

## Review of the Institutional Arrangements for Labour Market Information and Skills Anticipation in India

Manipal-City & Guilds Skills Training Private Limited
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## **Acronyms**

AICTE All India Council for Technical Education
ASDC Automotive Skills Development Council

CSO Central Statistical Organisation
CSR Corporate Social Responsibility
CII Confederation of Indian Industries
CITU Centre of Indian Trade Unions

MOSPI Ministry of Statistics and Programme Implementation

DGET Directorate General of Employment and Training

FICCI Federation of Indian Chamber of Commerce and Industry

GJSSC Gems and Jewellery Sector Skills Council

G-CED Gujarat – Centre for Entrepreneurship Development
G-DET Gujarat – Directorate of Employment and Training

GSDM Gujarat Skills Development Mission

IAMR Institute of Applied Manpower Research

IT ITes SSC IT-ITeS Sector Skill Council
ITC Industrial Training Centre
ITI Industrial Training Institute

KILM Key Indicators of the Labour Market

LMI Labour Market Information

LMIA Labour Market Information Analysis
LMIS Labour Market Information Systems

MHA Ministry of Home Affairs

MSME Ministry of Micro Small and Medium Enterprises

MORD Ministry of Rural Development

NSDC National Skill Development Corporation

NSSO National Sample Survey Office

OAPM-NSCD Office of the Advisor to the Prime Minister - National Council on Skill Development

NTMIS National Technical Management Information System

O-DOL Odisha – Department of Labour

O-ETETD Odisha – Employment and Technical Education and Training Department

O-SCVET Odisha – State Council for Vocational Education and Training

PC Planning Commission

RSDC Rubber Skills Development Council

SKSDC Security Knowledge and Skill Development Council
TVET Technical and Vocational Education and Training

## 1. Study background and objectives

Determining the characteristics of the labour market is one of the fundamental tasks faced by those with responsibility for policy on skills and employment. There is, therefore, a need to identify the requirements such stakeholders have in terms of labour market information and analysis, and what can allow LMI to best inform decision making and policy formulation both in terms of methods and in terms of institutional arrangements.

This study was commissioned by the ILO as part of a dual phase assignment to review current institutional arrangements for labour market information and skills anticipation in India, and to develop a national model that recommends the roles, responsibilities and key data sets required to meet the information needs of key users in the future. This study, which comprises the first phase, seeks to review the current institutional arrangements for LMI and skills planning in India.

## 1.1 Objectives

The study seeks to set out the views of key Indian stakeholders involved in the management and use of LMI for their professional data requirements. The specific objectives of the study cover:

- Detailing the policy and management decisions they make that require skills development data;
- Identifying the types of data required for making such decisions;
- Assessing the capacity of individual key data institutions at different levels;
- Assessing the roles and responsibilities of key institutions related to the collection, processing, management and reporting of LMI and data for skills anticipation.

The focus of the study is on the perceptions of key stakeholders which have been identified in consultation with the ILO and its affiliates. Accordingly, the conclusions carry the caveat that they are based on the subjective, though expert, views of specific individuals representing the institutional stakeholders. The objective assessment of either gaps in data provision or of institutional capacity is not a goal of this study.

**Disclaimer:** This report contains views of stakeholders on different aspects of Labour Market Information Systems in India. They are not official standpoints.

## 2. Labour market information system (LMIS): key concepts

In order to allow for the development of a national model (phase two) that recommends the roles, responsibilities and key data sets required to meet the information needs of key users in the future, there is a need to draw on existing knowledge and evidence concerning the nature of the LMI required in modern skills development systems and how this has been shown to be successfully generated. This is essential to contextualise the views of Indian stakeholders and identify where their thinking may not fully reflect current standards and knowledge levels internationally. The short literature review on LMI experiences informed the design of the research tools used to identify the current needs and levels of understanding regarding LMI among stakeholders for this study. It is a brief synthesis of existing international evidence as to the most important LMIS requirements for skills development purposes. The review was used to frame the questions for the subsequent stakeholder interview stage.

#### 2.1 Introduction

With the change of the demographic profile of the population of India, there also comes a change in the labour market. As younger workers enter the workforce, the need for a robust and effective system of information flow between the supply and demand sides of the labour market becomes imperative to tap the potential of the 'demographic dividend' that the country is facing. Indian policy makers have recognized the need for adequate information to support labour market policies and programmes. In developing its LMI system, India can learn from experiences in countries that have more established systems, but will need to devise an approach tailored to its unique geography, demography and scale.

## 2.2 The definition and purpose of LMI

Sparreboom (1999) defines LMI as statistical and non-statistical information concerning labour market actors and their environment, as well as information concerning labour market institutions, policies and regulations that serves the needs of users and has been collected through the application of accepted methodologies and practice to the largest possible extent. This definition recognises that LMI can be defined at least partly by the needs of the end user.

A functional definition of a labour market information system is provided by Woltermann (2004) who states that an LMIS is an active labour market policy instrument that collects, evaluates and provides labour market information to both the labour supply side and the labour demand side. The implementation of an LMIS is aimed at the following strategic targets:

- Nationwide transparency concerning supply and demand in the markets for labour and vocational training;
- Fast access to job offers and job requests, acceleration of the matching process by fast access to job offers and job requests for both employers and job-searchers;
- Use of all available possibilities to support labour market functions;
- Uncomplicated and red-tape-free ways of communicating offers and notices.

## 2.3 Users of Labour Market Information and Analysis (LMIA)

Labour Market Information Analysis (LMIA) is described as an examination of the best information regarding the state of the labour market, the state of skills, often using indicators that have been produced using standardised methods and definitions (Sparreboom et al 2009). LMIA can be used to identify signals about the labour market and skills trends based on real data or observations. Analysis of a full set of labour market indicators provides a fairly comprehensive picture of labour market trends. Powell (2008) specifies the broad level users of LMIA as the following:

- **Policy-makers and planners**, who will be able to identify areas where skills are in high demand, and have tools available to help them target resources at these areas. In addition, LMIA will enable planners to monitor progress towards defined objectives, including feedback on when difficulties are being experienced during implementation and what action needs to be taken in order to rectify the situation.
- Education and training providers, who may find LMIA useful, as they will have an improved understanding of the nature and extent of the demand for skills. This will help institutions determine which programmes of study should be expanded in the near future and which ones should be cut back.
- **Employers**, who will want to have timely and accurate information about the labour market for planning of on-going operations (including replacement of staff) as well as for investment purposes. For example, the availability of skills in a specific geographical environment, combined with an enabling business environment, is an important factor influencing inward investment. In many countries good market intelligence is used as a means of attracting such investment.
- Unions, who would find LMIA information useful for bargaining purposes. For instance, they would want to know average wage levels and productivity for specific occupations in different industrial sectors. Similarly, unions would also want to have information about the number of work permits issued, and the type of skills covered by these work permits. All of this information would be used to improve the working conditions of their members.
- Community groups and civil society institutions, who would also want to obtain information about local skill requirements and opportunities, particularly for vulnerable groups and those who have difficulty accessing the labour market, in order to assist their communities in improving their situation.
- Students and young people, who would want to have improved information about career prospects. Young people are also interested in knowing what type of careers they could follow if they enrolled for a particular programme of study. It is not always possible to provide an exact parallel between subject studied and type of employment, but it is possible to signal which types of programmes of study are likely to lead to successful careers and which are not.

## 2.4 Designing an effective LMIS

To enable the collection and dissemination of LMI and allow for analysis, the LMIS must incorporate certain features that enable it to have the widest possible reach. The basic questions that arise when designing a labour market information system (LMIS) are:

- What LMI should be sought?
- What should be the priorities in terms of collection of quantitative and qualitative data?
- How should this data be stored and shared?

For the purpose of this research, the role of policy makers in shaping the economy and addressing the changing needs of the labour market is the key. Mangozho (2003) states that the following information is of paramount importance for human resources and employment planning:

- Information on the demand for different occupations and their changing work content.
- Information on occupations that are disappearing and emerging as a result of technological changes and structural changes in an economy.
- The employability and career opportunities of young people entering the labour market, i.e. information on the school to work transition.
- Future skill requirements of the economy.
- Recurrent manpower shortage areas and analysis of the causes and consequences of such occurrences.
- Information on workplace learning as well as other forms of skills development practices, i.e. participation and investments in training.
- Information on the likely effects of economic as well as other policies on specific target groups, e.g. women, youth, migrant workers and disabled people.

## 2.5 Components of an LMIS

To allow a better understanding of the structure of an LMIS, in their seminal work on labour market indicators, Gray et al (1996) reflect that a labour market information system consists of a set of institutional arrangements, procedures and mechanisms that are designed to produce labour market information. The usual components of LMIS are listed as follows:

- Users individuals and organisations;
- Sources of signals, indicators and intelligence;
- System managers, data gatherers, operators and analysts;
- Labour market information itself;
- Methodology of data collection and analysis;
- Equipment computers and other hardware;
- Processing software;
- Means of communication, including public media;
- Financial resources;
- Sub-systems:
  - training for system staff and end users;
  - feedback and evaluation;
  - research, development and publications.

This list shows that LMI as such is only one component in the system. Equally important are the users of LMI, the methodology that is applied to collect and analyse it and the institutional structures that accompany the establishment of an LMIS.

## 2.6 Institutional arrangement strategies

Mangozho (2003), in his review of institutional arrangements in 10 countries (Canada, United Kingdom, Singapore, Philippines, India, Hungary, Ukraine, Jamaica, Bahrain and Zimbabwe), identified two broad strategies that several countries have adopted to establish efficient mechanisms of assessing the usefulness of LMI and to achieve a coherent, comprehensive and systematic flow of information from producers to users.

The first strategy has been to adopt a co-ordinated data collection and dissemination system within the national government, at the helm of which is a committee with the Ministry of Labour (or equivalent) as the secretariat and chair of such a committee. The major functions of this committee are: to co-ordinate activities in the LMIS; to undertake the formulation of labour market policies; and to monitor and supervise the implementation of labour market programmes. In countries with a federal form of government it has been necessary to involve provincial or state government ministries responsible for education, higher education, training, labour and human resources development.

The second strategy has been to set up Labour Market Observatories at local, regional, sectoral or national level, comprising Employment Services, education planners, training providers, career counsellors, small to medium scale enterprises, employer and employee organisations, non-governmental organisations and civil society groups involved in human resources development, skill formation and employment issues. Labour market Observatories work hand in hand with national training organisations and vocational training centres. They are often closely connected with universities and research centres. They mainly handle qualitative information and they meet from time to time to discuss skill and training needs and other wider labour market issues such as social dialogue, current and anticipated changes in work organisation and collective bargaining. LMOs try to raise awareness and levels of understanding on the state of the labour market, as well as future likely labour market trends.

The review observed that these two strategies are not necessarily in conflict; a country can have both. In fact, even countries with well-functioning LMIS are now in the process of adapting these observatories to suit their situations. But whichever way a country decides to go, what is ultimately important is to give the responsibility of coordinating the collection, analysis and dissemination of LMI to a specific institution or government ministry.

## 2.7 Statistical data that may be incorporated

The actual statistics that may be included in an LMIS are characterized by the ILO's key indicators of the labour market (KILM). Twenty KILM are used by researchers and policy makers throughout the world for use in labour market analysis. These categories of indicators can be classified, if necessary, by field of activity, employment, status of employment and study status or by geographical area, sex or age. This breakdown offers unlimited possibilities for compiling databases on the labour market and indicators for describing or formulating policies.

These indicators are classified under eight broad categories:

- participation in the work world;
- employment;
- unemployment, underemployment and inactivity;
- educational attainment and illiteracy;

- wages and manpower costs;
- labour productivity and unit labour cost;
- labour market flows;
- poverty and income distribution

# 3. Skills development data in India: Summary of ILO-IMACS study findings

In 2011, the International Labour Organisation conducted an environmental scan of the sources and availability of skill development data in India. Given the broad objectives of the study, a summary of the data sources has been presented here.

## 3.1 Relating to the supply of the trained and educated workers

- 1. General Education
  - a. Number of youth in different age groups;
    - Source: Census and NSSO
    - Issues: District level information is not readily available of especially of numbers of youth in different age groups
  - b. Enrolments in general education, progression and graduation rates;
    - Source: Department of Higher Education
    - Issues: Disciple wise enrolment, progression and graduation rates for Universities (including Open Universities) and colleges is not available in the public domain. However, we observe that the data is available at the University level. Also, university wise number and type of colleges are available for select reputed universities only.
  - c. Graduations from the primary and secondary school and dropouts and their shares enrolled in further education including TVET and skills training establishments (public and private institutions including NGOs, ITIs, polytechnics, etc.);
    - Source: Department of Primary and Secondary Education, District Information System on Education
    - Issues:
      - Tracking system of dropouts does not exist. Little information is available about dropouts enrolling for TVET and other skill training.
      - There is no system for reconciling dropout against the total TVET enrolment, due to lack of individual tracking system. The system of Unique Identification Number (Aadhar) would address this problem in future.
      - District wise and school wise enrolment data is not available for higher secondary
- 2. TVET and skills training providers (public and private institutions, schools, NGOs and others) including their numbers, location, average annual enrolments and graduates, types and duration of courses trade-wise, and learning outcome-wise;
  - Source: Directorate General of Employment and Training, National Skills Development Corporation and Individual Websites

#### Issues:

- No centralised database available for ITIs and ITCs for enrolments, pass and dropout rate and placement data.
- Lack of learning outcome information for all training providers. No centralised database for vocational training providers outlining the enrolments, pass and dropout rate and placement.
- No centralised database available for employers sponsored vocational training programs under their Corporate Social Responsibility (CSR) initiatives
- O No tracking mechanism for pass out rate, placement and training outcome. Double counting of numbers trained under different schemes
- 3. Formal apprentices enrolments and graduations per year, trade-wise;
  - Source: Directorate General of Employment and Training
  - Issues: None
- 4. Employability of the recent graduates from different programmes, occupational qualification-and tradewise:
  - Source: National Technical Manpower Information Systems of IAMR; Economic Census
  - Issues:
    - o Employability information is as per the candidate information and qualitative information
    - o Information lag of more than 3 years
    - o Prone to sampling error due to poor response
    - o Lack of information about general education (BA, BSC, B.Com, etc.,)
    - o Employability information is not available for unorganised economies
- 5. Annual supply of skilled and educated workforce due to massive retrenchments, company closures, etc., tradewise;
  - Source: Labour Bureau, Board of Industrial and Financial Reconstruction, NSSO
  - Issues:
    - Multiple agencies involved
    - o Inadequate information about service industry, informal economy
    - No tracking mechanism for retrenched workforce company wise, level wise, skill wise, area wise for private sector enterprises
    - Limited data available on the sick companies however, data on the workforce is not available
    - No information is available for the same in unorganised economies
- 6. Annual arrival of the skilled and educated workforce returning from overseas, trade-wise
  - Source: Ministry of Overseas Indian Affairs and Ministry of Home Affairs
  - Issues:
    - Lack of consolidated view of skilled and educated workforce returning from overseas and trade wise
    - Lack of occupation wise skilled information

- o However the same can be reconciled with Ministry of External Affairs data based on various visa types
- 7. Rates of unemployment and underemployment of the educated and trained persons, trade-wise where it exists;
  - Source: NSSO, Employment Exchanges
  - Issues:
    - o No data on education wise, skill wise, district wise unemployment
    - Available data in employment exchange might not be comprehensive, due to the following reasons: it is not mandatory procedure and even an employed person may register for government jobs.

## 3.2. Relating to the demand for trained and educated workers

- 1. Occupational and qualification structures of economic sectors (organised and, if possible, unorganised economies) at the national and state levels;
  - Source: National Classification of Occupation (DGET), National Industrial Classification (CSO)
  - Issues: Not identified
- 2. Occupational and qualification structures of economic sectors (organised and, if possible, unorganised economies) at the national and state and district levels;
  - Source: Annual Survey of Industries; Economic Census
  - Issues:
    - Time lag in information collection
    - Disconnect with organisation level due to changing nature of jobs and business needs
    - o Inadequate information regarding occupation and qualification structure Time lag in information collection
- 3. Occupational data on the annual demand for semi-skilled, skilled and high-skilled workers, and technicians for overseas employment (ie: labour outflow);
  - Source: Ministry of Overseas Indian Affairs
  - Issues:
    - o Lack of regular survey of demand assessment
    - o Lack of linkage between demand and supply.
    - o Lack of linkage with placement agencies involved in overseas employment
    - Lack of regular updation and linkage with overseas employees Lack of regular survey of demand assessment
- 4. Annual local demand for skilled and semi-skilled workers and technicians due to: Demographic replacement needs (due to sickness, death, retirements, etc.); Labour turnover when exiting skilled workers are changing their occupational profiles through skills; and retraining to accept different jobs;
  - Sources: Multiple
  - Issues:
    - Time lag and regular update of demographic replacements due to death by state, age, sex and occupation.

- We observe that only 50% of the deaths are reported and registered in civil registration systems.
- 5. Average demand for skilled and educated workforce for the new jobs created annually (emerging from new investments, company registrations, etc.) in both the organised and unorganised economies;
  - Source: Department of Industries
  - Issues:
    - o Data available with leading industrialised states
    - O Disconnect in aggregation of national and state level data
- 6. Other data used to forecast the demand for skills in different economic sectors.
  - Sources: Ministry of Finance, National Accounts, Population Census
  - Issues:
    - Lack of uniform/standardised forecasting methodology
    - o Multiple forecasting data
    - Lack of base data for informal sector

## 4. Methodology

## 4.1 Methodology

Key informant interviews were carried out with representatives of stakeholders that were identified in consultation with the ILO and other associates to the overall study. The stakeholder interviews were designed to be semi-structured, allowing the interviewer to focus on key information while also giving the interviewee space to express what their key priorities and views are.

Semi structured interviews were decided upon as the main tool to collect information for the study to:

- Obtain specific qualitative information from the stakeholders;
- Obtain general information relevant to the objectives of the study
- Gain a range of insights on specific issues regarding information requirements.

Prior to the interview process, the websites of the various organisations were reviewed to identify the roles and responsibilities of the stakeholders. Certain generic questions were formulated to allow for a flow of information without any pre conditioned bias. This allowed the interviewer to pursue informed follow up questions if required. The nature of the interviews allowed for variation and rich data with the questions being non leading and open ended.

Most interviews were carried out with national level organisations; two states (Gujarat and Odisha) were also selected for interviews with state-level organisations. These choices were made in a preliminary consultation with the ILO and its affiliates, before the start of the interview process. The purpose behind these choices was to have a representation of states where, according to the opinions of those present in the consultative meeting, policies and institutional frameworks for skills development and employment are in an advanced

stage (Gujarat) and where the same are in an earlier stage of development (Odisha). A more detailed analysis regarding the states is provided in the analysis section of the report.

## 4.2 Design of the interview tool

The main interview tool was a semi-structured interview schedule which consisted of generic questions relating to data and information needs. The interview questions were designed after a review of literature on international experiences on LMIS which focused on the components and requirements of an LMIS. The information gained from the literature review was used in particular to design the questions related to information wants, gaps and, also thoughts and views on data and information requirements. Also, specific questions or areas to be addressed with individual organisations were identified, based on our understanding of their roles from the review of the information listed in their websites.

In the case of the states, the same approach was taken and one key organisation in each state was identified in a consultative meeting with the ILO and its associates. In Gujarat, this stakeholder was the Directorate of Employment and Training and in Odisha, the Department of Technical Education and Training. However it was felt that due to the constraints that may arise during the visit to the individual states, as far as availability of stakeholders was concerned, other stakeholders would be identified and decided, after consultation with the acknowledged stakeholder. It was felt that this would provide a more complete picture to the study in the individual states.

The interview schedule was shared with the ILO and its associates and suitable changes, based on the requirements of the ILO and associates were made after several consultative exchanges.

The interview schedule used has been listed in the appendix.

## 4.3 Phases of Interview process

The study was developed and conducted over three key phases. The objectives and activities under each individual phase are listed below:

#### 4.3.1 Phase 1:

Objective: Literature review and mapping of stakeholders and key data sources.

## Activities:

- Review of literature on labour market information system to understand the basic definition, purpose and constituents of an LMIS
- Identification of stakeholders after consultation with the ILO and associates
- Consultative exchanges with the ILO and affiliates to ensure that relevant stakeholders were covered so as to provide a better and more complete picture to the study
- Listing down roles (mission), strategies, and organisational structure of each stakeholder to gain an overview of different stakeholder regarding their role in the area of skill development
- Identifying specific questions or areas to be addressed with individual organisations based on our understanding of their roles

- Developing the generic questions for stakeholder interview and identifying the questions that could be posed to all the stakeholders
- Identifying important individual or position/designation (more than one could be identified) in an organisation, who could be interviewed

#### 4.3.2 Phase 2:

Objective: To conduct interviews of key informants in the stakeholder organisations, both the national and state levels.

#### Activities:

- Conducting face to face interviews, where possible, with stakeholders based in Delhi.
- Conducting telephone interviews with stakeholders not available for a face to face interview.
- Travel to the states (Odisha and Gujarat) to conduct interviews face to face rather than telephonically to both get a better perspective and also allow a better exchange of information.
- Creating interview transcripts of all interviews.

#### 4.3.3 Phase 3:

Objective: Creation of draft report to be shared with the ILO in preparation of a workshop presenting the findings.

#### Activities:

- Analysis of transcripts and identification of key themes
- Creating initial draft report
- Discussion on draft report with the ILO
- Incorporate changes into final report
- Planning for workshop and preparation of workshop notes and presentation.

## 5. Stakeholder interviews

The organisational stakeholders that were chosen were decided upon after a preliminary consultation with the ILO and its associates. Though not a comprehensive list of the range of Industry and Ministry stakeholders, it was felt that these stakeholders captured the essence of institutions that may need and use LMI. The various organisations can be broadly classified into categories listed below. The stakeholders have been classified on the basis of their mandate and roles they perform and have been used for the analysis of stakeholder viewpoints:

- Central government institutions
  - All India Council for Technical Education (AICTE)
  - o Directorate General of Employment and Training (DGET)
  - o Ministry of Micro Small and Medium Industries (MSME)

- Ministry of Rural Development (MoRD)
- o National Skill Development Corporation (NSDC)<sup>1</sup>
- Office of the Advisor to the Prime Minister National Council on Skill Development (OAPM-NCSD)
- o Planning Commission (PC)

#### Industry associations

- o Confederation of Indian Industries (CII)
- Federation of Indian Chamber of Commerce and Industry (FICCI)

#### Research institutions

- o Institute of Applied Manpower Research (IAMR)
- Central Statistical Organisation (CSO)

#### • State level institutions

- Gujarat
  - Centre for Entrepreneurship Development (G-CED)
  - Directorate of Employment and Training (G-DET)
  - Gujarat Skills Development Mission (GSDC)

#### Odisha

- Department of Labour (O-DOL)
- Employment and Technical Education and Training Department (O- ETETD)
- State Council for Vocational Education and Training (O-SCVET)

#### Sector bodies

- o Automotive Skills Development Council (ASDC)
- o Gems and Jewellery Sector Skills Council (GJSSC)
- o IT-ITeS Sector Skill Council (IT ITeS SSC)
- o Rubber Skills Development Council (RSDC)
- Security Knowledge and Skill Development Council (SKSDC)

#### Trade unions

o Centre of Indian Trade Unions (CITU)

These organisations were consulted as it was felt that they would provide a macro level representation of institutions related to skill development activity in the country and reflect overall LMI requirements; as well a

<sup>&</sup>lt;sup>1</sup> The National Skill Development Corporation is a Public Private Partnership rather than a purely central government institution. It has been included in the central government institutions category for ease of analysis.

representative study of information needs of states. A point to note is that though training providers, workers and students have been identified as key stakeholders, they were not a part of the scope of the study.

Efforts were made to hold every interview in person so as to allow a better exchange of information and dialogue. However in certain cases, some of the interviews were held by telephone. All in all, out of the total 22 interviews that were conducted, 4 were conducted telephonically. A list of the organisations interviewed is provided below in the alphabetical order along with details on whether the interview was carried out in person or telephonically

Table 1: List of stakeholder organisations and method of interview

S. No.	Organisations	Face to Face Interview	Telephonic Interview
1	All India Council For Technical Education		✓
2	Automotive Skills Development Council	✓	
3	Centre of Indian Trade Unions	✓	
4	Central Statistical Organisation	✓	
5	Confederation of Indian industry	✓	
6	Directorate General of Training and Employment	✓	
7	Federation of Indian Chambers of Commerce and Industry	✓	
8	Gems and Jewellery Skill Council of India		✓
9	Gujarat – Centre for Entrepreneurship Development	✓	
10	Gujarat – Directorate of Employment and Training	✓	
11	Gujarat Skills Development Mission	✓	
12	Institute of Manpower Research		✓
13	IT-ITeS Sector Skills Council	✓	
14	Ministry of Micro, Small and Medium Enterprises	✓	
15	Ministry of Rural Development	✓	
16	National Skill Development Corporation	✓	
17	Office of the Advisor to the PM- National Skill Development Council		✓
18	Odisha – Department of Labour	✓	
19	Odisha – Employment & Technical Education & Training Department	✓	
20	Odisha – State Council for Vocational Education and Training	✓	
21	Planning Commission	✓	
22	Rubber Skill Development Centre	✓	
23	Security Knowledge and Skill Development Council	✓	
	Total	20	3

## 6. Mandate of organisations

In this report, references to the mandates and roles of stakeholder organisations refer only to their roles regarding skill development. Our understanding of mandate, for the purpose of this study, is the skill-related objectives that an organisation seeks to achieve and the roles it takes on in pursuit of these objectives. The information set out in the tables and in the stakeholder role matrices detailed below has been collected from the websites of the individual organisations prior to the interviews and also, through inputs from the stakeholder interviews.

The stakeholder matrices were designed prior to the interviews to allow an understanding of the roles and responsibilities of the stakeholder organisations. As the interviews were semi structured, the matrices helped us guide the interviewees without leading them with specific questions and allowed for them to come out with the information that was sought.

Table 2: Stakeholders role matrix - national level organisations

		Mandates/roles														
List of	stakeholders	Policy making/planning related to employment, labour, social security	Creating employment (livelihood) opportunities in general	Creating opportunities for self- employment	Research and advocacy	Identifying skill needs/gaps	Planning and/or delivery of training for skill up-gradation	Developing skill competency standards and qualifications	Setting standards for affiliation and accreditation process of institutes	Participation in affiliation, accreditation & standardisation of training	Promoting the formation of Sector Skills Councils	Focus on unorganised/Informal sector	Focus on women and other disadvantaged groups	Focus on developing Apprenticeships	Employment advice and guidance functions	Promoting private sector initiatives in skills training
1	All India Council for Technical Education							✓	✓	✓						
2	Automotive Skills Development Council					✓	✓	✓		✓						✓
3	Central Statistical Organisation				✓											
4	Centre of Indian Trade Unions				✓											
5	Confederation of Indian Industries			✓	✓	✓					✓					✓
6	Directorate General of Employment and Training	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
7	Federation of Indian Chamber of Commerce and Industry				✓	✓					✓					✓
8	Gems and Jewellery Sector Skills Council					✓	✓	✓		✓						✓
9	Institute of Applied Manpower Research				✓	✓										
10	IT-ITeS Sector Skill Council					✓	✓	✓		✓						✓
11	Ministry of Micro Small and Medium Enterprises		✓	✓			✓				_	✓				
12	Ministry of Rural Development		✓									✓	✓			
13	National Skill Development Corporation					✓	✓				✓	✓	✓			✓
14	Office of the Advisor to the Prime Minister - National Council on Skill Development				✓	✓										
15	Planning Commission	✓			✓	✓										
16	Rubber Skills Development Council					<b>✓</b>	<b>√</b>	<b>✓</b>		<b>√</b>						✓
17	Security Knowledge and Skill Development Council					✓	✓	✓		✓						✓

Table 3: Stakeholders role matrix - state level organisations

								Ма	ndates/ro	oles						
List o	f stakeholders	Policy making/planning related to employment, labour, social security	Creating employment (livelihood) opportunities in general	Creating opportunities for self- employment	Research and advocacy	dentifying skill needs/gaps	Planning and/or delivery of training for skill up-gradation	Developing skill competency standards and qualifications	Setting standards for affiliation and accreditation process of institutes	Participation in affiliation, accreditation & standardisation of training	Promoting the formation of Sector Skills Councils	-ocus on unorganised/Informal sector	Focus on women and other disadvantaged groups	Focus on developing apprenticeships	Employment advice and guidance functions	Promoting private sector initiatives in skills training
1	Gujarat – Centre for Entrepreneurship Development		✓	✓		✓	✓									
2	Gujarat – Directorate of Employment and Training	✓	✓				✓									✓
3	Gujarat Skills Development Mission		✓		✓		✓									✓
4	Odisha – Department of Labour											✓	✓			
5	Odisha – Employment and Technical Education and Training Department	<b>✓</b>	<b>✓</b>				<b>✓</b>									
6	Odisha - State Council for Vocational Education and Training		_		_		✓	✓	✓	✓			_		✓	

## 7. Outcomes of Stakeholder Interviews

This section presents the outcomes of the stakeholder interviews. It has been broken down into five subsections, on the basis of questions posed to the stakeholders during the interview viz.

- Sources of labour market information used by stakeholders
- Usability of information sources
- Views on components of an effective labour market information system
- Current gaps in the LMI system
- Institutional structure necessary for an effective labour market information system in India

The listed outcomes have been presented in greater detail in the section below.

## 7.1 Sources of labour market information used by stakeholders

The stakeholders were asked about the labour market information source they currently use or are likely to use in future for decision making related to skills development. It was found that the all the stakeholder organisations did use some forms of information to take decisions with regards to formulating policies and implementing programmes.

The table below lists the sources of information and the stakeholders that use them. The vertical axis shows the different data sources and the horizontal axis the various stakeholders. The italics below each information source indicate the owner of the information source. The information sources have been listed in the order of frequency of their citations.

Table 4: Sources of labour market information used by stakeholders

	Stakeholder Organisations																			
Information source (Information source owner)  1. Data from Industry associations	1. AICTE	∠ 2. ASDC	< 3. CII	4. CITU	5. CSO	6. DGET	✓ FICCI	< 8. GJSSC	9. GUJARAT	10. IAMR	√ 11. IT ITeS SSC	12. MSME	13. MORD	14. NSDC	15. OAPM-NCSD	16. ODISHA	17. PC	✓ 18. RDSC	✓ 19. SKSDC	✓ Total citations
(Companies)  2. National Sample Survey (2004-05 & 2009-10)			<b>✓</b>		./				./	<b>✓</b>					./		./			6
(MOSPI)			V		٧				V	V					V		٧			,
Skill Gap Studies – State and Sector     (NSDC and individual SSC's)							✓	✓	✓					✓		✓				5
In-house Project Management Information System     (Concerned institution)	✓												✓	✓		✓				4

5. External government ministries/department and institutions (Concerned institution)										✓		<b>√</b>	✓	3
6. Reports and data from multilateral institutions (companies)		<b>✓</b>			<b>✓</b>					<b>✓</b>				3
7. Micro, Small and Medium Enterprise Census (MSME)								<b>✓</b>				<b>√</b>		2
8. Population Census (1991 & 2001) (MHA)											✓	<b>✓</b>		2
One off studies, by the stakeholders themselves     (Respective stakeholders)						✓						✓		2
10. Data from DGET on employment and training (MOLE)				✓								✓		2
11. Annual Survey of Industries (MOSPI)												✓		1
12. National Technical Manpower Information Systems (IAMR, AICTE)							<b>✓</b>							1
13. Data from Labour Bureau (Labour Bureau)												✓		1
14. Data from Trade Union Members (Union members)			✓											1

As it is clear from the table above, the stakeholders identified 14 distinct sources of information on skills development that they currently use or are likely to use in foreseeable future. These 14 distinct sources were cited in the process of interviewing 23 key informants. As some of the stakeholders cited more than one source, a total of 40 instances of use or likely future use were recorded.

The most commonly used source was the data submitted by companies/industries to industry associations. The stakeholders that use this data were primarily sector bodies. The sector bodies use this data to gain basic understanding of the current employment situation in their sector and future demand of labour. This data source is also used by industry association themselves, for research and advocacy functions.

The second most commonly used datasets is the National Sample Survey round 61<sup>st</sup> and 66<sup>th</sup> on employment and unemployment. This data source is very often used by organisations that deal in labour policy formulation, labour planning and programme implementation. Industry associations and research organisations also use this data.

The Skill Gap Studies are the third most commonly used information source. It is used widely by sector bodies and central government institutions having an exclusive mandate for skills development. It is also used by states that have access to state level skill gap studies and sometimes by industry associations if they have promoted the formation of a particular sector skill council.

The data from in-house project management systems is also frequently used, mainly by the organisations that deals with project implementation on skills development and technical education

Data from external government ministries/departments/institutions were the fifth most commonly used source of information. The stakeholders that use this information are those that are involved in policy advice and policy planning. Sometime, sector bodies also used this information source to understand the details of the sector.

The stakeholders also use information from multilateral institutions such the World Bank, the International Labour Organisation and UNESCO-UNEVOC (the UN's International Centre for Technical and Vocational Education and Training). But these are mainly in the form of reports generated from the available secondary data from various government departments and ministries. It is mainly used by industry associations and sometimes by central government institutions.

The data sources: MSME census; Population Census; One off studies, by the stakeholder themselves; Data from DGET on employment and training; Annual Survey of Industries; Data from Trade Union Members; and National Technical Manpower Information Systems are mostly used by the organisation that is either the owner of that data source, or by organisations that are involved in labour market research (if the information is in public domain) or labour policy and planning.

## 7.2 Usability of information sources

This section sets out the views of stakeholders regarding how usable the labour market information sources are.

- Data available with industry associations: Data from industry associations mainly comprised of data
  that is submitted by individual companies to their associations, whenever requested by the association.
  This data source is generally considered reliable, accurate and timely by the stakeholders; it is also
  quite easily accessible. According to the stakeholders the limitation of this information source is that it
  captures only the demand side of the labour market and the kind of people employed within the
  member industries.
- National Sample Survey (2004-05 & 2009-10): This data source is considered the most reliable by stakeholders. It is available in the public domain for use. However, stakeholders expressed concerns about lack of availability of current (recent) data and need of expertise to analyse the raw data that it offers. Other concerns included its lack of sufficient indicators on the skill levels of the workforce and its lack of usage in terms of planning at micro level, especially districts and blocks.

"Sample survey is only the option as India is such a vast country. NSS provides very useful, consistent, comparable, data by state..... but not by district. Historically it has become the basis of planning in India"

An interviewee

• Skill Gap Studies – State and Sector: The information provided in the skill gap studies have been considered useful in terms of providing state and sector specific demand and supply of workforce in specific job roles. However, skill gap studies are based on certain assumptions, which may not remain true in future. So the projections in these studies might not turn out to be very accurate:

"Current Skill gap studies might become outdated in future. They would have to be recalibrated to assess skill gaps"

An interviewee

- In-house Project Management Information Systems: The in-house data is considered accessible, reliable, accurate and timely. This data however helps only in tracking the progress of a project or a programme.
- External government ministries/department and institutions: This data is not easily accessible to stakeholders and requires significant effort to gather. Though not easily accessible, this data is considered accurate.
- Reports and data from multilateral institutions: The report and statistics made available by multilateral institutions are considered reliable and accurate.
- Micro, Small and Medium Enterprise Census: The available data is considered very reliable by the stakeholders, in terms of the workforce data that is available. It is considered the best source of data about the present labour force absorption capacity of the MSME sector, a large part of which comes under unorganised category.
- Population Census (1991 & 2001): Stakeholders considered the population census as a reliable source of information for assessing the supply side of the labour force. But they unanimously considered it to suffer it from a time lag of up to 10 years and sometimes even more.
- National Technical Manpower Information Systems: Stakeholders considered this data source as reliable in terms of three disciplines: engineering; management; pharmacy; and hotel management and catering technology.
- Annual Survey of Industries: The stakeholders considered this data source useful in terms of
  estimating the size of labour force in the industries. It provides reliable information of the workforce
  working in the organized sector.
- One-off studies: These studies are issue specific and commissioned by stakeholders to get information about different aspects about the labour market and have been found to be useful by the concerned stakeholder.
- Data from Labour Bureau: Labour Bureau statistics are only used by organisations dealing with labour policy formulation and planning.
- Data from DGET on employment and training: There were no specific views by stakeholders on usability of DGET data on employment and training.
- Data from Trade Union Members: This data is mostly collected on ad-hoc basis depending upon the need or issue. It not considered representative and seldom used by external stakeholders.
- Overall, the stakeholders felt that even though many data sources are available, many a times they are not able to get the required information:

"We don't rely on any one report or source, we use all the reports for cross referencing but that brings a different problem, because all the sources are not consistent. It hampers decisions we take and the outputs we produce"

An interviewee

## 7.3 Views on data elements of an effective labour market information system

Stakeholders were asked about the kind of information that a labour market information system should yield for them for effective decision making. This section presents the components of an effective labour market information system as presented by various stakeholders, in terms of the information or data it should provide.

- The central government institutions identified demand and supply information of the workforce as the basic constituent of an LMI system. They felt that it should have information about training providers and assessment bodies; about wages; and demand and supply information of specific job roles.
- The industry associations identified the following components of an effective labour market information system: supply of workforce broken down on the basis of geographical locations, sectorand social category-specific information about the labour force and current employment situation.
- The state specific institutions emphasised labour market information categorised on the basis of gender and caste, current vacancies in the job market on a real time basis and quality (skill level) of the workforce.
- The sector specific institutions were of the opinion that the labour market information system should have information about providers, test centres and examinations in addition to the demand and supply information of the workforce.
- Stakeholders identified that an effective labour market information system should be able to accurately project the future skills requirements of the economy.
- A few stakeholders emphasised the importance of starting new initiatives even in the absence of data that gives them a complete picture. They opined that the data would start getting captured a few years later when the institutions have been able to build capacity.

## 7.4 Institutional gaps in current LMI system

Stakeholders were asked about gaps in the current LMI system. In this particular case, the interviewer also prompted about gaps in the institutional structure in the current system of skills anticipation and whether the current system allows for an efficient mechanism of feeding labour market information into policy formulation. The stakeholders felt that due to inaccurate (non-representative) data, time-lag in data availability and lack of precise information related to demand of specific skills and job roles, the current system of data collection was not very helpful. It is not able to clearly establish the changing trend in demand and supply of labour market in relation to the policy intervention:

"Present arrangement is not able to bridge the gap between data collection and analysis on one hand and policy formulation on the other. The data sources fail to give a complete and current picture of demand and supply of specific skills and how many would need training in times to come"

An interviewee

With regards to the institutional structure, the stakeholders expressed the following gaps in the system:

- Lack of clear leadership: Though not all of the stakeholders pointed towards the lack of leadership, a few stakeholders felt that there is a lack of a national body to coordinate the labour market information related activities of different stakeholders. They pointed towards the fact that lack of clear leadership is hindering the formation of a consensus around different indicators or data points and frequency of data availability, of the labour market information system.
- Lack of clearly defined roles and responsibilities: Linked to the lack of clear leadership is a lack of clearly defined roles and responsibilities related to data collection, collation and sharing:

"We do not know who are the managers of the system, who are the data collectors, operators and analysts. There is a lack of clear vision on what LMIS should ideally look like for the country"

An interviewee

- Lack of communication between stakeholders: A few stakeholders expressed a complete absence of communication and coordination with regards to sharing of information and data between some institutions, especially of the government. The in-house management information system is not available in the public domain and it takes repeated attempts by an external organisation (public or private) to access that data. The stakeholders also expressed reservations about lack of trust between institutions when it comes to sharing data.
- Lack of a system to share and assess the data and information needs: Stakeholders expressed concern over absence of a platform that allows them to discuss and share views on the kind of data or information they require for making effective decisions. There was also an absence of a platform to discuss the common indicators stakeholders involved in implementing skill development programmes could use to collect data.

"There are 17 central government ministries, and all of them run skills development programmes. But they use different standards to capture data. There is no system for them to sit and discuss which common indicator they should use.......It will also allow easy data assembling."

An interviewee

• Lack of clarity on financial, material and human resources required to build the system: A couple of stakeholders expressed concerns over making their in-house data base consistent with the larger system because they are not sure what financial, material and human resource would be required to for it. They expressed that this is not directly an institutional gap, but is a direct consequence of not having an apex body to lay down the principles and requirements of an effective labour market information system.

## 7.5 Institutional structure required for an effective labour market information system in India

Stakeholders were asked about the institutional structure that should be in place for creation of an effective labour market information system. The following broad categories of institutional responsibility came to the fore:

- Institutions that should be responsible for data collection;
- Institutions that should collate data:
- Institutions that should be responsible for overall management of the system; and
- Institutional mechanisms for information dissemination and sharing.

#### 7.5.1 Institutions for data collection

Stakeholders, especially the central government institutions opined that the large and small industries, both from public and private sector, should submit data of those employed in their company or industry and projections about future vacant positions. Stakeholders expressed concerns over the reporting of data especially by micro, small and medium enterprises. As more than 90% of the current industries are in the MSME category, failure to report this data means missing out on the skills requirements of a large chunk of the workforce. It is important for policymakers to enact a law or amend existing laws that makes it mandatory for them to report it:

"The demand side data from micro, medium and small industries are not reported, in the absence of which manpower planning for this sector is difficult. There should be policy changes to make it mandatory for this category of industries to report data"

An interviewee

- Most of the stakeholders were of the view that state and central government that run skills development programmes should accurately track the individuals who have been trained. This would give essential information on how employable those who complete their course are or what other training they undergo. A stakeholder suggested using Unique Identification Number (Aadhar) identity cards to track them.
- It was expressed that the capacity of the training institutions ITIs, ITCs and public and private institutions to collect data and feed it into a system is important. A similar opinion was expressed about universities, colleges and higher secondary schools. Currently they capture only the students that are enrolled and number of students who dropped out. These institutions should be made responsible for keeping a proper record of the enrolled and completed.
- Research institutions elaborated the need for a sample survey at the state level to get an accurate picture of employment and unemployment at the district level and if possible at the block level. However, the capacity of the states to conduct such a survey was questioned. It was felt that the capacity of states should be enhanced to conduct such a survey.
  - "There should be a provision for states to conduct sample surveys to get accurate picture about employment and unemployment at the district level."

An interviewee

- In order to capture the huge supply of workforce in the unorganised sector, labour contractors should be made responsible for collecting data, and industries should assist them
- Labour unions should gather data about the supply of labour, especially from the organised sector. They could gather information about specific job roles that the union members perform.

#### 7.5.2 Institutions for data collation

The interviewees expressed collation of data as a very critical process in the LMIS. They opined that institutions should be given responsibility of collating data from any bodies they represent or fund. This institution should issue clear guidelines on data that should be submitted and formats they should use. This institution should also be cleaning data and make it in a usable format:

"We need a filtering organisation in between data collection and analysis, to make job easier for topmost institution to covert the data in a usable format....There could also be a third layer that collates data that has already been collected, which is another level of filtering...the ultimate goal should be compilation without errors"

An interviewee

- Research organisations and industry associations were of the opinion that industry associations themselves could play a critical role in collating data from its members. They opined that a mechanism of data flow (on demand from associations) exists, but it has to be built into the wider system. The industry associations could also play a strong role in sensitising member companies in sharing the data on labour demand.
- Most Sector Skills Councils expressed that it is easy to get data from specific industry associations. In
  their opinion they themselves should be collating the sector specific data from association and if
  required seeking data from companies. They were not in favour of industry associations taking charge
  of data compilation from their member companies.

- State level stakeholders stated that Sector Skills Councils should disaggregate data collated from various sources (and also skill gap studies) and share it with them. State departments might aggregate data from sector skills council and their own institutions to get a state level picture of labour demand and supply. They however pointed towards their limited coordination and communication with Sector Skills Councils.
- A few stakeholders (mostly central government institutions) suggested using Employment Exchanges for collation of data that feeds from different industries. According to them, a system of data gathering and compilation already exists and that needs to be strengthened further.
- All the stakeholders felt that National Skills Development Corporation should aggregate data from Sector Skills Councils. Because SSCs are in a nascent stage, NSDC should handhold them in developing a common framework for LMI collection.
- Two of the stakeholders suggested that AICTE should continue collating data from technical institutions about labour supply. One of them expressed the need to integrate the in-house AICTE data base and NTMIS.
- One of the stakeholders suggested that a nodal body should be created (for instance within the University Grants Commission) to gather data from universities. Currently it exists only for high ranking and well organised universities in India.

#### 7.5.3 Institutional responsibility for overall management

Some interviewees felt that though the labour market information system ought to be a coordinated effort between various stakeholders, there should be a lead institution to guide the development and look after the overall management. The following are the broad views presented by stakeholders regarding who should lead the formation of an effective LMIS for the country and have ownership of the overall management.

- The Sector Skills Councils were generally of the opinion that the formation of an LMIS should be led by the National Skill Development Corporation. These institutions were also of the opinion that skill development data, especially from the demand side, should be collected sectorally and not regionally (at the state level institutions) or centrally (by central government ministries). In this model, as expressed by some stakeholders, the Sector Skills Councils would feed in the data from their respective sectors and NSDC would aggregate it. The NSDC would have data on both demand of skills (from skill gap studies) and supply of skills (of those trained from in-house management information systems). It could use additional data from ministries and state level institutions to have an overall assessment of workforce demand and supply.
- Government ministries were largely of the opinion that the Ministry of Labour and Employment should lead the formation of an effective and robust labour market information system in India. They should provide the supply side information about the labour force. It should be coupled with information from the SSCs to constitute the overall system.
- The industry associations were of the opinion that the formation and overall management should be led by the industries themselves (to adequately account for the demand side) and government institutions (to account for the supply of labour force).
- According to one of the stakeholders, the labour market information system should be led by an institution that does not have a mandate of implementing skills development programmes or schemes, such as National Skills Development Authority, if it comes into being in future. It could be assisted by the Office of the Advisor to the Prime Minister National Council of Skills Development in setting out data standards, indicators and frequency for varied requirements of different organisations. It should find the uniform grounds for data amalgamation. This institution should be given a statutory authority to seek labour market information from various stakeholders.

• Some stakeholders expressed that there should be different institutions leading on demand side data and supply side data. On top of it there could be an apex institution to coordinate and match the demand and supply.

## 7.5.4 Institutional arrangements for information dissemination and sharing

Regarding institutional arrangements related to information dissemination and sharing, stakeholders expressed the following viewpoints.

- All the stakeholders felt that skills anticipation data should be available in the public domain, hence accessible to everyone. It should however be possible to protect the identity of the units that share data. All of them felt that cleaned and processed data should be made available in the electronic format on a web portal. The responsibility of information sharing should lie with one specific institution.
- A couple of respondents, from central government institutions, emphasised the need for a nodal institution for analysing the specific needs of all stakeholders, and to build in systems for culling out specific information, if desired by a particular stakeholder.
- Regarding information dissemination, a couple of stakeholders (central government institutions and research organisations) felt that LMIS couldn't be in the form of a single portal or platform. Because different institutions have different needs, and there are different policy goals, there could be more than one information sharing portal. For example, one platform could give data on demand for skilled labour and skill requirements whereas a different platform could give information on supply of trained workforce from different institutions. But what is essential here is that the all the supply side data and demand side data from different institutions should integrate into one system.

## 8. Analysis and recommendations

Labour market information is used by all the stakeholders in India to take decisions. However, there seems to be quite a great deal of variation in terms of stakeholder views regarding what sources of information is used, how useful they are and what the components of LMI should be in terms of information content and institutional structure. In this section of the report the findings of stakeholder interviews have been analysed on the basis of five main themes. These themes have been chosen on the basis of views expressed by the stakeholders during the interview.

- Availability of the labour market information: this refers to the different data or information sources used by a particular stakeholder organisation and how accessible is it to them.
- **Usability of information:** this refers to how helpful the data or information that is available for decision making is, in terms of its accuracy (preciseness); reliability (dependability and consistency) and timeliness.
- **Information requirements:** this refers to the information that stakeholders require for effective decision making.
- **Institutional arrangements:** this refers to the roles and responsibilities of various stakeholders regarding who should collect, collate and publish (disseminate) labour market information.

• **State level differences:** this relates to difference of viewpoints of stakeholders from Gujarat and Odisha with regards to LMIS

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## 8.1 Availability of labour market information

The stakeholders identified 14 distinct source of labour market information. Identification of these many sources suggests that stakeholders do not have clarity on what information sources are most useful. As found out during the interviews, the stakeholders referred to more than one sources of information, for the same indicator. Sometimes, this brings new difficulties as the figures vary because of different methodologies used. This is indicative of lack of uniformity across information sources.

On the basis of stakeholder interviews and comparison with the ILO-IMACS report, the study found that two broad categories of data exist in the country,

- National and state level data for an overall picture on employment and unemployment: this comprises Population Census, NSSO, Annual Survey of Industries; MSME Census and Economic Census and is mostly used by organisations that deal with overall labour policy formulation and planning at the national level and quite frequently by research organisations.
- Intervention or programme specific data: this comprises mainly DGET data on employment and training, NSDC data, NTMIS, in-house data from central and state ministries about government schemes. It is mainly used to monitor the progress of schemes with respect to the overall target of the institution.

These two data sources exist independently. There seems to be no bridge to connect the two categories of information source, in the absence of which the progress of a scheme can't be linked to the national level data collection.

States do not find NSS data particularly useful for initiating skills development programmes, as it can't be further broken down for districts and blocks. The Population Census gives a good estimate of labour supply but it suffers from a time lag of up to 10 years or sometimes even more.

All the sources of information (except in-house project information management information systems) are available in the public domain; hence their accessibility is not an issue. However, not all those that are available are useful. The different sources of information (even within the national surveys) make it difficult to compare data.

## 8.2 Usability of labour market information

As the information such as those collected and published in the Population Census, NSS, MSME Census, and Annual Survey of Industries are produced by different organisations, they follow different definition and standards.

In the category of one-off studies (Skill Gap Studies, report by multilateral institutions) both supply and demand side information about the labour market is included, but they are either desk-based research or conducted over a small sample.

There are limitations in terms of the information that these data sources offer. There is no collated data source on the number of training providers, assessments of people who were given training etc. Such data only exists within individual organisations for in-house project management, and these organisations tend not to share information with each other.

## 8.3 Information requirements

Almost all the stakeholders expressed concerns over the lack of a reliable and continuous flow of information about the labour market and hence a need for an effective system. However, no single stakeholder could clearly detail out what the main constituents of an LMIS should be, and some had only a very broad and high-level understanding. Most identified information about demand and supply of labour force as the main component of an LMI system. A few others related it only to employment and unemployment statistics at national, state and district level.

Contrasting the content of the interviews with the review of literature reveals a significant gap between stakeholders' understanding of that comprises an effective labour market information system and what evidence and practice from elsewhere reveals on the subject. Only a few stakeholders could identify the granular requirements revealed in the literature, such as:

- Demand for different occupations (job roles) and their changing work content;
- Information on school to work transition;
- Employability (quality of education and training) of workforce;
- Recurrent manpower shortage areas and its analysis;
- Information on workplace training;
- Labour productivity and manpower cost
- Career advice and guidance functions.

This suggests a lack of clarity on what an LMI can achieve in ideal situation and what it can achieve in the Indian context, both in the short and long run.

## 8.4 Institutional arrangements

International experiences suggest that assigning clear responsibility for coordinating the collection, analysis and dissemination to a specific institution or government ministry has been the key to establishing effective LMIS. This study found that some of the stakeholders did identify this as the current gap in case of India and also elaborated on what could be done to plug it. However, they generally refrained from clearly suggesting who should lead in creating such a system because of the concern that their views in favour of specific institutions would not be welcomed by those institutions. This suggests that that there might be a concern

among stakeholders about ownership of such a system. This also meant that stakeholders were often unwilling to clearly articulate their views on suitable strategies for developing the system.

The collective views of the different stakeholders indicate significant gaps in the institutional structure. These range from the lack of a regular idea-sharing platform to the lack of clear understanding on the roles and responsibilities of different stakeholders in the LMI system. The most commonly cited concern was the absence of a lead organisation to develop in detail the conceptual framework and guidelines for data collection, collation and dissemination for stakeholders. Currently, the stakeholder organisations seem to have limited understanding of how their present position as an LMI user would change when they become part of the larger LMI system.

Lack of communication and coordination between some of the key institutions was also identified as a gap. In some cases this appeared to exist because of a lack of willingness to communicate, while in others it was related to the absence of a communication and coordination system between the institutions.

Regarding data collection, the stakeholders mostly opined that it should be collected at source by the concerned institution: companies for labour related data from the factory floor or workshops, universities and colleges for enrollment etc. Stakeholders also felt that the existing law should be amended so that it becomes mandatory to report labour related data for institutions.

Regarding data collation, stakeholders saw this as an essential step in an effective LMIS which is currently missing and needs to be strengthened. Stakeholders were of a uniform opinion that it should begin at the next level above the institutions that collect data. This filtering process would ensure data quality and help build an effective system. Data collation institutions could also play a critical role in finding common indicators (or at least a common denominator with the indicator) if there is a system for them to communicate within each other.

Two broad institutional arrangements have been adopted internationally to establish successful LMIS system: establishing a Labour Market Information Committee at the national level that coordinates LMIS with the different federal and provincial structures and establishing Labour Market Observatories at local, regional, sectoral or national level with representation from various stakeholders. The institutional model that is currently evolving leans more towards the former. However, the crucial elements that could be strengthened in case of India is the involvement of state government ministries in the larger system.

#### 8.5 State level differences

The two states that were chosen for this study were Gujarat and Odisha. These choices were made in a preliminary consultation with the ILO and its affiliates, before the start of the interview process. The purpose behind these choices was to have a representation of states where, according to the opinions of those present in the consultative meeting, policies and institutional frameworks for skills development and employment are in an advanced stage (Gujarat) and where the same are in an earlier stage of development (Odisha).

Gujarat is a more industrialised state with special emphasis on manufacturing units. The state government has a pro-industry policy which is evident in the large number of Special Economic Zones (SEZs) that have been set up in the state to attract more investment from industry. The major towns of the state are economic hubs and have a large productive urban population. The comparatively more advanced state of

industrialisation in Gujarat, and its larger number of skill training institutions offering a higher number of courses, implies that a larger proportion of the population may be skilled across different trades and occupations than in Odisha.

In comparison, Odisha has a much more dispersed population with a majority of its people in rural and semi urban areas. With an economy that is primarily based on agriculture, it has struggled with public protests against several large industry projects in the State which have also hurt its image as a state which is looking to attract and involve industry. Recent tie ups with national level training providers have resulted in a flurry of skilling activities in the state.

During the course of the interviews with state level stakeholders, a few points of difference were noted between the interviewees from the two states. These have been themed accordingly and listed below. These points do not seek to describe or differentiate between the systems and operations of the two states in general, but have been arrived by collating, compiling and analysing the views of the stakeholders that were interviewed. In general, there appears to be a considerably higher degree of sophistication on the part of Gujarat stakeholders in comparison with Odisha, and a more critical and demanding approach to data and information.

#### 8.5.1 Knowledge about LMI

- The stakeholders in Gujarat were familiar with the concept, scope and components of LMI.
- In Odisha, all stakeholders used the term 'manpower forecasting' in lieu of LMI and demonstrate a more detailed understanding of the wider aspects of LMI.

#### 8.5.2 Validation of Skill Gap Studies

- In Gujarat, the stakeholders were of the view that the various skill gap studies that were conducted by government bodies and consultants were inadequate. The primary feeling which was expressed by all stakeholders in the state was that the studies were desk based and did not involve enough field work to be of real value to them.
- In Odisha, the skills gaps studies were listed as the primary source of data for decision making, and stakeholders had a largely uncritical view of them.

#### 8.5.3 Relationship between departments and organisations

- In Gujarat, there seems to be a higher amount of cooperation between different departments and organisations as far as data and information sharing is concerned. Relevant data is shared readily and there appears to be a high amount of synergy between the organisations.
- In Odisha, the different stakeholders who were interviewed did not have ready access to data and information from other organisations, apart from information which was available on public domains.

## 8.5.4 Acceptance of figures and projections

• In Gujarat, the stakeholders maintained that the figures that have been suggested by the NSDC and other organisations have not been based on any form of research. The overall feeling is that the

- numbers are arbitrary and are not followed by the stakeholders, who have their own system of forecasting which includes extensive field reports and analysis by different departments.
- In Odisha, none of the stakeholders had any specific view towards the numbers projected by the NSDC; they seem to have uncritically accepted them as a policy decision that needs to be implemented.

## 8.5.6. Approach to external providers

- In Gujarat, the stakeholders maintained that the initiatives taken by the state government are adequate and they did not foresee any large scale involvement of private training providers.
- In Odisha, the approach has been to entrust almost all skilling activity to external providers with only the funding coming from the state.

#### 8.5.7. Linkages with industry

- In Gujarat, all stakeholders reiterated the importance of the involvement of industry sources when planning a skill development project or program. A review of the attendees of a few workshops and consultative meetings on such programmes revealed a high proportion of attendees are from local industry.
- In Odisha, the onus on industry linkage is on the training provider but when consultations on skill development programmes or projects were held more emphasis was given on participation by members of quasi government institutions such as Panchayats and Gram Sabhas.

## 8.6 Summary of findings: SWOT matrix

Views expressed by different stakeholders have been put together in a SWOT (Strengths-Weakness-Opportunities-Threats) format. The four categories of the matrix has be defined in the context of current LMI system in India It is not an exhaustive list but aims to give a broad picture of the overall arrangements (including institutional arrangements) that exist in India.

- Strengths: refers to the characteristics that are strong suits of the current system;
- Weaknesses: refers to the internal characteristics that place at a disadvantage;
- Opportunities: refers to the elements that the current system could exploit to its advantage in future;
- Threats: refers to the external elements in the environment that could cause trouble in future.

#### Strengths (S)

- Generally reliable data from census and sample studies
- System exists for collecting programme specific data
- Common perception that a lack of data is hampering labour policy planning and formulation; hence support for creating a more effective system

## Weakness (W)

- Time lag in census and sample data
- Non representative data of sample surveys at micro level
- Lack of uniformity across definitions and indicators of programme specific data
- Lack of data on the unorganised sector
- · No involvement of labour unions
- Employment exchanges are not integrated
- Unclear roles and responsibilities of institutions regarding collecting, collating and disseminating data.
- Lack of clear guidelines on the structure of LMIS

## Opportunities (O)

- Nascent SSCs
- NSSO and other sample surveys already exists at the national level, and hence could be extended to states
- Programme specific data could be integrated
- Conceptual framework taking shape
- Leadership getting defined

#### Threats (T)

- Political willingness
- Top down planning
- Insufficient allocation of financial, material and human resource
- Limited facilities to train staff on LMI
- Lack of communication/coordination between stakeholders (especially states) in building the LMIS structure

#### 8.7 Recommendations

On the basis of the analysis of stakeholder interviews, we recommend the following for the next stage of the ILO's work in this area:

- The ILO should facilitate the development of a broad consensus among stakeholders regarding the conceptual framework and institutional structure of the LMIS.
- The ILO should examine the feasibility of the creation of an apex institution to spearhead the development of LMIS and define clear roles and responsibilities for institutions within the structure. This institution should be conceived as one with statutory authority to seek information or data from different sources.
- The roles and responsibilities of institutions should be divided into the following categories. An institution could carry out or be part of more than one role.
  - Institutions responsible for data collection;
  - Institutions responsible for collation data;
  - Institutional mechanisms for information dissemination, publishing and sharing;
  - Institutions that should be responsible for regional and sectoral management of the system, with
    overall management lying with the apex institution. The apex institution should also be
    responsible for judging whether information is getting transformed into policy action, aligned to

broader economic and labour policies; and whether labour market trends are getting adequately reflected in the data.

- The ILO should take forward further dialogue aimed at helping stakeholders to articulate their needs with regards to different kinds of information and analysis they need out of the system, and aiding their understanding with regard to what can be realistically achieved with the current LMIS, what is plausible in future, and what evidence and good practice exists elsewhere. Workshops and training should be organised to attain this objective. This process could be initiated within various working group on LMIS that already exists, using networks of partners organisations such as the employer organisations and the NSDC. This will also help in better communication and coordination between institutions.
- The ILO should ensure that state-level institutions are included in all work in this area, to ensure that they also feel ownership of the system and to allow for the significant differences between states to be accounted for. This should be balanced with the development of sectoral approaches in cooperation with the SSCs.
- The ILO should support the amendment of the Employment Exchanges (Compulsory Notification Of Vacancies) Act, 1959 so that it becomes mandatory for all categories (including the agriculture sector) and size of organisations (employing even less than 10 workers) to report vacant job positions to the employment exchanges, and so that organisations are suitably incentivised to share this information.

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#### **Annexure**

#### **Interview schedule**

- 1. Could you please describe the mandate/role of your organisation in detail?
- 2. What decision does your organisation takes to fulfil each of its roles?
- 3. What data/sources of data does your organisation use or likely to use in future (external as well as internal source) for decision making?
- 4. Is the data available at regular intervals? What is its frequency?
- 5. What is the quality of the data available, especially in terms of accuracy and reliability?
- 6. How usable is the information or data overall? Do you have process it before using? What kind of processing or analysis do you undertake?
- 7. Is sufficient data available for you to take decisions in order to fulfil each of your roles effectively? If not, what is the data that you think is lacking?
- 8. How critical is the data that is lacking, for fulfilment of the organisation's role?
- 9. How do you take decision in matters where sufficient data is not available?
- 10. What kind of information or data do you think should an effective labour market information system provide?
- 11. What should be the structure of an effective system?
- 12. In terms the institutional structure of who should lead the initiative, who should collect, collate process and disseminate the data?
- 13. What do you think are gaps in the current institutional structure of the LMIS?