# Defining and Measuring Employment

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Labour Statistics & Analysis Portfolio

**ITC** ILO
International **Training** Centre
Centre international de **formation**
Centro Internacional de **Formación**

# Scope

➢ Labour statistics: An overview

➢ Key labour market definitions & indicators (Work, employment, unemployment, and potential labour force)

➢ Sustainable Development Goals (SDGs) indicators framework

➢ Labour underutilization

➢ Labour market information systems (LMIS)

# But first,
# an Ice Breaker!



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# **Labour statistics: An overview**

# What are labour statistics?

"Statistics dealing with **productive activities** and their characteristics, from many perspectives and covering **many dimensions**."

# Labour statistics are only a part of official national statistics

The national statistical system includes:

- Labour statistics
- Education statistics
- National accounts
- Demographic statistics
- Industrial production statistics
- Agricultural statistics
- Health statistics

Labour statistics concepts & methods **need to be related & consistent with other official statistics**

# Labour statistics deal with **productive activities**

- From two perspectives: demand and supply sides

| Statistics about labour demand | Statistics about labour supply |
|:---:|:---:|
| Enterprises | Employed |
| Vacancies | Unemployed |
| Jobs | Not in labour force |

- Including all forms of work

| Statistics about work for pay/profit | Statistics about work not for pay/profit |
|:---:|:---:|
| Employed | Own-use production work |
| | Unpaid trainee work |
| | Volunteer work |

**Enterprises**
- Ownership
- Size
- Economic activity
- Location
- Establishments
- Occupational injuries
- Unionization
- Collective bargaining
- Strikes
- ...

**Working-age population**
- Sex/gender
- Age
- Educational level
- Education attendance
- Nationals/migrants
- Disability status
- Rural/urban areas
- ...

**Vacancies**
- Skills required
- Economic activity
- Occupation
- ...

**Employed persons**
- Status in employment
- Occupation
- Economic activity
- Private/public sector
- Hours of work (hours actually worked, hours usually worked)
- Earnings
- Informal employment
- Occupational injuries and diseases
- Unionization
- Collective bargaining
- Strikes
- ...

**Unemployed persons**
- Job search methods
- Duration of unemployment
- Qualifications
- Previous work experience
- Previous occupation
- Previous economic activity
- Receipt of unemployment benefits
- ...

**Persons outside the labour force**
- Reasons for being outside the labour force
- Desire to work
- Availability
- Job search
- Qualifications
- Previous work experience
- Receipt of benefits such as pensions
- ...

**National output and income**
- Gross Domestic Product
- Gross Value Added
- Labour productivity
- Labour income share
- ...

**Jobs**
- Pay
- Labour costs
- Hours paid for
- ...

Employment creation, productivity

Employment creation, working conditions, skills needed

Characteristics of employment, working conditions

Pressures on the labour market, access to the labour market

Labour market attachment

| | Labour demand | Labour supply | Potential labour supply |
|---|---|---|---|

| Country | Enterprises | Individuals |
|---|---|---|

| Macro | Micro |
|---|---|

**ILO Department of Statistics**

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# Uses of labour statistics:

- Macro-economic monitoring;

- Identification of key socio-economic issues;

- Formulation and implementation of policies and programmes;

- Evaluation of policies and programmes;

- Monitoring of progress towards attainment of goals (i.e. SDGs).

# Main sources of labour statistics

- Population and housing census

- Household surveys

  - Labour force surveys

  - Household income and expenditure surveys

  - Etc.

- Establishment censuses & surveys

- Administrative records

  - Unique objectives; different coverage, periodicity, measurement units, etc.

# Main sources of labour statistics

| | Strengths | Limitations |
|---|---|---|
| **Population censuses** | - Comprehensive enumeration, coverage of the whole population<br>- Allows for the production of reliable information on small groups | - Very costly<br>- Short questionnaires prevent from getting detailed information on specific topics |
| **Household surveys** | - Comprehensive coverage of population<br>- Detailed questioning permits precise measurement of statistical concepts for short reference periods | - Sampling prevents reliable estimates for small groups<br>- Lower quality of data on "sensitive", income-, and employer-related topics<br>- Cannot provide estimates of vacancies, training needs, etc. |
| **Establishment surveys** | - Comprehensive coverage of larger businesses<br>- Payroll records provide consistent and reliable data for income and employment by industry<br>- Only source for data on vacancies, training needs, etc. | - Typically poor coverage of very small and unregistered businesses<br>- Requires constant updating of registers (births and deaths)<br>- Difficult identification of small or informal units<br>- High non-response rates<br>- Sampling prevents reliable estimates for small groups<br>- Data items are limited by the information in establishment's registers |
| **Administrative records** | - Total count allows maximum detail<br>- Inexpensive to compile statistics | - Often poor coverage<br>- Often not up to date<br>- Data quality may be questionable |

# Main sources of labour statistics

But this requires **coherence** between sources

- Concepts

- Definitions

- Classifications

- Reference periods

- Methods

Labour statistics framework and standards

# International standards on labour statistics

**Two main types of international standards on labour statistics:**

- Conventions and Recommendations adopted by the International Labour Conference (ILC)

- Resolutions and Guidelines adopted by the **International Conference of Labour Statisticians (ICLS)**


Statistical Standards

# **Key labour market definitions & indicators**

# Defining work

*"Any activity performed by persons of any sex and age to **produce goods or to provide services** for use by others or for own use* irrespective of legality, context, and personal status"

*(19th ICLS, 2013)*

# Forms of work: Employment
(i.e. ALL activities to produce goods and services)

**For own final use**
(by households)

**For use by others (i.e. other units)**

**For remuneration (i.e. for pay or profit)**

**Without remuneration**

**Own-use production work**

| Services | Goods |
|---|---|

**Employment**
(work for pay or profit)

| Services | Goods |
|---|---|

**Unpaid trainee work**

| S | G |
|---|---|

**Other work activities** (e.g. unpaid compulsory work)

| S | G |
|---|---|

**Volunteer work**

| G | S |
|---|---|

**ALL** who work for pay

**ALL** who work for profit
-Employers
-Own account workers in market units
-Contributing family workers
-Members of market producer cooperatives
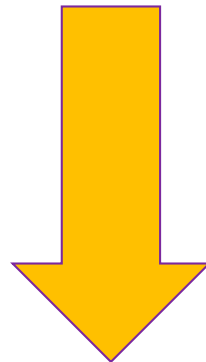
*ALL OTHERS > age, whether or not:*

-Provide services for own final use

-Volunteer providing services for households

-Work unpaid for training

-Produce goods for own final use

-Volunteer through / for organizations

Volunteer producing goods for households

**Not employed (for pay/profit)**

**Persons in employment (for pay / profit)**

**Unemployed**
(seeking + available for work for pay/profit)

**Outside the labour force**

**Underutilized labour**
**(with unmet need for employment (for pay/profit)**

# Labour force

"Refers to the current supply of labour for the production of goods & services **in exchange for pay or profit**"

Labour force = Employed + Unemployed

*(19th ICLS, 2013)*

➤ Focuses on <u>work transacted for pay or profit</u>

➤ Provides snap-shot picture of the labour market at a given point in time (reference period)

# Labour force classification

In short reference period, Employment for 1+ hours

Y · N

**1st**

With job for pay / profit, not at work

N

Y

NOT EMPLOYED
*(without work for pay/ profit)*

Seeking work for pay/profit

Y · **2nd** · N

Available

Y · N

**3rd**

**a. Employed**

**b. Unemployed**

*c. Outside the labour force*

*Labour force (a + b)*
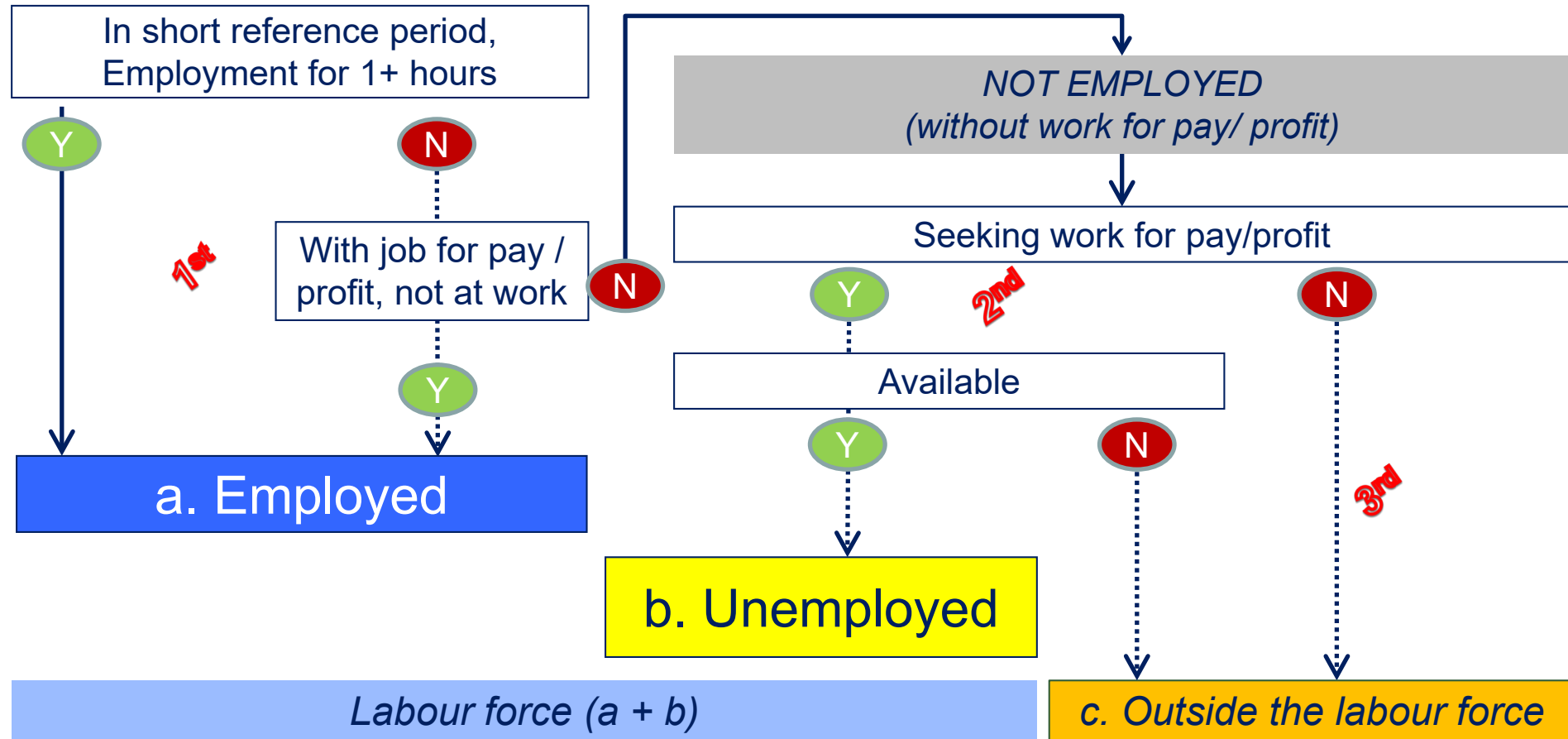
# Employment

**"Employment** is work performed for others in exchange for pay or profit generally in monetary terms, but can also be in kind"

**(19th International Conference of Labour Statisticians)**

# Employment encompasses different types of individuals:

- Employees
- Self-employed
- Casual workers
- Contributing family workers
- Assisting family members
- Etc.

# Employment to population ratio

➢ The **employment-to-population ratio** is "*the proportion of a country's working- age population that is employed.*"

➢ Employment comprises **all persons of working age who during a specified brief period** were in the following categories:

➢ **Paid employment** (whether at work or with a job but not at work); or

➢ **Self employment** (whether at work or with an enterprise but not at work).

## How do we measure the employment to population ratio?

The employment-to-population ratio is calculated as follows:

$$\text{EPR (\%)} = \frac{\text{Persons employed} \times 100}{\text{Working-age population}}$$

# Labour force participation rate

*"The proportion of a country's working-age population that engages actively in the labour market, either by working or looking for work."*

➢ Measures **the supply of labour available to engage in the production of goods and services**, relative to the population at working age.

# **Unemployment**

The unemployed comprise "all persons of working age" who were:

- a) **Without work during the reference period**, i.e. were not in paid employment or self-employment;

- b) Currently **available for work**, were available for paid employment or self-employment during the reference period; and

- c) **Seeking work**, i.e. had taken specific steps in a specified recent period to seek paid employment or self-employment."

(ILO)

# Unemployment rate

➢ Focuses on **the current unused supply of labour**

➢ Emphasis on monitoring labour markets:

➢ Captures <u>persons without employment and within the working age population</u>;

➢ Signals situations of potential match between available **labour supply** (people) and **available demand** (jobs)

➢ **Measured only through household surveys**

## How do we measure the labour force participation rate?

The unemployment rate is calculated as follows:

$$\text{UR (\%)} = \frac{\text{Persons unemployed} \times 100}{\text{Labour force}}$$

$$\text{UR (\%)} = \frac{\text{Persons unemployed} \times 100}{\text{Persons employed + persons unemployed}}$$

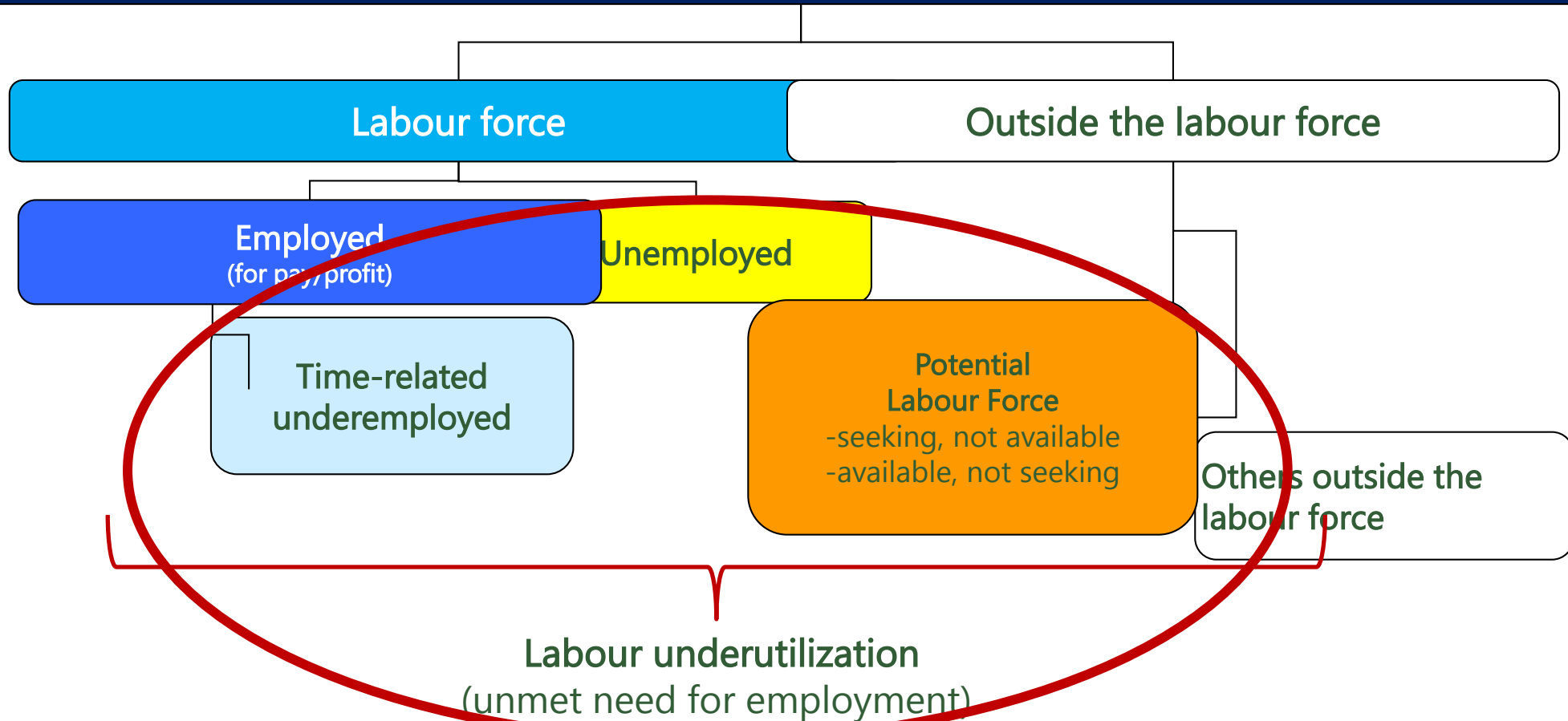**Job Quality remains a major concern for many around the world, unemployment is only the tip of the iceberg!**

# **Labour Underutilization**

# Employed, unemployed, and potential labour force

**Working age population**

**Labour force** | **Outside the labour force**

**Employed** (for pay/profit) | **Unemployed**

Time-related underemployed

Potential Labour Force
-seeking, not available
-available, not seeking

Others outside the labour force

**Labour underutilization**
(unmet need for employment)

# Labour underutilization

"Labour underutilization refers to **mismatches between labour supply and demand, which translate into an unmet need for employment** among the population." (ILO)

- Unemployment rate was typically the only underutilization indicator published and the main focus of the standards;

- Old standards referred to time-related underemployment but not the potential labour force

- **New standards recognise the need to extend the range of indicators while retaining unemployment**

# Time-related underemployment

**"Reflects a situation when the working time of persons in employment is insufficient in relation to alternative employment situations they are willing and available to engage"**

*(19th ICLS, 2013)*

- **Significant component** of labour underutilization;

- To be disseminated together with unemployment rate;

- **Does not capture other dimensions of underemployment** due to skills mismatches or low remuneration.

# How do we measure Time-related underemployment?

The time-related underemployment rate is calculated as follows:

TRU (%) =  Persons in time-related underemployment x 100

_____

Persons employed

# Potential labour force

*"Sub-groups of **persons outside the labour force with an expressed interest in employment** (desire to work)"*

Relevant in contexts of:

➢ **Limited labour market access**, job opportunities;

➢ **Limited channels** to seek employment.

Relevant for groups

➢ With **other responsibilities** (women, students); Persons in situations that limit their capacity to seek / be available for work.

# **Population outside the labour force by labour market attachment**

➢ Seeking employment, but not available

➢ Not seeking employment, but wants and available to work

➢ Not seeking, Not available but wants employment

➢ Does not want employment

**Based on SAME questions used to identify the unemployed**

Labour market attachment

# **Sustainable Development Goals (SDGs) indicators framework**

# What are the Global Goals?

17 SDGs to end poverty, hunger and inequality, take action on climate change and the environment, improve access to health and education, build strong institutions and partnerships, and more
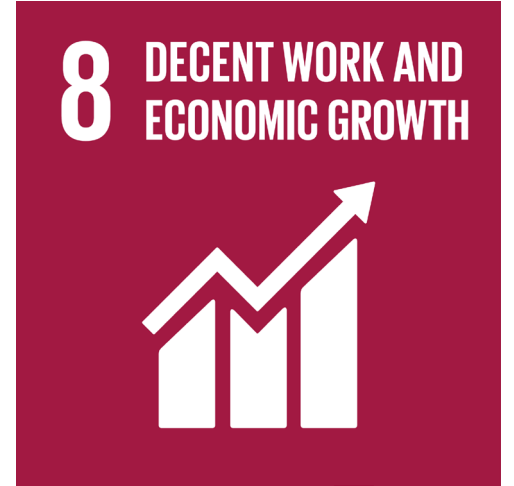
# The SDG Global Indicator Framework



Integrated framework

Diverse

Forward-looking

Extensive

Not exclusive
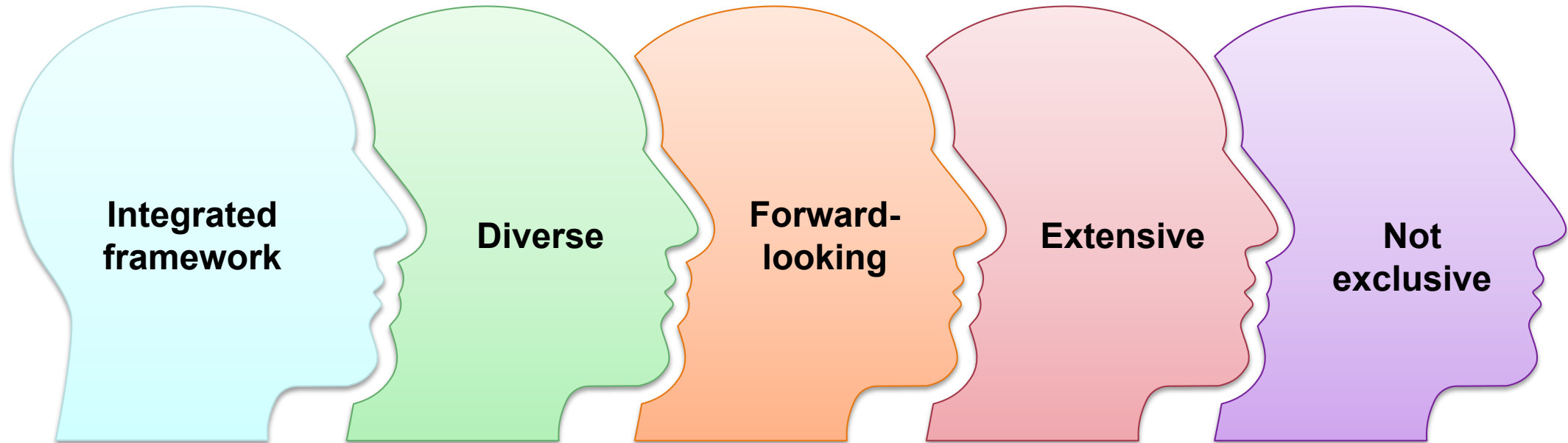
**Set of indicators designed to monitor progress towards SDGs and each of the 169 targets at the global level**

247 indicators (231 unique)

# Decent work is a prominent item in the SDGs



1 NO POVERTY

4 QUALITY EDUCATION

5 GENDER EQUALITY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

14 LIFE BELOW WATER

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

# 3 indicator tiers
## Is there an internationally-agreed methodology and are data available?
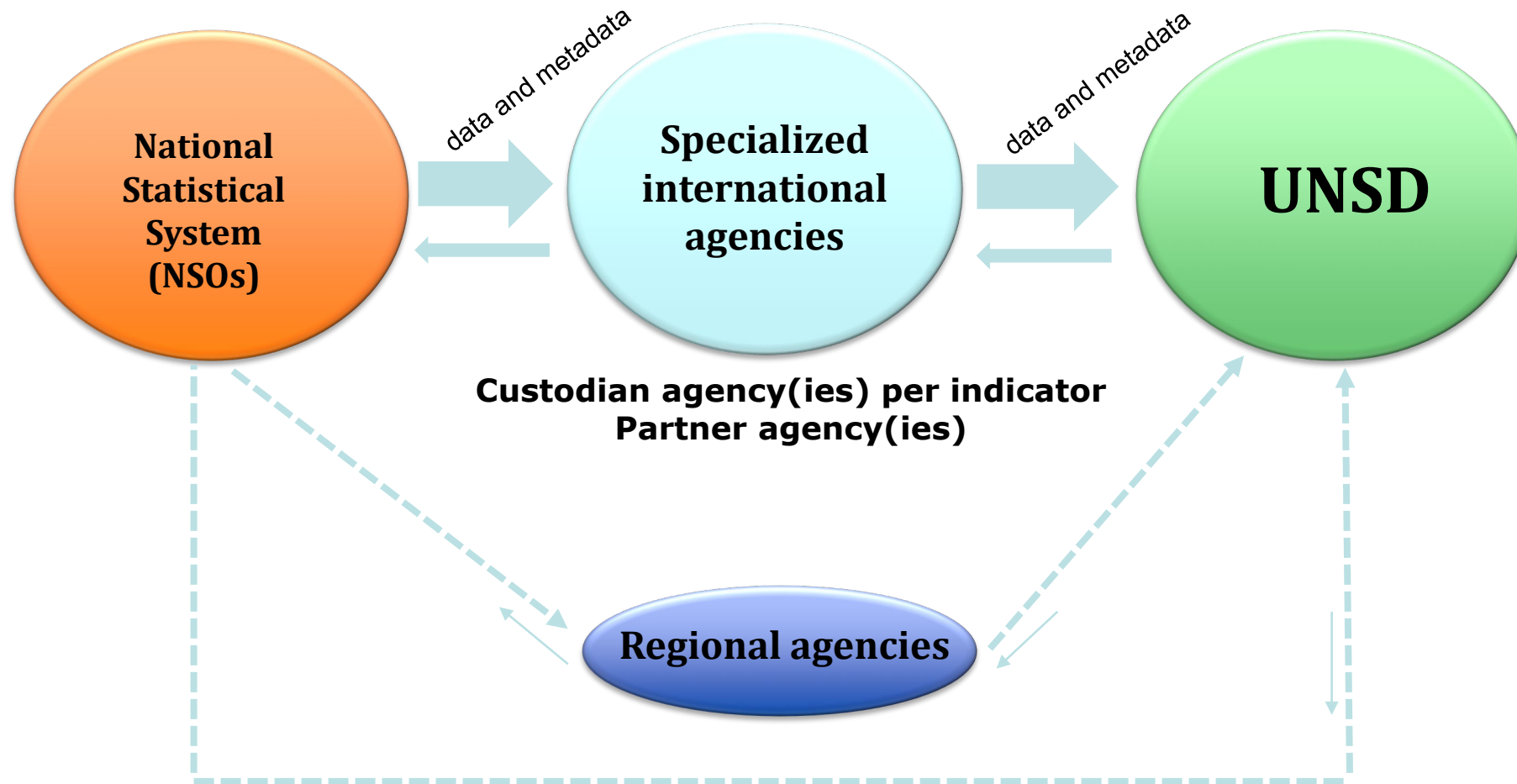
**1**

**Defined and widely available**

Indicators with an internationally-agreed methodology and data regularly available for at least 50% of countries and of the population in every region where the indicator is relevant.

**2**

**Defined and some availability**

Indicators with an internationally-agreed methodology and data regularly available for at least 50% of countries and of the population in every region where the indicator is relevant.

**3**

**Not defined and not available**

Indicators with no internationally-agreed methodology or standards yet (thus, no data available yet either).

# Global SDG reporting process: main actors and roles



National Statistical System (NSOs) → data and metadata → Specialized international agencies → data and metadata → UNSD

Custodian agency(ies) per indicator
Partner agency(ies)

Regional agencies

# 30 indicators on decent work and the labour market

ILO custodian for 14 indicators

ILO partner agency for 3 indicators

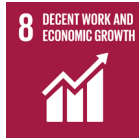Many other indicators related to decent work across goals

## SDG labour market indicators for which ILO is currently reporting to UNSD

- 1.1.1 Working poverty
- 1.3.1 Social protection
- 5.5.2 Women's share of managers
- 8.2.1 Labour productivity
- 8.3.1 Informality
- 8.5.1 Earnings / gender pay gap
- 8.5.2 Unemployment rate
- **8.6.1 Youth NEET rate**
- 8.7.1 Child labour (UNICEF)
- 8.8.1 Occupational injuries
- 8.8.2 Compliance of labour rights
- 8.b.1 National strategy for youth employment
- 9.9.2 Manufacturing employment (UNIDO)
- 10.4.1 Labour income share

# SDG Global Indicator Framework
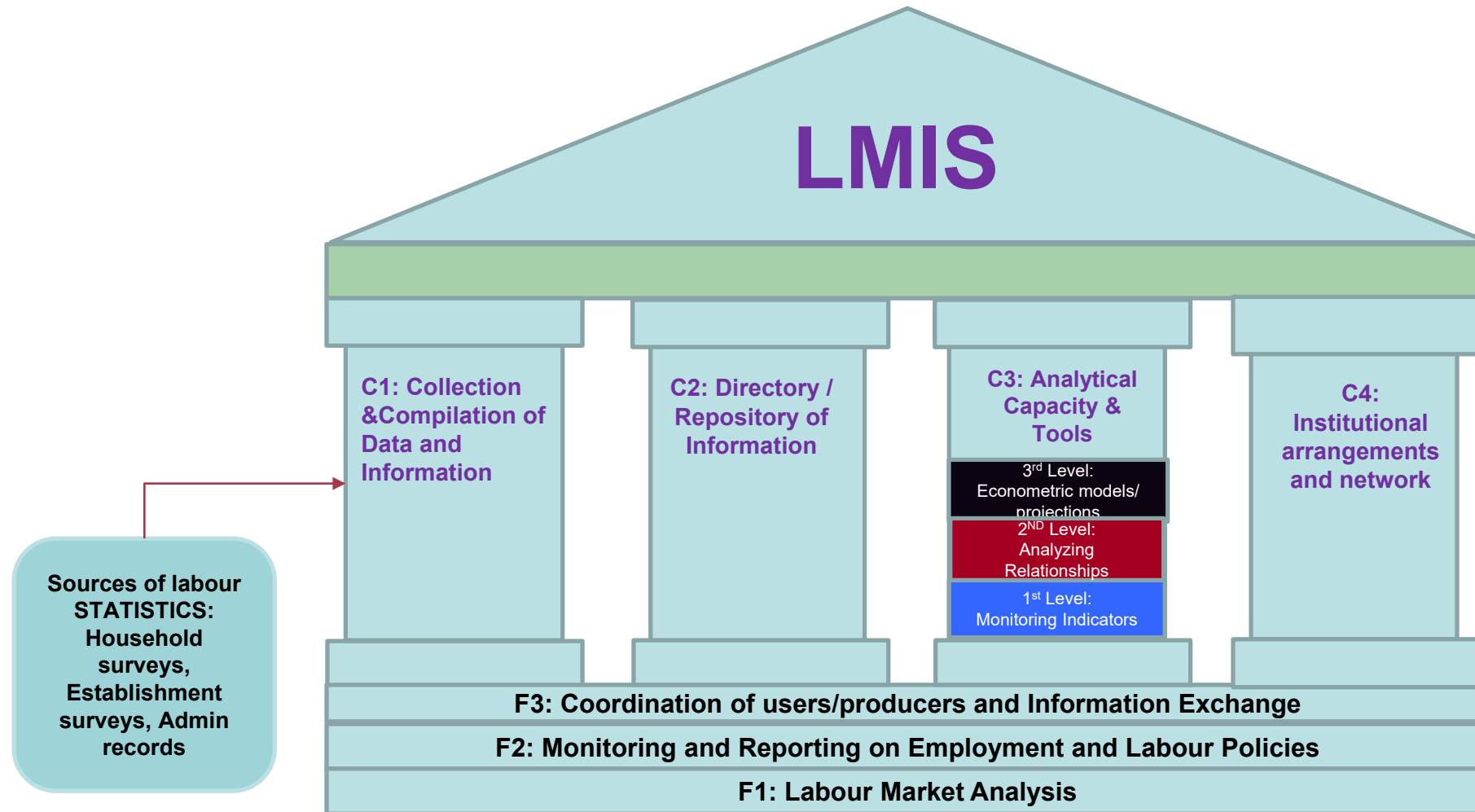
⚠️ ***All indicators are equally important!***

➢ Tier Classification **only meant to assist in developing global implementation strategies**

➢ **An indicator's tier may differ at the global level** than at the country level

➢ SDG Indicators call for t**he active involvement of all social actors.**

# Labour market information systems (LMIS)

# What is a LMIS?

*"A network of institutions, persons and information that have **mutually recognized roles, agreements, and functions** with respect to the production, storage, dissemination, and use of labour market-related information and results in order to maximise the potential for relevant and applicable policy and programme formulation and implementation."*

# LMIS Functions & Components



**LMIS**

**C1: Collection &Compilation of Data and Information**

**C2: Directory / Repository of Information**

**C3: Analytical Capacity & Tools**

3rd Level: Econometric models/ projections

2ND Level: Analyzing Relationships

1st Level: Monitoring Indicators

**C4: Institutional arrangements and network**

**Sources of labour STATISTICS: Household surveys, Establishment surveys, Admin records**

**F3: Coordination of users/producers and Information Exchange**

**F2: Monitoring and Reporting on Employment and Labour Policies**

**F1: Labour Market Analysis**

# Who needs this information?

| | | | |
|---|---|---|---|
| Researchers/Analysts | Education institutions | Training institutions | Private trainers |
| Employers/Self employed | Displaced workers | Trade Unions | Governments(HR, Employment, economic planners) |
| Policy makers | Students and jobseekers | Young people and their families | Employment Service Providers |

# Why do we need an LMIS?

- **Development of sound and effective employment national policies,** and sectoral educational, skills, industrial and trade policies

- **Monitoring and evaluation of employment and labour market policies**, programmes and projects

- **Labour market signaling**

  - Analysis of labour market functioning and processes

  - Efficiently allocating and using resources

# Closing remarks…

➢ Labour market statistics and indicators are **essential** for evidence based-policy making;

➢ **All labour market indicators are important** to aid decision making;

➢ SDG indicators go **beyond quantitative** labour statistics and focuses on assessing job quality & decent work;

➢ There is a need to find **a common statistical understanding** among member states based on internationally agreed statistical standards

# An finally,
# A Pop Quiz!
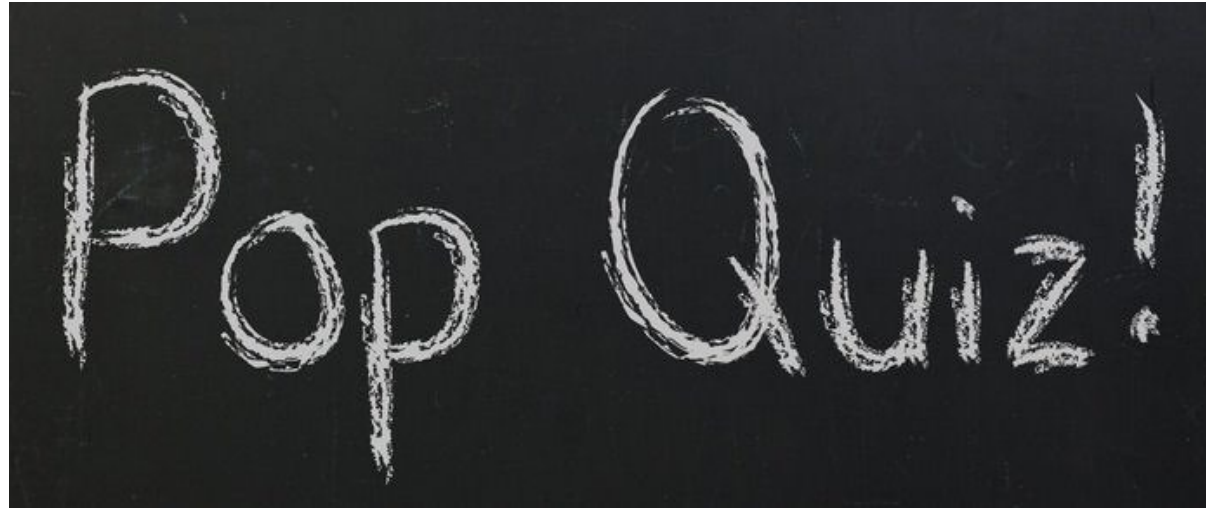


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# Questions