



International Labour Office

A practical guide on anticipation and matching of skills at sector level

**Guides for skills anticipation and matching
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OVERVIEW

Introduction

- What do we mean by a Sectoral Approach?
- Why, What for & for Whom?

Scope & Rationale

- Coverage, Content, Methods and Tools used
- Diversity of approaches

Brief overview of selected cases

- Common features, differences

Key messages:

- Key steps to be included in a good study
- Pitfalls to be avoided

SECTOR DRIVES SKILLS



What do we mean by a Sectoral Approach?

There is no such thing as THE sectoral approach.

Sectoral studies use a wide variety of different tool and methods

BUT.....

Sector matters – it is crucial to understand the key drivers of change in skills demands to have sectoral focus and perspective.

In this *Guide* a **sectoral approach** to skills anticipation and matching is defined as one which looks at changing skill needs from the perspective of an individual sector

Key Considerations: Context and Constraints

- The general ***Economic, political & social context*** (type of economy, level of development, cultural background, involvement of social partners);
- the ***Institutional Infrastructure***;
- the existing ***Statistical Infrastructure*** (including the existence of other research and related activities as well as other surveys and relevant data sources) and available resources.

Sources of information

Formal Surveys:

- of fact as opposed to opinion/ perception;
- of households / employers;

Other sources of information and opinion

- interviews;
- focus groups; and
- other less formal meetings.

Developing views about the future

Asking people what they think, including:

- Surveys of opinion (amongst employers or other groups) ;
- Delphi methods (systematic gathering of expert opinion);

Other foresight techniques, including:

- Formal, quantitative modelling:
 - different levels of sophistication;
 - general versus partial analysis;
 - econometric versus computable techniques;
- Other ways of generating new knowledge and understanding about possible futures, including various – scenario development techniques

The cases selected for detailed examination

Case Study 1: - Portugal

Case Study 2: - Europe - DG Employment Sectoral Studies

Case Study 3: - UK Sector Skills Councils

Case Study 4: - South Africa

Case Study 5: - The Australian Experience

Case Study 6: - Czech Republic

Case Study 7: - Georgia

Case Study 8: - Ukraine

Case Study 9: - Italy

Case Study 10: - USA

Case Study 11: - Germany

The Importance of the Institutional Context – additional case studies

Social partnership is one of the key aspects of this workshop

ILO conducted a number of additional case studies in various different Countries

These illustrate various other aspects of the links between institutional developments related to sectors and skills anticipation

Olga will return to this at the end of this session

Characteristics of cases

Whether or not they involve:

- Primary data collection;
- Use of modelling or other foresight methods;
- Role of interviews and other forms of consultation;
- Classification and definition of the sector (limitations and benefits of using standards systems of classification);
- **S**trengths, **W**eaknesses, **O**pportunities, **T**hreats;
- Technology scanning;
- Clusters;
- Qualitative profiling;
- Software (use of standard packages Excel, SPSS, Stata as well as other more specialised software);
- Industry value added/ supply chain analysis;
- Complementary research that can help inform the results.

The Key Steps

1. Clarifying the aims and objectives;
2. Recognising context and constraints
3. Defining the sector;
4. Carrying out a data audit;
5. Consulting and engaging key stakeholders;
6. Clarifying the key questions to be addressed;
7. Qualification frameworks and skill anticipation;
8. Choice of methodology (how best to answer the questions);
9. Executing the study;
10. Final outcomes (dissemination, validation & policy action);

1. Clarifying the aims and objectives;

- Who?
- What?
- Why?

2. Recognising context and constraints

The current general political and social context

Institutional framework

Statistical infrastructure

Resources

3. Defining the sector;

Which sector to analyse – strategic priorities:

- Growth potential

- Change in technology

- Users and institutional context

- Developing a more elaborate “vision” for the sector

Defining, classify and measuring the sector

- Official classifications (principal economic activity)

- “supply chains” (“input-output” tables)

- Broader definitions of a sector* “occupational sector – observatories” and transversal sectors

Caveats – the need sometimes for an even broader perspective multi-sectoral analysis

4. Carrying out a data audit

Important to take a good data audit – make the most of existing information

Sources of information - Surveys; Interviews; etc

Key questions regarding data availability & quality:

- Is the data source regular?
- Is its sustainability in the future assured?
- Is the frequency sufficient?
- How long are the time series?
- Are there significant breaks in the series?
- Are the data national/regional/local?
- Do they allow such breakdowns?
- Are they economy-wide or sector-specific?
- What sectoral breakdown is available?
- Are the data available in an appropriate form?

4a. Possible data sources for sectoral analysis

The census

- Does the census include education and labour market information? (occupations, sectors, level and field of education?)
- How relevant are the most recent census data in terms of qualitatively observed changes in economy since their collection?

The labour force (household) survey (LFS)

- Is the entire labour force sufficiently covered? LFS (household) surveys have potential to capture the informal employment, they sometimes fail to cover rural population, remote areas and people who do not live in ordinary households (in institutions, migrants...)
- Are the breakdowns of labour force available by age, gender, education attainment – level/field?
- Are the breakdowns of employment by occupation and industry available? What classification are used and what detail is available?

Public Employment Service (PES) statistics

- What share/ which segment of the job seekers and vacancies do the PES statistics cover and which they do not?
- What information on vacancies and job seekers are available in the statistics?
- Do the statistics use standard classification of occupations?
- Are the records from individual employment offices merged in one database? Do they use integrated information system?

Establishment (employer) skills surveys (ESS)

- What part of economy does it cover (private/public, size of establishments, selected sectors etc.)? Enterprise surveys usually do not cover informal employment, sometimes only cover establishments above some minimum number of employees
- Is there a breakdown by sector/region possible?
- What information the survey provides?
 - Share of employers facing skill shortages?
 - Hard to fill vacancies/reasons?
 - Occupations which are hard to fill and skill shortages?
 - Types of skills which the employers cannot find?
 - Training needs?

5. Consulting and engaging key stakeholders

- The importance of social dialogue and involvement of social partners - Involvement in designing, commissioning & execution
- Audience for the final output: Government; Academic; Employers; Sectoral bodies; Unions; Education & training providers; Careers guidance professionals; Individuals making career choices and decisions; The general public.
- Power and ownership – need to secure both financial and other support from the key players involved.
- Different needs and interests of various types of target groups have to be factored in (sometimes conflicting)

6. Clarifying the key questions

1. Understanding the context for the sector

- Key drivers of change generally & in the sector
- Links to other parts of the economy

2. Sector position and outlook

- Analyses of trends and future developments /scenarios;

3. Implications for jobs and skills

- Numbers of jobs / Changes in requirements for skills

4. Skills supply

- Possible imbalances and mismatches

Synthesis and proposed responses

Drawing together the results from 1-4 develop appropriate responses and priorities for action amongst different stakeholders.

NB Defining Skills

- Defining and measuring skills is also far from straightforward.

7. Qualification frameworks and skills anticipation

May be useful to connect this type of activity with the introduction of qualification frameworks:

- Economies of scale
- synergies

if looked at as a single skill development/policy initiative.

Example – Croatia: integrated process. The employment service is collecting information on competences and occupations and monitoring the changes taking place over time. Outcomes are made available to the skill councils who are responsible for defining occupation standards which can be modified to respond to labour market needs. The National Human Resources Council makes sure that government policies are coordinated

8. Choice of methodology

Tools and methods: vast range of different tools (ideally all coordinated)

Scale - economies of scale may make production of general resources easier but smaller countries may find it easier to keep track & join up

Coordination and coherence: linking the sectoral study with other aspects of the system of anticipation of skill needs and related LMI.

Developing views about the future: again any different tools & techniques

The Pros and Cons of different methods depend on the circumstances and what the precise aims and objectives are - no one size fits all solution.

- Quantitative results are often essential;
- But more qualitative methods can be advantageous in helping to develop broader strategies that are robust in a range of different circumstances.

Statistical issues: sectoral studies need to be based on solid evidence, but questions about ensuring the information is reliable and robust.

8a. Problems and pitfalls in primary data collection

Primary data collection appears to provide a “quick fix”: *Draft a questionnaire; Send it out and get responses back; Analyse and publish the results. Job done!* But there are many pitfalls!

The need to distinguish between *Fact* versus *Opinion* or *Perception*

Need for representative surveys to get unbiased data (importance of good *Sampling frames* to ensure representation of the population)

Need for adequate samples to ensure that the information collected is statistically robust following well established statistical principles

Technical issues about the best way to obtain certain types of information (ask employers or households?)

The analysis and consolidation of results, including critical appraisal

Employers surveys are at the heart of many of the sectoral approaches.

NB Other types of surveys may also provide useful

9. Executing the study

No.	Stage	Details
P Stage 00	Objectives	Clarify policy and other aims and objectives
P Stage 01	Defining the sector	
P Stage 02	Carrying out a data audit	Check existing data available
P Stage 03	Consulting key stakeholders (institutional audit)	Identify and get on board all relevant stakeholders
P Stage 04	Audience	Identify the main audience(s)
P Stage 05	Clarify questions	Clarifying the key questions to be addressed
P Stage 06	Choice of methodology	Deciding how best to answer the key questions and selection of optimal methods
Stage 1:	Sector position and outlook	Sector Characterisation; Business Environment; Envisioning the Future
Stage 2:	Business capability implications	Gap in Business Capabilities Required to Achieve Objectives
Stage 3:	What type of skills?	Implications for Types of Skills Needed
Stage 4:	How many workers by skill type?	Modelling Employment and Skills demand
Stage 5:	Skills supply gap	Gap between Skills Supply and Types of Skills Needed
Stage 6:	Proposed responses	Proposed Response to Future Skills Needs

10. Final outcomes

Communicating the findings

- Outputs can take many forms -“Participation” may be a key output
- Good practice helps reinforce engagement and ownership
- But may need to reach a much wider audience

Uses and actions - Different users have different priorities:

- Policy makers; Education & training providers; Employers; Individuals

Work on skills anticipation, whether at national or sectoral level is invariably carried out on behalf of the government. Dissemination strategy often focussed on policy makers rather than others

Dangers of a “top down” planning mentality – need to recognise that some level of vacancies and unemployment is inevitable and healthy in an well functioning market economy.

Validation and evaluation –peer review; standard setting

“In a nutshell”

- Establish where you are now, in a manner supported by solid evidence;
- Think about where things are going, in a consistent and transparent manner.

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