

# ► Employment policies for a job-rich recovery and a better future of work

Fourth ILO Employment Policy Research Symposium

Session 4: LABOUR MARKET DATA GAPS ON SKILLS NEEDS

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## ▶ General data gaps on skills

- Skill needs, especially future skill needs
- Financing of education and training by type and level
- Participation: enrolments, graduation and drop out rates
- Adult learning – participation, funding
- Work-based learning, apprenticeship training
- All of the above by sex, age, migration status

# Use of results of skills needs anticipation and assessments

Policy  
formulation

Design/update  
of competency  
standards

Matching skills  
& jobs and  
career  
counselling

## How to measure a skill?

### Testing a skill? (competencies)

#### Proxies:

- Occupations
- Jobs / job tasks
- Qualifications
- Education / training type / subject / level
- Vacancies

**SKILLS SUPPLY:**  
What skills are, or will be available in the labour market in terms of the number and structure of the labour force:

- **Stock:** Labour force and skills available on the labour market
- **Flows:** currently in studies, expected to graduate; returning to the labour market.
- **Data on:** population, enrolments, graduates, job seekers...

**SKILLS MISMATCH:**  
Imbalances between supply and demand of skills

- Unemployment by skill level
- Skills-shortage and hard-to-fill vacancies

- Skill shortage
- Qualification mismatch
- Skills gaps
- Skills obsolescence
- Horizontal mismatch
- Vertical mismatch
- Over/under-qualification

**SKILLS DEMAND:**  
Which skills are needed, or are likely to be needed in the future in the labour market

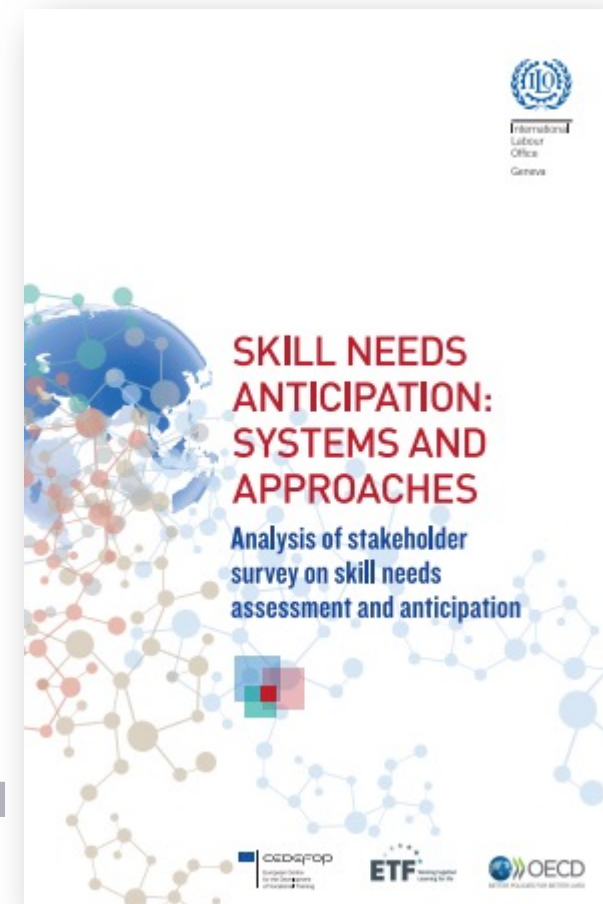
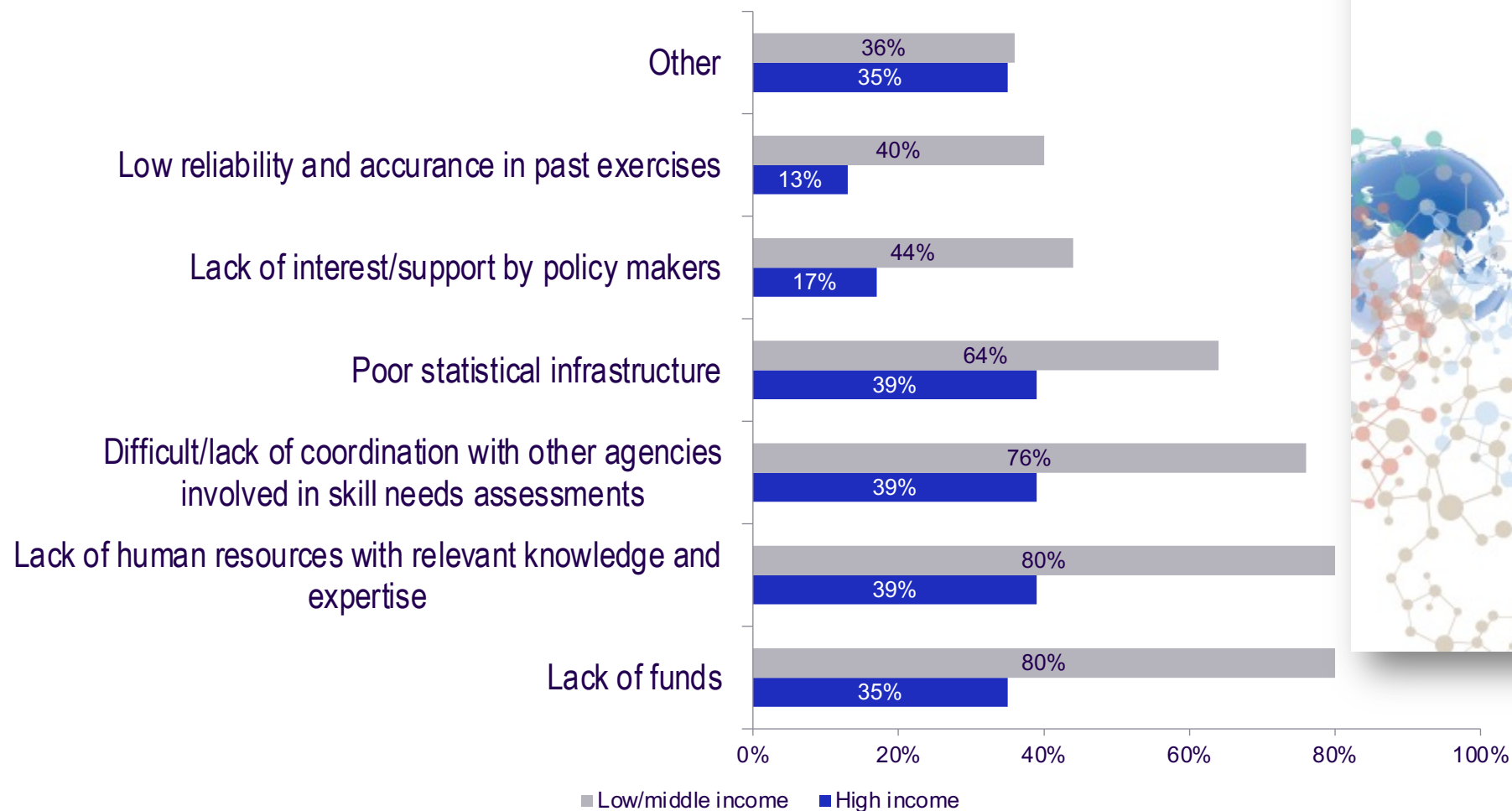
- **Expansion demand:** caused by economic growth
- **Replacement demand:** caused by people leaving the labour force
- **Data on:**
  - Employment by sector/occupation/education
  - Job vacancies (available jobs) and jobs-to-come,
  - Job-task skills requirements



# Key data gaps for skill needs measurement in low and middle-income countries

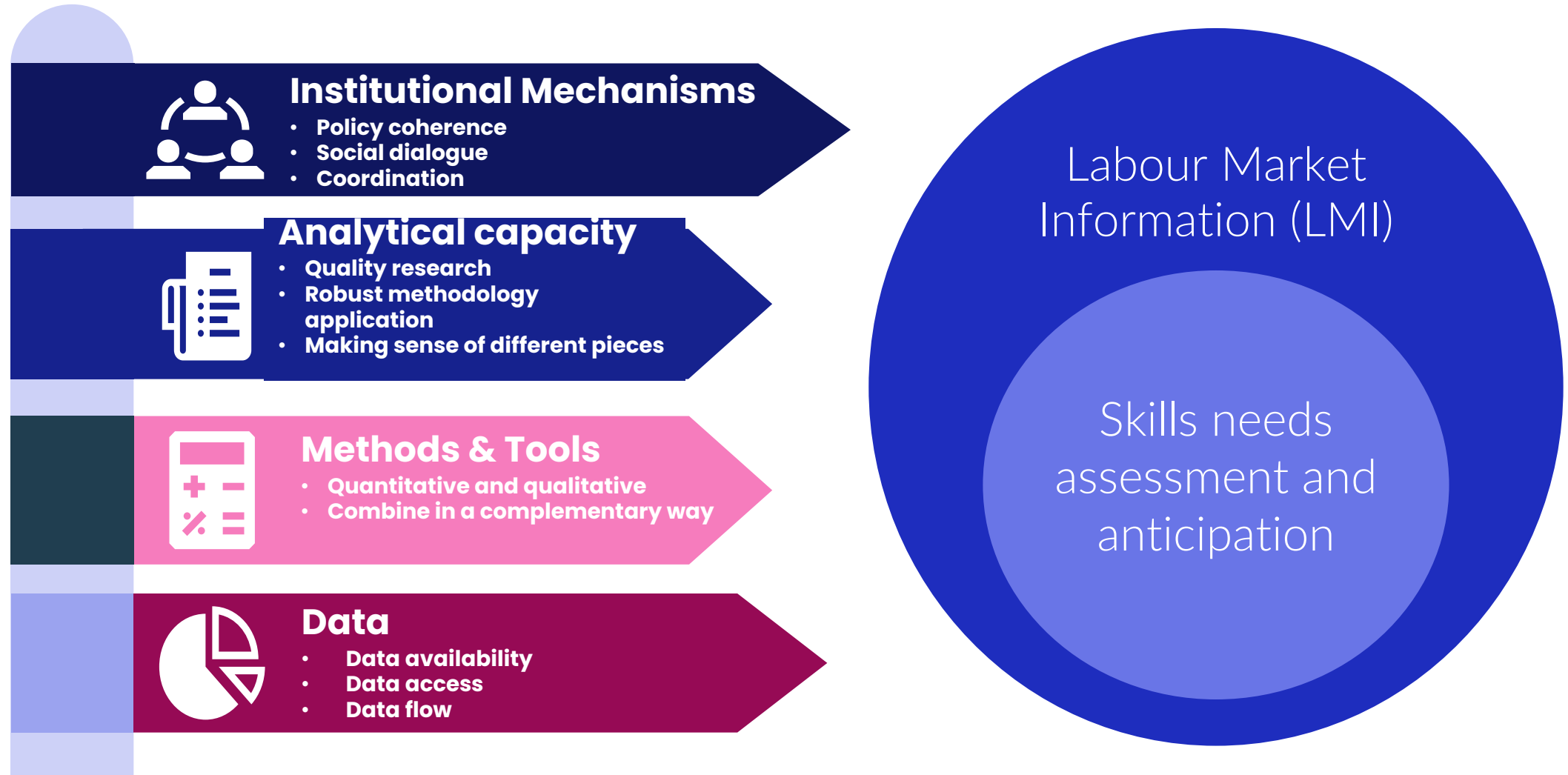
- Irregular or non-existent Labour Force Surveys; short time series, small samples.
- Education admin statistics of low quality
- No record on adult learning, work-based learning, apprenticeship training
- Surveys among establishments (ESS) or individuals (STWT) are only ad hoc
- No or poor vacancies data. Online job adds (Big Data) have very little coverage in relation to developing countries labour markets due to high informality and high share of blue-collar occupations
- PES rarely collect regular data for matching
- No data on wages or pay
- Tracer studies only ad hoc
- No skills taxonomies that would measure skill and bridge this information with occupations

# Obstacles in further development of skill needs activities, (% national ministries)



Source: ILO (2018), "Skill needs anticipation: systems and approaches"

# Essential components of skills needs anticipation system



# Key challenges emerging from 5 mapping exercises in Africa

- Lack of regular, representative, reliable, good quality data collection and its reporting /dissemination.
- Lack of involvement of social partners along with relevant ministries at all stages of data collection
- Inadequate capacities of LMIS players to effectively collect, analyse, interpret and validate
- Governance for LMIS does not fully exist as institutions are fragmented, implementing interventions separately and often working in silos in an uncoordinated manner,
- Weak link between education system and industry; Inadequate adaptation of the vocational and technical training system to the needs of the productive sector.
- Underdeveloped network of public employment services, low institutional and resource capacity of employment services to support job seekers and employers.



## Potential solutions to the challenges

- Strengthening coordination and institutional platforms linking to the broader skills governance system
- Strengthening capacities of institutions responsible for data collection (such as NSOs, PES) and analysis
- Increased investment in data and analysis collection methods
- Apply more qualitative approaches, sector level research, foresights – with the direct involvement of social partners
- Using digital technologies for systematic feedback (ILO's Service Tracker)
- Adapting existing analytical methods and indicators to developing countries
- Combining big and “small” data
- Adapting methods quickly to new situations, such as COVID-19.

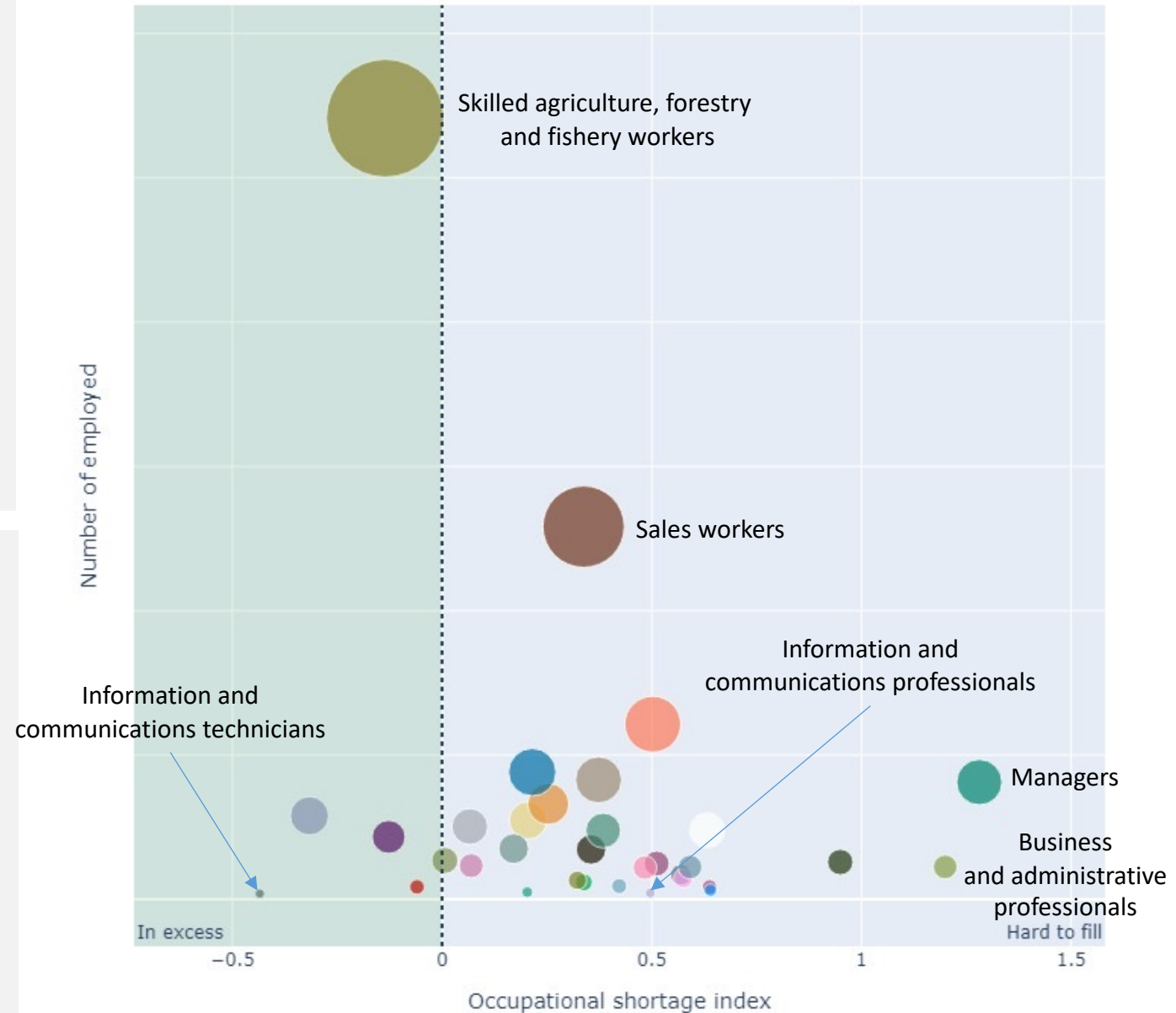
- Composite indicator to measure skill mismatches
  1. hours worked
  2. employment growth
  3. hourly wage growth
  4. proportion of underqualified
  5. unemployment rate
- Details on skill content from O\*NET<sup>1</sup> used to map occupation shortage/surplus to skills.



### Adapting Skills for Jobs indicator for low and middle-income countries

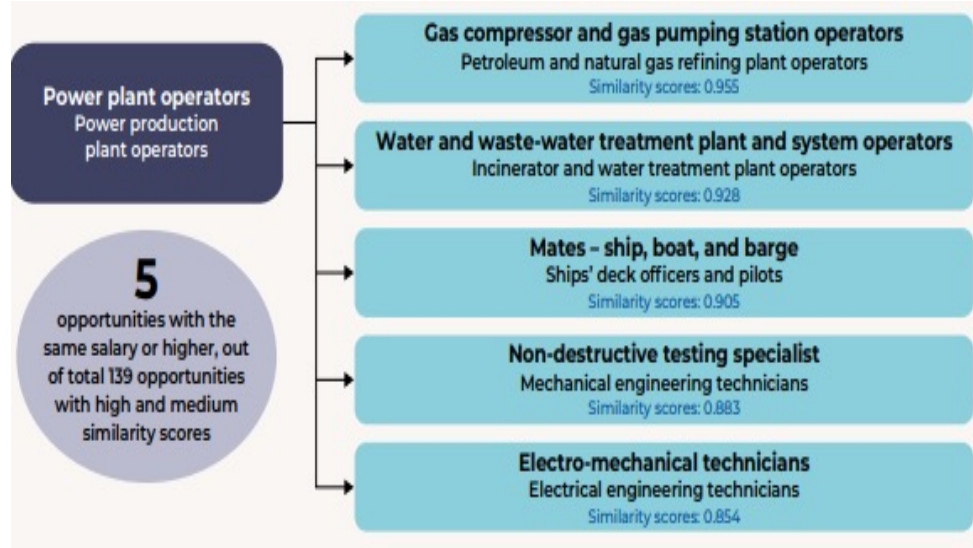
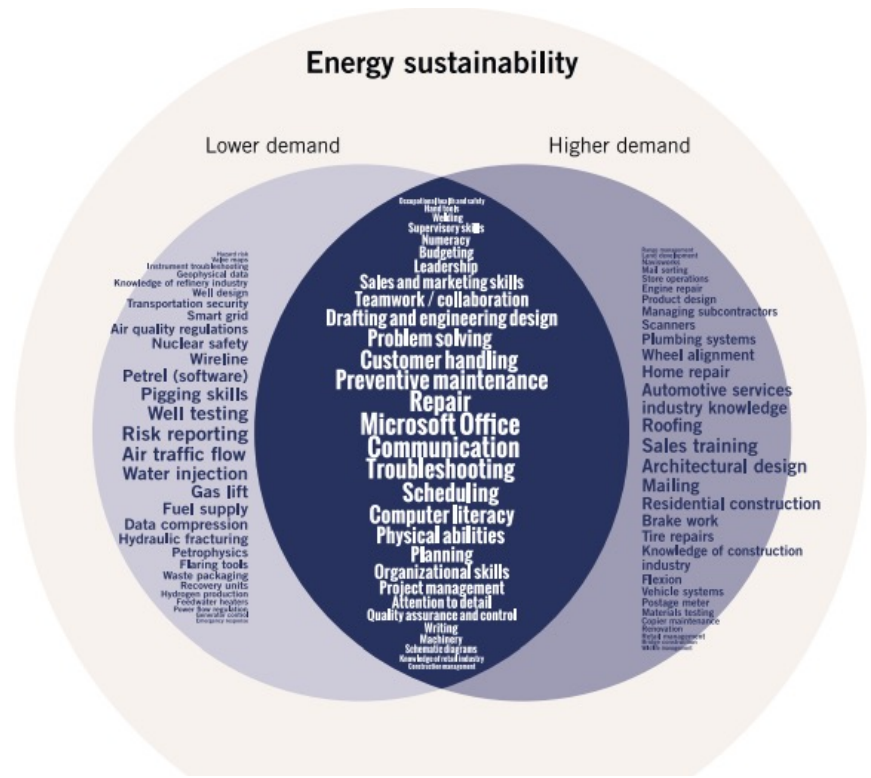
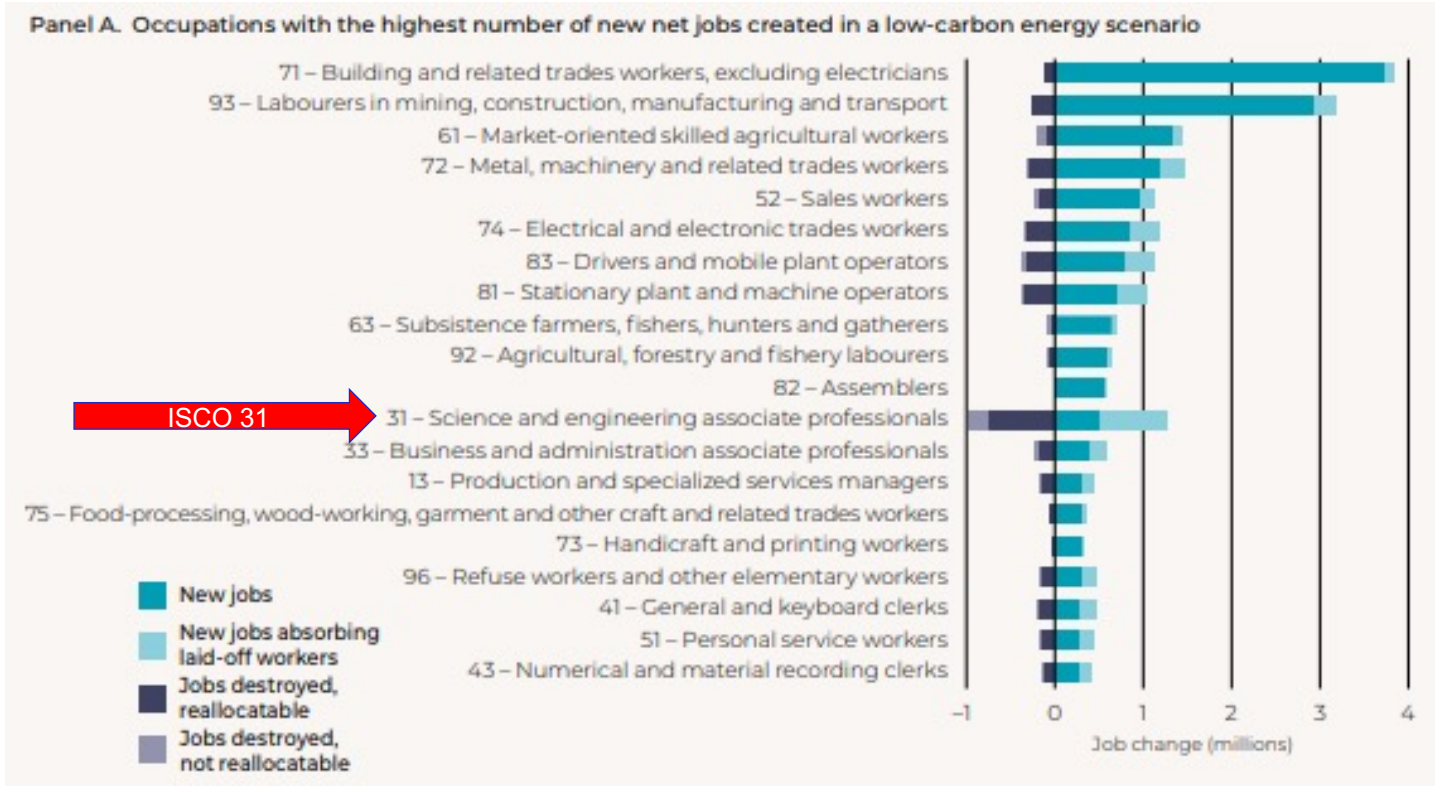
- Adapt the approach and extend the database to low and middle income countries.
- In future: dropping some elements, adding big data, using other than O\*NET US taxonomy.

Scatter plot of skill mismatches by occupation groups of Thailand, 2020



<sup>1</sup>Occupational Information Network (O\*NET) developed by the US Bureau of Labour Statistics

# Experimenting with data integration: Skills for a Greener Future - Energy sustainability scenario, 2030



Source: ILO (2019) Skills for a Greener Future.

# Quickly adapting to COVID-19: ILO Rapid Assessments of reskilling and upskilling needs due to the COVID-19 (2021)

Implemented online/ by phone

## KEY FINDINGS FROM THE SURVEYS OF EMPLOYERS AND INDIVIDUALS

**Covid led to many job losses in sub-Saharan African countries**

**13%** of survey respondents unemployed pre-pandemic

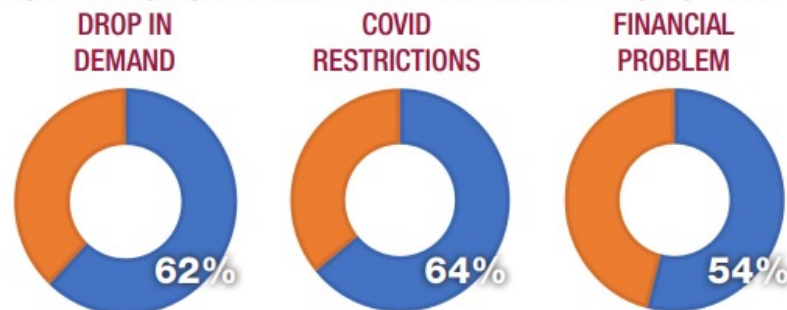
**36%** of survey respondents unemployed during the pandemic

**23%** percentage point increase in the number of survey respondents unemployed

**Employment has contracted across most sectors and occupations, especially in:**

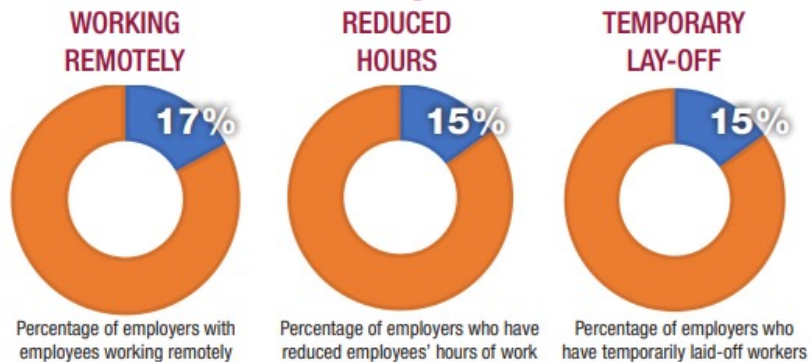
- sectors dependent upon exports – notably tourism
- relatively low skilled workers

**Why did employers reduce their number of employees?**



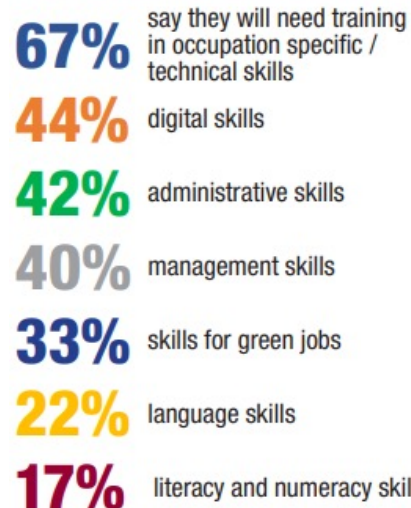
**49%** of employers continued to work as usual

**Others have introduced changes...**

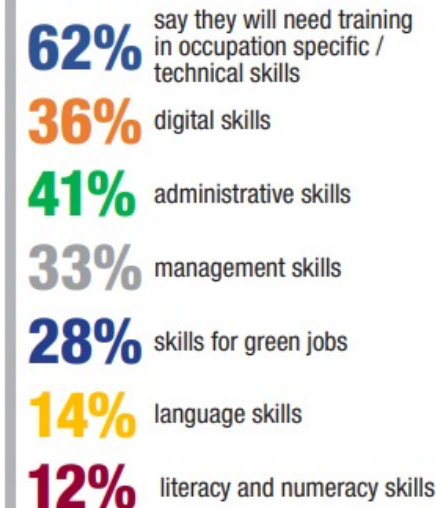


Note: Data used for 9 African countries - 5029 individuals and 1801 employers

**Where those in work say they would need retraining to find a new job:**



**Where unemployed people say they need training to find a job:**

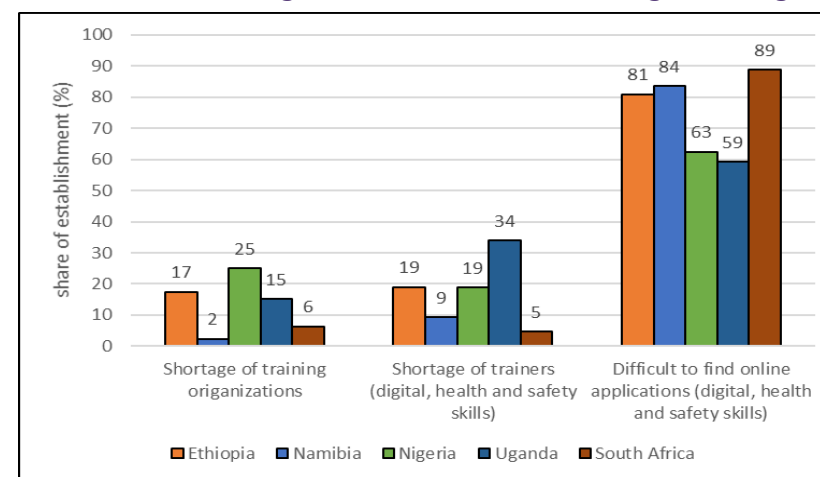


Training is not always easy to find and access

**45%**

of employers providing training faced difficulties doing so

**Reasons for facing difficulties in delivering training**



# ILO skills needs anticipation resources

**Guidance Note**

## Anticipating and matching skills and jobs

Many countries are experiencing a growing gap between the skills needed in the labour market and those offered by the workforce. Skills anticipation is a strategic tool to anticipate the skills needs of the labour market and to design training and education programmes that respond to these needs. This guidance note provides a framework for skills anticipation, including the role of employers, training providers, and government. It also discusses the importance of skills anticipation in the context of the COVID-19 crisis.

### Why is skills anticipation important?

Employers are increasingly investing in training and upskilling their workforce to remain competitive in a rapidly changing labour market. Skills anticipation allows employers to identify the skills needed in the future and to design training programmes that respond to these needs. This can help to reduce the skills gap and to improve the quality of the workforce.



► **Guidelines on Rapid Assessment of reskilling and upskilling needs in response to the COVID-19 crisis**



ETF European Centre for the Development of Vocational Training

CEDEFOP European Centre for the Development of Vocational Training

International Labour Office

## USING LABOUR MARKET INFORMATION

GUIDE TO ANTICIPATING AND MATCHING SKILLS AND JOBS VOLUME 1

## DEVELOPING SKILLS FORESIGHTS, SCENARIOS AND FORECASTS

GUIDE TO ANTICIPATING AND MATCHING SKILLS AND JOBS VOLUME 2

## WORKING AT SECTORAL LEVEL

GUIDE TO ANTICIPATING AND MATCHING SKILLS AND JOBS VOLUME 3

## DEVELOPING AND RUNNING AN ESTABLISHMENT SKILLS SURVEY

GUIDE TO ANTICIPATING AND MATCHING SKILLS AND JOBS VOLUME 5

## CARRYING OUT TRACER STUDIES

GUIDE TO ANTICIPATING AND MATCHING SKILLS AND JOBS VOLUME 6

## THE ROLE OF EMPLOYMENT SERVICE PROVIDERS

GUIDE TO ANTICIPATING AND MATCHING SKILLS AND JOBS VOLUME 4

STED Skills for Trade and Economic Diversification

A Practical Guide

Con Gregg, Marlon Jansen, Erik van Marck

Skills and Employment Department  
Trade and Employment Programme

STED Skills for Trade and Economic Diversification

Rapid STED: A Practical Guide

CEDEFOP European Centre for the Development of Vocational Training

International Labour Office

## Guidelines for inclusion of skills aspects into employment-related analyses and policy formulation

Hana Řihová, Olga Strělská-Išna

Guide

SKOLKOVO

International Labour Organization

## SKILLS TECHNOLOGY FORESIGHT GUIDE

CEDEFOP European Centre for the Development of Vocational Training

Geneva, 2018

International Labour Organization

100 1919-2019

## SKILLS FOR A GREENER FUTURE

Key findings

International Labour Organization

Geneva

## SKILL NEEDS ANTICIPATION: SYSTEMS AND APPROACHES

Analysis of stakeholder survey on skill needs assessment and anticipation

CEDEFOP European Centre for the Development of Vocational Training

ETF

OECD

International Labour Organization

100 1919-2019

## Skills and jobs mismatches in low- and middle-income countries

GENEVA, 2019