4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

Definition:

Percentage of youth and adults in a given age range (e.g. 15-24 years, 25-64 years, etc.) participating in formal or non-formal education or training in a given time period (e.g. last 12 months).

Formal education and training is defined as education provided by the system of schools, colleges, universities and other formal educational institutions that normally constitutes a continuous 'ladder' of full-time education for children and young people, generally beginning at the age of 5 to 7 and continuing to up to 20 or 25 years old. In some countries, the upper parts of this 'ladder' are organized programmes of joint part-time employment and part-time participation in the regular school and university system.

Non-formal education and training is defined as any organized and sustained learning activities that do not correspond exactly to the above definition of formal education. Non-formal education may therefore take place both within and outside educational institutions and cater to people of all ages. Depending on national contexts, it may cover educational programmes to impart adult literacy, life-skills, work-skills, and general culture.

Purpose:

To show the level of participation of youth and adults in education and training of all types.

Calculation method:

The number of people in selected age groups participating in formal or non-formal education or training is expressed as a percentage of the population of the same age.

$$PR_{AGi} = \frac{E_{AGi}}{P_{AGi}}$$

where:

PR_{AGi} = participation rate of the population in age group **i** in formal and non-formal education and training

E_{AGi} = enrolment of the population in age group **i** in formal and non-formal education and training

P_{AGi} = population in age group **i**

i = 15-24 years, 15 years and above, 25-64 years etc.

Interpretation:

A high value indicates that a large share of the population in the relevant age group has access to and takes part in formal and non-formal education and training.

Type of data source:

Administrative data, household surveys.

Disaggregation:

By age and sex from administrative sources; and by age, sex, location and income from household surveys and others as available.

Data required:

Numbers of participants by single year of age in formal and non-formal education and training; population estimates by single year of age.

Data sources:

Administrative data from schools and other places of education and training or household survey data on participants in formal and non-formal education and training by single year of age; population censuses and surveys for population estimates by single year of age (if using administrative data on enrolment).

Limitations and comments:

Formal and non-formal education and training can be offered in a variety of settings including schools and universities, workplace environments and others and can have a variety of durations. Administrative data often capture only provision in formal settings such as schools and universities. Participation rates do not capture the intensity or quality of the provision nor the outcomes of the education and training on offer.

4.3.2 Gross enrolment ratio for tertiary education, by sex

Definition:

Total enrolment in tertiary education regardless of age expressed as a percentage of the population in the 5-year age group immediately following upper secondary education.

Purpose:

To show the general level of participation in a given level of education. It indicates the capacity of the education system to enrol students of a particular age group.

Calculation method:

The number of students enrolled in tertiary education is expressed as a percentage of the 5-year age group immediately following upper secondary education.

$$GER_{5t8} = \frac{E_{5t8}}{SAP_{5t8,a}}$$

where:

GER_{5t8} = gross enrolment ratio in tertiary education (ISCED levels 5, 6, 7 and 8)

E_{5t8} = enrolment in tertiary education (ISCED levels 5, 6, 7 and 8)

$SAP_{5t8,a}$ = population of the official age **a** for tertiary education (ISCED levels 5, 6, 7 and 8)

Note: The population of the official age for tertiary education is estimated to be the 5-year age group immediately following upper secondary education. If the official entrance age to upper secondary is 15 years and the duration is 3 years, then **a** is the age group 18-22 years.

Interpretation:

A high value of the indicator shows a high degree of participation in tertiary education by students of all ages.

Type of data source:

Administrative data, household surveys.

Disaggregation:

By sex from administrative sources; and by sex, location and income from household surveys and others as available.

Data required:

Enrolment in tertiary education; population estimates by single year of age (if using administrative data) and data on the structure (entrance age and duration) of upper secondary education.

Data sources:

Administrative data from schools and universities or household survey data on enrolment; population censuses and surveys for population estimates by single year of age (if using administrative data on enrolment); administrative data from ministries of education on the structure of upper secondary education.

Limitations and comments:

The gross enrolment ratio is a broad measure of participation in tertiary education and does not take account of differences in duration of programmes between countries or between different levels of education and fields of study. It is standardised to some extent by measuring it relative to a 5-year age group for all countries but may underestimate participation especially in countries with poorly developed tertiary education systems or those where provision is limited to first tertiary programmes (which are generally shorter than 5 years in duration).

4.3.3 Participation rate in technical and vocational programmes (15- to 24-year-olds), by sex

Definition:

Percentage of young people aged 15-24 years participating in technical or vocational education either in formal education, work-based or other settings, on a given date or during a specified period.

Purpose:

To show the level of participation of youth in technical and vocational education and training.

Calculation method:

The number of young people aged 15-24 years participating in technical and vocational education at secondary, post-secondary or tertiary levels of education is expressed as a percentage of the population of the same age group.

$$PR_{V,15t24} = \frac{E_{V,15t24}}{P_{15t24}}$$

where:

$PR_{V,15t24}$ = participation rate of young people aged 15-24 years in technical and vocational education and training

$E_{V,15t24}$ = enrolment in technical and vocational education and training of young people aged 15-24 years

P_{15t24} = population aged 15-24 years

Interpretation:

A high value indicates a large share of the 15 to 24-year-old population are participating in education and training designed specifically to lead to a job.

Type of data source:

Administrative data, household surveys.

Disaggregation:

By age and sex from administrative sources; by age, sex, location and income from household surveys and others as available.

Data required:

Numbers of participants aged 15-24 years in technical and vocational education and training; population estimates for the age group 15-24 years.

Data sources:

Administrative data from schools and other places of education and training or household survey data on enrolment in technical and vocational programmes by single year of age; population censuses and surveys for population estimates for the age group 15-24 years (if using administrative data on enrolment).

Limitations and comments:

Technical and vocational education and training can be offered in a variety of settings including schools and universities, workplace environments and others. Administrative data often capture only provision in formal settings such as schools and universities. Participation rates do not capture the intensity or quality of the provision nor the outcomes of the education and training on offer.