

Supplementary material 3: Subthemes and criteria of the SCDI framework

Subthemes and criteria of theme health

Theme: Health		
Risk behavior ²	Nutrition ^{1,2}	Child mortality ¹
<ul style="list-style-type: none"> Tobacco use² Alcohol use² Adolescent fertility² Contraceptive prevalence² Cannabis use² Prevalence of sexual activity in youth² Illicit drug use² 	<ul style="list-style-type: none"> Low birth weight¹ Overweight and obesity¹ Breastfeeding² Underweight¹ Stunting¹ Wasting¹ 	<ul style="list-style-type: none"> Infant mortality¹ Under-five mortality¹ Neonatal mortality¹
Immunisation coverage ²	Eating and physical activity ²	Water and sanitation ²
<ul style="list-style-type: none"> Measles containing vaccine (MCV) immunisation² Diphtheria tetanus toxoid and pertussis (DTP3) immunisation² Polio (Pol3) immunisation² Hepatitis B (HepB3) immunisation² Bacillus Calmette-Guérin (BCG) immunisation² 	<ul style="list-style-type: none"> Physical activity² Eating behavior² 	<ul style="list-style-type: none"> Access to improved sanitation facilities coverage² Access to improved drinking water coverage²
	Subjective health ¹	Injury ¹
	<ul style="list-style-type: none"> Self-rated health¹ 	<ul style="list-style-type: none"> Medically attended injuries¹
	Mental health ¹	Health expenditure ²
	<ul style="list-style-type: none"> Suicide¹ Depression¹ Emotional and behavior difficulty¹ 	<ul style="list-style-type: none"> Public expenditure on health² Health insurance coverage²
Hazardous pollutant ²	Maternal health ²	Oral health ¹
<ul style="list-style-type: none"> Household and ambient air pollution² PM2.5 exposure² Family smoking² 	<ul style="list-style-type: none"> Antenatal care² Skilled attendant at birth² Maternal mortality² Maternal smoking² 	<ul style="list-style-type: none"> Untreated dental caries¹
HIV ¹	Malaria ¹	Chronic disease ¹
<ul style="list-style-type: none"> HIV prevalence among youth¹ Pregnant women living with HIV, receive medicine for preventing transmission¹ 	<ul style="list-style-type: none"> Children under five sleeping under nets¹ Children under five fever with treatment¹ 	Disability ¹

1, 2 respectively indicates outcome, contextual level.

Subthemes and criteria of theme education and safety

Theme: Education		
School attainment¹	Attendance of education²	Completion of education¹
<ul style="list-style-type: none"> • Mathematical literacy¹ • Reading literacy¹ • Overall literacy¹ • Repetition¹ 	<ul style="list-style-type: none"> • Enrollment in primary school² • Enrollment in secondary school² • Enrollment in tertiary school² 	<ul style="list-style-type: none"> • Primary school completion¹ • Secondary school completion¹ • Tertiary school completion¹
Early childhood education²	Subjective evaluation¹	Parent's educational qualification²
<ul style="list-style-type: none"> • Enrollment of kindergarten² • Parents reading to young children² 	<ul style="list-style-type: none"> • Satisfaction of school¹ • Pressure from school work¹ 	<ul style="list-style-type: none"> • Parent's formal educational level²
Gender equality²	Transition to employment¹	Government support on education²
<ul style="list-style-type: none"> • Gender equality in enrolment² • Gender equality in graduation² • Gender equality in youth literacy² 	<ul style="list-style-type: none"> • Idle youth (15–19) not in education, training or employment¹ 	<ul style="list-style-type: none"> • Public expenditure on education²
	Other participation¹	Provision of vocational school²
	<ul style="list-style-type: none"> • Reading pleasure¹ • Extra-curricular subjects¹ 	<ul style="list-style-type: none"> • Attendance of vocational education²
Theme: Safety		
Violence and crime^{1,2}	Child care arrangement²	Violent discipline²
<ul style="list-style-type: none"> • Bully in school^{1,2} • Juvenile delinquency¹ • Fighting¹ • Criminal victimisation² • Family violence² • Sexual violence against children² 	<ul style="list-style-type: none"> • Formal care² 	<ul style="list-style-type: none"> • Psychological aggression and/or punishment²
	Demographic structure²	Birth registration²
	<ul style="list-style-type: none"> • Sex ratio at birth² 	<ul style="list-style-type: none"> • Registration of newborns²
Child labour²	Child marriage²	Female genital mutilation²
<ul style="list-style-type: none"> • Children involved in child labour² 	<ul style="list-style-type: none"> • Children married or in union² 	<ul style="list-style-type: none"> • Girls received genital mutilation²

1, 2 respectively indicates outcome, contextual level.

Subthemes and criteria of theme economic status, relationship, participation and environmental aspect

Theme: Economic status		
Material deprivation ²	Housing quality ²	Macroeconomic situation ²
<ul style="list-style-type: none"> Fewer than ten books² Few educational resource² Low family affluence² Deprivation rate² 	<ul style="list-style-type: none"> Electricity coverage² Crowded household² Risky housing² 	<ul style="list-style-type: none"> General Unemployment² Youth Unemployment² Income equality at societal level² National debts² National income²
Relative household income poverty ²	Household without job ²	Debt and financial difficulty ²
<ul style="list-style-type: none"> Children living in households with income \leq national median² 	<ul style="list-style-type: none"> Children living in jobless families² 	
Theme: Relationship		
Family relationship ^{1,2}	Peer relationship ²	Community relationship ²
<ul style="list-style-type: none"> Family structure² Relation of parents and children¹ Family engagement² Satisfaction of family¹ 	<ul style="list-style-type: none"> Kind and helpful peers² Peer engagement² 	<ul style="list-style-type: none"> Social capital² Satisfaction of community¹
Theme: Participation		
Participation in civic activity ¹	Social connection ²	Voting in presidential elections ¹
<ul style="list-style-type: none"> Participation in community activities¹ 	<ul style="list-style-type: none"> Telephone/mobile access² Internet access in home² Access to mass media² 	<ul style="list-style-type: none"> Youth voting engagement²
Theme: Environmental aspects		
Freshwater vulnerability ²	Renewable energy consumption ²	
<ul style="list-style-type: none"> Risk of depleting freshwater resources² 	<ul style="list-style-type: none"> Consumption of renewable energy² 	

1, 2 respectively indicates outcome, contextual level.