



Lessons learned

From the implementation of an enterprise survey in the capital goods sector in
Maharashtra

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1 Summary of the report

This report has been drafted to share the lessons learned from implementing a qualitative labour market analysis survey (LMA) in the capital goods sector in the state of Maharashtra during May and June 2015. It has been written in addition to the LMA technical report and therefore should be read in conjunction with that. The intention behind documenting these lessons is to highlight the positive and the practical learnings and also the challenges faced, as these can be taken forward in any similar future exercise.

The project conducted a similar study in the automotive sector last year. A lessons-learnt report was produced at the end of the study and we tried to learn from those lessons while planning and implementing the study in the capital goods sector. However, many of the lessons documented in the previous report are still relevant as they were beyond the scope of the project to manage. Therefore, we will reiterate some of the lessons presented before and hope that these will be taken into account for similar studies in future.

The following is the summary of the lessons learned:

- The roles of the project (and of any outside consultant) and the involved stakeholders in implementing the LMA must be precisely defined. SSCs in particular need to make a firm commitment to the LMA in terms of time, staff, information and networks, and continuously involve themselves to improve knowledge and to build their own capacity. The role of an outside agent has to be limited to supporting the SSC, rather than taking the lead in design, implementation and analysis of sector specific labour market analysis. Due to limited resources and other priorities, the CGSC was not able to take up this role in the current study.
- The design of any LMA requires that the project and the SSC agree on objectives which are realistic and linked to achievable results. This means that stakeholder expectations need to be brought in line with what is feasible with the available resources. For example, a qualitative labour market analysis cannot be used to make quantitative predictions about the demand for labour, one of the subjects SSCs are interested in. Instead, the LMA can provide information about the composition of the labour force in the sector as well as recruitment, selection and training practices and issues. Also, detailed information about the skills and knowledge specific job roles (in the current study CNC – setters cum operators and fitters-fabrication) can be collected as well.
- The questionnaire as the main tool for a qualitative LMA. Note that this tool cannot be standardised for all sectors and has to be adjusted to the specific purpose and objectives. It also has to address the different features of the organised and unorganised sectors, of the different sub-sectors and of different regions. In short, the questionnaire needs to be tailor made for the objective of the study and for the state/industrial cluster.
- The initial contact with the interviewee/company must be made by a trusted source that is recognised by the industries. It was a disadvantage that the CGSC is not yet well-known within the industry, resulting in a lower response rate than anticipated.
- The implementation of the survey benefits from well briefed interviewers who understand the context and the technical area to be investigated. It was an advantage to have one interviewer from the technical background but disadvantage that others had limited knowledge about the sector. Ideally, each team should have at least one interviewer that is familiar with the sector.

- The implementation of a LMA requires appropriate and on-going administrative and management support, especially for the arrangement of interviews with companies located in different parts of a state. In the case of the current survey, support has been provided as much as possible by the project and interviewers have contributed significantly as well. In future surveys, a dedicated person or organisation providing support would be preferable.
- Secondary data and information on the sector and more specifically on skills development is scattered and not easily locatable. If SSCs want to become expert institutions on skills development in their sector, they need to not only collect primary information on a regular basis, but also ensure that they have access to relevant and up to information from secondary sources. In this context, SSCs could create a network of existing research institutions and other organisations, with whom they can collaborate and exchange data and information related to skills development on a regular basis, both at state-level and at a national level.

More details and explanations can be found in the different sections below.

2 Introduction and purpose of the report

The India-EU Skills Development project funded by the European Union assists the National Skill Development Agency (NSDA), selected State Skill Development Missions (SSDMs) and Sector Skill Councils (SSCs) in implementing policies aimed at skilling large numbers of Indian men and women to increase their employability and entrepreneurship, as a precondition of economic and social development. To achieve this, the project uses international experience for developing institutional capacities in the Indian context, helps to define standards and procedures of implementing the National Skill Qualification Framework (NSQF), and supports the development of the Indian Labour Market Information System (LMIS). At the ground level the project experts work with Indian partners on piloting labour market analysis through enterprise surveys, on assessing training needs, on developing and testing examples of competence based curricula and on training the trainers and assessors.

One component of the Project has been tasked to enhance labour market and analysis at the state/industrial cluster level. The intention is to build on what has already been achieved, to identify gaps and to support improvement. Concerning labour market information at the state/cluster level, it is planned to pilot new or amended methods of implementing sector LMA, drawing on resources allocated by selected Sector Skills Councils (SSCs). These sector LMAs report on specific aspects of the labour market so that this information can be used to address particular labour market constraints, including developing new, or amending existing, skills development programmes. In this context, the project has implemented a labour market analysis with the Capital Goods Skill Council (CGSC) in the state of Maharashtra in the months of May and June 2015.

As the methodologies and tools of conducting qualitative labour demand analysis are relatively new to India, the pilot implementation is also meant to test the methodology and to identify constraints and limitations. That is why the project team has been tasked with preparing a report on lessons learned in addition to the technical report that is being produced to analyse the results of the survey. The purpose of this “Lessons Learned Report” is to review the process of preparing for and implementing the LMA, examining what worked well and what could be done better. It is aimed at

preventing mistakes and at ensuring that successes can be repeated when implementing a similar analysis in the current or in other state/industrial clusters.

The project team produced a similar report on the lessons learned during a labour demand analysis in the automotive sector in the state of Maharashtra in 2013. Though attempts were made to take advantage of these lessons during the planning and implementation of this study, many of the lessons were beyond the scope of the project to manage. Therefore, some of the lessons will be repeated in this report: see section 4 for more information. We urge those working on related topics in India to strive to continuously improve implementation processes and learn from related successes and failures.

3 Task and outcomes

3.1 Our understanding of the task

In June 2014, the India-EU Skills Project Steering Committee agreed that the Project Team would work together with the Capital Goods Skill Council (CGSC) in the state of Maharashtra to create a robust and evidence based example of a labour market analysis. The task was summarised in an implementation programme with planned activities, key milestones, timeframes and responsibilities. This programme has been discussed and agreed by CGSC and the National Skills Development Agency (NSDA). In consultation with the CGSC, the project's experts have formulated the following objectives of the analysis:

- To test a methodology to collect primary data for skills required by technical workers/employees in order to better understand the skills demand of the sector/sub-sectors
- To better understand the skills demand and human resource management practices in the sector
- To collect information for the development of curricula for CNC-Setter-cum-operator and Fitter-Fabrication

Given these objectives, the experts have chosen the following (combined) approach to the task:

- Collection of primary data directly from employers in the sector to comply with the requirement of the labour market analysis to be evidence based.
- Consultation of sector experts (i.e. consultants that had prepared an occupational map, staff of an Industrial Training Institute in Mumbai, staff of a private training institute in Pune and the DG of Maharashtra Chamber of Commerce, Industries and Agriculture;;
- Collection and analysis of relevant secondary data, i.e. information provided by the CGSC and online documents and studies of the Government of Maharashtra and the Government of India.

The focus was mainly on the first activity, i.e. collecting data and information directly from employers. In other words, the focus was on the demand side of the labour market as we did not have the resources to cover the supply side of the labour market as well.

3.2 Outcomes of the study

What was achieved?

The implementation of the survey has led to the following achievements:

1. An implementation plan with activities, timeframes and a draft budget for implementing the sector LMA;
2. The survey methodology and tools consisting of:
 - An enterprise questionnaire for the organised sector which was tested prior to the survey during interviews with two enterprises in Mumbai, and then amended based on their feedback;
 - An enterprise questionnaire for the unorganised sector taking into account the different features and response of the unorganised sector;
 - A questionnaire for the floor managers of workers in the job roles CNC Setter cum Operator and Fitter-Fabrication;
 - An approach and the criteria for selecting enterprises in Maharashtra taking into consideration different sub-sectors, company sizes, location in the state, and addressing both the organised and unorganised sectors;
 - Extensive instructions for the interviewers and a contact sheet for making appointments with the enterprises and a letter preparing employers for the survey;
 - An identification letter to introduce the interviewers to the enterprises;
 - The establishment of an online database to record the results of the survey.
3. Selection, briefing and management of interviewers for the survey:
 - 4 people were recruited as interviewers;
 - A one day of training for the interviewers to introduce them to the project, the CGSC, the sector and the survey methodology and tools;
4. Structured interviews with 105 companies, out of which 12 were in the unorganised sector. The information was captured in a database using online questionnaires;
5. A labour market analysis (LMA) report, i.e. the technical report analysing the results of the survey and offering recommendations.

What was not achieved?

Apart from the achievements, some other objectives have not been achieved:

1. The CGSC was not able to provide sufficient assistance during the implementation of survey
A study like the LMA demands a lot of time and resources, but due to limited staff availability and other priorities of the council, the sector skill council could not provide the support that was needed.
2. Employers received no prior information on the survey.
Initially, this was supposed to happen about a month before the implementation of the survey, but due to a delay in getting contact information of the employers, many did not receive prior notification about the survey taking place.

3. Very limited compliance of the selected sample.
We could not follow the plan to use the preferred method of “stratified random sampling”. Instead, the team had to resort to the non-probability sampling technique of “snow-ball sampling” or “referral sampling”. This means that the selection of the enterprises for the survey was based on networks and availability of interviewer rather than on a random predetermined selection process.
4. Limited data from the unorganised sector.
Out of the 105 companies interviewed, the team managed to include only 12 unorganised companies. The team found it very difficult to locate unorganised companies.
5. No (focus group) discussions to check the findings and conclusions
From the start of the planning of the survey, the experts have indicated that it would be good to check findings and conclusions with (a focus group of) different sector experts, but that this could only take place if there was sufficient time. Unfortunately, the implementation of the survey took so many working days, that checking findings and conclusions is not possible. However, this can be done in the future, and be used as input for a new LMA in Maharashtra or in another state.

4 Lessons for future surveys

4.1 Preparation and implementation of the survey

With regards to the preparation and planning of the LMA we want to identify if lessons can be learned from (i) preparing the tools, (ii) recruiting and training of interviewers, and (iii) project support and administration.

Lessons about the preparation of the questionnaire and the database:

- Although we tested the questionnaire with selected companies of the organised sector, the questionnaire would have benefitted from some further refinement. Ample time has to be allocated to test and refine questionnaires for the specific purpose and outcomes they are designed for.
- The length of the questionnaire needs to be adjusted to the target group: especially small companies require a short and less detailed questionnaire. In the current LMA, a shorter and less detailed questionnaire for the unorganised companies proved useful.
- It is very important to inform the employers about the purpose of the study and what the information will be used for before visiting them for an interview. That is why, once the appointment for an interview was made, employers received an email explaining the purpose of the study, as well as a summary of the questionnaire, which proved to be useful. Note that it is important not send the complete questionnaire as this might scare respondents off, or might announce that they do not want to meet for an interview but prefer to fill out the questionnaire and send it back via email.
- A large number of the organised sector companies and all the unorganised sector companies had never heard of the CGSC. Though the interviewers have explained the role of the CGSC, the interviews with the enterprises can be used more to raise the awareness about the SSC and its activities. For example, the distribution of a brochure on the objectives and main

activities of the CGSC (also explaining the connection between the CGSC and the different sector associations) would have been useful.

- Questions about the future, for example about future skills needs and investment plans, have only a very limited validity. The majority of enterprise representatives noted that these questions cannot be answered with any accuracy as the labour market changes too quickly and is influenced by internal and external economic developments. They noted that they react quickly to market developments but cannot plan far ahead. This illustrates that the LMA and econometric forecasting are two different instruments to understand the labour market, which should be used in parallel to each other.
- The use of an online database for recording the findings proved to be very useful, not only to capture the answers, but also to monitor the work of the interviewers.

Lessons about the recruitment and training of the interviewers:

- It is important to personally meet and assess the candidates before recruiting them for the survey. It is very difficult to change the candidate once the study has been started, therefore getting the right candidates is extremely important. We had to terminate the contract of one of the interviewers due to poor performance. Though the termination of the contract prevented negative effects on the quality of the study, the fact that the remaining interviewer in the team had to continue working alone, may also have impacted the implementation of the study to some extent.
- Interviewers need to be fully dedicated to the assignment and should not have other engagements. They have to be flexible in setting up appointments with enterprise representatives as there are often only limited timeslots available to meet the employees responsible for human resources or training. Sometimes this might also go beyond the usual working hours.
- Interviewers have to possess knowledge of the industry and some basic knowledge of related occupations, jobs and skills. Out of the 4 interviewers recruited, only one had a technical background and possessed some knowledge about the sector. This was useful, but it would have been better if at least one interviewer in each team had some understanding of the sector.
- Interviewers need to be know the questionnaire inside out. They were given one-day training session, which they confirmed was useful. Yet they felt that they would have benefitted from a more detailed training session. The interviewers were regularly in touch with the project team to get further clarifications about the questionnaire and the sector.

Lessons about the project support and administration:

- The initial contact with the potential interviewee/company must be made by a trusted source that is recognised by the industries (for example sub-sector associations). It was a disadvantage that the CGSC is not yet well-known within the industry, resulting in a lower response rate than anticipated.
- Although a relatively small number of enterprises participated in the survey, the survey did require a substantial amount of project support and administration, which was provided as much as possible by the India-EU skills project. In particular the arrangement of appointments with employer representatives was very time consuming and required

numerous follow-ups at times. SSCs and the project are able to provide only part of the human resources needed for the appointment making process. That is why it would be good to organise this differently in future studies, for example by hiring someone that will be full time involved in making appointments, or by hiring an experienced person or organisation with good contacts in the sector to do this job.

- Project support included the provision of funds for interviewers to travel throughout Maharashtra for their interviews. Any future LMA which intends to conduct a survey covering all districts or regions of a state or an area will have to consider the financial implications of this choice. On the one hand, companies in rural or remote areas might face different issues to those in urban regions, but on the other hand, sufficient funds will be needed as interviewers will only travel if they have an appropriate budget to cover travel and accommodation expenses..

4.2 Data collection and data analysis

In relation to data collection and data analysis, we looked into the lessons learned from potential constraints in (i) the tools and methodology used; (ii) data capturing, and (iii) data analysis.

Tools and methodology

- In addition to the points already made in section 4.1, the survey confirmed that it is not possible to use a standardised questionnaire for an LMA which is suitable for all sectors. The questionnaire needs to be reviewed and adjusted to the sector and to the specific situation.
- The training of interviewers needs to be compulsory and must be expanded. The training should include a basic interview training, but especially detailed training on the sector and on the content of the questionnaire.

Data capturing

- Timely data capturing ensures that information provided by the respondents, during and after the completion of the structured interview, are being recorded in as much detail as possible. This confirms that the number of interviews per day needs to be limited to at most two on average, giving interviewers time to enter data using the online questionnaires

Data analysis

- A limited number of open questions can be included in the questionnaire, as analysing open questions is very time consuming. In other words, open questions should be included only if the nature of the collected information requires this and if there is no other way to collect the information.
- Secondary data and information on sector and more specifically on skills development is scattered and not easily locatable, at least for the capital goods sector. If SSCs want to become expert institutions on skills development in their sector, they need to not only collect primary information on a regular basis, but also ensure that they have access to relevant and up to information from secondary sources. In this context, SSCs could create a network of existing research institutions and other organisations, with whom they can collaborate and exchange data and information related to skills development on a regular basis, both at state-level and at a national level.