrial Classification of all economic activities
ISCO	International Standard Classification of Occupations
Labour force	The total number of persons that is actively engaged in the labour market, either by working or by looking for work
LMA	Labour Market Analysis
LMI	Labour Market Information
LMIS	Labour Market Information System
MHRD	Ministry of Human Resource Development
MoLE	Ministry of Labour and Employment
MSDE	Ministry of Skill Development & Entrepreneurship
MOSPI	Ministry of Statistics and Programme Implementation
MSME	Micro, Small and Medium sized Enterprises
NCSD	National Council on Skill Development
NEET	Youth that are Not in Employment, Education or Training
NOS	National Occupational Standards
NSDA	National Skills Development Agency
NSDC	National Skills Development Corporation
NSDCB	National Skill Development Coordination Board
NSDT	National Skill Development Trust
NSQC	National Skills Qualifications Committee

NSQF	National Skills Qualifications Framework
NSRI	National Skill and Entrepreneurship Research Institute (at the time of writing, this still needs to be established)
NSSO	National Sample Survey Organisation
Primary data	Data collected through primary research activities – interviews, group discussions, brain-storming, feedback collecting etc.
Qualitative information	Information expressed in words, like opinions, reasons and descriptions
Quantitative information	Information expressed in figures, like expenses, time, age, income, etc.
QP	Qualification Pack
Secondary data	Data already available with the government, employers, organizations, academic and training institutions, research institutes, media houses etc. e.g. skill gap reports, market survey report, other sector information, administrative data captured on their databases etc.
Skills	Something a person is able to do, i.e. something one knows or has learned. Skills can be generic (like communication skills, social skills, personal skills) and job specific (like being able to renew the electric wiring, knowing a certain programming language, etc.)
SSC	Sector Skill Council
SSDM	State Skills Development Mission
Supply of labour	The total labour force, i.e. all the employed and all the unemployed
Underemployed (level)	Workers that are in a job for which they are overqualified, i.e. a workers that have a higher educational attainment than necessary for the job)
Underemployed (time)	Workers that work part-time involuntarily, i.e. workers that work fewer hours than they want to
UNESCO	United Nations Educational, Scientific and Cultural Organization
Unemployed	Persons that do not have a job and are actively looking for work
Unemployment rate	The proportion of the labour force that is unemployed
Working age population	The total number of persons aged 15 years or older
Youth unemployment rate	The proportion of the unemployed youth aged 15 to 24 years as a proportion of the same age group in the labour force

Table of content

Glossary of terms and abbreviations	2
Table of content	4
1. Introduction	5
2. Institutional land scape for skills development	6
3. Terminology used in this handbook	9
<i>Labour market information, labour market analysis and labour market information systems</i>	9
<i>Labour market vocabulary</i>	11
4. Different stakeholders have different objectives for LMA	12
5. Steps to take when conducting labour market analysis	15
<i>Step 1 – Orientation: why conduct an LMA and who will do the work?</i>	15
<i>Step 2 – Organisation: prepare for the collection of LMI</i>	16
<i>Step 3 – Data collection: implement the plan</i>	23
<i>Step 4 - Data processing and reporting phase</i>	24
<i>Step 5 - Use the outcomes</i>	25
<i>Step 6 - Evaluation and planning of new LMA</i>	25
6. Involving a research or consulting companies	27
Annexes	28

1. Introduction

This handbook has been put together as a reference document for staff of State Skills Development Missions (SSDMs) and Sector Skill Councils (SSCs) that are directly involved in the analysis of the labour market in the context of skill development. Readers can use the handbook to get an idea of the different stakeholders in the skills development field in India, to understand the reasons for conducting Labour Market Analysis (LMA), and to learn about a basic approach to analysing the labour market.

The handbook is one of several outputs of the India-EU skills development project, which started in 2012 and will continue until the end of 2016. This project aims, among other things, to “...increase the capacity of policy makers and key counterparts, develop a National Vocational Qualification Framework, and enhance labour market analysis processes” with the objective to “... improve the quality and relevance of training provision and the number of certified skilled labourers in various sectors of employment.”¹ This means that the LMA approach described in this document focuses specifically on assessing skill needs in the labour market. In other words, the outcomes of the LMA need to be useful for the development, monitoring and/or evaluation of skills development activities by (public and private) training providers, companies, non-governmental organisations, civil society organisations, and any other party active in this field. More information about the project is available on the project’s website, www.india-euskills.com.

The hand book consists of a glossary of terms and abbreviations, 6 chapters and 6 annexes. A description of the institutional land scape for skills development is included in the next chapter. Readers of the handbook can use this information to identify organisations that might have labour market information that can be used for a labour market analysis. The third chapter includes an explanation of terminology used in this handbook and to describe labour markets. Different stakeholders will need different labour market information, which is explained in chapter 4. The actual steps to conduct a labour market analysis are explained in chapter 5 and the sixth and last chapter is included for readers that consider hiring a research or consulting company to assist them during the design and implementation of the labour market analysis.

¹ From www.india-euskills.com/about.html.

2. Institutional land scape for skills development

Over the last few years, India has witnessed significant development in the skill development landscape considering the huge importance given to skilling in order to tap the demographic dividend in the country. Several ministries, national level agencies, state bodies, sector bodies, industry are together trying to reap the benefits of this demographic dividend. All of these organisations are potential sources of LMI and may be able to provide the input for a LMA carried out by SSC and SSDM staff, which is why a description of the institutional landscape is included in this handbook.

In order to form an institutional base for skill development at the national level in India, a three tier structure consisting of National Council on Skill Development (NCSD), National Skill Development Coordination Board (NSDCB) and National Skill Development Corporation (NSDC) was created in 2008. In June 2013, the National Skill Development Agency (NSDA) was notified as an autonomous body which subsumed the NSDCB, NCSD, and the Officer of Adviser to the PM.

The NSDA was made responsible for the coordination and harmonisation of the skill development efforts of the Government and the private sector and between a large number of Central Ministries, departments and states, so as to achieve the skilling targets of the 12th Plan and beyond. This would involve a range of areas, such as the inclusion and operationalization of the National Skills Qualifications Framework (NSQF), the coordination and harmonisation of the approach to skill development of various stakeholders, the evaluation of skill development schemes, the development of a Labour Market Information System (LMIS), and policies and activities in several other areas.

As a preliminary step, NSDA has conducted some sector and state specific studies on skill gaps, mobilisation of candidates, and affiliation of training providers. The information collected during these studies would be a valuable source of information for SSDMs and SSCs initiating a LMA. The NSDA is also mandated to create and maintain a national data base related to skill development including development of a dynamic LMIS². This LMIS is currently being developed, and will be an important source of LMI for SSDMs and SSCs conducting LMA. The NSQF is anchored at the NSDA and is being implemented through the National Skills Qualifications Committee (NSQC) chaired by the chairperson of NSDA and NSDC and includes representatives of the key Ministries of the Government of India which are involved in skill development, representatives of State Skill Development Missions, sector representatives from industry and heads of all relevant regulatory bodies and selected training bodies/agencies pertaining to the sector. As per the new Policy on Skill Development, the role of NSDA may be redefined to that of a Qualifications Authority for implementing the NSQF.

The NSDC is a Public Private Partnership that plays a catalysing role in the setting-up of large scale, for-profit, sustainable vocational institutions in the country. It also funds supporting systems such as quality assurance, labour market information systems and train-the-trainer facilities at sector level. The NSDC is mandated with the task of facilitating private sector participation in the skill development effort, including incubation of industry-led bodies known as Sector Skill Councils (SSC), which define the National Occupational Standards (NOS) for the respective skills sectors. NSDC also provides funding to enterprise

² In the National Skill Development policy that is currently under public view, the LMIS will become a responsibility of to (still to be created) National Skill and Entrepreneurship Research Institute (NSRI). Users of this handbook need to check the current state of affairs online.

and organisations that provide skill training. It will also develop appropriate models to enhance, support and coordinate private sector initiatives. Furthermore, NSDC certifies private training providers and plays a role in directing potential students to the nearest relevant training provider. This information could be another relevant source of information about the supply side of the labour market. In the context of conducting LMA, relevant information available with the NSDC includes information on sector skill councils, sector-wise occupational standards and mapping, qualification packs, curriculum development, affiliated training providers, and skill gap reports available at both sector-wise and state-wise district level.

At the national level, skill development initiatives are spread across 20 ministries managing 73 different skill development schemes³ with a combined target of imparting skills to 350 million people by 2022. All these ministries have played an important role in the skill development mission and are likely to have significant amount of information that might be relevant for SSCs and SSDMs conducting LMA. List of all the ministries and various schemes under them is enlisted in Annex 6. Two key ministries managing higher education and technical education are Ministry of Human Resource Development (MHRD) and the Ministry of Labour and Employment (MoLE). All aspects of higher education and college education, including vocational courses, come under the purview of the Ministry of HRD and the vocational training infrastructure, including government and private Industrial Training Institutes (ITIs), comes under the Ministry of Labour and Employment's Directorate General of Employment and Training (DGET). Both Ministries have introduced various schemes and programmes in the field of infrastructure development and employment linkages to impart quality skill training (for more information, see Ernst and Young LLP & FICCI, 2014)⁴. For that reason, they can be a useful resource for those conducting LMA.

In an attempt to rationalise different schemes and coordinate the activities better, the Ministry of Skill Development and Entrepreneurship (MSDE) was notified by the Government of India on the 31st of July 2014 which led to the creation of the Ministry on 10th November 2014. The MSDE was mandated with the task of coordinating all activities relating to skill development in India. The three key agencies – the NSDA, the NSDC and the National Skill Development Trust (NSDT) are now subsumed under the umbrella of the MSDE. The new ministry is mandated to, among other things, evolve an appropriate skill development framework, removal of disconnect between the demand and supply of skilled manpower through vocational and technical training, skill up-gradation, building of new skills, innovative thinking, mapping of existing skills and their certification. As part of the MSDE, the NSDA and NSDC continue to perform the tasks assigned to them. As per the new Policy on Skill Development, NSDT can take the role of Independent Regulator under the umbrella of the MSDE, tasked with technical quality and audit checks on NSDC, SSCs and Assessing Bodies, providing direction for funding and approving cases put forward for it by NSDC and SSCs, grievance addressing, and integrating & publishing data for demand & supply of skilled manpower. MSDE will coordinate the work between various ministries involved in skill development at the national level.

At the state level, the new Policy on Skill Development recognises the vital role that State Governments play in the skills ecosystem as the States are the ultimate authorities in implementing them. Therefore, it envisages empowering the State Skill Development Missions so that these become effective bodies for

³ See https://c27web2.saas.talismaonline.com/NSDA/Skill_Development_schemes.pdf for more information

⁴ See Ernst and Young LLP & FICCI (2014). Reaping India's promised demographic dividend — industry in driving seat. Downloaded on 11 June 2015 from <http://www.globalskillsummit.com/report-1.pdf>

coordinating the skill development efforts in the state. If necessary, states may be advised to set up Departments of Skill Development & Entrepreneurship. SSDMs work on the identification of relevant sectors for skill development, and coordinate between Ministries and departments at state level, the industry and training providers. At the time of writing, most of India's states and union territories have a State Skill Development Mission. Many SSDMS have year wise targets for skill development, a specified budget, and complement their activities with efforts to encourage private investment. SSDMs are set to play a vital role in promoting skill development, as they are involved in identification of important sectors for job creation, and coordination with relevant government institutions, as well as industry and private training organizations.

At the sector level, the NSDC has set-up and continues to set up Sector Skill Councils, which are national partnership organizations that bring together industry stakeholders, including private sector, labour, academia and the Government, to meet the skill requirements of various sectors of the economy. As on March 2015, 31 SSCs have been approved by the NSDC board and seeking to add four more in the current financial year. Standards developed by SSCs are expected to address one of the major issues in the current skill delivery framework, namely, the poor quality of training and lack of alignment with industry needs. SSCs also collect information about the labour market in their sector and will ideally develop its own sector LMISs uncovering demand and supply. The objective of collecting such information would be to improve the SSC's understanding of the skills and training needs within the sector, both today and in the future. In addition, the information could be used to support the planning/delivery and monitoring of skills development. They are also required to conduct sector studies and maintain a registry of assessors and training providers for their qualifications.

The role of SSCs does not stop with the collection of LMI. In fact, it is crucial that SSCs become the main experts or authorities on skills issues in their sectors across India. They are responsible for providing industry's inputs in terms of quantity and quality of different skilled personnel required, and for this purpose, engaging with central and state level implementing agencies as regards the development of curriculum packages, the training of vocational teachers, and the assessment of skills imparted. This role of the SSCs matches international developments of industries taking up larger roles in the skill development agenda of their respective countries.

3. Terminology used in this handbook

It is important to make sure that all readers of this handbook “speak the same language”. That is why the concepts like labour market information, labour market analysis and labour market information system are introduced, as well as some common basic labour market terminology.

Labour market information, labour market analysis and labour market information systems

Labour markets are most effective when relevant, timely and accurate information is available to all participants. That is why labour market Information is important for the functioning of the labour market. In this handbook, the term Labour Market Information (LMI) refers to all information that describes the labour market. This includes statistics about the size and composition of (part of) the labour market, information about problems and mechanisms in the labour market, and also information about the background, preferences and aspirations of the different actors in the labour market. In short, the term labour market information refers to all information about the labour market and its stakeholders. Examples of LMI are the number and characteristics of the employed and the unemployed, the size and composition of the labour force compared to the size and composition of the population, wages and productivity trends, contributions by different economic sectors to the Gross Domestic Product (GDP), etc.

LMI that is relevant in one situation, may not be relevant in another situation. The contribution of a sector to the national GDP may be relevant when developing economic policies, but it does not help you understand what skills employers need in their workers. And information about skill gaps in the sector is helpful for curricula developers, but it is not directly relevant for vocational guidance of students. This introduces the concept of Labour Market Analysis (LMA): we analyse labour markets to improve our understanding of market mechanisms and of the actors in the labour market, i.e. the employers (the demand side) and the employed and the job seekers (the supply side). For example, LMA can reveal employers’ skill needs and recruitment practices and preferences, and divulge patterns in the behaviour of job seekers and employees in the labour market. Also, analysing LMI can provide insight in the influences of industrial and demographic developments, such as technological changes, shifts in consumer demand and population changes.

We can distinguish three main aspects of LMA (Mangozho, 2003)⁵. The first is labour market signalling, i.e. noticing early warnings of major new developments in the labour market. This information is especially important for decision makers in the labour market field. For example, if decision makers know that there will be a decrease in the demand for labour in a certain sector, they can react timely and proportionally. However, predicting or forecasting reality has proven difficult in the past and Mangozho points out that labour market signalling is often criticised for producing large amount of data⁶, that is often partial, unreliable, outdated and devoid of analysis. A second main aspect of LMA would be to analyse labour market functioning and processes, thus revealing the underlying dynamics. Such research usually involves medium and long term indicators and their underlying factors and correlations. However, Mangozho rightly points out that the results of this kind of research have mainly been of academic interest, but have not

⁵ Nicholas Mangozho (2003). InFocus Programme on Skills, Knowledge and Employability. Working paper No. 13. *Current practices in labour market information systems development for human resources development planning in developed, developing and transition economies*. International Labour Office, Geneva: ILO, 2003.

⁶ Though the term data is plural by definition, it is generally used as a singular term in everyday language. That is why the word “data” will be treated as a singular word throughout this document.

been of much relevance to policy and decision making processes. The last aspect of LMA would be the development, monitoring and evaluation of labour market policies and programmes, i.e. to systematically assess the outcome and impact of labour market policies and programmes. This is generally done to identify the needs in the labour market, as well as constraints or deficiencies in the existing labour market and skills development policies and programmes, that can be developed and/or adjusted according to the findings. This third aspect will generally be the reason for SSDMs and SSCs to conduct LMA

A Labour Market Information System (LMIS) is “... the one stop data and information source which provides access to the data and information for clients who need this information for any reason. Data can take the form of text, graphs, charts, and actual data sets. The data can be historical, current or forecasts.” (Maloney, 2015)⁷. Maloney further explains that, the economic theory is that all players in the labour market have equal access to information that allows them to make informed decisions about jobs, education and training. Yet he points out that the reality is different, which is why governments feel the need to supplement the information flows in the labour market to improve the labour market’s efficiency and effectiveness. Obviously, a LMIS would play an important role in this, by improving the availability of labour market information.

Labour market information systems can be used at national level, but also at sector level or at state level if the objective of the LMIS is linked to a specific sector or state. For example, a sector labour market information system would be designed to address sector specific problems and areas of interest, such as the assessment of the size and the nature of skill problems in the sector. For a sector LMIS, information from companies in the sector and from training institutes that educate or train current and future employees would be very relevant of course. The information should help SSCs to initiate training and to develop or adjust curricula. Yet the collected LMI can also be used as input for lobby groups that try to change government policies that negatively affect (part of) the companies in the sector. Just like a sector LMIS is designed according to the needs of the sector, a state level labour market information system focuses on the needs of the state. For example, a state LMIS can be designed to help identify sectors that are particularly successful in the state and sectors that are not. State-level government can use the information to develop policies that target specific sectors, for example sectors that are labour intensive and sectors that have a high growth potential. A national labour market information system would (in the long term) include information about all states and all sectors. A typical objective of such a national LMIS would be to generate LMI for the monitoring and evaluation of labour market and education policies, but also for career guidance purposes and to inform the general public.

Ideally, data collected in a sector or a state level LMIS would feed into a national LMIS, provided that there is a strong coordination from the national level, for example to ensure that the same definitions and categorisations are used in different states and sectors.

Lastly, it is also possible to develop a LMIS at regional level: there are examples in which local government bodies in border regions initiate a regional labour market information system with their counterparts in

⁷ Aidan Maloney (2015). *LMIS concept paper. A labour market information system to meet India’s LMI needs (draft version)*. India EU skills development project, Delhi, 2015.

neighbouring states or countries in an effort to develop policies to stop continuous migration or to develop the regional economy.

Labour market vocabulary

The labour market is generally described using a limited number of terms. An important term would be the working-age population, i.e. persons that are old enough to work (but may choose not to). The working-age population has been defined as all persons that are 15 years of age or older. Often, the working-age population is divided in youth (aged between 15 and 24 years) and adults aged 25 or older.

The employed are persons that, during the reference period, are employed as a salaried worker or are self-employed. This category includes all workers regardless of their contractual arrangement. It includes permanent employees, contract workers and day labourers, temporary workers, self-employed workers (like freelance workers), family workers, formally and informally employed workers in the organised and in the unorganised sector, etc. The unemployed are persons that do not have a job during the reference period, but are available and actively looking for work. Together, the employed and the unemployed form the labour force.

The unemployment among the labour force younger than 25 years is referred to as youth unemployment. The youth unemployment rate is the proportion of unemployed youth aged 15 to 24 years as a proportion of the same age group in the labour force.

Underemployment refers to the underutilisation of the capacity of a population. This is the case if workers are in a job for which they are overqualified, i.e. workers that have a higher educational attainment or more skills than necessary for the job. Workers that involuntarily work part-time are regarded as underemployed as well.

Part of the population will not be working or looking for a job. These people are referred to as the inactive. The inactive may be retirees, persons taking care of the household, or just simply persons with resources that allow them not to work. Many young people do not work and are not looking for work, because they are enrolled in education. To distinguish between this group and other inactive youngsters, the concept of NEET has been introduced, i.e.: youth that are Not in Employment, Education or Training.

Like any other market, the labour market is where the demand for labour and the supply of labour meet. The total demand for labour includes the whole job potential, namely the total number of vacancies and the total number of workers regardless of their contractual arrangements (i.e. in a permanent job, temporary job, in a family business, formally or informally employed, etc.). On the other hand, the total supply of labour is the total labour force – as mentioned above, the total of employed and unemployed – both in the formal and informal sectors.

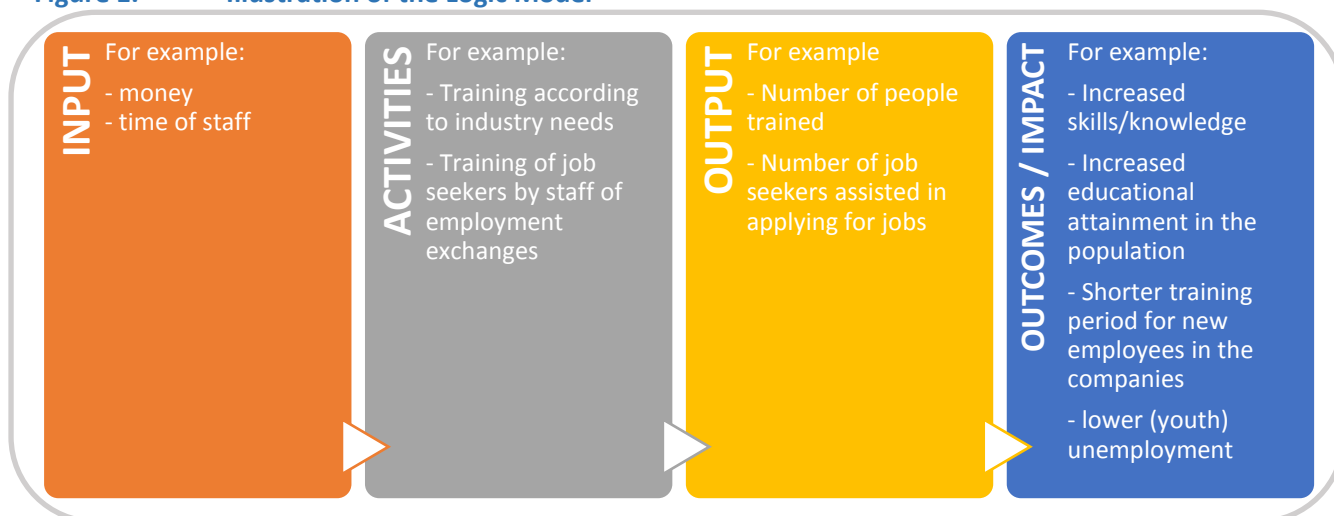
4. Different stakeholders have different objectives for LMA

LMI is essential to understand the labour market, but as mentioned before, not all LMI is relevant in all situations. More precisely, the objective of the data collection determines the type of LMI that needs to be collected. This chapter contains a general description of what information different stakeholders might require.

Policy makers and training programme designers use LMI to design, monitor and evaluate skill development policies or programmes. For the design of such a policy or programme, information is needed to decide which group should be targeted (though this is often not a technical but a political decision), how many people need to be trained and on what skills, etc. This means that information is needed about the current demand and supply for labour in the labour market, about the economic situation and expected developments, and about the willingness of companies and workers to invest in the development of skills.

If a policy or a programme is already in place, it will need to be monitored during the implementation and, in the longer term, it needs to be evaluated. Typical questions that need to be answered during such an evaluation would be whether the education policy or training programme is efficient, effective, relevant, what the impact is, and whether it is sustainable⁸. Based on the answers to these questions, policy makers and programme designers can decide to continue, adjust or even abolish the education policy or training programme.

Figure 1. Illustration of the Logic Model



Policies and programmes are generally based on the assumption that there is a logical link between the inputs and the outcome. A common way to explain the logic behind them is by preparing a “logic model”⁹,

⁸ Effective: whether the policy’s or programme’s desired result is achieved.
Efficient: whether the policy’s or programme’s outputs are in balance with the investments made.
Relevant: whether the activities and outcomes are in line with the needs of the target group.
Impact: the direct and indirect positive or negative changes due to the policy or programme, whether intended or not.
Sustainable: whether positive impacts are not temporary but will last, and whether the policy or programme is financially sound and does not harm its social and ecological environment.

⁹ A logic model is also sometimes referred to as a “logical framework” or a “theory of change”

and this model can help policy makers and programme designers to decide what LMI is needed for the monitoring and evaluation of education policies and training programmes.

An example of such a model is included in Figure 1. The model consists of four elements, i.e. input, activities, output and outcomes/impact, elements that can be used to describe any policy and programme. For example, a skill development policy or training programme could be described as follows:

- *Input, i.e. the investments*
For example money, time and energy of staff, equipment
- *Activities, i.e. activities organised as part of the policy of programme*
For example the development of training materials, training of trainers, training of students, etc.
- *Output: what is “created” with the activities*
For example the number of trained people, curricula that are developed, etc.
- *Outcome / impact: the changes resulting from the policy or programme, in the short term (i.e. outcome) but also long term (i.e. impact).*

An example of a short term outcome of a training programme could be an increased skills or knowledge level of training participants. Depending on the type of policy or programme, a long term effect could be that companies need a shorter training period for new employees, lower unemployment, or higher educational attainment in the population.

When monitoring the implementation of a policy or programme, the focus is on the logic model’s elements “input” and “activities”. However, when evaluating a policy or programme, the focus is on the elements “output” and “outcome or impact”, which is a bit more complex because the outputs and outcomes cannot be assessed as easily as the inputs and the activities. That is why indicators¹⁰ need to be chosen for all of the outputs and outcomes in the logic model. Based on these indicators, the policy makers or programme designers should be able to tell if the policies or programmes are effective. The efficiency of a policy can be determined by looking at the input, output and outcome and by combining this information with information about other policies or programmes. To decide on the relevance and sustainability of a policy or programme, the opinion of all stakeholders needs to be assessed, varying from participants, company representatives, experts, and any other party that is in any way linked to or affected by the policy or programme. LMI will play a big role in determining the effectiveness, efficiency, impact, sustainability and relevance of a policy or programme in the field of skill development.

Apart from the politicians and other persons operating in the skill development field, there are several other stakeholders that use and analyse labour market information. Firstly, career counsellors in employment exchanges and in public and private schools and training providers need LMI to advice students and job seekers on education choices and on career plans and decisions. This would mean that they need information about the current structure of the labour market, occupational profiles (including typical career paths), and current and expected developments in the labour market in the region.

¹⁰ An indicator is a variable or information that points to (“indicates”) something else. For example, a thermometer indicates the temperature, a blood glucose indicates the glucose level in the blood, and the unemployment rate can be seen as one of the indicators of the economic conditions in a country.

Another group that depends on LMI are the developers of curricula for vocational education and training. These curricula developers can be based within TVE institutes or another (private or public) party involved in curricula development. This group of users would need LMI about generic and specific skills that are not, not accurately, or not sufficiently covered in curricula. This would require very detailed information about the technical skills of graduates entering the labour market, skill needs of enterprises, and the technical skills of the current workforce.

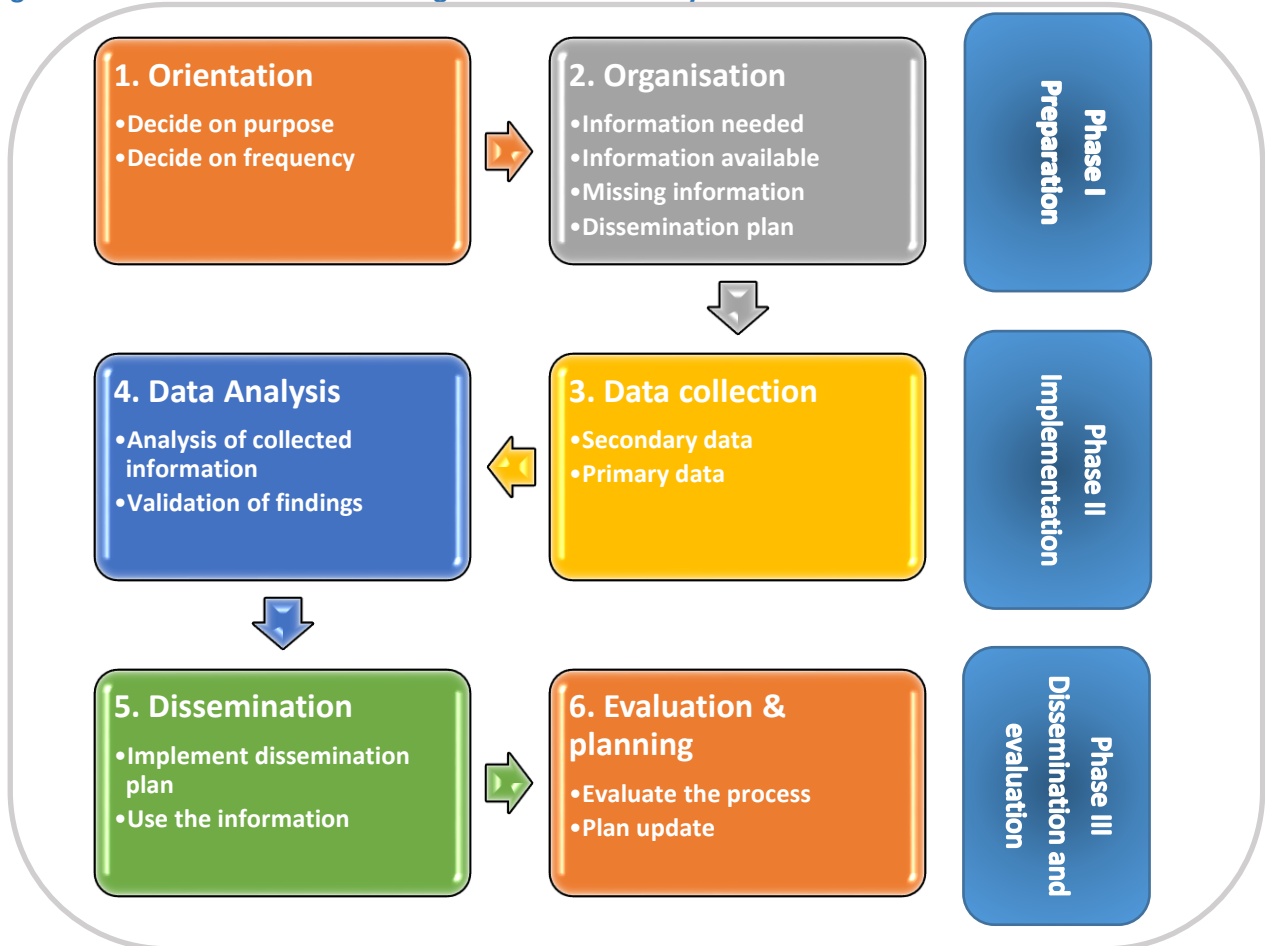
Employers and trade unions are interested in LMI as well. Employers are providers of LMI, but can also use LMI, for example for recruitment, terms of employment, (re-)training policies, and sometimes even for the timing and size of investment decisions. Trade unions would be interested to know the composition of the workforce, wages and fringe benefits of employment, training possibilities, and current and future developments in the labour market in the sector or region they focus on.

Last but not least, the general public is a principal user of LMI. Those active in the labour force may base career decisions on LMI, and may prepare for negotiations with future employers by consulting information about wages and other benefits in the sector or region. Also, as education is costly, parents and students may want to use LMI to decide on education and training. Furthermore, LMI is used by journalists, by researchers, by bloggers, and other interested individuals that want to inform themselves about the current state of affairs in the labour market.

5. Steps to take when conducting labour market analysis

The process of conducting LMA is summarised in Figure 2. It shows that there are six steps of different duration, spread out over three phases, i.e. the preparation phase, the implementation phase and the dissemination and evaluation phase.

Figure 2. Process of conducting labour market analysis



Step 1 – Orientation: why conduct an LMA and who will do the work?

The preparation for the LMA consists of two steps, i.e. orientation and organisation. The orientation and organisation do not necessarily take place consecutively, as decisions taken during the orientation phase influence the organisation phase and vice versa, which may require an update on the decision taken during the orientation step.

The orientation step involves taking decisions about the purpose and specific objectives of the LMA, about the manpower and funds available for the LMA and if and how they want to collaborate with other potential stakeholders. Obviously, these decisions need to be taken by persons that have the mandate to take decisions on these subjects.

The first decision is on the general purpose of the LMA and the corresponding specific objectives. For example, the general purpose of the LMA could be to collect information to develop a skill development

policy or programme according to the requirements in the industry. An SSDM might break this purpose in more specific objectives like (1) collecting information for the development of a skill development programme according to the requirements in the three biggest sectors in the state in terms of number of workers, or (2) the three sectors that contribute most to the state’s Gross Domestic Product (GDP). SSCs on the other hand, could break down the general purpose into other specific objectives such as (1) collecting information for the development of a skill development programme according to the requirements in the industry for job roles with the biggest skill problems, or (2) for job roles for which employers have the biggest recruitment problems.

Furthermore, the orientation step involves assessing the institutional environment. Based on the chosen purpose and objectives, other relevant stakeholders can be invited to take part in the decision making process and to contribute to the implementation process. Ideas about relevant stakeholders can be found in chapter 2 on the institutional land scape for skills development, but there can be other relevant parties such as non-governmental or civil society organisations, or training institutes that have a leading role in relevant sectors or in certain regions.

Conducting LMA takes time and money. That is why the decision makers should plan for human, financial and technical resources. Sufficient resources need to be made available for each phase of the LMA, and it would make sense to decide how often and when the LMA will be repeated. Based on this, sufficient resources need to be made available for future LMAs as well. The required resources also depend on the decisions about the organisation of the LMA (i.e. step 2), as this is when decisions are made for specific data collection methods.

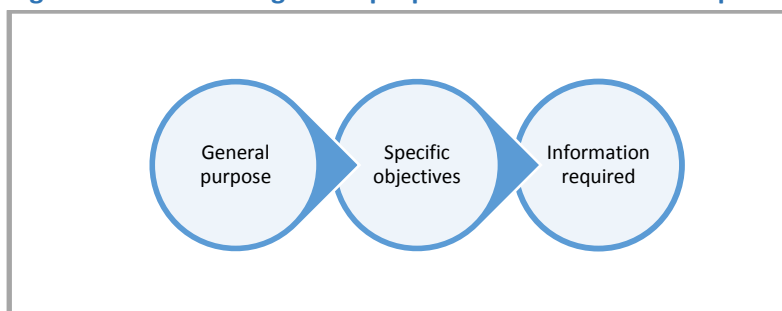
Once the above decisions have been taken, roles and responsibilities are to be assigned to persons and organisations for the further implementation of the process. This means that the responsibility for designing and implementing the LMA, as well as for disseminating the results and for evaluating the process needs to be appointed to a group of persons that will be involved in the next steps of the LMA. In the remaining part of this document, this group is referred to as the “working group”.

Step 2 – Organisation: prepare for the collection of LMI

Identify information required to meet specific objectives

The second step would be to plan and organise the LMA, i.e. step 2 “Organisation” in . This step is still part of the preparation phase and is important for a smooth implementation of the LMA (i.e. step 3).

Figure 3. From general purpose into information required



The first step to take in the organisation of the LMA, is to further break down the general purpose and specific objectives formulated in step 1, until it is clear what kind of information is needed to achieve the specific objectives of the LMA (see **Error! Reference source not found.**). If we continue with the example in step 1, the next step for the working group would be to further break down the specific objectives. If an SSDM decides to collect information for the development of a skill development programme according to the requirements in the three biggest sectors in the state in terms of number of workers, the working group will need to find information about the number of workers per sector (including the unorganised part of the sector), so the three sectors with the biggest number of workers can be identified. They then need to decide how to define the “requirements in the industry”: is it the number of workers, or the quality of the workers, or any problem enterprises have regarding recruitment of workers? If the quality of the workers is a problem, new curricula may be needed or old curricula will need to be updated. In that case, the survey should be used to collect detailed technical data about a limited number of occupations, which means that the working group needs to select these occupation prior to the enterprise survey – or collect the detailed technical information at a later stage. Apart from this, the collected information should enable the researchers to identify differences (if any) between sub-sectors, different company sizes, and different regions, etc. Also, information is needed about the current human resources practices: do companies currently train their staff, and if so, how? Are they interested and willing to hand this responsibility to a third party, such as the training providers that would implement the skills development policy or programme that is being designed?

Apart from the data collection on the demand side of the labour market, it makes sense to check if the remarks of companies about the availability of workers are correct. In other words, collect information about the supply side of the labour market to establish if employers’ claim that there are insufficient candidates to fill the positions of certain job roles are correct, and also how the current shortage of (qualified) workers is solved. Collecting this kind of information requires that the working group collects information from employment exchanges in the state, databases of registered job seekers of online job portals, training providers that provide training that is relevant for the sector targeted, and information from other stakeholders and sector experts.

The other example objective of LMA for SSDMs mentioned in step 1 as well as the example objectives of LMA for SSCs (i.e. collecting information for the development of a skill development programme according to the requirements in the industry for job roles with the biggest skill problems, or for job roles for which employers have the biggest recruitment problems) can be broken down in a similar way.

Data collection plan: collecting secondary and primary information

Once it is clear what information is needed, the working group needs to develop a detailed data collection plan specifying exactly how to collect the information that is required to reach the specific objectives. Some information will already be available, while other information needs to be collected specifically for the LMA. Information that can be used for the LMA, but has been collected for another purpose, is referred to as secondary information. Examples of secondary information are census data, administrative data (for example with information about students, graduates, jobseekers, etc.), but also reports from sector organisations, schools, universities, national statistics, etc. The advantage of secondary data is that it tends to be cheap, and that it is relatively easily available and accessible. The disadvantage would be that the data is collected for another purpose and may therefore not be completely in line with what information is

needed. Information that is collected specifically for the LMA is referred to as primary information. This information can be collected during surveys, interviews, focus group meetings or any other data collection method. The pros and cons for primary information are the opposite of the pros and cons secondary information: it may be perfectly in line with what information is required, but it takes time to collect it and is usually costly.

Both primary and secondary data can be expressed in figures (quantitative data) or in words (qualitative data). It is up to the working group decide on a (combination of) data sources and data collection method(s), based on the available financial and human resources of course. Obviously, the more secondary information can be used, the lower the costs of the LMA. Yet the more primary information can be used, the better the quality of the information collected. It is up to the working group members to find the right mix of data sources and data collection methods.

The data collection plan should also include a rough planning of activities, because it is important to realise that some activities can only take place when other activities are finalised. To continue with the example above: the enterprise survey will need to be finalised and the results need to be analysed before the focus group meeting can take place.

Lastly, it is a good practice to design the data collection plan in such a way that the findings from one source can be “triangulated” with another source. This means that you only trust information from any source if it is confirmed by information from another source. Make sure that your data collection plan includes the possibility to triangulate information. For example, you can check findings from an enterprise survey about current and future labour market demand by consulting a focus group consisting of economists, training providers, sector experts, government representatives, and a small number companies from the sector(s). If both the outcomes of survey and the focus group meeting point in the same direction, the value of the findings increases. If this is not the case, you know that you need to find an explanation for the differences.

Sources of secondary information

Obviously, the working group members will need to map the available secondary information. To do this, working group members will conduct desk research, and use and expand their professional network, making contact with organisations that could provide this information. Information about some subjects is more likely to be available from secondary sources than about other subjects. For example, figures about the number of graduates entering the labour market is easier to find than information about the opinion of employers about their skill level.

Two important sources of secondary information for any LMA are the National Sample Survey Organisation (NSSO) and the Ministry of Statistics and Programme Implementation (MOSPI). Though official statistics (by nature) will always be somewhat out-dated, they can be used as an indication of the size and educational level of the population and the labour force. These demographic statistics, as well as labour force statistics are relevant for both SSDMs and SSCs. Similarly, the economic census and the census of Micro, Small and Medium sized Enterprises (MSMEs) will contain relevant information about companies and sectors.

Relevant secondary information about the supply side of the labour market, for example about public and private training providers that train future workers and/or train employees is available with the Ministry of

Labour and Employment (MoLE). Other ministries also have information about their respective training institutes (see chapter 2 on the institutional landscape for skills development), and the National Skills Development Corporation (NSDC) has a database of certified training providers. Though there have been several changes since the publication, the report of the International Labour Organisation (ILO) "[Review of the Sources and Availability of Skill Development Data in India](#)" contains a detailed overview of different sources of LMI. The ambition for the future is to make all this information available via the MSDE, which will then have a complete overview of the different institutes.

The unorganised sector

The majority of Indian workers work in the unorganised sector¹¹ and in many sectors, the majority of companies are part of the unorganised sector. Because of this, it is very important to include unorganised sector companies in the enterprise survey, so their needs, problems and points of view are known. However, as unorganised sector companies mostly work informally and are not registered in official registers and administrations, it is not possible to include unorganised sector companies in the sample of enterprises that is selected for the survey. To make sure that the perspective of unorganised sector companies are also taken into account, the working group and interviewers need to ask around for information about companies in the unorganised sector. This means that, in every town, city or panchayat covered during the survey, interviewers need to ask for information and recommendations from companies that participate in the survey, local government representatives, sector experts or informal sector experts, non-governmental organisations, and any other person or organisation that know where to find unorganised sector companies that operate in the sector targeted in the survey.

Unorganised sector companies that have been identified during the implementation of the survey can be approached and asked to collaborate in a similar interview as the companies from the organised sector. You need to prepare a separate questionnaire for the unorganised sector companies by removing questions from the questionnaire in Annex 1 that are not relevant for unorganised sector companies (and it is up to you to decide what is important and what is not). This makes the questionnaire shorter, which is important because the interviewers should not bring the questionnaires to interviews with unorganised sector company owners. The reason is that filling out a questionnaire can make the atmosphere of the interview too official, which may scare off the unorganised sector company owners who will then refuse to participate in the survey. Interviewers need to learn the questionnaire by heart and collect the information from unorganised sector company owners during an informal conversation. Obviously, the shorter the questionnaire is, the smaller the risk that the interviewers forget questions.

When conducting interviews with representatives of unorganised sector companies, keep in mind that unorganised sector companies are small by definition. This often leads to a different composition of the workforce, with employees combining tasks of job roles associated with different job roles in other (bigger) companies. During the analysis of the data, the coding of the job roles in line with the NOS/QPs may be problematic.

¹¹ The unorganized is defined as private enterprise having less than 10 workers and operating on proprietary or partnership basis. (Source: Expert Group on Informal Sector Statistics (Delhi Group), May 2006)

Furthermore, though turnover is generally higher than in organised sector companies, recruitment is not always a problem as many unorganised sector companies prefer to train new unskilled employees on the job instead of recruiting fully qualified workers to keep labour costs low.

Make sure to also triangulate information about unorganised sector companies collected during the enterprise survey with information from other sources. Experts on the unorganised sector and representatives of associations of micro, small and medium sized companies can be interviewed or can be invited for a focus group meetings on the outcomes of the enterprise survey.

Preparations for an enterprise survey

When collecting LMI for skills development, primary data collection is very likely to include an enterprise survey in one or more sectors. To conduct such a survey, the working group needs to conduct the following activities:

1. *Design the questionnaire(s)*

The enterprise questionnaire needs to cover all (primary) information that, according to the data collection plan, should be collected from enterprises. An example of an enterprise questionnaire is included in Annex 1, which can be used as a starting point and adjusted according to the needs of the SSDMs and the SSCs.

Make sure that the collected information economic activity and about occupations is (or can later be) coded according to classifications that are common in India. Using a these common classification means that the collected information can be compared to data collected in other states and sectors and, if applicable, also to secondary information. Economic activities need to be coded according to the National Industrial Classification, for occupations it is advisable to use the code of the National Classification of Occupations and if possible the reference ID of the appropriate Qualification Pack. More information about the classification of economic activity and occupations is available in Annex 2.

2. *Select the enterprises that will be invited to participate*

For SSCs that conduct an LMA, it would be good to start in one state or in a geographical cluster of enterprises, as this would allow SSCs to learn from mistakes and problems that occur unexpectedly. Likewise, SSDMs that conduct an LMA, might focus first on one or two sectors. In other words, start small!

Once the geographical location and the sector has been decided, the next step is to compile a list of all enterprises in the area and in the sector where the enterprise survey will take place. Unless your budget is big enough to include all enterprises on this list of *potential* participants in the survey, the working group needs to draw a “sample” of enterprises that will be invited to participate the survey. The selection of the companies for the sample needs to be done “by chance”, which means that you do not select companies that are regularly in touch with the SSCs or the MSDMs, but that you randomly¹² invite a percentage of the companies on the list to participate in the survey.

The enterprises in the sample need to be representative for the other enterprises in the population, which is why it is important to make sure that different kinds of enterprises are included in the selection. For example, the sample should include enterprises from all sub-sectors (if any), from

¹² Random selection is not difficult. You can do this by creating a “random number” for every enterprise in the list, for example by using the function “RAND()” in MS Excel. Then sort the enterprises by this random number and select the number of companies you need, starting from the top of the list. This may include companies you know, but also companies you have never heard of before.

different company sizes (micro, small, medium, big) and from different locations (divisions or districts), and any other factor you believe to influence training and skill needs of enterprises. To achieve this, randomly invite a fixed share of the companies in the different sub-categories we refer to as “strata”. For example, if you believe that the sub-sector (sub-sector 1, 2 and 3) influences the skill and training needs of the company as well as the location of the company (district 1 to 6), and you have information about these variables, you can randomly select enterprises from these different strata (i.e. combination of sub-categories). This means that you would randomly select companies in sub-sector 1 in district 1, sub-sector 2 in district 1 and sub-sector 3 in district 1, sub-sector 1 in district 2, sub-sector 2 in district 2 and sub-sector 3 in district 2, etc. In this case you would have a total of 18 strata or combinations of sub-categories. This approach is called “random stratified sampling”, i.e. a random sample from each stratum.

The actual number of companies you need to participate depends on your budget and on the willingness of companies to participate in the survey. Make sure to register companies that do not want to participate in the survey, as it is good practice to also analyse the non-response. After all, if the non-response is not random (for example companies in one district or one sub-sector are more likely not to want to participate in the survey), you may not be able to collect all the information you need during the enterprise survey.

3. *Prepare a planning and announce the survey*

Once you know how many companies will be included in the survey, you can start preparing a planning. Avoid periods during which the companies are more likely to refuse participation, such as the period before the closing of the fiscal year or very busy periods for the companies. Call companies and sector organisations to get more information about this.

The questionnaires need to be filled out by interviewers during face-to-face interviews with representatives of the different companies, so you need to plan the interviews taking into account the duration of the interviews and the travel time to and from the companies, both within a city but also throughout the state or regional cluster if the companies are away from the place of residence of the interviewers. The planning can be used as a basis to calculate the costs of the survey (for travel, hotels, local transport, printing, telephone, salaries for interviewers, etc.).

Companies are more likely to respond if they are consulted and informed prior to the survey. See Annex 3 for an example of a letter that could be sent to the enterprises. Alternatively, you can announce the survey in newspapers, on your website, etc. It is also useful to set-up a committee of stakeholders to oversee the survey (and the rest of the LMA), and to “open doors” if necessary.

4. *Recruit teams of interviewers and organise other human resources as needed*

Interviewers can conduct the interviews alone, but working in a team of two interviewers is likely to improve the quality of the data, for example if one interviewer conducts the interview while the other interviewer takes notes. Also, two interviewers can reverse the roles if necessary if one of the interviewers is tired, or if specific technical knowledge is needed.

If a research or consulting company will conduct the survey for you (see chapter 6), you do not need to recruit the interviewers as this is a responsibility of the company. If you organise the survey yourself, or if you want to help the consulting company to recruit the right persons for the interviewer positions, you can use the example of the Terms of Reference for interviewers in Annex 4. Ideally, interviewers have (a) experience in conducting interviews, preferably with representatives of enterprises, and (b) have knowledge of the sector(s) that are targeted. If you cannot find these qualities in one person,

make sure that these qualities are at least present in the teams of interviewers. Also, take the place of residence of candidate interviewers into account: you could recruit teams of interviewers from different cities to reduce hotel and travel expenses. Make sure that you also organise other human resources to support the process, for example to provide logistical support and to conduct analyses. In addition to the interviewers, the following human resources will be needed throughout the implementation of the survey:

- a. One or more persons responsible for the planning of the interviews, for making appointments and registering non-response. Ideally, this would be someone that is well known and trusted in the sector(s), or someone representing an organisation that is known and trusted in the sector(s). After all, companies that are called by someone they know and trust are more likely to be willing to take part in the survey. Do not underestimate the time needed to plan and organise the interviews: companies may refuse to participate, may need to be called several times, appointments may need to be changed at the last moment, etc.
- b. One person to organise the logistics of the survey: book tickets for flights, train or bus trips, find and book hotels, organise the local transport, organise the reimbursements of the costs of the interviewers, etc.
- c. One person to check up on the interviewers: this person would be available throughout the survey for questions and problems interviewers run into while doing their jobs. In addition, he or she will regularly join the interviewers during their visits to the companies to make sure that the interviews are conducted the way they are supposed to. Also, he or she can collect the hard copies of the questionnaires. Obviously, it is very important that this person knows the questionnaires and the objective of the survey very well.

All of the above-mentioned persons can be part of your team already, but can also be hired specifically for these tasks. If you work with a research or consulting company, this company may take care of this as well.

5. *Testing the questionnaire(s)*

The final preparation for an enterprise survey is to test the questionnaire with a small number of companies. During these interviews you might notice that some questions are not clear, that answer categories are missing, or that questions or answers are not properly phrased for the respondents. Also some questions may not result in information that can be used or questions may be missing. Use this information to make a final version of the questionnaire(s) as it is not possible to change questions while the survey is on-going.

6. *Programme the questionnaire(s) in an online platform*

Rather than entering data directly in a database yourself, it is much easier to let interviewers fill out the questionnaires online. Of course they cannot do this during the interview (as this would slow down the progress), but immediately after the interview. Once the questionnaires are tested and finalised, programme the questionnaire on an online platform, making sure that the flow through the questionnaire is correct.

There are a number of platforms you can use to programme your questionnaire online. You would need to pay for using the advanced services, but you can generally test the platform for free¹³. However

¹³ See for example Qualtrics on www.qualtrics.com or SurveyGizmo on www.surveygizmo.com, but there are many more options if you search online

these free (test) accounts usually come with some limitations (like a maximum number of responses or a maximum number of questions) until you become a paying customer. Alternatively, you can use Google Forms (www.google.com/forms/about) if you have a relatively simple questionnaire (i.e. simpler than the questionnaire in Annex 1).

It is possible to conduct another survey among training providers or some other group that you would like to systematically collect information from. If this is the case, follow the same procedure as for the enterprise survey.

Other activities during the organisation step

Primary data can also be collected with other instruments than surveys. For example by conducting interviews and focus group meetings with experts and stakeholders. Like surveys, focus group meetings and interviews need to be designed and planned carefully, making sure that all information is covered that should be collected with these instruments according to the data collection plan. The working group should specify the purpose of the meetings, identify the target groups and persons, and decide how the activities fit into the time frame of the survey plan. Limit the number of participants of focus group meetings: usually, the number of participants would be restricted to 10 to 15 participants or less.

Lastly, it would be a waste of time and resources if the collected information and outcomes of the LMA would not be used because the findings are not shared with the right persons or organisations. That is why the working group needs put together a plan to disseminate the findings, covering both “internal” users, i.e. users within the stakeholder organisations that are involved in the LMA, and “external” users, i.e. individual users and users in organisations that are not (directly) involved in the LMA. Target the right persons and organisations to make sure that the collected information and conclusions are actually used for the purpose and objectives formulated in the previous step. The working group will also need to decide how they would like to disclose this information to their own organisation as well as others, and to the general public, for example through a report, a seminar, a press release, etc.

Step 3 – Data collection: implement the plan

Step 3 is about implementing the data collection plan to collect the information required to achieve the specific objective. If the orientation step and the organisation step have been done well, the data collection step will just involve carrying out activities according to the plan, but not taking difficult decisions any more. Nevertheless, though a lot of preparatory work has been done during the previous step, the actual implementation will take a lot of time.

Part of the secondary data will already have been collected during the mapping of the available information. In the case of data that has already been collected, a closer look at the content of databases, publications and websites will be needed. The secondary data that has not yet been collected needs to be collected during the implementation phase as well.

Most of the energy will be spent on the collection of primary data, especially on the enterprise survey (and if applicable, surveys among other target groups). The biggest part of the work is likely to be the implementation of the enterprise survey. Once the questionnaire is tested, and if necessary adjusted and finalised, it is time to implement the make appointments and visit enterprises. The person(s) making the

appointments should take the location of the company into account to limit the amount of time enumerators spend on travelling.

It is important that the appointment for the interview is made with the right person(s), i.e. the person(s) that can answer the questions. In the case of the example questionnaire in Annex 1, this would be the person that knows most about human resources management in the company. In smaller companies this might be the general manager while bigger companies can have a human resources manager. If detailed technical information is collected for a number of specific job roles, an additional appointment may be needed with the person directly supervising workers in these job roles. Depending on the first experience in the sector: reconfirm appointments the day before or just before the interview.

Make sure to have a standard email with information about the survey that you can send if your contact person wants to have more information before agreeing to the interview. You can base this email on the announcement that was sent to inform the sector(s) about the survey. Attach a summary of the questions, but do not send the questionnaire, as the companies are then likely to say that they do not want to make an appointment, but will fill it out and send it back to you. Even if the company would actually do this, this is not a good idea as you do not know who fills out the questionnaire and you cannot ask for clarification.

Before the teams of interviewers are ready to visit the enterprises and conduct the interviews, you need to prepare the interviewers for the job. Organise a training on the content of the questionnaire: see Annex 5 for an example of the instructions for the interviewers based on the questionnaire in Annex 1. Make sure to also share information about the sector(s) with the interviewers. They need to know the typical products and services that characterise the sector, they need to know the different sub-sectors, as well as typical occupations. If available, share the sector's qualification packs. If technical information is collected about specific job roles, make sure that the interviewers understand the job roles and have the vocabulary to talk about the work with the supervisors of workers in these job roles. Also, make sure they understand how to fill out the questionnaire you programmed online. After the training, members of the working group should join the teams of interviewers during their first interviews, as a "training on the job": you can show the interviewers how the work should be done and then see them do the interview. As mentioned above, make sure that someone is available for the interviewers to answer questions about the survey and about the sector during the entire implementation period.

Step 4 - Data processing and reporting phase

The analysis of the collected information should result in the information the LMA was designed for. The outcomes of the enterprise survey need to be confronted with the secondary data that has been identified and with the information collected during interviews with experts, training providers, government representatives, etc. The different data sources and data types require that a sector expert is directly involved, possibly assisted by someone that knows how to analyse larger amounts of data.

As mentioned before, it is important to triangulate information. That is why the working group needs to discuss the outcome of the analysis with the stakeholders, for example by discussing the conclusions during a focus group meeting (or meetings) with experts and stakeholders for the sector.

The outcomes should be presented in a compact report. This report should focus on the purpose and the specific objectives of the LMA and should enable decision makers to take the required decisions. Also, the report should make clear how the SSDMs and the SSCs plan to put the outcomes of the study to good use.

It is good practice to inform the participants of the survey, both the representatives of the organised sector and the unorganised sector, of the findings of the LMA. That is why you will need to prepare a short summary of the findings in which you inform the participants where they can get the full report – most probably by adding a link to a website from where the report can be downloaded.

Step 5 - Use the outcomes

The working group needs to implement the dissemination plan that was developed in step 2. Of course, this means sharing the report with the stakeholders identified in the plan, but the plan may also include other ways to disclose the findings, such as preparing an official press release, the organisation of a seminar for persons active in the field, or a media campaign to make general public aware of the information. In fact, considering the amount of work that usually goes into developing a LMA, it would be good to develop a more substantial communication strategy for the outcomes of the LMA.

A summary of the report, prepared during the previous step, should be distributed among the participants of the survey, both the representatives of the organised sector and the unorganised sector. This may increase the chance that companies are willing to participate if the survey(s) is (are) repeated or in other surveys.

The last step depends on the plans of the SSDMs and the SSCs. If the LMA was conducted with the objective of collecting information for skill development programmes, the information should be used to make a planning concerning the number of trainees, the locations of the training, etc. and if detailed technical information is collected, curricula developers should use it to update existing curricula and/or to develop new ones. The information can be used for lobbying work or to start a dialogue with state or federal governments, other SSCs, training providers, etc. If necessary, additional research to get more detailed information or similar information in another state or sector can be planned, organised and implemented.

Step 6 - Evaluation and planning of new LMA

Many problems will occur while implementing the survey and while conducting the analysis. Also, the working group will realise that it might be good to do things differently if the LMA would be repeated in the time to come. That is why it makes sense to evaluate the process of the five steps discussed above and to prepare a “lessons learned” report.

All aspects of the LMA would need to be evaluated, varying from the selection of stakeholders and the prioritisation of the purposes and objectives, to methodological questions such as whether the quality of secondary data was sufficient and whether the quality of the survey design could be improved. The evaluation should be well planned and should involve all the parties that have, in one way or another, been part of the LMA.

Using the outcomes of the evaluation, an update of the LMA needs to be planned. The subject of this new LMA may be exactly the same - then it makes sense to wait one or two years. But the SSDMs might decide to repeat the LMA in other sectors and the SSC may decide to conduct the LMA in other states as well. In

any case, go through the steps described above again, but use the lessons learned that surfaced during the evaluation.

It is possible that a decision has already been taken in step 1, on how often the LMA would need to be repeated, and sufficient resources may already have been made available for these future LMAs as well. If this is the case, planning the next LMA won't be a problem. If not, make sure to involve persons in decision making positions in the planning of a new SSC, so are sure that sufficient financial and human resources will be available.

6. Involving a research or consulting companies

Both SSCs and SSDMs may choose to take all of the afore-mentioned steps to conduct an LMA, but they might also opt for the possibility of recruiting a research or consulting to conduct or help to conduct the LMA. For example because these companies can provide know-how and skills the SSDMs and SSCs are lacking, or because the human resources in the SSDMs and SSCs are not sufficient to conduct the LMA while the financial resources are. Whatever the reason, if a research or consulting company is hired to conduct the LMA, it is important that the SSC or SSDM is also directly involved in the day-to-day process of planning and implementing the LMA. This direct involvement ensures that the outcome of the LMA is what is actually needed, and that the SSDM's and SSC's staff build up experience in conducting LMA. Also, SSCs will probably have a better understanding of the sector than most research or consultancy companies. Lastly, both SSDMs and SSCs will have a good network in the sector and/or the skill development field, and will be able to open doors during the LMA that would otherwise remain closed for the interviewers and staff of the consulting companies. Bearing these reasons in mind, research or consultancy companies can be hired for the following activities:

- Prepare the data collection plan:
 - advise on the combination of different data collection methods
 - design the enterprise survey by developing or updating the questionnaire, selecting the enterprises from the list of potential participants of the survey, preparing a planning, recruiting the interviewers and testing the questionnaire
 - Advise on dissemination of the findings and prepare a dissemination plan
- Implement the survey:
 - Train interviewers
 - Make appointments for the interviewers
 - Organise the travel arrangements, i.e. booking flights and hotels
- Conduct the data processing:
 - Analyse and combine data from different sources and of different types
 - Report on the findings
 - Prepare a summary of the findings
- Assist in dissemination of the findings according to the dissemination plan
- Assist in the evaluation of the process by preparing a lessons learned report

Annexes

The handbook comes with the following annexes:

- Annex 1 – Example screening instrument and questionnaire for an enterprise survey page 30
- Annex 2 – Classifications of occupations, education, economic activities page 60
- Annex 3 – Example of a letter to announce an enterprise survey page 63
- Annex 4 – Example of a Terms of Reference for interviewers page 64
- Annex 5 – Example of the instructions for interviewers page 67
- Annex 6 - List of ministries and skill development schemes page 89