

# Technical note to accompany the AGEE Spotlight Briefs

December 2024

This technical note is to be used in relation to the AGEE Spotlight Briefs. Section 1 explains the nature of each of the constituent indicators, including sources and any rescaling for the dashboard radar graphs. Section 2 explains how to read the AGEE radar graphs, by domain and across the whole dashboard.

### Contents

Tech	nical note to accompany the AGEE Spotlight Briefs	1
1. Tł	ne AGEE Cross-national Dashboard: indicators	3
a)	Resources	3
	i) Gender finance tracking, 'GenFin'	3
	ii) Single sex sanitation primary/lower secondary, PrimSan / LowSecSan	3
	iii) Gender balance of teachers, WomTeachPrim / WomTeachSec / WomTeachTert	4
b)	Values	5
	i) Presence of legal frameworks on gender equality, leggen1	5
	ii) Human rights institutions, hrpp1	5
	iii) Convention on the Elimination of Discrimination Against Women (CEDAW), cedaw1	5
	iv) Convention Against Discrimination in Education (CADE), cade1	6
	v) International Bill of Rights, ibr1	6
	vi) Laws on marriage under 18, marr181	6
	vii) Laws on sexual orientation, sexor1	6
	viii) Views on women's access to higher education, wvsq30	7
	ix) Laws on provision of reproductive health care, information and education, shrc1	7
	x) Sex ratio at birth, csr1	8
	xi) Non-condonement of domestic violence, domvcon1	8
c)	Opportunities	9
	i) Legal guarantee 9 years of schooling, NineYrsEd1	9
	ii) Legislation to protect pregnant girls' education, EdPreg1	9
	iii) Endorsement of Safe School Declaration, SSD1	9
	iv) Prevalence of marriage under 18, Marr18Prev1 1	0
	v) Prevalence of partner violence, VAWPrev1 1	0
	vi) GPI Child labour, ChildLab1 1	0
	vii) GPI Internet use, IntUse1 1	1
	viii) GPI Stunting, StntGPI1 1	1
	ix) Mean years of schooling (female), MeanSch1 1	1



x) GPI Mean years of schooling, MeanSchGPI1	. 12
d) Participation	. 13
i) GPI Gross Enrolment Ratio (Pre-primary), GPI GER PreP1	. 13
ii) GPI Gross Enrolment Ratio (Tertiary), GPI GER Ter1	. 13
iii) GPI Participation in Technical and Vocational Education and Training (15-24), GPITVE	T1
iv) GPI Completion (primary), GPI Com Prim1	
v) GPI Completion (lower secondary), GPI Com LSec1	. 14
vi) GPI Completion (upper secondary), GPI Com USec1	. 15
vii) GPI Tertiary graduation, GPI Grad Ter1	. 15
viii) Expected years of schooling (female), ExpSch1	. 15
ix) GPI Repetition (lower secondary), Rep1	. 16
x) GPI Experience of bullying, BullSch1	. 16
e) Knowledge	. 17
i) GPI Literacy (15+), GPI Lit1	. 17
ii) GPI Harmonised test scores, HTS1	. 17
iii) GPI Participation of youth and adults in formal education and training, WomTr1	. 17
iv) Female share of students graduating from STEM courses, STEM1	. 18
f) Outcomes	. 19
i) GPI Employed in poverty, MedInc1	. 19
ii) GPI Proportion of time spent on unpaid work, UnpaidWk1	. 19
iii) GPI Labour force participation rate, LFPR1	. 20
iv) Proportion of parliamentary seats held by women, WmInst1	. 20
v) Proportion of women making informed decisions relating to sexual and reproductive health, InfDec1	. 20
2. The AGEE dashboard: how to read the visualisations	. 22
Creating the AGEE dashboard	. 22
Introducing AGEE radar graphs	. 22
How to read AGEE radar graphs	
a) Radar diagrams by domain	. 22
b) Radar diagrams across all domains / the AGEE dashboard	. 24



# 1. The AGEE Cross-national Dashboard: indicators

This section describes the indicators in each of the six domains of the AGEE dashboard.

General notes:

- In most instances, the data available by country spans a range of dates. The most recent data point has been used, for each country.
- In the current version, the data has been manually collated from cross-national datasets and databanks. More recent data will be available as online databases are updated, but for the time being any updates to the AGEE dashboard are made manually.
- In the 'radar graph' representations of the AGEE framework (see next section), the values for each indicator range from 0-100. Some indicators have had to be rescaled, and the details of this can be found in the text below.
- In some cases where there is missing data, it has been possible to impute values from comparable studies. This has been done by identifying appropriate data and then manually adding the values to the database. Imputed data sources vary by country and indicator; details will be given in country-specific notes.

# a) Resources

### i) Gender finance tracking, 'GenFin'

This is the degree to which a country's overall expenditure has gender tracking (not the amount of resource allocated to gender). SDG indicator 5.c.1, 'Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment'. We have used the raw data to adapt this to country level.

The current GenFin indicator has been included in order to have some measure which reflected country commitment to financial resourcing and gender; this reflects the degree of supportive governance structures for gender.

In future, there would ideally be an indicator for funding allocated to education with gender component. This is not available yet (but may be in future).

Any scaling decisions: Countries are classified as 'fully meets requirements' (2), 'approaches requirements' (1), and 'does not meet requirements' (0). We have rescaled this from 0-100, with fully meeting requirements at 100.

Missing data: Just over 100 countries are covered in the dataset currently, and it is not possible to impute data from other sources. It has not been included in some spotlight briefs where data is missing.

### ii) Single sex sanitation primary/lower secondary, PrimSan / LowSecSan

PrimSan: Percentage of primary schools with single-sex basic sanitation facilities

Version: December 2024



LowSecSan: Percentage of lower secondary schools with single-sex basic sanitation facilities

Although this is a basic measure, it is included in order to give a sense of school level resources that are allocated to gender. Single-sex toilets can be significant in increasing girls' school attendance in some contexts.

This information is available from SDG indicator 4.a.1, and is collated by UIS.

Scaling decisions: This has not been rescaled as it is already a percentage.

Missing data: the coverage of this indicator is fairly good but there is quite a lot of missing data. Some countries collect this information, but in a different format and therefore cannot currently be included. For example, Kenya collects the ratio of girls to toilets / boys to toilets, rather than the more basic single sex provision.

## iii) Gender balance of teachers, WomTeachPrim / WomTeachSec / WomTeachTert

WomTeachPrim	Percentage of teachers in primary education who are female (%)
WomTeachSec	Percentage of teachers in secondary education who are female (%)
WomTeachTert	Percentage of teachers in tertiary education who are female (%)

Although this is a basic measure relating to educational resources, this indicator has been included to give a sense of gender balance relating to teaching resources. In some contexts, the presence of female teachers may encourage girls to attend school; however when a high proportion of teachers are female, it can indicate a lower status of the profession.

This is not an SDG indicator, but comes from UIS.

Scaling decisions: this indicator has been scaled so that the highest score is where the gender balance is 50:50. I.e. country will score lower if either it has a high proportion of female teachers, or a high proportion of male teachers.

Missing data: there is good coverage of these datasets.



# b) Values

### i) Presence of legal frameworks on gender equality, leggen1

This measures the presence of legal frameworks to promote and monitor equality and nondiscrimination on the basis of sex. The indicator is based on an assessment of legal frameworks that promote, enforce and monitor gender equality. The assessment is carried out by national counterparts, using a questionnaire comprising 42 yes/no questions.

It is included to reflect the value placed on gender equality at national level. The information comes from SDG indicator 5.1.1, and is collated by UN Women.

Scaling decisions: This is measured as a percentage and does not need rescaling.

Missing data: There is quite a lot of missing data for this variable. It is not possible to impute data where values are missing, due to the detailed nature of the questionnaire that the dataset is based on.

### ii) Human rights institutions, hrpp1

This measures the presence of national human rights institutions complying with Paris Principles. The indicator describes different levels of accreditation classification (A, B, C or D).

It is included to reflect the value placed on human rights at national level. The data comes from SDG indicator 16.a.1, and is collated by OHCHR.

Scaling decisions: The level of accreditation has been scaled to between 0 and 100 (where A, full accreditation, is 100 and D is 25).

Missing data: There is good coverage for this indicator.

# iii) Convention on the Elimination of Discrimination Against Women (CEDAW), cedaw1

This variable shows whether a country has ratified the CEDAW (Convention on the Elimination of all forms of Discrimination Against Women) with or without reservations.

It is included to show the value placed on gender equality at the national level. The data comes from the UNESCO HER Atlas.

Scaling decisions: This value is measured using a 5-point scale (0, 25, 50, 75, 100), where 0 is least protected and 100 is most protected.

Missing data: There is good coverage for this dataset.



## iv) Convention Against Discrimination in Education (CADE), cade1

Ratification of CADE.

This shows whether a country has ratified CADE (the Convention Against Discrimination in Education), and has been included to reflect the value placed on equality in education at national level.

The source for this data is the UNESCO HER Atlas.

Scaling decisions: This value is measured using a 5-point scale (0, 25, 50, 75, 100), where 0 is least protected and 100 is most protected

Missing data: There is good coverage for this dataset.

### v) International Bill of Rights, ibr1

This indicator shows the ratification of International Bill of Rights, by country, and is included to reflect the value placed on human rights at the national level. Together, the UDHR, CESCR and ICCPR are informally known as 'International Bill of Human Rights'.

The data comes from the OHCHR ratification dashboard.

Scaling decisions: The information from the ratification dashboard has been converted into 1 (ratified) or 0 (not ratified), and then scaled from 0-100, where 100 is ratified.

Missing data: There is good coverage for this dataset.

### vi) Laws on marriage under 18, marr181

This indicator shows whether marriage under 18 is illegal in a country. It is included to have a measure of the value placed by institutions on equality and protecting the rights of adolescent girls at national level.

This data comes from the UNESCO HER Atlas.

Scaling decisions: In the original dataset, countries are scored from 1 to 5 (1 = least protected, 5 = most protected). We have then scored both 3 and 5 as 100 (both cover contexts where the minimum legal age of marriage is 18, in some cases with exceptions).

Missing data: There is good coverage for this dataset. If needed, it would be possible to impute values where they are missing.

#### vii) Laws on sexual orientation, sexor1



This captures whether there are laws criminalising or protecting sexual orientation. The information is included to reflect the value placed on equal rights and recognition of LGBTQ at national level. The data is collated by ILGA.

Scaling decisions: This value is measured on a 3-point scale (0, 50, 100) on whether different sexual orientations are protected, where 0 is least protected and 100 is most protected.

Missing data: There is good coverage for this dataset. If needed, it would be possible to impute values where they are missing.

#### viii) Views on women's access to higher education, wvsq30

This is a measure of men's and women's views on women's right to higher education, a question in the World Values Survey. It is included to reflect individual-level values around gender and higher education.

Men's and women's views on women's right to higher education, a question in the World Values Survey. The measure is based on level of agreement with the statement, 'University is more important for a boy than a girl'.

Scaling decisions: We have grouped together 'strongly agree' and 'agree'; and the same for 'disagree' and 'strongly disagree', and used this to calculate a proportion of those who disagree with the statement. The values were then rescaled to give a score out of 100, with a higher value indicating more support for women's right to higher education; a lower value indicates less support for women's right to higher education.

Missing data: There is fairly low coverage, although the World Values Survey covers different countries in different rounds. It may be possible to impute some values by using similar questions in other household surveys.

# ix) Laws on provision of reproductive health care, information and education, shrc1

This indicator measures the extent to which countries have laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education (%).

It is included to reflect values relating to sexual and reproductive health care, information and education. The data is from SDG indicator 5.6.2, and is collated by UNFPA.

Scaling decisions: The value reflects a percentage of laws and regulations based on an assessment. It has not been rescaled as it is already a percentage.

Missing data: There is fairly good coverage for this dataset. It is likely to be difficult to impute data where values are missing, because of the complicated assessment of laws and regulations required.



## x) Sex ratio at birth, csr1

This indicator measures differences in numbers of girls and boys up to the age of 5. It aims to reflect whether girls and boys have equal rights to be born and have care and receive equal support needed to survive to the age of 5. This measure is sometimes used as a proxy for the relative value placed on male / female children.

The data comes from the UN's World Population Prospects, collated by UN DESA.

Scaling decisions: This has been rescaled so that an equal ratio scores high (100 is a 50:50 ratio), but an imbalance in either direction would yield a lower score.

Missing data: This dataset has excellent coverage.

### xi) Non-condonement of domestic violence, domvcon1

This indicator measures the proportion of women who express views which condone domestic violence. It is included to reflect social pressure and dominant norms around gender-based violence and levels of bodily integrity.

The data comes from the OECD's SIGI database.

Scaling decisions: The measure is a percentage in the SIGI database, but for the AGEE dashboard the scale has been reversed, to give a higher score where violence is not condoned. So a score of 100 would indicate that no women express views which condone domestic violence, and a score of 0 would indicate that all women condone domestic violence.

Missing data: There is fairly good coverage for this dataset; it may be possible to impute values from other sources if needed.



# c) Opportunities

## i) Legal guarantee 9 years of schooling, NineYrsEd1

Presence of a legal framework guaranteeing 9+ years of free and compulsory public education for all. There are three categories: (a) yes 9+ years free and compulsory education are guaranteed, (b) 9+ years education free but not compulsory, (c) 9+ years education not free, tuition reported.

This measure has been chosen to reflect a country's commitment to education for all.

The source of this data is the UNESCO HER Atlas. Countries are scored from 1 to 5 (1 = not free, 5 = 9+ years free and compulsory education are guaranteed).

Scaling decisions: The measure has been rescaled so that 100 is the highest (9+ years free and compulsory guaranteed) and 0 the lowest (9+ years education not free / compulsory).

Missing data: 196 countries are covered in the dataset.

### ii) Legislation to protect pregnant girls' education, EdPreg1

Presence of legislation to protect and facilitate education of pregnant adolescent girls.

This measure has been chosen to reflect a country's commitment to supportive gender education policies.

The source of this data is the UNESCO HER Atlas. Countries are scored from 1 to 5 (1 = least protected, 5 = most protected).

Scaling decisions: The measure has been rescaled so that 100 is the highest (most protected) and 0 the lowest (no protections for adolescent girls).

Missing data: The dataset covers under 196 countries, there some missing data. This would have to be manually collated if it is missing.

### iii) Endorsement of Safe School Declaration, SSD1

This has been chosen to represent a country's commitment to safe school environments.

The measure comes from the Global Coalition to Protect Education from Attack (GCPEA). Countries score 1 if they have signed safe schools declaration; and score 0 if they haven't signed (yet)



Scaling decisions: The measure has been rescaled so that 100 is the SSD has been signed and 0 means it hasn't been signed.

Missing data: 249 countries are covered in the database.

### iv) Prevalence of marriage under 18, Marr18Prev1

This indicator measures the proportion of women aged 20-24 years who were married or in a union before age 18 (%).

This measure has been chosen to represent the level of pressure around marriage and girls' freedoms relating to marriage.

The measure comes from SDG 5.3.1, and is collated by UNICEF.

Scaling decisions: The data already exists as a percentage, but for the AGEE dashboard the scale has been reversed to give a higher score where a lower proportion of women married under 18.

Missing data: 138 countries are covered in the dataset.

### v) Prevalence of partner violence, VAWPrev1

Proportion of ever-partnered women and girls subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months, by age (%).

This measure has been included to represent gender inequality in freedom from violence / bodily integrity.

The measure comes from SDG indicator 5.2.1, and is collated by the Interagency Working Group on Violence against Women Data (WHO, UN Women, UNICEF, UNSD, UNFPA, UNODC).

Scaling decisions: This has been rescaled, to reverse the values. So for a country that has a low prevalence (i.e. a low proportion of women reporting violence) then they will score higher on this indicator.

Missing data: 157 countries in the dataset; it may be possible to impute data from other sources if needed.

### vi) GPI Child labour, ChildLab1

Proportion of children aged 5-17 years engaged in paid child labour; we have created a GPI.



This measure has been included to represent gender differences in the time available to children and young people.

The data comes from SDG indicator 8.7.1, collated by UNICEF and the ILO.

Scaling decisions: The data has been rescaled so that gender parity in the measure scores highest at 100 (equal amounts of boy and girl child labour). Any ratio above or below this reduces the value.

Missing data: 100 countries are covered in the SDG dataset. Where countries are missing, it has in some cases been possible to impute data from other research studies, especially for countries where child labour is illegal / restricted by law.

### vii) GPI Internet use, IntUse1

Proportion of women and men using the internet; we have created a GPI from the dataset.

This indicator has been chosen to represent gender differences in levels of digital access to information.

This data is from SDG indicator 17.8.1, which is collated by the ITU. Currently this data is not age-disaggregated but when it is possible to do so, we might choose to look at levels just for youth.

Scaling decisions: the GPI has been rescaled, so that a score nearer 100 means greater gender parity in levels of internet use.

Missing data: 133 countries are covered in the SDG dataset; it is possible to look for values from other research studies to impute in cases where data is missing.

### viii) GPI Stunting, StntGPI1

Prevalence of stunting, height for age (% of children under 5); we have created a GPI.

This measure has been included to represent gender differences in nutrition and infant health. The source is the World Bank / UNICEF / WHO joint child malnutrition estimates.

Scaling decisions: This has been rescaled so that a score nearer 100 means greater gender parity in levels of stunting. Any ratio above or below parity reduces the value.

Missing data: There are 147 countries in the dataset; it is possible to look for values from other research studies to impute in cases where data is missing.

ix) Mean years of schooling (female), MeanSch1



Mean years of schooling (ISCED 1 or higher), for the female population aged 25+ years.

This has been included as a measure of the capability for girls and women to participate in education. The data is collated by the Unesco Institute for Statistics.

Scaling decisions: A higher value indicates more years (higher average) of female years' of schooling; a lower values indicates fewer years (lower average) of female years' of schooling.

Missing data: The dataset has 241 countries; there are values for most countries but these are spread across different years.

### x) GPI Mean years of schooling, MeanSchGPI1

Mean years of schooling (ISCED 1 or higher), population 25+ years, adjusted gender parity index (GPIA).

This has been included as a measure of gender difference in the capability to participate in education. The data is collated by the Unesco Institute for Statistics.

Scaling decisions: The GPI has been converted into a percentage and then reversed, so that a score nearer 100 means greater gender parity in the capability to participate in education, any ratio above or below this reduces the value.

Missing data: The dataset has 241 countries; there are values for most countries but these are spread across different years.



# d) Participation

As with the following 'Knowledge' domain, many of the indicators in this domain have been used as 'traditional' indicators of gender equality in education, typically through GPIs.

### i) GPI Gross Enrolment Ratio (Pre-primary), GPI GER PreP1

GPI of Gross Enrolment Ratio in pre-primary education and early childhood development

This indicator is included as a measure of gender parity in access to pre-primary education.

The data would be from SDG indicator 4.2.4 (Thematic), but this is not available in the SDG database yet. The data is collated by the Unesco Institute for Statistics.

Scaling decisions: The GPI has been converted to percentage, with the highest score (100) for gender parity. Any ratio above or below parity reduces the value.

Missing data: There are 217 countries in the database, but the coverage can be patchy. It may be possible to impute data from other research studies.

### ii) GPI Gross Enrolment Ratio (Tertiary), GPI GER Ter1

Adjusted GPI of GER in tertiary education.

This indicator is included as a measure of gender differences in access to tertiary education.

The data relates to SDG indicator 4.3.2, but this is not in the SDG database currently. The data is collated by the Unesco Institute for Statistics.

Scaling decisions: The GPI has been converted to percentage, with the highest score (100) for gender parity. Any ratio above or below parity reduces the value.

Missing data: There are 217 countries in the database, but the coverage can be patchy. It may be possible to impute data from other research studies.

# iii) GPI Participation in Technical and Vocational Education and Training (15-24), GPITVET1

Proportion of 15-24 year-olds enrolled in vocational education, adjusted gender parity index (GPIA).

This indicator is included as a measure of gender difference in TVET participation.



This relates to SDG indicator 4.3.3, but not as a GPI – this data comes from the World Bank Databank / UIS.

Scaling decisions: The GPI has been converted to percentage, with the highest score (100) for gender parity. Any ratio above or below parity reduces the value.

Missing data: There are 217 countries in the database, but the coverage can be patchy. It may be possible to impute data from other research studies.

### iv) GPI Completion (primary), GPI Com Prim1

Adjusted GPI for the completion rate for primary education.

This indicator is included as a measure of gender difference in participation in primary education.

This measure relates to SDG indicator 4.1.2. The data is collated by the Unesco Institute for Statistics.

Scaling decisions: The GPI has been converted to percentage, with the highest score (100) for gender parity. Any ratio above or below parity reduces the value.

Missing data: There are 217 countries in the database, but the coverage can be patchy. It may be possible to impute data from other research studies.

# v) GPI Completion (lower secondary), GPI Com LSec1

Adjusted GPI for the completion rate for lower secondary education.

This indicator is included as a measure of gender difference in participation in lower secondary education.

This measure relates to SDG indicator 4.1.2. The data is collated by the Unesco Institute for Statistics.

Scaling decisions: The GPI has been converted to percentage, with the highest score (100) for gender parity. Any ratio above or below parity reduces the value.

Missing data: There are 217 countries in the database, but the coverage can be patchy. It may be possible to impute data from other research studies.



## vi) GPI Completion (upper secondary), GPI Com USec1

Adjusted GPI for the completion rate for upper secondary education.

This indicator is included as a measure of gender difference in participation in upper secondary education.

This measure relates to SDG indicator 4.1.2. The data is collated by the Unesco Institute for Statistics.

Scaling decisions: The GPI has been converted to percentage, with the highest score (100) for gender parity. Any ratio above or below parity reduces the value.

Missing data: There are 217 countries in the database, but the coverage can be patchy. It may be possible to impute data from other research studies.

### vii) GPI Tertiary graduation, GPI Grad Ter1

This is the gender parity index for the graduation ratio from tertiary programmes.

This indicator is included as a measure of gender difference in participation in tertiary education. The data is collated by the Unesco Institute for Statistics.

Scaling decisions: The GPI has been converted to percentage, with the highest score (100) for gender parity. Any ratio above or below parity reduces the value.

Missing data: There are 217 countries in the database, but the coverage can be patchy. It may be possible to impute data from other research studies.

### viii) Expected years of schooling (female), ExpSch1

Expected years of schooling, female. Expected years of school is calculated as the sum of agespecific enrolment rates between ages 4 and 17. Age-specific enrolment rates are approximated using school enrolment rates at different levels: pre-primary enrolment rates approximate the age-specific enrolment rates for 4 and 5 year-olds; the primary rate approximates for 6-11 year-olds; the lower-secondary rate approximates for 12-14 year-olds; and the upper-secondary approximates for 15-17 year-olds.

The data comes from the World Bank Human Capital Index, based on data from the UIS.

Scaling decisions: This has not yet been scaled, showing the raw value for expected years of schooling for girls / women. It is not currently included in the AGEE dashboard but may be once it has been rescaled.

Missing data: There are 217 countries in the database, but the coverage can be patchy. It may be possible to impute data from other research studies.

Version: December 2024



# ix) GPI Repetition (lower secondary), Rep1

Repetition rate in lower secondary general education (all grades), GPI.

This has been included as a measure of gender difference in school achievement. The data is collated by UIS.

Scaling decisions: The GPI has been converted to percentage, with the highest score (100) for gender parity. Any ratio above or below parity reduces the value.

Missing data: There are 217 countries in the database, but the coverage can be patchy. It may be possible to impute data from other research studies.

### x) GPI Experience of bullying, BullSch1

Adjusted gender parity index (GPIA) of the percentage of students who, during a school year, were physically attacked, participated in a physical fight, experiencing bullying, corporal punishment, harassment, sexual discrimination or abuse. The figure is calculated as the number of students in a given level of education reporting that they have experienced any of the different types of violence or abuse in the past year expressed as a percentage of all students at the same level of education.

This has been included as a measure of gender difference in school experiences and schoolrelated gender-based violence. Bullying has been linked to reduce academic and health outcomes for victims and for perpetrators.

The data relates to SDG indicator 4.a.2, and is collated by the World Bank. Data for this indicator may come from two different school based surveys coordinated by the World Health Organization (WHO): a) The Global School-based Student Health Survey (GSHS) developed by the World Health Organization (WHO) and the US Center for Disease Control and Prevention (CDC) in collaboration with UNICEF, UNESCO, and UNAIDS.

Scaling decisions: The GPI has been converted to percentage, with the highest score (100) for gender parity (equal proportions of boys and girls experiencing bullying). Any ratio above or below parity (e.g. either more girls being bullied than boys, or vice versa) reduces the value.

Missing data: There are 217 countries in the database, but the coverage can be patchy. It may be possible to impute data from other research studies.



# e) Knowledge

# i) GPI Literacy (15+), GPI Lit1

Adjusted gender parity index for the population over 15 who are literate.

This indicator is included as a measure of gender equality in foundational knowledge and skills. The data is from SDG indicator 4.6.2, and is collated by UIS.

Scaling decisions: The GPIA has been rescaled to give a value out of 100, with a higher value where there is greater gender parity. Any ratio above or below parity reduces the value.

Missing data: There is very good coverage for this dataset.

### ii) GPI Harmonised test scores, HTS1

A GPI has been created from male and female Harmonised Test Scores. These are harmonized test scores from major international student achievement testing programs. They are measured in TIMSS-equivalent units, where 300 is minimal attainment and 625 is advanced attainment. Test scores from the following testing programs are included: TIMSS/PIRLS; PISA; SACMEQ; PASEC; LLECE; PILNA; EGRA; and EGRANR.

This measure is included to reflect gender parity in overall school achievement. The data comes from the World Bank's Human Capital Index Database

Scaling decisions: The GPI has been rescaled, so that a value of 100 indicates a 50:50 ratio of participation rates (women and men); any ratio above or below this reduces the value.

Missing data: there is very good coverage in this dataset.

# iii) GPI Participation of youth and adults in formal education and training, WomTr1

Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, adjusted gender parity index (GPIA)

This has been included as a measure of gender transformative knowledge. The data is collated by UIS, and is available through the SDG database (indicator 4.3.1) and World Bank Education Databank. The specific age range is not clear from the existing databases, and may vary slightly by country. Where data has been imputed, the age range used has been whatever is closest to 16-54 (see country notes); more specific work may be possible with national level data.



Scaling decisions: The GPIA has been rescaled, so that a value of 100 indicates a 50:50 ratio of participation rates (women and men); any ratio above or below this reduces the value.

Missing data: There is a lot of missing data in this dataset; it may be possible to impute values from other sources.

### iv) Female share of students graduating from STEM courses, STEM1

Female share of graduates from Science, Technology, Engineering and Mathematics (STEM) programmes, tertiary (%).

Female share of graduates in the given field of education, tertiary, is the number of female graduates expressed as a percentage of the total number of graduates in the given field of education from tertiary education.

This indicator is included as a measure of gender transformative knowledge, as STEM subjects are less traditionally female areas of study. This data is collated by UIS.

Scaling decisions: This has been rescaled, so that a higher value means greater parity between male and female graduates, and 100 means parity.

Missing data: There is fairly good coverage of this indicator, and where data is missing it may be possible to impute from other sources.



# f) Outcomes

# i) GPI Employed in poverty, MedInc1

Gender parity index of the employed population living below the international poverty line.

This measure is included to represent differences in the proportions of employed men and women who are living in poverty.

This data is for SDG indicator 1.1.1 and is collated by the World Bank.

Scaling decisions: This has been scaled to give a score out of 100. Gender parity in employment in poverty will give a score of 100; gender difference (either more employed men in poverty than women, or vice versa) will give a lower score.

Missing data: There is quite a lot of missing data at the moment, but it may be possible to impute values from other sources.

### ii) GPI Proportion of time spent on unpaid work, UnpaidWk1

Gender parity index of proportion of time spent by women and men on unpaid domestic and care work.

The average time women / men spend on household provision of services for own consumption. Data are expressed as a proportion of time in a day. Domestic and care work includes food preparation, dishwashing, cleaning and upkeep of a dwelling, laundry, ironing, gardening, caring for pets, shopping, installation, servicing and repair of personal and household goods, childcare, and care of the sick, elderly or disabled household members, among others.

Proportion of time spent on unpaid domestic and care work is calculated by dividing the daily average number of hours spent on unpaid domestic and care work by 24 hours. Data presented for this indicator are expressed as a proportion of time in a day. Weekly data is averaged over seven days of the week to obtain the daily average time.

This indicator is included to measure gender inequality in domestic and care roles. The data is for SDG indicator 5.4.1, and is collated by UNSD / UN Women.

Scaling decisions: for the countries with data, we have created a GPI by dividing the value for women by the value for men.

Missing data: There is a lot of missing data at the moment. It may be possible to impute some values from smaller studies, but there are likely to be inconsistencies in measurement to work around.



### iii) GPI Labour force participation rate, LFPR1

Ratio of female to male labour force participation rate (%) (modelled ILO estimate) The ratio of female to male labour force participation rate is calculated by dividing female labour force participation rate by male labour force participation rate and multiplying by 100.

This measure is included to represent gender inequality in the capability to be active in the labour force. The data is from the World Bank World Development Indicators, originally collated by the ILO.

Scaling decisions: In future it may be necessary to rescale this so that any gender difference (including if the female labour force participation rate is higher than male) would result in a lower score. Currently, a score closer to 100 indicates greater parity.

Missing data: There is very little missing data for this indicator.

### iv) Proportion of parliamentary seats held by women, WmInst1

Proportion of seats held by women in national parliaments (% of the total number of seats).

This indicator has been included as a measure of gender inequality in political representation and voice. It is the indicator for SDG 5.5.1, and the data is collated by the International Parliamentary Union (IPU). In due course more data will hopefully become available relating to the proportion of women in positions in national and local institutions, including (a) the legislatures; (b) the public service; and (c) the judiciary, compared to national distributions, by sex, age, disability and population group.

Scaling decisions: This has not been rescaled, as it is already a percentage.

Missing data: There is fairly good coverage; where data is missing, in theory it would be possible to impute values by gathering the data from other sources.

# v) Proportion of women making informed decisions relating to sexual and reproductive health, InfDec1

Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use, and reproductive health care, calculated as a percentage.

This measure is included to represent women's capability to make choices relating to sexual relations, contraception, and reproductive health care. This data relates to SDG 5.6.1, and is collated by UNFPA.

Note: this has not been included for some countries in the first round of 'spotlight' briefs, due to the lack of comparable data.

Scaling decisions: This has not been rescaled, as it is already a percentage.

Version: December 2024



Missing data: There is low coverage for this indicator at present.



# 2. The AGEE dashboard: how to read the visualisations

# Creating the AGEE dashboard

The AGEE dashboard emerged from a concern to build a more substantive, holistic measurement framework for gender equality in education, and has been designed through a multi-layered, participatory process. In the first phase, theoretical perspectives on equality from the capability approach were used to derive a definition of gender equality in education, and this was brought together with a series of national-level consultations in two countries (Malawi and South Africa) to create a longlist of potential indicators and identify 6 core domains.

To create the cross-national dashboard, a further set of consultations was held to decide the criteria for a final selection of global-level indicators, and then a final consultation to apply this criteria and choose a final list of indicators for the AGEE cross-national dashboard. Following this, cross-national data for each indicator was collated from a wide range of different sources (including, for example, SDG databases; the UIS database; and UNICEF databases). In order to represent the data in graphs that show a range of indicators within a domain, the data has been rescaled so that the variations are in proportion with each other<sup>1</sup>. For the final AGEE dashboard graph denoting 6 domains, values within each domain have been aggregated to arrive at a single value for each domain, which has then been plotted on the graph.

# Introducing AGEE radar graphs

A distinctive aspect of how we are presenting the AGEE dashboard is the use of 'radar' graphs. We have chosen this form of diagram for a number of reasons. First, to quickly give an overall visual sense of how well a country scores across a range of indicators at once. More broadly, we have chosen these because a key principle of the AGEE Project is to take a more holistic picture across a range of variables, the point that gender equality in education is complex and needs a wide range of information to be understood.

# How to read AGEE radar graphs

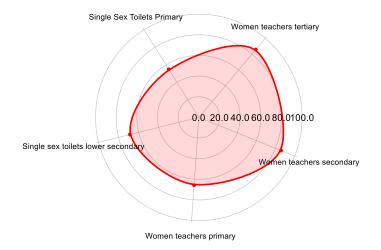
### a) Radar diagrams by domain

Example: Resources domain for Indonesia

<sup>&</sup>lt;sup>1</sup> Please see Section 1 for more details on how each variable has been rescaled, and the sources of each indicator.



#### Domain 1: Resources for Gender Equality in Education



- Each point in the coloured circle (also accompanied by a line from the centre) represents a different indicator in the domain in question. So, for example, for the 'Resources' domain, the radar graphs have a maximum of six points (gender finance, single sex toilets in primary and secondary school; and gender balance of teachers at primary, secondary and tertiary levels).
- The further away from the centre a point is, the higher the score on that indicator. In the example above, the Indonesia has a relatively high score for gender balance of teachers at tertiary level, and a lower score for single sex toilets at primary level.
- Some indicators in the radar graphs have been rescaled so that their range is between 0-100, so they are in the same scale as the other indicators.
- In some instances, data may not be available for one of the indicators for a country. In this case, the point will be missed off the radar diagram (as it is not possible to represent missing data on the scale). So for example, in the graph above, there is currently no gender finance indicator available for Indonesia, so there are only 5 out of a potential 6 indicators included in the diagram. Where data has been imputed, this has been done by identifying comparable data from other studies (which may be smaller scale) and manually adding this to the dataset. However for some indicators (such as some of the legal measures in the Values domain) it is not possible to impute any values, because of the complexity of the questionnaires that the original data comes from.

In the accompanying tables where values are listed, 'nd' indicates no data is available for this indicator in the cross-national datasets. These tables show the full list of AGEE indicators for each domain and therefore note when no data is available; however as detailed above, the indicators with missing data have been omitted from the radar diagrams. In future, it may be possible to impute data for these gaps from other sources at the national level.

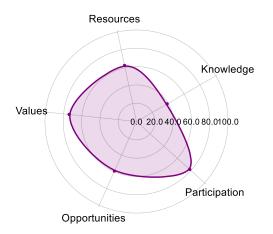
- The overall shape of a radar diagram will give a sense of how well the country scores in that domain overall. A wide even circle, for example, would suggest a country scores



well in all the indicators. A small circle would mean low scores on all the indicators. An uneven shape means that some scores are relatively high and others low.

### b) Radar diagrams across all domains / the AGEE dashboard

#### Example: AGEE dashboard for Kenya



- In these diagrams, each point represents one domain of the AGEE dashboard for that country.
- The score for each domain has been calculated by aggregating the scores for each of the constituent indicators of that domain, and then dividing by the number of indicators. There is no weighting at present.
- As discussed above, for some countries, data is not available for some indicators. We will produce an average value for a domain if a country is missing data for up to two indicators, but we will not calculate an average if more than two indicators are missing. It is envisaged that more data will become available for most indicators as the SDGs move forwards.
- A wide circle means a country scores highly in all areas of the dashboard; an uneven shape will indicate the areas in which more support may be needed.
- Limitations:
  - o The aggregate value for each domain may include some missing data
  - There may also be areas within each domain which we think should be measured but which cannot yet be calculated (for example, GBV in schools).
  - These graphs are based on aggregate data at the national level, and do not indicate inequalities by region, or intersecting inequalities like ethnicity, religion, age, income etc.

However, our perspective is that this is a better way of representing the state of gender equality in education in a country than just looking at a narrow range of parity indicators.