SDG labour market indicators

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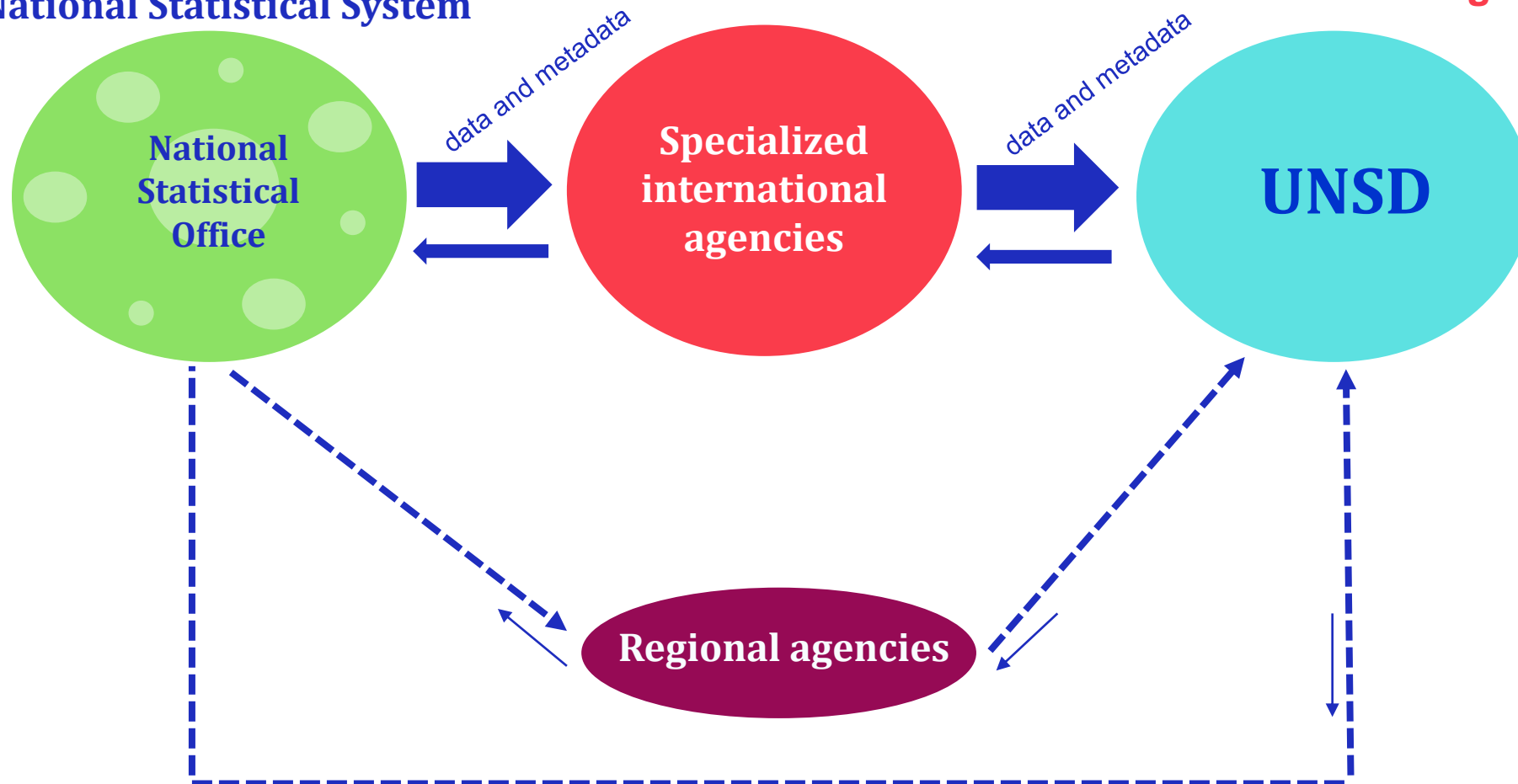
October 2021

The actual value of statistics resides in their use, analysis and interpretation

Global SDG reporting process: main actors and their roles

Custodian agency(ies) per indicator

Partner agency(ies)

National Statistical System

National Statistical Office

data and metadata →

Specialized international agencies
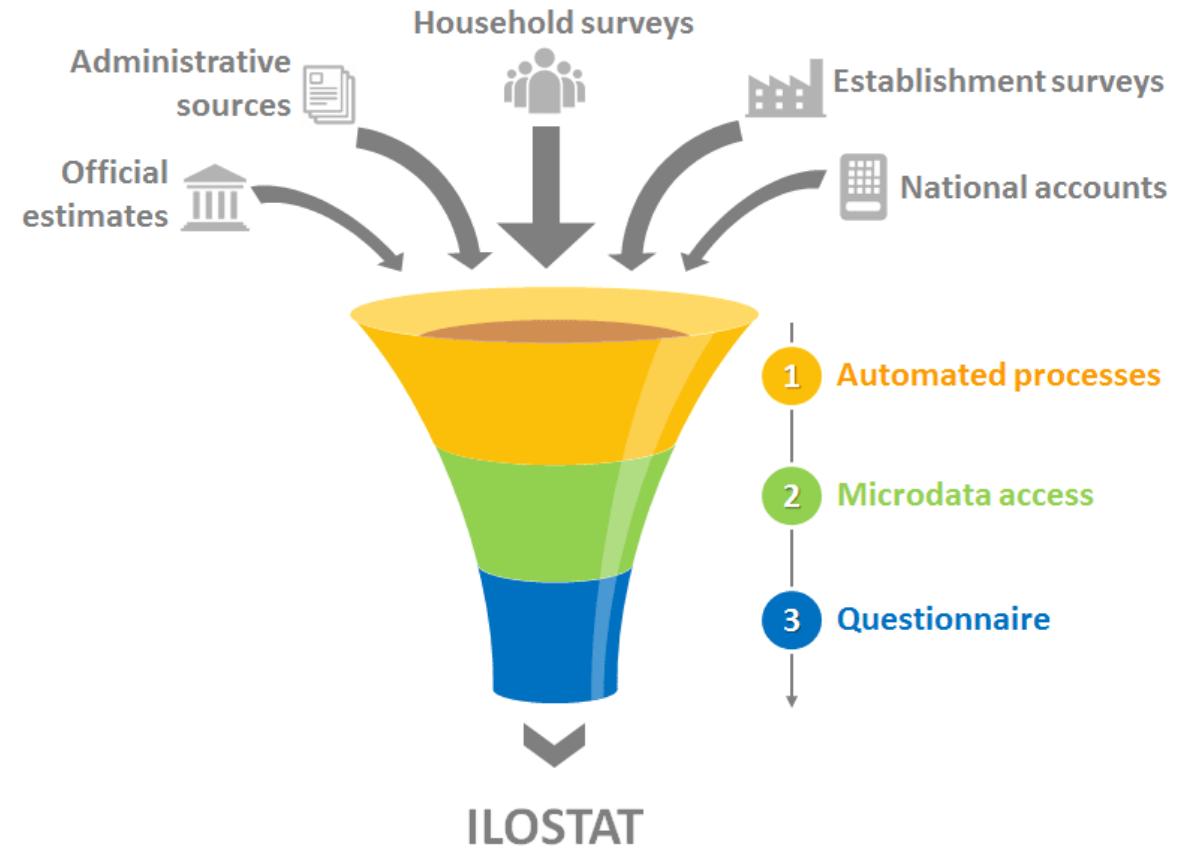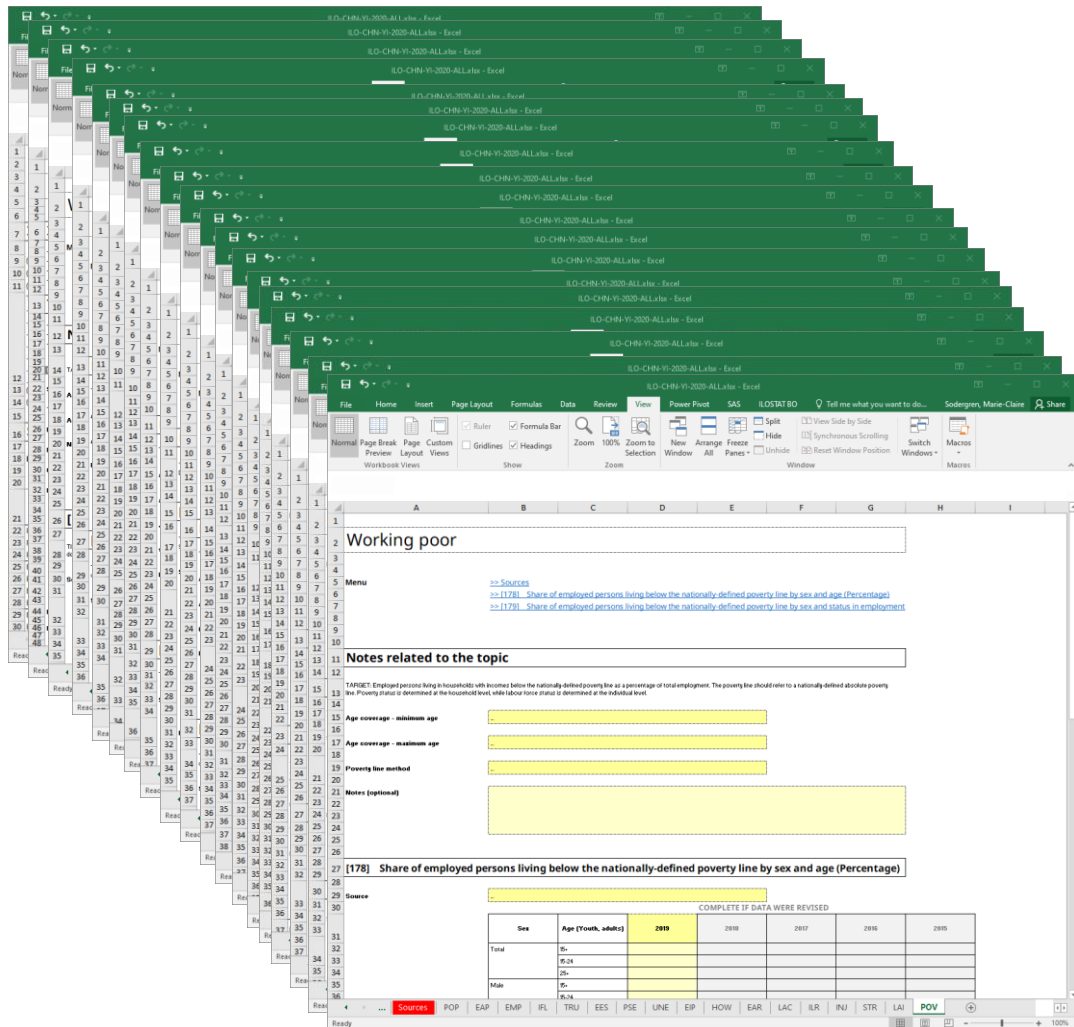
data and metadata →

UNSD

Regional agencies

▶ ilo.org

The role of ILO

As custodian, the ILO is responsible for:

▶ Compiling national statistics from data producers

▶ Verifying country data and metadata and ensuring international comparability

▶ Developing international standards and methods for Tier 3 indicators

▶ Estimating global and regional aggregates

▶ Analysing data and identifying data gaps and key trends

▶ Reporting data and metadata to the UN annually and contributing to SDG progress reports

▶ Strengthening national capacity for producing high-quality data on SDG labour indicators

The ILO Department of Statistics is the focal point for all inputs provided to the UN Statistics Division, with key contributions from other departments and field offices.

Data collection from national sources

Administrative sources

Household surveys

Establishment surveys

Official estimates

National accounts

1. Automated processes
2. Microdata access
3. Questionnaire

ILOSTAT

ILO microdata processing: More, better and faster data dissemination*

Benefits

▶ Exponentially more data

▶ Ensure international comparability

▶ Significantly reduced reporting burden

▶ Reduced reporting errors

▶ Highlights areas for technical assistance

*For household survey data

SDG indicator 8.3.1
Informal employment

8.3.1 Proportion of informal employment in total employment, by sex

Tier II / Custodian: ILO

Previously in non-agriculture only

Informal employment includes all workers in the informal sector and all workers holding informal jobs in the formal sector

> **Informal employment** =
>   own−account workers, employers and members of producers' cooperatives in the informal sector +
>   own-account workers producing for own final use +
>   all contributing family workers (formal and informal sectors) +
>   employees with informal jobs

Preferred source: Labour force survey

Informal sector versus informal jobs

Two components (and 2 statistical units):

▶ Employment in informal sector enterprises (Informal sector employment)

▶ Employment in informal jobs (Informal employment)

→ different aspects which should be kept separate as often require different policies

> **Informal economy** =
> Informal sector employment + Informal employment *outside* of the informal sector

Informal
employment

Informal
sector
employment

*Informal jobs outside
of the informal sector*

*Formal jobs in
informal sector enterprises*
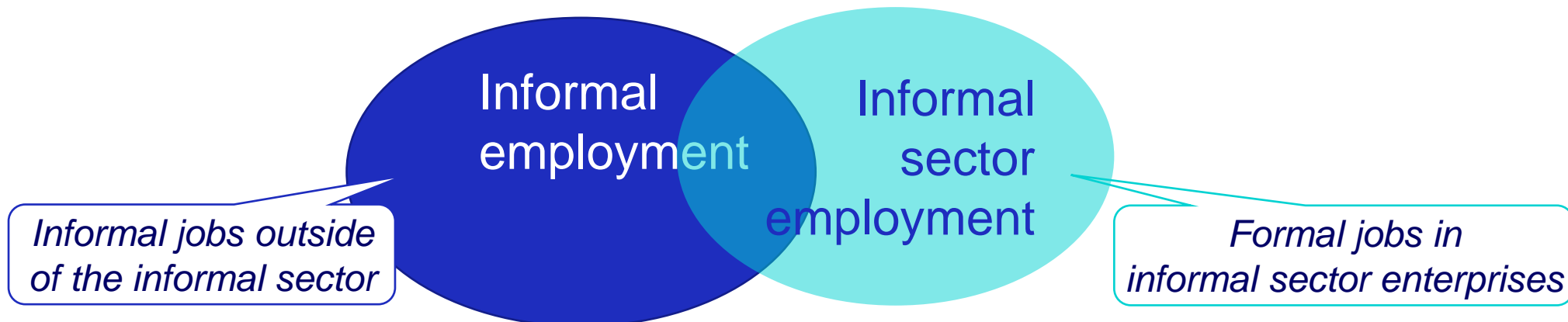
Conceptual framework for informality
(17th ICLS guidelines)

Production units by type	Jobs by status in employment								
	Own-account workers		Employers		Contributing family workers	Employees		Members of producers' cooperatives	
	Informal	Formal	Informal	Formal	Informal	Informal	Formal	Informal	Formal
Formal sector enterprises					1	2			
Informal sector enterprises[b]	3		4		5	6	7	8	
Households[c]	9					10			

Notes

(a) Cells shaded in dark grey refer to jobs, which by definition do not exist in the type of production unit in question. Cells shaded in light grey refer to formal jobs. Unshaded cells represent the various types of informal jobs.

(b) As defined by the 15th ICLS resolution (excluding households employing paid domestic workers).

(c) Households producing goods exclusively for their own final use and households employing paid domestic workers.

Informal employment: Cells 1to 6 and 8 to 10.

Employment in the informal sector: Cells 3 to 8.

Informal employment outside the informal sector: Cells 1, 2, 9 and 10.

Informal sector

Private unincorporated enterprises (SNA: household unincorporated enterprises)

Owned by individual household members, several members of the same household, or members of different households

Not constituted as separate legal entities independently of their owners, and no separate/ no complete sets of accounts available

Establishment size in terms of employment below a certain threshold (based on national practices Delhi Group: less than 5 employees, for international reporting)

AND/OR enterprise not registered.

The ILO approach to identifying the informal sector
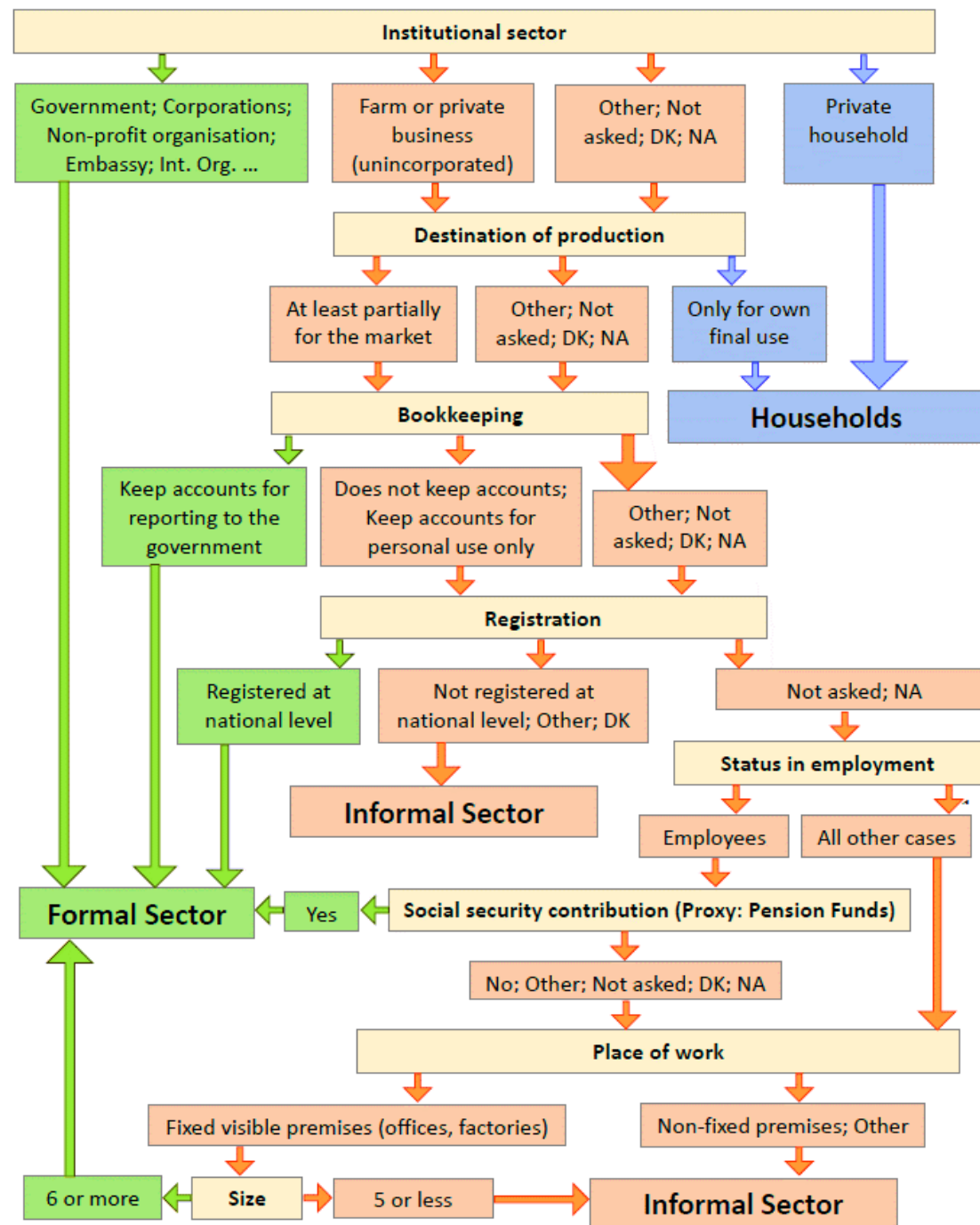
Quiz
Which criteria is most often used to define the informal sector?

Activity answer – Criteria used to define informal sector/informal employment for self-employed

Criteria	Africa	Americas	Arab States	Asia and the Pacific	Europe and Central Asia	Total countries per criterion
Registration	17	12	2	8	12	51
Institutional sector	9	11	3	9	10	42
Size of enterprise	8	13	2	8	8	39
Complete set of accounts	11	8	2	9	6	36
Unincorporated	6	10	2	6	8	32
Additional criteria	2	4	1	3	1	11
Total countries in the region	17	17	4	10	15	

Source: ILO questionnaire 2018

Informal jobs

Operational definition depends on status in employment and characteristics of the job (benefits)

Self-employed : Employers, own-account workers and members of producers' cooperatives

Formal/informal nature of job depends on characteristics of their enterprise

▶ informal jobs if their enterprises are part of the informal sector

Contributing family members

Employment usually not subject to labour legislation, no contractual relationship → all informal jobs

Employees

Have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severance pay, paid annual or sick leave, etc.)

Criteria most commonly used:

▶ Lack of contributions to social security system by employer

▶ No paid annual leave

▶ No paid sick leave

The ILO approach to identifying informal employment
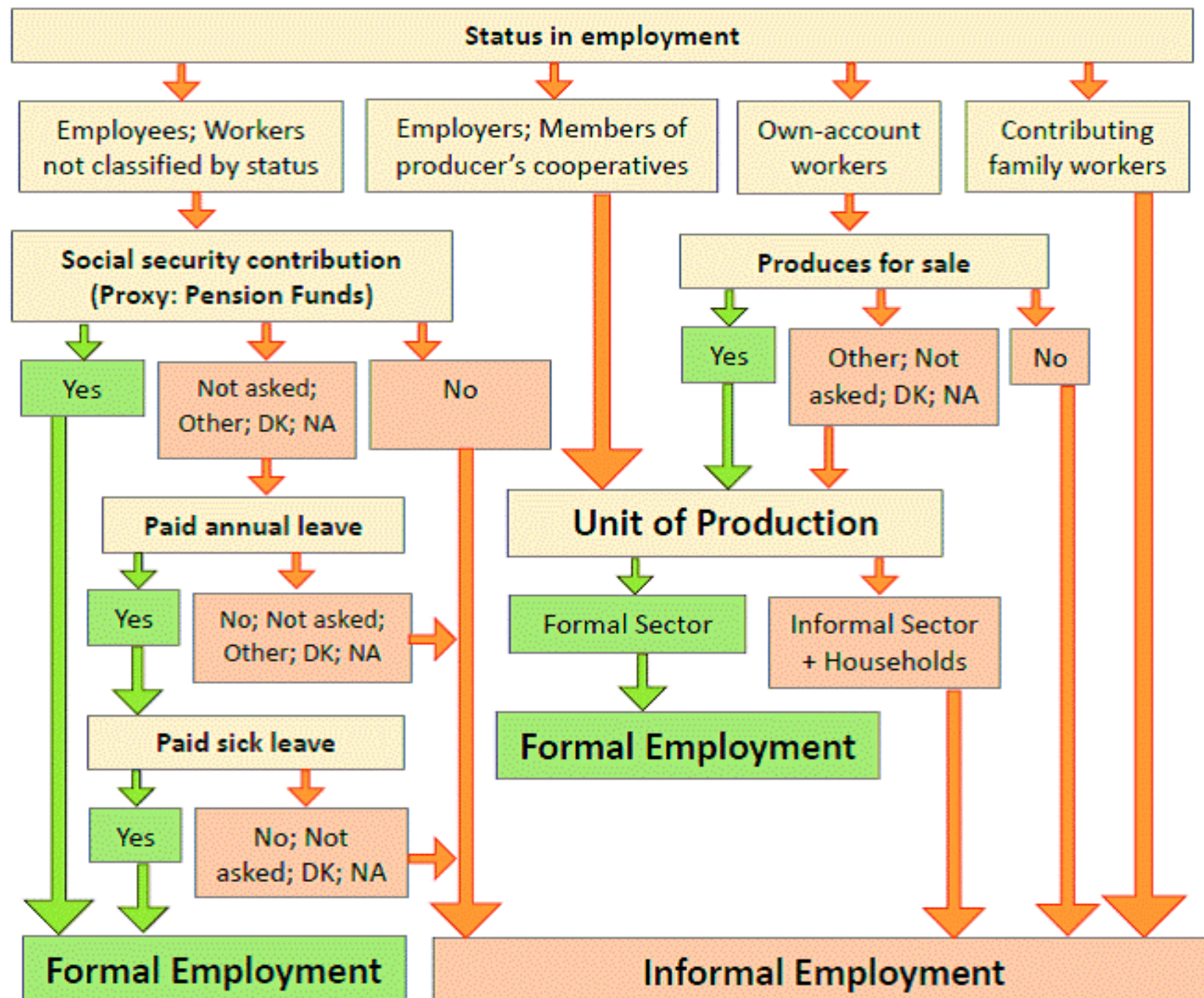
Quiz

Which criteria is most often used to define informal jobs held by employees?

Activity answer – Criteria used for the definition of informal employees

Criteria	Africa	Americas	Arab States	Asia and the Pacific	Europe and Central Asia	Total
Social insurance	13	13	2	8	10	46
Written contract	12	7	3	7	11	40
Paid annual leave	10	8	2	8	10	38
Paid sick leave	10	5	2	8	10	35
Additional criteria	7	5		3		15
Total number of countries	13	14	4	9	14	54
Source: ILO questionnaire 2018						

Interpretation, uses and limitations

Crucial to inform policy-makers seeking to improve labour market access and working conditions.

Link between informal employment and being poor:

▶ Stems from lack of labour legislation and social protection covering workers in informal employment, and persons in informal employment usually earn less than workers in formal employment.

Lack of international comparability:

▶ Statistical standards intentionally kept flexible → operational criteria vary significantly across countries.

New statistical standards to be adopted in 2023.

Share of informal employment, latest year
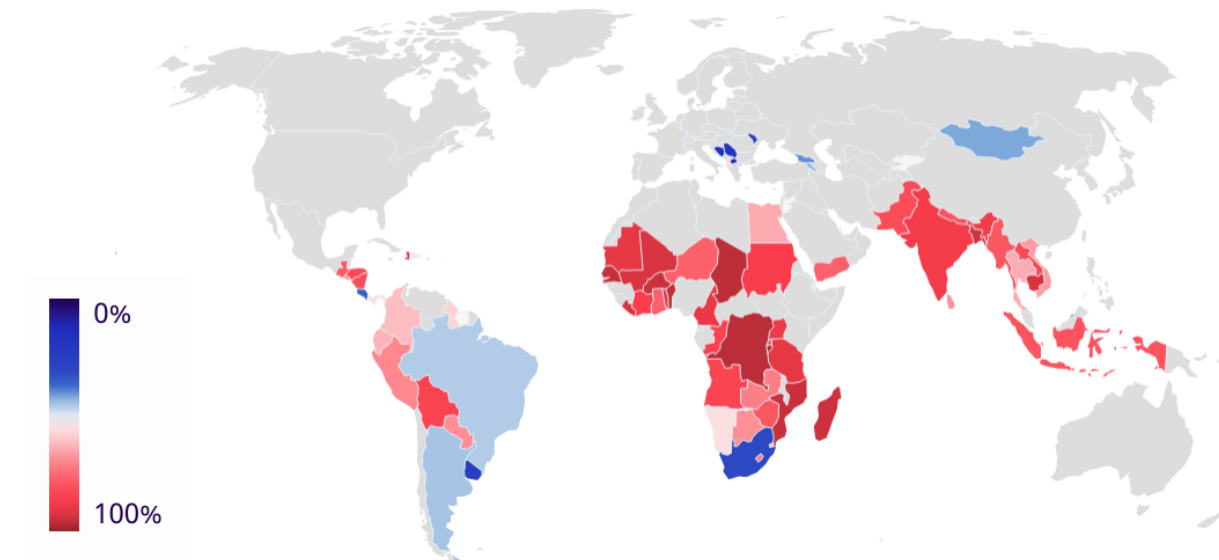
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Note: The boundaries shown on this map do not imply endorsement or acceptance by the ILO.
Source: ILOSTAT

▶ ilo.org

Questions?

International Labour Organization

SDG indicator 8.5.1
Hourly earnings

Rationale

Earnings are a key factor of quality of employment and living conditions

Indication of workers' purchasing power

▶ Hourly earnings → information on earnings' adequacy by removing the effect of working time

▶ Disaggregated data on hourly earnings → pay gap (notably, gender pay gap)

Male-dominated occupations have higher wage premiums for men

Male share of occupation (ILO modelled estimates for 2018) and median hourly wage premium for men (latest available)

● All skills   ● Skill levels 3 and 4 (high)   ● Skill level 2 (medium)   ● Skill level 1 (low)
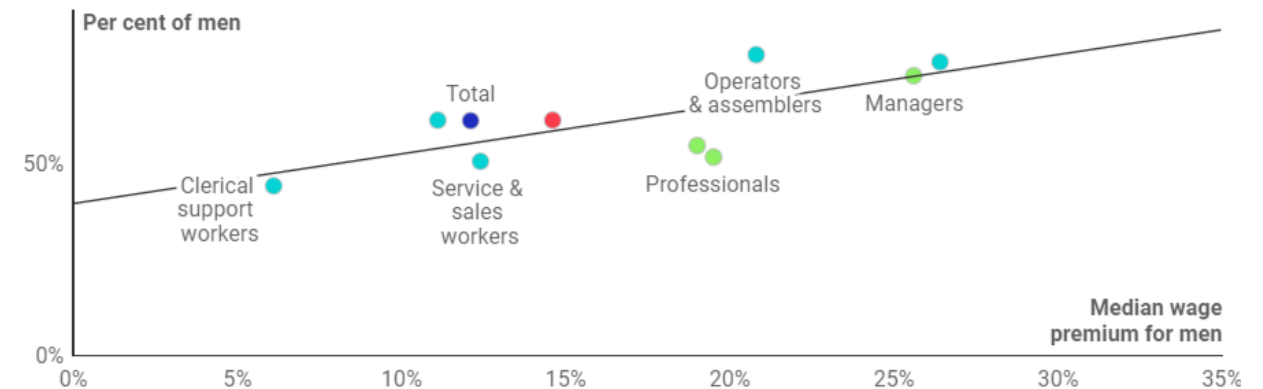
Source: ILOSTAT · Get the data · Created with Datawrapper

The building blocks of earnings-related concepts

Vocational training and other labour costs	**Allowances**	**Bonuses paid every pay period**	**Bonuses paid less frequently**
	Basic pay		**Irregular bonuses**
Social security benefits received from employer			**Pay in kind**
Social security benefits from Social Security schemes	**Employers' social security contributions**	**Profit-related pay**	**Pay for time not worked**

Wage rates

Vocational training and other labour costs	Allowances	Bonuses paid every pay period	Bonuses paid less frequently
Social security benefits received from employer	Basic pay		Irregular bonuses
			Pay in kind
Social security benefits from Social Security schemes	Employers' social security contributions	Profit-related pay	Pay for time not worked

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Direct wages and salaries

Vocational training and other labour costs

Allowances

Bonuses *paid every pay period*

Bonuses *paid less frequently*

Irregular bonuses

Basic pay

Social security benefits received from employer

Pay in kind

Social security benefits from Social Security schemes

Employers' social security contributions

Profit-related pay

Pay for time not worked

ilo.org

Earnings

Vocational training and other labour costs

Allowances

Bonuses paid every pay period

Bonuses paid less frequently

Basic pay

Irregular bonuses

Social security benefits received from employer

Pay in kind

Social security benefits from Social Security schemes

Employers' social security contributions

Profit-related pay

Pay for time not worked

Compensation

| Vocational training and other labour costs | Allowances | Bonuses paid every pay period | Bonuses paid less frequently |
| | | | |

Basic pay

Social security benefits received from employer

Irregular bonuses

Pay in kind

Social security benefits from Social Security schemes

Employers' social security contributions

Profit-related pay

Pay for time not worked

ilo.org

Labour cost

Vocational training and other labour costs

Allowances

Bonuses paid every pay period

Bonuses paid less frequently

Social security benefits received from employer

Basic pay

Irregular bonuses

Pay in kind

Social security benefits from Social Security schemes

Employers' social security contributions

Profit-related pay

Pay for time not worked

Income related to paid employment

Vocational training and other labour costs	Allowances	Bonuses paid every pay period	Bonuses paid less frequently

Basic pay

Irregular bonuses

*Workers' social security Contributions **Subtracted***

Pay in kind

Social security benefits from Social Security schemes	Employers' social security contributions	Profit-related pay	Pay for time not worked

Social security benefits received from employer

Quiz
True or False?

Definition and concepts

Earnings

Gross remuneration in cash and in kind paid to employees, as a rule at regular intervals, for time worked or work done together with remuneration for time not worked, such as annual vacation, other type of paid leave or holidays.

- Excluding employers' contributions in respect of their employees to social security and pension schemes and also the benefits received by employees under these schemes.

- Excluding severance and termination pay.

Gross (vs. net)

The total before any deductions are made by the employer in respect of taxes, contributions of employees to social security and pension schemes, life insurance premiums, union dues and other obligations of employees.

Hourly

Per hour.

Average (a.k.a. mean)

Arithmetic average of the hourly earnings of all employees.

Nominal (vs. real or constant)

Current, unadjusted for inflation.

Employees (vs. self-employment)

Persons employed holding paid employment jobs (jobs with a basic remuneration not directly dependent on the revenue of the economic unit).

Currency / unit

Expressed in local currency.

Calculations

Average hourly earnings

$$= \frac{\sum_{i=1}^{N} earnings_i}{\sum_{i=1}^{N} hours_i} = \frac{\sum (\text{hourly earnings of each employee x hours worked by each employee})}{\text{Total number of hours worked by all employees}}$$

$\neq$ average of hourly earnings of each employee

Gender (unadjusted) pay gap

$$= \frac{\text{Average hourly earnings}_{\text{Men}} - \text{Average hourly earnings}_{\text{Women}}}{\text{Average hourly earnings}_{\text{Men}}} \text{ x } 100$$

Employee	Gender	Monthly earnings	Hours worked
John Smith	M	1250	150
Bob Kat	M	1400	200
Peter Wilson	M	1350	150
Mary Johnson	F	850	140
Lisa Simpson	F	950	160

Quiz

Based on the following data,
what is the gender wage gap?

Activity answer

Employee	Gender	Monthly earnings	Hours worked
John Smith	M	1250	150
Bob Kat	M	1400	200
Peter Wilson	M	1350	150
TOTAL		**4000**	**500**
Mary Johnson	F	850	140
Lisa Simpson	F	950	160
TOTAL		**1800**	**300**

$Average\ hourly\ earnings_{Men}\ or\ AHE_{Men}$

$$= \frac{\sum earnings_{Men}}{\sum hours\ worked_{Men}} = \frac{4000}{500} = 8$$

$Average\ hourly\ earnings_{Women}\ or\ AHE_{Women}$

$$= \frac{\sum earnings_{Women}}{\sum hours\ worked_{Women}} = \frac{1800}{300} = 6$$

$Gender\ (unadjusted)\ pay\ gap$

$$= \frac{AHE_{Men} - AHE_{Women}}{AHE_{Men}} \times 100 = \frac{8-6}{8} \times 100 = 25\%$$

▶ ilo.org

Desired disaggregations

Gender

Age

At least identify youth/adults

Occupation

Using the latest International Standard Classification of Occupations (ISCO-08) at 1-digit

Disability status

Based on the WHO's International Classification of Functioning, Disability and Health (ICF)

Disability covers impairments, activity limitations and participation restrictions

For measurement purposes, the ICF defines a person with disability as a person who is limited in the kind or amount of activities that he or she can do because of ongoing difficulties due to a long-term physical condition, mental condition or health problem

To the extent possible, simultaneously

Main data sources

Establishment surveys

Preferred source given the high accuracy of data (provided directly by employer)

But often limited coverage (e.g., excluding informality, excluding smaller establishments)

Labour force surveys

Cover all employees regardless of their sector, the establishment they work in, etc.

Methodologies vary from country to country

Data quality dependent on respondents' accuracy

- ▶ Over/under-declare
- ▶ Report gross or net, incl./excl. Bonuses and benefits

Variety of possible sources represents a challenge

Poll
What is the main source for
hourly earnings in your country?

International
Labour
Organization

Hourly earnings data in ILOSTAT by source type, latest year available for 104 countries

Other household survey 16%

Establishment survey or census 38%

Labour force survey 46%
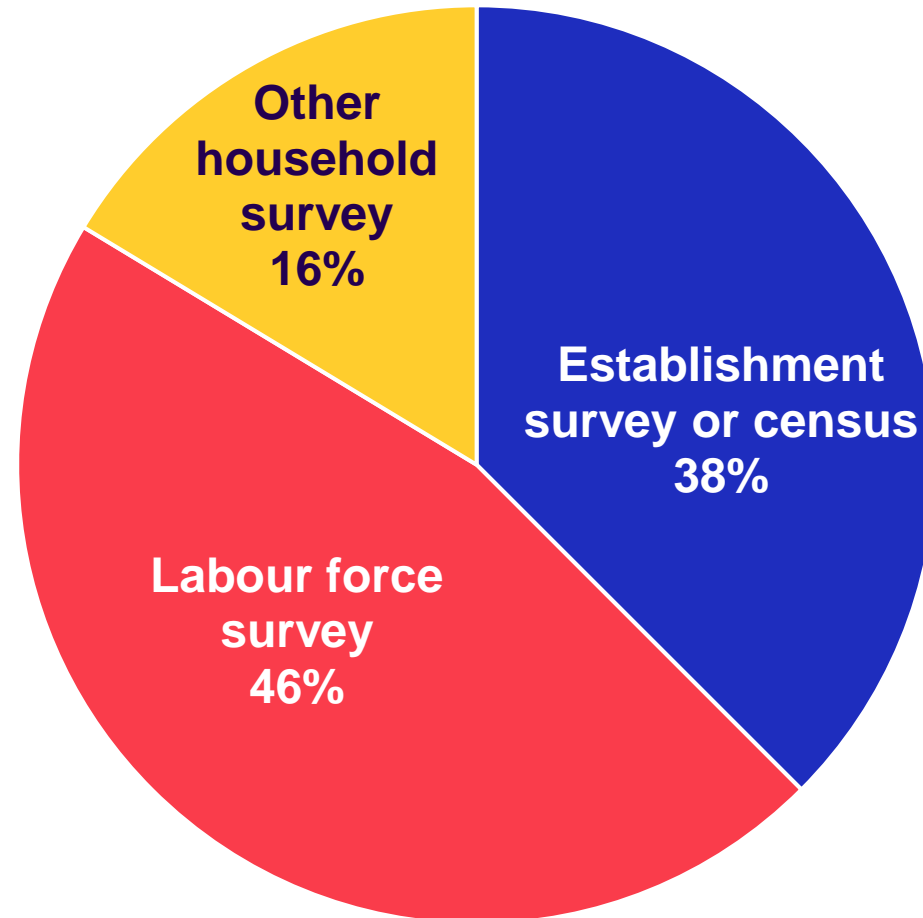
Limitations

Comparability issues due to variety of data sources

Sources have differences in methods used, operational criteria used, definitions, reference periods, coverage, etc.

Hourly earnings may refer to hourly pay rate or a calculation of hourly earnings based on monthly earnings and working time, hindering comparability

Other limitations

Household survey data: quality depends on respondents' accuracy

The use of «average» earnings may mask very different realities

Questions?

SDG indicator 8.6.1
Youth NEET rate

Definition and concepts
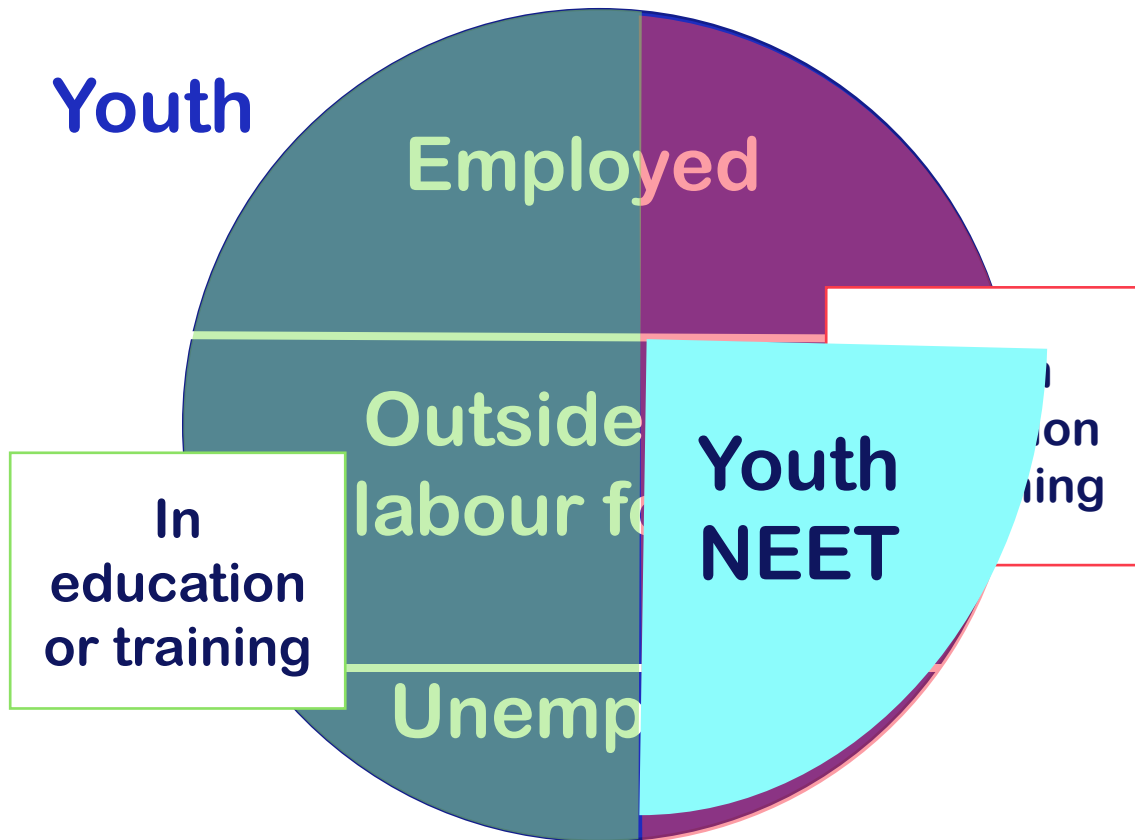
Youth

Youth

Ages 15-24 inclusive

NEET

Not in employment, education or training

Employment

Work for pay or profit for use by others

Education

Organized and sustained communication designed to bring about learning

Includes formal and non-formal education but excludes informal education

Training

Non-academic learning activity to acquire specific skills intended for vocational or technical jobs

International Labour Organization

Employed

Outside labour force

Youth NEET

In education or training

Unemp

ion ning

▶ ilo.org

Calculations

Youth NEET rate $=$

$$\frac{Youth - Youth\ in\ employment - Youth\ not\ in\ employment\ but\ in\ education\ or\ training}{Youth\ population} \times 100\ or$$

$$\frac{(Unemp\ youth + Youth\ outside\ the\ labour\ force) - (Unemp\ youth\ in\ Ed\ or\ Tr + Youth\ outside\ the\ labour\ force\ in\ Ed\ or\ Tr)}{Youth\ population} \times 100$$

	Number of youth	Unemployed youth	Employed youth
In education or training	1200	20	100
Not in education or training	800	80	400

Quiz

Based on the following data, what is the youth NEET rate?

Activity answers

	Number of youth (Pop)	Unemployed youth (Unemp)	Employed youth (Emp)	Youth in labour force (LF) = Unemp + Emp	Youth outside the labour force (OLF) = Pop – LF
In education or training (in edu)	1200	20	100	120	1080
Not in education or training (not in edu)	800	80	400	480	320
Total	**2000**	**100**	**500**	**600**	**1400**

= 400 / 2000 * 100 = 20%

= (Unemp not in edu + OLF not in edu) / Pop * 100 = (80+320) / 2000 * 100

= [Pop – Emp – (Unemp in edu + OLF in edu)] / Pop x 100 = [2000 – 500 – (20+1080)] / 2000 * 100

= [Unemp + OLF – (Unemp in edu + OLF in edu)] / Pop x 100 = [100 + 1400 – (20+1080)] / 2000 * 100

Desired disaggregations

No disaggregations specifically required

Overarching principle of data disaggregation of the SDG Global Indicator Framework:

▶ SDG indicators should be disaggregated, where relevant, by income, sex, age, race, ethnicity, migratory status, disability and geographical location.

Strongly advisable to have data at least by sex

Data sources

Information needed on:

▶ Age

▶ Labour market situation (employed or not)

▶ Education and training participation / enrolment

Labour force surveys preferred source

Data available in ILOSTAT for over 140 countries

Interpretation, uses and limitations

Measure of youth labour underutilization

- Broader than youth unemployment
- Broader than youth inactivity
- Captures also the fact of not developing skills and qualifications (i.e., not in education or training)

High NEET rate may suggest engagement in household chores, care activities and/or strong institutional barriers to access employment

Informs policy-makers on the youth not gaining professional experience in employment and not furthering their skills in education, thus at risk of labour market and social exclusion

Youth refers to ages 15-24 but it may be relevant to study share of persons NEET in other age groups

NEET composed of 2 subgroups (unemployed and outside the labour force) → important for interpretation

- Youth NEET rate gives no information on its composition – prevalence of each subgroup (unemployed and outside the labour force)

Comparability issues

Differences in operational criteria used, sources, definitions, etc.

Poll
What is the youth NEET rate in your country?

International Labour Organization

Share of youth aged 15-24 not in employment, education or training (NEET), modelled estimates for 2019
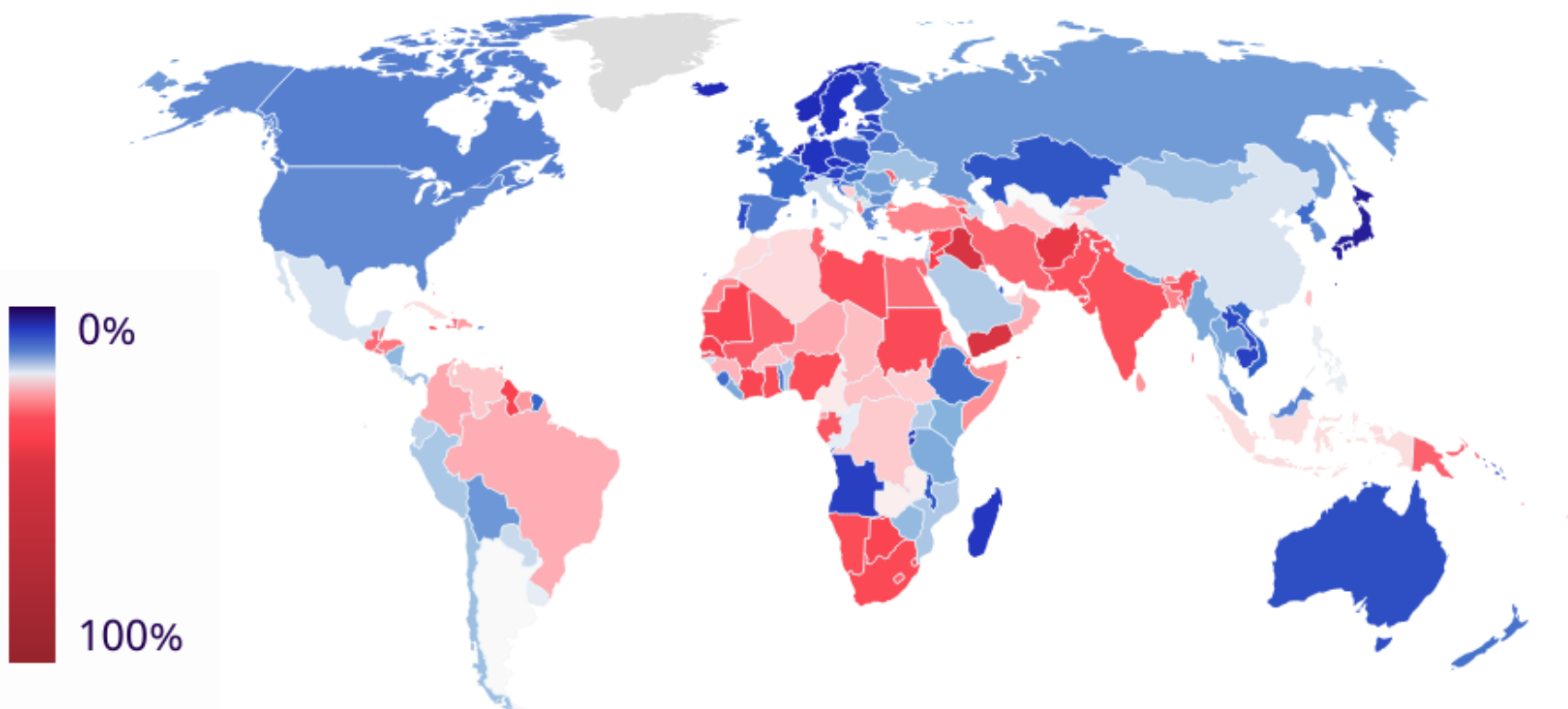
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Note: The boundaries shown on this map do not imply endorsement or acceptance by the ILO.
Source: ILO modelled estimates, Nov. 2020, ILOSTAT

▶ ilo.org

International Labour Organization

Questions?

Poll
Do you have data on occupational injuries in your country?

Definition and concepts

Occupational injury

Any personal injury, disease or death resulting from an occupational accident

▶ An occupational injury is therefore distinct from an occupational disease, which is a disease contracted as a result of exposure over a period of time to risk factors arising from work activity

Occupational accident

An unexpected and unplanned occurrence, including acts of violence, arising out of or in connection with work which results in one or more workers incurring a personal injury, disease or death

Calculations

Although the indicator title of SDG global framework indicator 8.8.1 calls for the compilation of frequency rates, national practices point towards a more widespread use of incidence rates.

(Non−)Fatal occupational injuries frequency rate

$$= \frac{\text{Number of new cases of (non−)fatal occupational injuries during the reference period}}{\text{Total number of hours worked by workers in the reference group during the reference period}} \times 1'000'000$$

(Non−)Fatal occupational injuries incidence rate

$$= \frac{\text{Number of new cases of (non−)fatal occupational injuries during the reference period}}{\text{Number of workers in the reference group}} \times 100'000$$

Quiz
Which one of these is the formula for the incidence rate of non-fatal occupational injuries?

Data sources

Preferred source is the one the most comprehensive coverage and most robust time series

Possible sources include various types of administrative records:

▶ Insurance records
▶ Labour inspectorate records
▶ Household surveys
▶ Establishment surveys

Recommended data sources are records from the corresponding national system of notification (i.e., labour inspectorate records) or compensation (i.e., insurance records) of occupational injuries

▶ In many countries, employers are required by law to notify all occupational accidents occurring in their workplace

▶ Compensation records refer to claims made by workers for benefits or compensation, after incurring an occupational injury, to the competent authority (social insurance, labour ministry, etc.).

Agencies notified about fatal occupational injuries tend to be different from the agencies notified about non-fatal occupational injuries

▶ Data on fatal and non-fatal occupational injuries likely to be derived from different sources

▶ Sources may have different coverage, so although complementary, they may not be strictly comparable

Desired disaggregations

Sex

Migrant status

And if possible:

- ▶ Economic activity
- ▶ Occupation
- ▶ Region

Interpretation, uses and limitations

Data on occupational injuries are essential for planning preventive measures because they signal areas of particular concern

Analysing trends in occupational injury rates provides information on the progress or deterioration in occupational safety and health, revealing the effectiveness of prevention measures and the eventual need for further regulation

There may be problems of underreporting

Indicators on occupational injuries can be volatile since unexpected but significant accidents or national calamities can bring about strong annual fluctuations

Variety of possible data sources (and their coverage) hinders international comparisons

References

ILO Guidebook on SDG Labour Market Indicators
(https://www.ilo.org/stat/Publications/WCMS_647109/lang--en/index.htm)

ILOSTAT database
(www.ilostat.ilo.org)

Sustainable Development Goals and Targets
(http://www.un.org/sustainabledevelopment/sustainable-development-goals/)

Manual on Decent Work Indicators
(http://www.ilo.org/stat/Publications/WCMS_223121/lang--en/index.htm)

SDG Indicators Global Database
(http://unstats.un.org/sdgs/indicators/database/)

SDG Indicators – Metadata Repository
(http://unstats.un.org/sdgs/metadata/)

Tier Classification for Global SDG indicators
(https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification)

Questions?

Thank you

International Labour Organization