



GHANA'S HEALTH AND HEALTH-RELATED SDGS



UPDATED PROGRESS REPORT

2024

GHANA'S HEALTH AND HEALTH-RELATED SDGS
UPDATED PROGRESS REPORT

1.0 Overview

Ghana adopted the SDGs in 2015 as part of global efforts to address global challenges and achieve a sustainable and equitable future for all. This report presents an updated account from a scoping review conducted in 2022. The updated review tracked the implementation progress of health and health-related Sustainable Development Goals (HHSDGs) in Ghana between September 2015 and December 2024. This report updates the national situational progress of the HHSDGs in Ghana as of 2024 while highlighting challenges for redress as part of Ghana's efforts to achieve the HHSDGs by 2030. SDG 2 (Zero hunger), SDG 3 (Health and wellbeing), SDG 5 (Gender equality), SDG 6 (Clean water and sanitation), and SDG 13 (Climate change and climate action) remained the identified HHSDGs in Ghana. Generally, Ghana has made progress in meeting some HHSDG global targets; however, others face major challenges and require acceleration. SDG 2 and 3 have met some global targets, particularly for significantly reducing overweight among children under five years and childhood immunization coverage, respectively. However, progress for some indicators such as tuberculosis (TB) and malaria incidence, road traffic deaths, lower secondary school completion by girls, and violence against women and girls, embedded in SDG 3 and 5, are stagnating. While the spillover effect of COVID-19 pandemic (2020-2022) and the Russia-Ukraine war (2022-present) disrupted global economies leading to reversals in years of progress made through internal and external funding and aid, and collaborations, this review documented significant in-country challenges in implementing HHSDGs in Ghana. These included: poor data tracking and management, inadequate inter-institutional and inter-ministerial collaboration, rapid population growth and urbanization which interferes with urban planning and sanitation; unfavorable behavioral tendencies among the Ghanaian population, budget incredibility, insufficient health resourcing, and inadequate agricultural mechanized systems.

2.0 Evaluation of HHSDG Progress

Figure 2.1 illustrates the overall progress evaluation of the HHSDGs in percentages based on the cumulative progress of the 5 HHSDGs (SDGs 2,3,5,6 and 13) between September 2015 and December 2024. The data indicate that 20% of the HHSDGs are stagnating or off-track, while an additional 80% are moderately improving but require acceleration. Specifically, SDG 5 is stagnating, whereas SDGs 2, 3, 6, and 13 are moderately improving but necessitate acceleration, as detailed in Figure 3.1 below. It is noteworthy that none of the 5 identified HHSDGs are currently on track to achieve the SDG goals by 2030.

TABLE OF CONTENT

1.0 Overview

2.0 Evaluation of HHSDG Progress

3.0 Ghana's HHSDG status as of December 2024

4.0 Ghana's progress status on HHSDG-specific targets

5.0 Challenges impeding Ghana's HHSDG progress

6.0 Conclusion and recommendations for achieving HHSDG global goals 2030 in Ghana

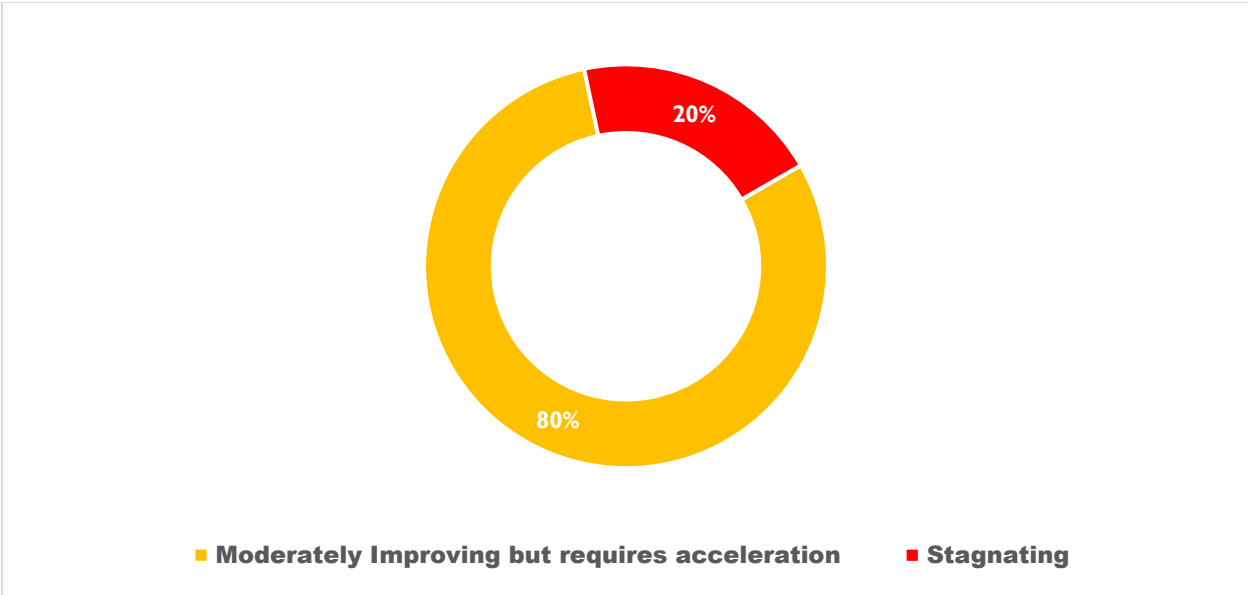


Figure 2.1 Ghana’s HHSDG progress as of December 2024

Figure 2.2 below illustrates the trend in progress of the five HHSDG goals based on assessed targets. This assessment provides a visual representation of individual HHSDG progress based on cumulative HHSDG targets and indicators. In summary, approximately 10% of SDG 2 targets have been met, while approximately 20% are on track to achieving the SDG goals by 2030. However, nearly 15% require acceleration for their targets to be achieved by 2030. Approximately 10% of the targets had data gaps, with 20% having no available data for progress evaluation. Conversely, nearly 3% of the SDG 3 indicators had met their target, with close to 10% on target but 50% requiring acceleration. Approximately 20% of SDG 5 targets are stagnating, with an additional 70% requiring acceleration. Nearly 40% of SDG 6 indicators require acceleration, with approximately 10% exhibiting data gaps and 50% having unavailable data. SDG 13 has demonstrated progress, with close to 40% of indicators on target, more than 40% requiring acceleration, and 20% having insufficient data.

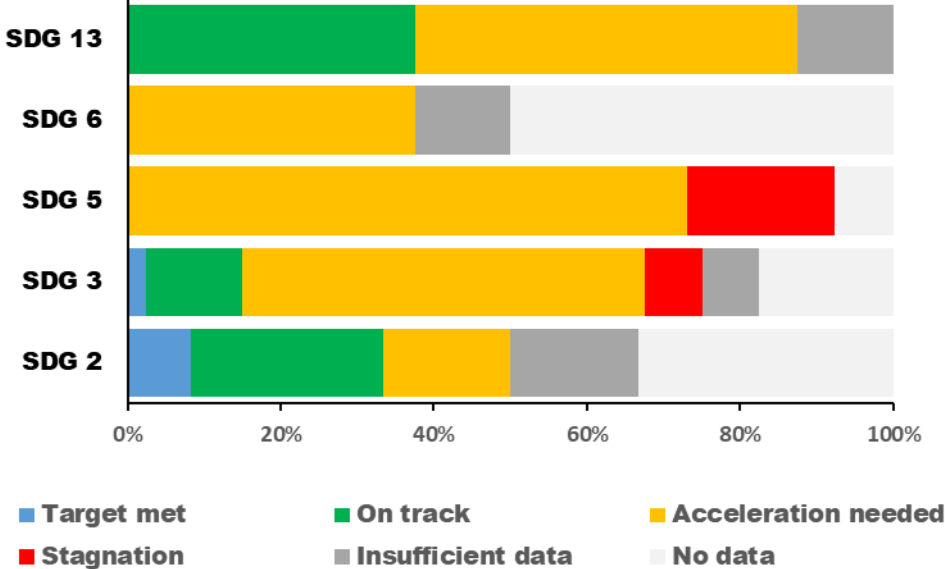


Figure 2.2 Progress assessment for the 5 HHSDG Goals based on assessed targets as of December 2024

3.0 Ghana's HHSDG status as of December 2024

Ghana has made significant progress in implementing the HHSDGs since their inception in 2015. Figure 3.1 summarizes Ghana's HHSDG progress performance by goal as of December 2024. Generally, the HHSDG related to gender equality (SDG 5) is stagnating with major challenges. For instance, the percentage of girls who complete lower secondary school decreased from 73.5% in 2019 to 50% in 2020. Moreover, the goal to reduce violence against women and girls to the minimum by 2030 had not demonstrated progress. Specifically, 18.8% of women (15-49 years) experience any form of violence, 10% of ever-partnered women and girls 15-49 years are subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months, and 24% of ever-partnered women and girls 15-49 years are subjected to physical and/or sexual violence by a current or former intimate partner in their lifetime as of 2018. Nevertheless, some successes have been achieved in efforts toward gender equality. For example, an existing ministry has been revitalized to incorporate gender-related issues, national gender policies have been launched, and laws have been amended to protect women, girls, and boys; quotas have been reserved for girls and women in education and leadership of government institutions [1–3]. Conversely, SDGs 2, 3, 6 and 13 are moderately improving with major challenges, but minor challenges remain for SDG 13. For example, maternal mortality has seen a significant decline since 2021 from 263 to 104 per 100,000 live births as of 2023 against the 70 target [3–6]. Similarly, Child mortality has decreased from 44.7 in 2020 to 42 per 1,000 live births in 2022 against the 25 target [3–7]. Additionally, mental health issues have been previously underrepresented in SDG progress reports in Ghana, largely due to the limited literature profiling the progress and challenges reported at the various levels of healthcare. For instance, in the scoping review conducted in 2022, only three (3) out of forty-two (42) SDG 3 reports considered issues related to mental health [7–9]. Specifically, this dearth of data may be associated with the unavailability of sustainable data tracking systems and poor information management as described in Table 5.1.1 below. However, this updated report presents evidence on available data on mental health epidemiology in Ghana. For example, 3.8% of attempted suicide within the past 12 months as of 2023, suicide mortality stands at 6.6 per 10,000 population as of 2019, and 8% depression prevalence as of 2023 have been documented [6]. In SDG 2, the goal of reducing overweight among children under five years to 2.9% has been achieved; however, undernourishment among children to the minimum level, stunting among children under five, and wasting among children under five are currently on track [3,4,6,7,10,11]. Additionally, moderate to severe food insecurity declined from 49.5% in 2017 to 47.7% in 2020, but severe food insecurity increased from 8% in 2017 to 9.5% in 2020 [3]. Ghana has made progress in access to safe drinking water, sanitation, and hygiene. There was a significant increase in the population using safely managed drinking water services from 44% in 2022 to 88.4% in 2023 and population using at least basic sanitation services from 16% in 2022 to 28.6% in 2023 [3,4,6,7,10–12]. However, Ghana continues to address open defecation among 9.9–44.2% of the population [7,8,11,13,14]. Conversely, SDG 13 has seen progress in emissions, climate change policies, and the United Nations Framework Convention on Climate Change (UNFCCC) commitments, including engaging in policy interventions and agricultural adaptation re-strategization [3,4,10]. Furthermore, Ghana has utilized global technological advancements to deploy zero-carbon emission medical drones to supply essential medicines and products to remote communities, which aligns with the United Nations' agenda to achieve zero net carbon emissions [15]. Ghana established 0.6 tCO₂/capita CO₂ emissions from fossil fuel combustion and cement production as of 2022 [4]. Ghana's HHSDG progress performance is comparable with that of the World and Africa. According to the United Nations' SDG report 2024, between 2015 and 2024, 17% of the global SDG indicators are collectively on track, 18% moderately progressing, 30% marginally progressing, 18% stagnating, and 17% regressing [16]. Generally, Ghana's HHSDG progress is on track and synchronized with the global HHSDG targets. Specifically, globally, SDG 2 is only about 20% on track, 10% stagnating, and 50% regressing. SDG 3 is only

about 8% on track and close to 20% stagnating. SDG 5 is 20% on track but 20% stagnating. SDG 6 is about 15% moderately progressing, 20% stagnating, and 10% retrogressing. Finally, SDG 13 is about 70% stagnating and 30% retrogressing. However, Ghana presents with major challenges that need to be addressed to better align with global HHSDG targets. Similarly, the 2024 SDG report for Africa reveals that SDG 2 is improving but requires acceleration and SDG 13 is regressing, better aligned with the progress in Ghana [17]. However, the Africa report does not address the other 4 HHSDGs.



Figure 3.1 Ghana’s HHSDG progress performance as of December 2024

4.0 Ghana’s progress status on HHSDG-specific targets

Specific HHSDG targets were tracked and progress is reported below:


4.1 Good Health and Wellbeing (SDG 3)

Ghana's progress on the 13 health goals embedded in SDG 3 was tracked and presented in Table 4.1.1 below. The health SDGs 3.1 (Maternal mortality), 3.2 (Child mortality), 3.3 (Communicable diseases), 3.4 (NCD and Mental Health) and 3.8 (Universal Health Coverage Index) have demonstrated significant progress; however, certain challenges persist and necessitate acceleration. Specifically, maternal deaths declined substantially from 263.1 per 100,000 live births in 2021 to 106 in 2022 and further to 104 in 2023. Similarly, child mortality decreased from 44.7 per 1,000 live births in 2020 to 42 in 2022. Additionally, Ghana has achieved a Universal Health Coverage (UHC) index of 48 as of 2021, an improvement from 45 in 2019. This progress is largely attributable to Ghana's health and health-related programs and policies formulated and implemented over the period under review. For instance, Ghana launched an Artificial intelligence-enhanced medical drone in the healthcare supply chain in April 2019 [18]. These drones function as a sustainable healthcare supply chain management system for real-time delivery of essential medicines, blood and blood products to hard-to-reach indigenous communities in Ghana. This intervention has significantly reduced the duration of vaccine stockouts and the proportion of people who miss vaccinations by 30% and 44% respectively [19]. Other initiatives include the government's action plan for local vaccine production [2]. However, further efforts are required to achieve the HHSDG targets by 2030, as road traffic deaths, TB and malaria incidence continue to stagnate. Conversely, there was insufficient data and/or lack

of data to adequately review Ghana's progress on the remaining health goals as outlined in table 4.1.1, including substance abuse, sexual & reproductive health, health impact of pollution, tobacco control, R&D for health, health financing and workforce, and management of health risks.

Ghana's health progress aligns with the global health status reported in the 2024 global SDG report [16]. Comparatively, Ghana is approaching a Universal Health Coverage (UHC) index of 48, in contrast to the global UHC index of 68 as of 2021. Furthermore, Ghana has made progress in reducing child mortality from 44.7 per 1,000 live births in 2020 to 42 per 1,000 live births in 2022, although further acceleration is necessary to meet the target of 25 deaths per 1,000 live births by 2030 [3–6]. This progress reflects global trends (43 in 2015 to 37 in 2022) more favorably than sub-Saharan Africa (87 in 2015 to 71 in 2022) [16]. Additionally, the National Health Insurance Scheme (NHIS) has experienced a decline in population coverage from 38.4% in 2013 to 35.8% in 2018, primarily due to inadequate program financing [20]. However, stakeholder engagement, education, communication, donor support from developmental partners, and efforts to improve accessibility through the mobile renewal system using USSD codes have contributed to an increase in coverage to 54% in 2022 (table 4.1.2), although significant efforts are still required to attain the 80% coverage target by 2030 [20,21]. Ghana has successfully achieved childhood immunization targets, with 95% of surviving infants receiving at least 2 World Health Organization-recommended vaccines as of 2022, surpassing the projected target of 90% [4,5]. Moreover, Ghana is progressing towards achieving the 90% district coverage for Penta 3 (79 out of 90% target coverage) as of 2023. These achievements exceed the global coverage improvement of 74% for two doses of the measles vaccine and 60% for three doses of the pneumococcal conjugate vaccine recorded in 2022, following the notable stagnation in 2020-2021 [16].

Table 4.1.1 A summary of Ghana's HHSDG progress according to major health goals

	Health goals	Status	Ghana's figures	Ghana's target 2030	Data coverage	Source
	3.1 Maternal mortality (per 100,000 live births)	●	2020: 263 2021: 263.1-301 2022: 106 2023: 104	70	2020-2023	Sachs et al., 2024 [4]; NDPC, 2022 [3]; MOH, 2024 [5]; WHO, 2024 [6]
	3.2 Child mortality (under-5) (per 1,000 live births)	●	2020: 44.7 2022: 42-42.3	25	2020-2022	Sachs et al., 2024 [4]; UNICEF, 2023 [7]; Sachs et al, 2022 [10]; NDPC, 2022 [3];
	Neonatal mortality ((per 1,000 live births)	●	2020: 22.9 2021: 7 2022: 21-21.1	4.8		WHO, 2024 [6]
	3.3 Communicable diseases	●			2020-2023	UNICEF, 2023 [7]; Sachs et al, 2022
	Total deaths from infectious diseases (%)	●	2023: 43			[128]; NDPC (2020) [11]; NDPC, 2022 [3];
	HIV incidence (per 1,000 uninfected population)	●	2022: 0.50 2023: 0.56	0.08		Sachs et al., 2024 [4]; WHO, 2024 [6]; Ghana AIDS Commission [22]
	New HIV Incidence in children under 5 (per 1,000 uninfected population)	●	2020: 0.88			
	New HIV incidence in girls 15-19 years (per 1,000 uninfected population)	●	2020: 1.18	0.02		
	New HIV incidence in boys 15-19 years (per 1,000 uninfected population)	●	2020: 0.1			

TB incidence (per 100,000 population)	●	2022: 133 2023: 129	END TB		
Malaria incidence (per 1,000 population)	●	2020: 159 2022: 158.8	15.9		
3.4: NCD and Mental Health	●		Barest minimum	2019-2023	WHO, 2024 [6]; WHO 2024b [23]; MOH, 2022 [24]
Hypertension among adults aged 18-69 (%)	●	2019: 33.9 2023: 16.7			
Adults aged 18-69 years diagnosed with diabetes within the past 12 months (%)	●	2023: 1.9			
Adults aged 40-69 years diagnosed with cardiovascular disease (%)	●	2023: 11.2			
Attempted suicide within the past 12 months (%)	●	2023: 3.8			
Suicide mortality (per 10,000 population)	●	2019: 6.6			
Depression (%)	●	2023: 8.0			
NCD deaths (%)	●	2023: 47			
3.5 Substance abuse	○				
3.6 Road traffic deaths (per 100,000 population)	●	2021: 25.9		2021	Sachs et al., 2024 [4]; WHO, 2024 [6]
3.7 Sexual & reproductive health	○				
3.8 Universal Health Coverage Index	●	2019: 45 2021: 48	80	2019-2021	Sachs et al., 2024 [4]; Sachs et al, 2022 [10]; MOH, 2020 [25]
3.9 Health impact of pollution (Age-standardized death rate	●	2019: 194		2019	Sachs et al., 2024 [4]

attributable to household air pollution and ambient air pollution per 100,000 population)					
3. a Tobacco control	●		Cessation	2022-2023	WHO, 2024 [6]; WHO 2024b [23]; UNDP, 2024 [26]
Tobacco use among persons 15 years and older (%)		2022: 3.4			
Tobacco use among adults aged 18-69 years (%)		2023: 4.8			
3. b R&D for health	○				
3. c Health financing and workforce	○				
3.d Management of health risks	○				

● Target met ● On track ● Acceleration needed ● Stagnation ● Insufficient data ○ No data

Table 4.1.2 Ghana's health progress according to specific health indicators under review

3 GOOD HEALTH AND WELL-BEING	Health indicator	Status	Ghana's figures	Ghana's target 2030	Data coverage	Source
	Life expectancy at birth (years)	●	2019: 66.3 2021: 63.8 2022: 63.9		2019-2022	Sachs et al., 2024 [4]; Sachs et al, 2022 [10]; WHO, 2024 [6]
	NHIS coverage (%)	●	2022: 54	Universal Health Coverage (80)	2022	NHIS, 2022 [21]
	Childhood Immunization (Surviving infants who received 2 WHO-recommended vaccines (%))	●	2022: 95	90	2022-2023	Sachs et al., 2024 [4]; MOH, 2024 [5]
	District coverage for Penta 3 (%)	●	2023: 79	90		
	Districts achieving at least 1 ANC visit (%)	●	2020: 79.2	80	2020-2023	MOH, 2024 [5]; NDPC, 2022 [3]
	Districts achieving ANC4+ visits (%)	●	2020: 58.6 2023: 75	80		
	Skilled birth attendance (%)	●	2020: 58.7 2023: 87.6	90	2020-2023	Sachs et al., 2024 [4]; WHO, 2024 [6]; NDPC, 2022 [3]; UNICEF, 2023 [7]
	Adolescent fertility rate (per 1,000 women)	●	2017: 75 2018: 78 2022: 59	Barest miimum	2017-2022	UNICEF, 2023 [7] World bank [27]
	Health funding	○				
	Health infrastructure	○				
	Health innovations/Medical technology	●	Drone technology		2020	Damoah et al (2021) [18]; NDPC, 2022 [3]
	Age-standardized death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory disease in	●	2019: 22.5	Barest minimum	2019	Sachs et al., 2024 [4]

adults aged 30–70 years (%)					
--------------------------------	--	--	--	--	--

● Target met
● On track
● Acceleration needed
● Stagnation
● Insufficient data
○ No data

The sub-level evaluation demonstrated Ghana's health progress performance stratified by the administrative regions and type of settlements in Ghana (Table 4.1.3). Fifteen (15) out of the new sixteen (16) administrative regions in Ghana have met SDG targets for childhood immunization coverage. However, the Volta region is on track to achieving targets. Urban settlements have met SDG targets for pregnant women to access the services of skilled birth attendants. However, rural settlements are on track to meeting these SDG targets. Similarly, all ten (10) old administrative regions as of 2017 had met SDG targets of supporting pregnant women to give birth under the supervised care of skilled birth attendants. These are towards the broader goal of reducing home deliveries, and maternal and neonatal mortality rates by at least 50% by 2030.

Table 4.1.3 Sub-level evaluation of Ghana's health progress

3 GOOD HEALTH AND WELL-BEING	Health indicator	Status	Data coverage	Source
	Childhood immunization coverage (by region)		2020	NDPC, 2022 [3]
	Ahafo	●		
	Ashanti	●		
	Bono	●		
	Bono East	●		
	Central	●		
	Eastern	●		
	Greater Accra	●		
	North East	●		
	Northern	●		
	Oti	●		
	Savannah	●		
	Upper East	●		
	Upper West	●		
	Volta	●		
	Western	●		
	Western North	●		
	Skilled birth attendance (by settlement)		2016-2017	NDPC, 2020 [11]
	Rural	●		
	Urban	●		

Skilled birth attendance (by region)		2016-2017	NDPC, 2020 [11]
Greater Accra	●		
Ashanti	●		
Brong Ahafo	●		
Volta	●		
Eastern	●		
Western	●		
Central	●		
Upper East	●		
Northern	●		
Upper West	●		

● Target met ● On track ● Acceleration needed ● Stagnation ● Insufficient data ○ No data

4.2 Zero Hunger (SDG 2)

Table 4.2.1 summarizes Ghana's progress in ensuring food security, and addressing hunger and malnutrition. Overall, Ghana has made significant progress in efforts to meet SDG 2 nutritional goals. Ghana is on track to reducing undernourishment to a minimal level (6.1% in 2019 to 4.9% in 2021), stunting among children under 5 (17.5% in 2017 to 14.2% in 2020) and wasting among children under 5 (6.8% in 2017 to 5.8% in 2022). However, the target for addressing overweight among children under 5 has been met (2.9% as of 2020)[4,7]. This progress was achieved despite the impact of COVID-19 in 2020-2021 and in 2022 when approximately 60% of global nations experienced increases in global food prices due to disrupted food supply chains, primarily resulting from conflicts, notably the Russia-Ukraine war[16,28]. Conversely, acceleration is required to meet global targets for significantly reducing overweight in children 5-19 years, and overweight in adults. There is insufficient data and/or lack of data to track Ghana's progress on small-scale food producers, sustainable agriculture, genetic resources for agriculture, investments in agriculture, agricultural export subsidies and food price anomalies. Ghana's SDG 2 progress was founded on core government programs and interventions. For instance, key national programs and government initiatives such as Planting for Food and Jobs, Rearing for Food and Jobs, Planting for Exports and Rural Development, Greenhouse villages, the Ghana Agricultural Sector Investment Program and Agricultural Mechanization were implemented between 2016 and 2020[2,29]. In 2017, the Girls' Iron and Folic Acid Tablets Supplementation (GIFTS) program and the Micronutrient Powder Initiative were introduced as a school-based program to address anemia and to improve nutrition among menstruating girls 10-19 years[3]. These statistics are comparable with global trends as Ghana aims to improve while aligning with global targets for 2030. For example, globally, stunting in children under 5 stands at 22.3%, overweight 5.6% and wasting 6.8% as of 2022[16].


Table 4.2.1 A summary of Ghana's HHSDG progress according to major nutritional goals

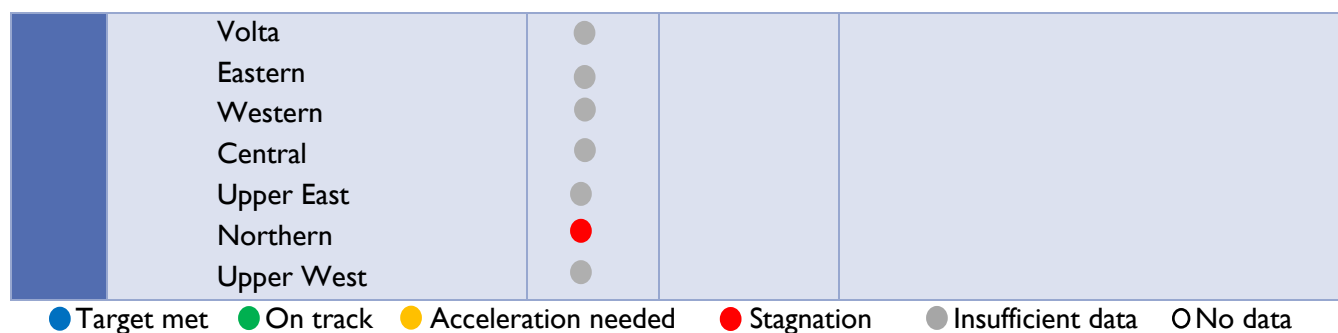
2020 SDG Icon	Nutritional goals	Status	Ghana's figures	Ghana's target 2030	Data coverage	Source
	2.1 Undernourishment (%)	●	2019: 6.1 2021: 4.9	To the barest minimum	2019-2022	Sachs et al., 2024 [4]; Sachs et al, 2022 [10]
	2.2.1 Stunting among children under 5 (%)	●	2017: 17.5 2020: 14.2 2022: 12.7	12.17	2017-2022	Sachs et al., 2024 [4]; UNICEF, 2023 [120]; Sachs et al, 2022 [10]; NDPC, 2020 [11]; WHO, 2024 [6]
	2.2.2 Wasting among children under 5 (%)	●	2017: 6.8 2022: 5.8	5	2017-2022	Sachs et al., 2024 [4]; UNICEF, 2023 [7]; Sachs et al, 2022 [10]; WHO, 2024 [6]
	2.2.3 Overweight among children under 5	●	2020: 2.9	2.9	2020-2022	UNICEF, 2023 [7]; Sachs et al., 2024 [4]; WHO, 2024 [6]
	Overweight children and adolescents 5 to 19 years (%)	●	2022: 7	To the barest minimum		
	Overweight adult (%)	●	2022: 12.9	To the barest minimum		
	2.3 Small-scale food producers	○				
	2.4 Sustainable agriculture	●			2021	Issahaku et al (2021) [30]
	2.5 Genetic resources for agriculture	○				
	2. a Investment in agriculture	●			2018-2021	MoF, 2018 [1]; MoF, 2021 [2]
	2. b Agricultural export subsidies	○				
	2. c Food price anomalies	○				

● Target met ● On track ● Acceleration needed ● Stagnation ● Insufficient data ○ No data

The review established Ghana's sub-group progress of SDG 2 (zero hunger) according to the type of settlement and regional progress performance. These are demonstrated in Table 4.2.2. Food security targets are on track in urban communities whereas rural communities continue to stagnate. Greater Accra, Ashanti and Brong Ahafo regions as captured under the old administrative regional system are on track to achieving SDG 2 targets of ending hunger and ensuring food security by 2030. However, acceleration is required for Volta, Eastern, Western and Central regions to attain food security. On the other hand, three (3) regions in the Northern part of Ghana (Upper West, Northern and Upper East regions) are stagnating towards achieving food security. Stratified by sex, SDG 2 targets aimed at reducing stunting to 10% among children under 5 have been met among females while males need acceleration. Similarly, urban dwellers have met the SDG targets for stunting whereas rural settlements require acceleration. Stunting reduction is on track in the Greater Accra region but stagnating in the Northern region of Ghana.

Table 4.2.2 Sub-level HHSDG progress of nutritional goals

	Nutritional goals	Status	Data coverage	Source
	Food security (by settlement)		2016-2020	NDPC (2020) [11]; NDPC, 2022 [3]
	Rural	●		
	Urban	●		
	Food security (by region)		2016-2020	NDPC (2020) [11]; NDPC, 2022 [3]
	Greater Accra	●		
	Ashanti	●		
	Brong Ahafo	●		
	Volta	●		
	Eastern	●		
	Western	●		
	Central	●		
	Upper East	●		
	Northern	●		
	Upper West	●		
	Stunting among children under 5 (by sex)		2020	NDPC, 2022 [3]
	Males	●		
	Females	●		
	Stunting among children under 5 (by settlement)		2016-2022	NDPC (2020) [11]; NDPC, 2022 [3]
	Rural	●		
	Urban	●		
	Stunting among children under 5 (by region)		2016-2022	NDPC (2020) [11]; NDPC, 2022 [3]
	Greater Accra	●		
	Ashanti	●		
	Brong Ahafo	●		



4.3 Gender Equality (SDG 5)

Ghana's status in achieving gender equality is summarized in Table 4.3.1. The majority of gender-related goals concerning discrimination against women and girls, early or child marriage, economic inequalities, skewed leadership, access and right to reproductive health, and gender equality policies are demonstrating progressive improvement. For instance, female representation in Ghana's parliament remained stable at 14% from 2019 to 2020, increased to 15% in 2021, and subsequently decreased to 14.6% in 2024. Female ministerial appointments increased from 19% (2016) to 21% (2020), while the appointment of female Supreme Court Judges rose from 26% (2019) to 28% (2020), and further to 31% in 2021. The proportion of female Metropolitan, Municipal, and District Chief Executives (MMDCEs) increased from 14% in 2017 to 15% in 2021. As of 2023, 65.3% of the labor force was female, with 26.6% in senior or middle management roles [3,4,31]. These statistics align with global trends (22.3% parliament seats as of 2015, 40% in global employment, and 27.5% in managerial positions as of 2022) [16]. Additionally, the prevalence of child marriage among girls before attaining the age of 18 years declined from 23.2% in 2015 to 19% in 2017 [11]. Various stakeholders contribute significantly to this progress. For example, Ghana Civil Society Organizations (CSOs) have facilitated the release of land to women in the Ellembele District and its environs in Ghana under the advocacy of equal opportunities for all [32]. Similarly, government interventions and policies support gender equality in Ghana. For instance, the Ministry of Gender, Children, and Social Protection was established to replace the Ministry of Women and Children's Affairs in 2013, and the National Gender Policy was adopted in 2015 [1]. Furthermore, a quota system was implemented to appoint 30% of women for government appointments and all public institutions, as well as the passage of the Affirmative Action Bill in parliament into law: Affirmative Action Act, 2024 (Gender Equity) to increase women's participation in decision-making at all levels and ranks [29,33]. Moreover, Ghana enacted and amended gender-related laws such as the Children's Amendment Act, 2016 (Act 937), Ghana Aids Commission Act, 2016 (Act 938), Right to Information Act, 2019 (Act 989), Land Act, 2020 (Act 1036) and Real Estate Agency Act, 2020 (Act 1047) to protect the rights and interests of women and children [3]. Nevertheless, acceleration is necessary to achieve global targets, including sustainable financing of SDG 5. Conversely, Ghana is experiencing stagnation in efforts to combat violence against women and girls, and there is a lack of data to track target 5a (Equal economic rights) and 5b (Technology for women empowerment). For instance, defilement cases decreased from 1889 in 2018 to 1720 in 2019 but subsequently increased to 1750 in 2020. Similarly, rape cases were reduced by only 1 case from 504 in 2019 to 503 in 2020 [3]. Furthermore, 18.8% of women (15-49 years) have experienced some form of violence, 10% of ever-partnered women and girls 15-49 years have been subjected to physical and/or sexual violence by a current or former intimate partner in the past 12 months, and 24% of ever-partnered women and girls 15-49 years have been

subjected to physical and/or sexual violence by a current or former intimate partner in their lifetime as of 2018 [7,11,27]. These statistics reflect the global trend of disparity towards women [16]; however, Ghana remains committed to addressing gender inequality.

Table 4.3.1 A summary of Ghana's HHSDG progress according to gender equality targets

5 GENDER EQUALITY 	Gender equality goals	Status	Ghana's figures	Ghana's target 2030	Data coverage	Source
	5.1 Discrimination against women & girls	●			2018-2022	Sachs et al., 2024 [4]; Lelea et al (2022) [34]; Yakovleva et al (2022) [35]; Doherty (2018) [36]; Gbagbo and Nkrumah (2022) [37]; CSPG, 2019 [32]; World bank, 2025 [27]; UNICEF, 2020 [38]
	Ratio of female-to-male mean years of education received (%)	●	2022: 72.9	100		
	Primary school completion rate by girls (%)	●	2020: 75	100		
	Lower secondary school completion by girls (%)	●	2019: 73.5 2020: 50	100		
	Upper secondary school completion rate by girls (%)	●	2020: 35	100		
	Female adult (15 years and above) literacy	●	2020: 76.2	100		
	Women participation in major decision making in the household (%)	●	2022: 55.6	100		
	5.2 Violence against women & girls	●		Barest minimum	2008-2018	UNICEF, 2023 [7]; NDPC (2020) [11]; WHO, 2024 [6]; World bank, 2025 [27]

	Women (15-49 years) who have experienced any form of violence (%)	●	2018: 18.8	0		
	Proportion of ever-partnered women and girls 15-49 years subjected to physical and /or sexual violence by a a current or former intimate partner in the previous 12 months (%)	●	2018: 10	0		
	Proportion of ever-partnered women and girls 15-49 years subjected to physical and /or sexual violence by a a current or former intimate partner in their lifetime (%)	●	2018: 24	0		
	5.3 Early marriage	●		Barest minimum 0	2017	UNICEF, 2023 [7]; NDPC (2020) [11]; GoG, 2019 [14]
	Women 20-24 years who were engaged in child union or marriage before attaining age 18 (%)	●	2017: 19.3			
	5.4 Unpaid care and domestic work	●		Barest minimum	2019-2023	Lelea et al (2022) [34]; Friedman et al, (2019) [39]; World bank, 2025 [27]
	Female labor force participation rate (%)	●	2023: 65.3	100		

Vulnerable employment among females (%)	●	2022: 77.3	100		
5.5 Women in Leadership	●			2017-2024	Sachs et al., 2024 [4]; Yakovleva et al., 2022 [35]; Doherty, 2018 [36]; Sachs et al, 2022 [10]; NDPC, 2020 [11]; GoG, 2019 [14]; NDPC, 2022 [3]; World bank, 2025 [27] UNDP, 2023 [31]
Women in senior and middle management (%)	●	2017: 26.6	30		
Seats held by women in parliament (%)	●	2020: 14.5 2023: 14.5 2024: 14.6	30		
Female Ministers (%)	●	2016: 19 2020: 21	30		
Female MMDCEs (%)	●	2017: 14 2021: 15	30		
5.6 Reproductive Health Access & rights	●			2017-2020	Sachs et al., 2024 [4]; Akazili et al., 2020 [40]
Demand for family planning satisfied by modern methods (% of females aged 15 to 49)	●	2017: 40.4	75		
5. a Equal economic rights	○				
5. b Technology for women empowerment	○				
5. c Gender equality policies	●			2013-2021	Yakovleva et al., 2022 [35]; Gbagbo and Nkrumah, 2022 [37]; MoF, 2018 [1]; MoF, 2021 [2]; NDPC, 2022 [3]; Anafo, 2021 [29]

● Target met ● On track ● Acceleration needed ● Stagnation ● Insufficient data ○ No data

Sub-level evaluation of Ghana's progress in achieving gender equality was performed according to the type of settlement and administrative regions in Ghana (Table 4.3.2). The SDG 5 targets to end child or early marriage are met in the Ashanti, Brong Ahafo and Western regions of Ghana. However, the Volta, Northern and Upper West regions are stagnating. Similarly, the goal to eliminate harmful practices such as female genital mutilation against the girl child is on track in urban settings of Ghana but stagnating in rural communities. Efforts to eliminate female genital mutilation in Ghana are stagnating in the Upper East and Upper West regions. However, the elimination targets require acceleration in the Ashanti and Northern regions of Ghana. The completion rate of girls in primary, lower and upper secondary school levels are disproportionated between rural and urban settlements. While the completion rate is on track in the ruban settings, there is the need for acceleration for girls in rural settings to stay and complete school. Similarly, completion rates for the girls are on track in the Ashanti and Eastern regions but progressively improving in the Northern region of Ghana.

4.3.2 Sub-level HHSDG progress of gender equality goals

5 Gender Equality	Gender equality goals	Status	Data coverage	Source
	Early marriage (by region)		2015-2017	NDPC, 2020 [11]
	Greater Accra	●		
	Ashanti	●		
	Brong Ahafo	●		
	Volta	●		
	Eastern	●		
	Western	●		
	Central	●		
	Upper East	●		
	Northern	●		
	Upper West	●		
	Female Genital Mutilation (by settlement)		2015-2017	NDPC, 2020 [11]
	Rural	●		
	Urban	●		
	Female Genital Mutilation (by region)		2015-2017	NDPC, 2020 [11]
	Greater Accra	●		
	Ashanti	●		
	Brong Ahafo	●		
	Volta	●		
	Eastern	●		
	Western	●		
	Central	●		
	Upper East	●		
	Northern	●		
	Upper West	●		

	Primary, Lower and Upper secondary school completion among females.				UNICEF, 2020 [38]
	Rural	●			
	Urban	●			
	Completion rate at all levels by region				UNICEF, 2020 [38]
	Ashanti	●			
	Eastern	●			
	Northern	●			

● Target met ● On track ● Acceleration needed ● Stagnation ● Insufficient data ○ No data

4.4 Clean Water and Sanitation (SDG 6)

Nationally, acceleration is required to meet the water and sanitation SDG targets by 2030, particularly goals 6.1 (Safe drinking water), 6.2 (Access to sanitation and hygiene), and 6.3 (Water quality). For instance, access to safe drinking water and safely managed sanitation have increased steadily from 44% in 2022 to 88.4% in 2023 and 16% in 2022 to 28.6% in 2023, respectively [3,4,6,11,12]. These trends align with global improvements, where access to safely managed drinking water has increased from 69% in 2015 to 73% in 2022, access to sanitation has risen from 49% to 57%, and basic hygiene services have improved from 67% to 75% between 2015 and 2022 [16]. However, Ghana is experiencing regression due to persistent challenges with open defecation. Open defecation continues to impede sanitation progress in Ghana, affecting approximately 18% of the population, predominantly in rural settings (32%) as of 2020 [11]. This figure has increased to approximately 25% as of 2022, with 39% disproportionately affecting rural settings according to the Demographic and Health Survey [41]. Insufficient data or a complete lack thereof hindered the tracking of progress for the remaining goals, including targets 6.4 (Water-use efficiency), 6.5 (Transboundary water cooperation), 6.6 (Water-related ecosystems), 6.a (International cooperation on water and sanitation), and 6.b (Participatory water and sanitation management), as presented in table 4.4.1. Various policies, programs, and interventions have been implemented in efforts to meet global targets for clean water and sanitation. For example, the Ministry for Water and Sanitation was established in 2017 to spearhead this national agenda, with a core expenditure of GH¢126.9 million as of 2018 [1]. Subsequently, GH¢750.40 million was allocated in the budget for water and sanitation in 2021 [2]. Similarly, the government of Ghana initiated the "Water for All" program, the Community-Led Total Sanitation Program, the Toilet for All Agenda project, the Greater Accra Resilient and Integrated Development Project, and the construction of fecal sludge management infrastructure [2]. Additionally, several Civil Society Organizations (CSOs) and Non-Governmental Organizations (NGOs) contribute to Ghana's agenda of providing safe drinking water, sanitation, and hygiene services, including WaterAid, Coalition of NGOs in Water and Sanitation (CONIWAS), Safe Water Network, and Buz stop boys, among others [42–45].

Table 4.4.1 A summary of Ghana's HHSDG progress according to clean water and sanitation targets

6 CLEAN WATER AND SANITATION	Clean water and sanitation targets	Status	Ghana's figures	Ghana's target 2030	Data coverage	Source
	6.1 Safe drinking water. Population using safely managed drinking water services (%)	●	2022: 44.0 2023: 88.4	100	2017-2023	Sachs et al., 2024 [4]; WHO, 2024 [6]; UNICEF, 2023 [7]; Sachs et al, 2022 [10]; NDPC (2020) [11]; GoG, 2019 [14]; NDPC, 2022 [3]; RCN Ghana [12]
	6.2 Access to sanitation & hygiene. Population using at least basic sanitation services (%)	●	2022: 16.0 2023: 28.6	80	2017-2023	Sachs et al., 2024 [4]; WHO, 2024 [6]; [46]; UNICEF, 2023 [7]; Sachs et al, 2022 [10]; NDPC (2020) [11]; GoG, 2019 [14]; NDPC, 2022 [3]; RCN Ghana [12]
	6.3 Water quality (%)	●	2017: 53.6	60	2017	RCN Ghana [12]
	6.4 Water-use efficiency	○				
	6.5 Trans-boundary water cooperation. SDG baseline for the proportion of transboundary basin area with an operational arrangement for water cooperation (%)	●	2017: 91	100	2017	RCN Ghana [12]
	6.6 Water-related ecosystems	○				
	6. a International cooperation on water and sanitation	○				
	6. b Participatory water and sanitation management	○				

● Target met ● On track ● Acceleration needed ● Stagnation ● Insufficient data ○ No data

In addition, this review tracked Ghana's progress in achieving universal and equitable access to safe and affordable drinking water for all; access to adequate and equitable sanitation and hygiene infrastructure for all and end open defecation. These were evaluated according to the type of settlement and administrative regions in Ghana (Table 4.4.2). Access to safe drinking water is on track and progressing in urban communities. However, rural communities require acceleration to improve access to safe drinking water. The Ashanti, Bono, Central, Greater Accra, Upper East and Upper West administrative regions are on track to meeting access to safe drinking water goals by 2030. However, the Ahafo, Bono East, Eastern, Volta, Western and Western North regions require acceleration to achieve these goals. On the other hand, four (4) out of the new sixteen (16) administrative regions (North East, Northern, Oti and Savannah) are stagnating to achieve the water goals. Although access to sanitation and hygiene infrastructure in urban settings of Ghana needs acceleration, progress is stagnating in the rural communities.

4.4.2 Sub-level HHSDG progress of water and sanitation goals

6 CLEAN WATER AND SANITATION	Clean water and sanitation	Status	Data coverage	Source
	Access to safe drinking water (by settlement)		2020	NDPC, 2022 [3]
	Rural	●		
	Urban	●		
	Access to safe drinking water (by region)		2020-2021	NDPC, 2022 [3]
	Ahafo	●		
	Ashanti	●		
	Bono	●		
	Bono East	●		
	Central	●		
	Eastern	●		
	Greater Accra	●		
	North East	●		
	Northern	●		
	Oti	●		
	Savannah	●		
	Upper East	●		
	Upper West	●		
	Volta	●		
	Western	●		
	Western North	●		
	Access to sanitation and hygiene (by settlement)		2016-2020	NDPC (2020) [11]; NDPC, 2022 [3]
	Rural	●		
	Urban	●		

● Target met ● On track ● Acceleration needed ● Stagnation ● Insufficient data ○ No data

4.5 Climate Action (SDG 13)

As indicated in table 4.5.1, Ghana is progressing towards achieving certain climate action goals, including goal 13.2 (Climate change policies) and 13a (UNFCCC commitments). Ghana has been a member and a signatory to the UN Framework Convention on Climate Change since 2016 and is committed to reducing total greenhouse gas emissions [11]. Furthermore, Ghana has developed and implemented strategic climate change documents, such as the National Climate Change Policy, National Climate Change Master Plan, Implementation Plan for Nationally Determined Contributions (NDC), Investment & Implementation Plan, National Climate Change Adaptation Strategy, 2016 National REDD+ Strategy, 2016-2040 National Forestry Plantation Strategy and the 2018-2021 Medium-term Development Policy Framework [14]. In 2010, the Ministry of Finance of Ghana established the Natural Resources, Environment, and Climate Change (NRECC) unit and developed a set of Climate Change Finance Tracking Tools in 2016 to enhance the coordination and management of funds [1]. Additional government-led initiatives, such as the Drive Electric Initiative and the Artificial Intelligence-powered medical drones, were launched in 2019 to promote electric vehicles to reduce carbon emissions [3,18]. Ghana is on track regarding GHG emissions embodied in imports (0.7 tCO₂/capita) as of 2021 and moderately improving in CO₂ emissions from fossil fuel combustion and cement production (0.6 tCO₂/capita) as of 2022 [18]; however, acceleration is required to achieve net zero emissions by 2030. Conversely, acceleration is necessary to achieve goals 13.1 (Resilience and adaptive capacity), 13.3 (Climate change awareness) and 13b (Climate change planning and management).

Table 4.5.1 A summary of Ghana's HHSDG progress according to climate targets

13 CLIMATE ACTION	Climate targets	Status	Ghana's figures	Ghana's target 2030	Data coverage	Source
	Emissions					
	a. CO ₂ emissions from fossil fuel combustion and cement production (tCO ₂ /capita)	●	2022: 0.6	Net zero emissions	2019-2022	Sachs et al., 2024 [4]
	b. GHG emissions embodied in imports (tCO ₂ /capita)	●	2021: 0.7			

	c. CO2 emissions embodied in fossil fuel exports (kg/capita)	●	2019: 718.7			
	13.1 Resilience & adaptive capacity	●			2017-2023	Issahaku et al., 2021 [30]
	13.2 Climate change policies	●			2010-2021	GoG, 2019 [14]; MoF, 2018 [1]; MoF, 2021 [2]; NDPC, 2022 [3]; CSPG, 2019 [32]
	13.3 Climate change awareness	●			2019-2020	Odonkor et al., 2020 [47]; CSPG, 2019 [32]
	13. a UNFCCC commitments	●			2020-2022	Sachs et al, 2022 [10]; NDPC, 2020 [11]
	13. b Climate change planning and management	●			2018-2021	Damoah et al., 2021 [18]; Issahaku et al., 2021 [30]; GoG, 2019 [14]; MoF, 2018 [1]; MoF, 2021 [2]; CSPG, 2019 [32]

● Target met
● On track
● Acceleration needed
● Stagnation
● Insufficient data
○ No data

5.0 Challenges impeding Ghana's HHSDG progress


The review ultimately identified significant challenges impeding the progress of HHSDGs in Ghana. These challenges encompassed a wide range of issues, from difficulties in HHSDG policy or legislative implementation at the governance level to behavioral tendencies of the Ghanaian population. However, inadequate data tracking and HHSDG progress evaluation systems, as well as suboptimal information management, emerged as primary obstacles across all individual HHSDG implementations. Notably, the COVID-19 pandemic and Russia-Ukraine war had a detrimental impact on nearly all HHSDG goals. Specific challenges are presented in the table below:

5.1 Good Health and Wellbeing (SDG 3)

Poor health financing emerged as the most severe challenge that impedes the progress of achieving the health SDG by 2030. Other health challenges include the wide health affordability gap between the rich and the poor;

geographical difficulties in accessing healthcare, inequitable posting of health staff, poor health policy implementation, poor NHIS coverage and large disbursement gap; the COVID-19 pandemic; and poor information management and data tracking systems. The least severe but highly neglected challenges that impede Ghana's health progress are the failure to fully implement the Persons with Disability Act, 2006 (Act 715) [48] hence inadequate disability-friendly health facilities; inaccessible sexual, reproductive health and rights (SRHR) services; policy discontinuation by previous governments; and poor commitment for mental health issues.

Table 5.1.1 A summary of Ghana's Health challenges


	Challenges	Data coverage	Source
	Inadequate disability-friendly health facilities	2020	Abrokwah et al., 2020 [49]
	Poor healthcare affordability	2020-2021	Abrokwah et al., 2020 [49]; Ofosu et al., 2021 [50]; Umar et al., 2020 [51]; NDPC, 2022 [3]
	Poor healthcare accessibility	2019-2020	Abrokwah et al., 2020 [49]; NDPC, 2020 [11]; GoG, 2019 [14]
	Poor health financing	2016-2022	Akazili et al., 2020 [40]; Ofosu et al., 2021 [50]; Gbagbo and Nkrumah, 2022 [37]; International Budget Partnership, 2022 [52]; Akologo, 2016 [53]; GoG, 2019 [14]; Forkuo, 2019 [54]; Ankiilu, 2022 [55]; Blaboe, 2019 [20]; MOH, 2022 [24]
	Inaccessible sexual, reproductive health and rights (SRHR) services	2020	Akazili et al., 2020 [40]
	Inadequate health workforce (Unequitable distribution of workforce)	2019-2022	Akazili et al., 2020 [40]; NDPC, 2020 [11]; GoG, 2019 [14]; NDPC, 2022 [3]; MOH, 2022 [24]
	Policy discontinuation and changed leadership priorities (changes in the political landscape)	2019	Assan et al., 2019 [56]
	Poor health policy implementation	2021	Ofosu et al., 2021 [50]; Gbagbo and Nkrumah, 2022 [37]
	Poor NHIS coverage and large disbursement gap	2019-2021	Ward et al, 2021 [57]; Sheff et al, 2020 [58]; Umar et al., 2020 [51]; Blaboe, 2019 [20]
	COVID-19	2022	NDPC, 2022 [3]; Ankiilu, 2022 [55]
	Poor information management, under-reporting and poor data tracking	2019-2023	Ankiilu, 2022 [55]; Blaboe, 2019 [20]; MOH, 2024 [5]; MOH, 2022 [24]

Stockouts of essential medicines and maternal and child health record books	2024	MOH, 2020 [25]
Poor health infrastructure	2024	MOH, 2020 [25]

5.2 Zero Hunger (SDG 2)

Similarly, poor financing of the agriculture sector is the most severe challenge to achieving zero hunger in Ghana by 2030. This is followed by the common use of non-mechanized systems, high production and food processing costs due to high import duties, high cost of supplies including seeds and fertilizers; poor HHSDG data management and progress tracking systems; climate change, environmental degradation, the COVID-19 pandemic, food hikes and high food inflation. Lastly, high population growth, poor road network, land encroachment and farm destruction by nomadic farmers commonly lead to insufficient food supply to meet market demands, post-harvest losses and farm losses respectively.

Table 5.2.1 A summary of challenges impeding Ghana's nutritional goals

 Challenges	Data coverage	Source
Poor mechanized systems and improved agricultural practices (hybrid seeds, and technology)	2018-2022	Quarshie et al., 2022 [59]; NDPC, 2020 [11]; MoF, 2018 [1]
Poor agriculture financing and investments	2016-2022	Quarshie et al., 2022 [59]; International Budget Partnership, 2022 [52]; Akologo, 2016 [53]; NDPC, 2020 [11]; GoG, 2019 [14]; Anafo, 2021 [29]; Forkuo, 2019 [54]
High production and processing costs (high import duties, high cost of supplies: seeds, fertilizers etc.)	2018-2022	Quarshie et al., 2022 [59]; NDPC, 2020 [11]; GoG, 2019 [14]; MoF, 2018 [1]
Poor data management and tracking	2016-2022	Akologo, 2016 [53]; Ankiilu, 2022 [55]
Population growth	2020	NDPC, 2020 [11]
Climate change	2018-2022	NDPC, 2020 [11]; MoF, 2018 [1]; MoF, 2021 [2]; NDPC, 2022 [3]
Environmental/Land degradation	2018-2022	NDPC, 2020 [11]; MoF, 2018 [1]; MoF, 2021 [2]; NDPC, 2022 [3]
COVID-19	2022	NDPC, 2022 [3]; Ankiilu, 2022 [55]
Poor road network	2022	NDPC, 2022 [3]
Food hikes/high food inflation (unstable food pricing)	2018-2022	MoF, 2018 [1]; NDPC, 2022 [3]
Illegal mining/Galamsey	2022	NDPC, 2022 [3]

Land encroachment and destruction by nomadic farmers	2022	NDPC, 2022 [3]
--	------	----------------

5.3 Gender Equality (SDG 5)

Poor information management systems and data tracking tools to evaluate SDG 5 progress; poor program financing; poor coordination and lack of decentralization of gender programs to local assemblies pose a more severe challenge to achieving gender equality by 2030. In addition, the fragmentation of support services for gender-based violence victims, the patriarchal society in some Ghanaian communities, inadequate lactating-mother-friendly infrastructures to support corporate lactating mothers to effectively practise exclusive breastfeeding; delay in passage and poor implementation of gender laws and policies; and some cultural practices continue to stall the progress of the gender equality goals.


Table 5.3.1 A summary of challenges impeding Ghana's gender equality goals

5 GENDER EQUALITY	Challenges	Data coverage	Source
	Fragmentation of support services for gender-based violence victims	2020	Akazili et al., 2020 [40]
	Patriarchal society	2019	Friedman et al., 2019 [39]
	Inadequate lactating mother-friendly infrastructure/ institutions	2022	Gbagbo and Nkrumah, 2022 [37]
	Poor data and information management systems (eg. Lack of data tracking tools, lack of access to expenditure records)	2016-2022	Akologo, 2016 [53]; International Budget Partnership, 2022 [52]; Anafo, 2021 [29]; CSPG, 2019 [32]
	Poor program financing/ Poor budget allocation	2016-2022	Akologo, 2016 [53]; International Budget Partnership, 2022 [52]; Forkuo, 2019 [54]; CSPG, 2019 [32]
	Poor coordination and decentralization	2016-2022	Akologo, 2016 [53]; International Budget Partnership, 2022 [52]; Forkuo, 2019 [54]
	Delays in the passage of laws and poor policy implementation	2020	NDPC, 2020 [11]
	Cultural practices	2020	NDPC, 2020 [11]

5.4 Clean Water and Sanitation (SDG 6)

Poor financing for the production of clean water and implementation of sanitation programs; and poor budget credibility emerged as the most common and severe challenges to achieving SDG 6 by 2030 in Ghana. In between, unsanitary behavioural practices and superstitious perceptions by the Ghanaian population, the high cost of installing and maintaining toilet facilities by the Government and landlords; and unequal distribution of social amenities such as toilet facilities and waste management bins pose a challenge to the SDG 6. Though not the most severe, poor law enforcement on sanitation, limited town planning monitoring systems, poor coordination and decentralization of water and sanitation programs, poor data tracking and management systems and poor project management and monitoring systems form the basis for poor progress performance in the implementation of SDG 6 goals.


Table 5.4.1 A summary of challenges impeding Ghana’s water and sanitation goals

	Challenges	Data coverage	Source
	Poor behavioural practices and superstitious perceptions	2020-2021	Quarshie et al., 2021 [60]; Cobbinah et al., 2020 [46]; NDPC, 2020 [11]
	High cost of installing and maintaining toilet facilities	2019-2020	Foggitt et al., 2019 [61]; Cobbinah et al., 2020 [46]
	Poor law enforcement on sanitation	2019	Foggitt et al., 2019 [61]
	Limited town planning monitoring systems	2020	Cobbinah et al., 2020 [46]
	Poor budget credibility/ poor financing	2016-2022	International Budget Partnership, 2022 [52]; Akologo, 2016 [53]; GoG, 2019 [14]; MoF, 2018 [1]; Forkuo, 2019 [54]
	Poor coordination and decentralization	2016	Akologo, 2016 [53]
	Poor data tracking and management systems	2016	Akologo, 2016 [53]
	Unequal distribution of social amenities/limited resources	2018-2019	GoG, 2019 [14]; MoF, 2018 [1]
	Poor project management/monitoring systems	2018	MoF, 2018 [1]

5.5 Climate Action (SDG 13)

Poor financing for climate action programs and poor budget credibility among key stakeholders are the most severe challenges to attaining SDG 13 climate goals. This is followed by low awareness of climate change among the Ghanaian population hence there is low prioritization of information services on climate action; and poor data tracking and information management systems. Finally, most human institutions in Ghana may not have the required capacity to appreciate and effectively manage climate change hence poorly coordinated and centralized climate programs.

Table 5.5.1 A summary of challenges impeding Ghana's climate action goals

	Challenges	Data coverage	Source
	Low awareness	2020-2021	Antwi-Agyei et al., 2021 [62]; NDPC, 2020 [11]
	Low prioritization/ appreciation of information services on climate action	2020-2021	Antwi-Agyei et al., 2021 [62]; NDPC, 2020 [11]
	Poor human institutional capacity	2021	Antwi-Agyei et al, 2021 [62]
	Poor coordination and decentralization	2021	Antwi-Agyei et al, 2021 [62]
	Poor budget credibility/ poor financing	2016-2022	International Budget Partnership, 2022 [52]; Akologo, 2016 [53]; NDPC, 2020 [11]; GoG, 2019 [14]; MoF, 2021 [2]; Forkuo, 2019 [54]; CSPG, 2019 [32]
	Poor data tracking and information management systems	2016-2022	International Budget Partnership, 2022 [52]; Akologo, 2016 [53]; NDPC, 2020 [11]

6.0 Conclusion and recommendations for achieving HHSDG global goals 2030 in Ghana

Ghana has demonstrated significant progress in implementing certain HHSDG goals, as evidenced by the commitments exhibited by various governments and stakeholders from September 2015 to December 2024. However, Ghana requires the development of a more cost-effective, integrated, coordinated, and real-time evaluated strategy to accelerate progress toward meeting the HHSDG targets by 2030. There was insufficient or no data to reliably evaluate Ghana's HHSDG progress on substance use and abuse, sexual and reproductive health coverage, health impact of pollution including air quality, child labor, and Water, Sanitation and Hygiene (WASH) infrastructure in schools. Furthermore, there was insufficient data to perform a conclusive sub-level evaluation analysis of Ghana's HHSDG progress. This report recommends the utilization of real-time data monitoring tools and offline data collection and management algorithms and dashboards to facilitate continuous and effective data entry and access, irrespective of geographical location and internet connectivity. Additionally, the government needs to integrate stakeholders such as Corporate Society Organizations (CSOs), Non-Governmental

Organizations (NGOs), academia, Think Tanks, and various partners in private practice into its SDG implementation strategies for a synergistic output, with additional priority given to vulnerable groups. A decentralized and coordinated approach to promote regional integration, collaborations, and knowledge exchange, including cross-national collaborations, should be prioritized to accelerate the implementation of the 2030 SDG agenda. Similarly, while a more stable funding mechanism is necessary, efforts should be made to ensure budget credibility to mitigate the recurring issue of insufficient funding. Moreover, studies should be conducted to evaluate HHSDG interventions and programs and to assess the intersection of HHSDGs, particularly regarding how one or more HHSDGs impact or influence others. Finally, to achieve HHSDGs by 2030, the Ghanaian population must be adequately sensitized through community involvement and engagement to support the implementation strategies, policies, and interventions deployed.

To address some of the challenges identified, Ghana's team aimed to have a national-level multi-disciplinary, autonomous, independent and inclusive Think Tank to facilitate, promote and create the momentum needed to build effective multi-sectoral strategies to address the challenges hindering progress to achieving the HHSDGs. The Ghana Think Tank was established in August 2023 with membership comprising government officials, academics, and members of the civil society. See Table 6.1.

The Think Tank constitute of experts in the area of climate change (ie. Green Africa Youth), health (including mental health) and gender inequalities (i.e., Basic Needs Ghana Ghana National Association of Persons with Disability), relevant government institutions (i.e., United Nation Population Fund (UNFPA), civil society and advocacy groups (i.e., Ghana Monitoring and Evaluation Forum, National Development Planning Commission) with focus on the HHSDGs. Representatives were appointed ensuring broad geographical and gender representation. Two "general" Think Tank meetings were held in August and November 2023. In addition, several "caucus" Think Tank meeting were held to tap the expertise of members on specific issues during the synthesis of the evidence on Ghana's progress toward the attainment of the HHSDGs.

Table 6.1. Ghana Think Tank members

S/N	Name	Institution
1.	Dr. Opare Djan	National Development Planning Commission, NDPC nana.oparedjan@ndpc.gov.gh 0244149954
2.	Mrs. Vera Karikari Bediako	Gender Department, Ministry of Gender, Children and Social Protection
3.	Mr. Labram Musah	Vision for Alternative Development, VALD labrammusah@valdgh.com 0243211852
4.	Mrs. Dede Abena Bedu Addo	Ghana Monitoring and Evaluation Forum abbedums@gmail.com 0277534204
5.	Ms. Margaret Impraim (representative)	Green Africa Youth Organization support@youthclimatecouncil.com
6.	Mr. Peter Badimak Yaro	Basic Needs Ghana peter.yaro@basicneedsghana.org 0244572733
7.	Lawyer Esther Akua Gyamfi	Ghana National Council on Persons with Disability esther.akua.gyamfi@gmail.com 0244237377/0264237367

8.	Prof. Frederick Ato Armah	University of Cape Coast farmah@ucc.edu.gh 0249483014
9.	Dr. Emmanuel Nii-Boye Quarshie	University of Ghana enquarshie@ug.edu.gh 0240446684
10.	Dr. Arti Singh	Kwame Nkrumah University of Science and Technology artisingh_uk@yahoo.com 0244464576
11.	Dr. Vida Yakong	University for Development Studies kawongugre@gmail.com 050670315
12.	Mr. Eric Okrah	United Nations Population Fund, UNFPA okrah@unfpa.org
13.	Mrs. Levlyn K. Asiedu	Ghana CSOs Platform on SDGs 0201617590
14.	Ms. Irene Asamoah	Ghana National Council on Persons with Disability 0244237377/0264237367

References

1. MoF. Ghana's SDG Budget Baseline Report 2018 [Internet]. Ghana: Ministry of Finance; 2018 [cited 2023 Jan 28] p. 27. Available from: <https://mofep.gov.gh/sites/default/files/news/Ghana's-SDG-Budget-Baseline-Report-Aug-09-18.pdf>
2. MoF. Ghana's 2021 SDGs Budget Report [Internet]. Ghana: Ministry of Finance; 2021 [cited 2023 Jan 28] p. 75. Available from: <https://mofep.gov.gh/sites/default/files/reports/economic/2021-Ghana-SDG-Report.pdf>
3. NDPC. Ghana's 2022 Voluntary National Review Report on the Implementation of the 2030 Agenda for Sustainable Development [Internet]. Ghana: National Development Planning Commission; 2022 Jun [cited 2023 Jan 28] p. 168. Available from: <https://ghana.un.org/en/195640-ghana-2022-voluntary-national-review-report-implementation-2030-agenda-sustainable>
4. Sachs J, Lafortune G, Fuller G. The SDGs and the UN Summit of the Future. Sustainable Development Report 2024 [Internet]. Paris: SDSN, Dublin: Dublin University Press. 10.25546/108572; 2024 [cited 2025 Mar 4]. Available from: <https://dashboards.sdgindex.org/profiles/ghana>
5. MOH. Analysis of reproductive, maternal, newborn, child and adolescent health indicators 2019-2023 [Internet]. Ghana: Ministry of Health; 2024 [cited 2025 Mar 4]. Available from: <https://www.countdown2030.org/wp-content/uploads/2024/07/CHARTBOOK-GHANA-2024-1.pdf>
6. WHO. Ghana: Health at a glance [Internet]. Geneva, Switzerland: World Health Organization; 2024 Nov [cited 2025 Mar 4]. Available from: https://srhdpeuwpubsa.blob.core.windows.net/whdh/DATADOT/COUNTRY/PDF/288_Ghana.pdf

7. UNICEF. Child-Related SDG Progress Assessment for Ghana [Internet]. UNICEF DATA. 2023 [cited 2023 Jan 22]. Available from: <https://data.unicef.org/sdgs/country/gha/>
8. Kusi-Mensah K, Tamambang R, Bella-Awusah T, Ogunmola S, Afolayan A, Toska E, Hertzog L, Rudgard W, Evans R, Omigbodun O. Accelerating progress towards the sustainable development goals for adolescents in Ghana: a cross-sectional study. *Psychol Health Med* [Internet]. 2022; Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85135994102&doi=10.1080%2f13548506.2022.2108086&partnerID=40&md5=64eb42f11274770b1cd59488e980dd11>
9. Amu H, Osei E, Kofie P, Owusu R, Bosoka SA, Konlan KD, Kim E, Orish VN, Maalman RSE, Manu E, Parbey PA, Saah FI, Mumuni H, Appiah PK, Komesuor J, Ayanore MA, Amenuvegbe GK, Kim S, Jung H, Adjuik M, Tarkang EE, Alhassan RK, Donkor ES, Zottor FB, Kweku M, Amuna P, Kim SY, Gyapong JO. Prevalence and predictors of depression, anxiety, and stress among adults in Ghana: A community-based cross-sectional study. *PLoS ONE* [Internet]. 2021;16(10 October). Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85116879667&doi=10.1371%2fjournal.pone.0258105&partnerID=40&md5=b5ff6e5b1ba432df43888f837b413550>
10. Sachs J, Kroll C, Lafortune G, Fuller G, Woelm F. Sustainable Development Report 2022 [Internet]. 1st ed. University Printing House, Cambridge CB2 8BS, United Kingdom: Cambridge University Press; 2022 [cited 2023 Jan 28]. Available from: <https://www.cambridge.org/core/product/identifier/9781009210058/type/book>
11. NDPC. 2020 SDGs Report: Ghana [Internet]. Ghana: National Development Planning Commission; 2020 [cited 2023 Jan 28] p. 98. Available from: https://ndpc.gov.gh/media/2020_SDGs_Report-Final.pdf
12. RCN Ghana. WASH reflections: Sustainable Development Goal [Internet]. RCN Ghana; 2018 Jul [cited 2025 Mar 4]. Available from: <https://washghana.org/wp-content/uploads/2024/02/WASH-REFLECTIONS-73-11.01.pdf>
13. Abubakari SW, Oppong FB, Wiru K, Manu G, Apraku EA, Abukari M, Zandoh C, Asante KP. Open defecation and attainment of Sustainable Development Goal Six: evidence from Kintampo Surveillance System, Ghana. *Ghana Med J*. 2021 Dec;55(4):273–7.
14. GoG. Ghana: Voluntary National Review on the Implementation of the 2030 Agenda for Sustainable Development [Internet]. Ghana: Government of Ghana; 2019 Jun [cited 2023 Jan 28] p. 127. Available from: <https://ghana.un.org/en/19155-ghana-voluntary-national-review-report-implementation-2030-agenda-sustainable-development#:~:text=The%20Ghana%20Voluntary%20National%20Review,as%20opportunities%20to%20be%20explored>.
15. UN. The race to zero emissions, and why the world depends on it | UN News [Internet]. UN News. 2020 [cited 2023 May 2]. Available from: <https://news.un.org/en/story/2020/12/1078612>
16. UN. The Sustainable Development Goals Report 2024 [Internet]. United Nation; 2024 [cited 2025 Mar 8]. Available from: <https://unstats.un.org/sdgs/report/2024/The-Sustainable-Development-Goals-Report-2024.pdf>
17. UNDP. Africa Sustainable Development Report [Internet]. United Nations Development Programme; 2024 [cited 2025 Mar 8]. Available from: https://www.undp.org/sites/g/files/zskgke326/files/2024-07/asdr_2024_-_en.pdf

18. Damoah IS, Ayakwah A, Tingbani I. Artificial intelligence (AI)-enhanced medical drones in the healthcare supply chain (HSC) for sustainability development: A case study. *J Clean Prod* [Internet]. 2021;328. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85119596994&doi=10.1016%2fj.jclepro.2021.129598&partnerID=40&md5=7d66c20111631b4a47d46fb0f61d8ab5>
19. Kremer P, Haruna F, Tuffour Sarpong R, Agamah D, Billy J, Osei-Kwakye K, Aidoo P, Dodoo D, Okoh-Owusu M. An impact assessment of the use of aerial logistics to improve access to vaccines in the Western-North Region of Ghana. *Vaccine*. 2023 Aug 14;41(36):5245–52.
20. Blaboe NA. ASSESSING SDG 3: ACHIEVING UNIVERSAL HEALTH COVERAGE IN GHANA [Internet] [Masters thesis]. [Ghana]: University of Ghana; 2019 [cited 2023 Jan 28]. Available from: <https://ugspace.ug.edu.gh/handle/123456789/33671>
21. NHIS. NHIS @20 clock is ticking [Internet]. 2022 [cited 2025 Mar 4]. Available from: <https://www.nhis.gov.gh/News/nhis-%4020-clock-is-ticking-----5399>
22. Ghana AIDS Commission. Ghana national HIV & AIDS strategic plan 2021-2025 [Internet]. Ghana AIDS Commission; 2020 [cited 2025 Mar 4]. Available from: <https://hivpreventioncoalition.unaids.org/en/resources/ghana-national-hiv-aids-strategic-plan-2021-2025>
23. WHO. Ghana STEPS report 2023 [Internet]. World Health Organization; 2024 Sep [cited 2025 Mar 4]. Report No.: ISBN 978 – 9988 – 3 – 9188 – 1. Available from: <https://www.afro.who.int/sites/default/files/2024-11/GHANA%20STEPS%20REPORT%202023.pdf>
24. MOH. National policy: Non-communicable diseases [Internet]. Ministry of Health; 2022 Mar [cited 2025 Mar 4]. Available from: <https://www.moh.gov.gh/wp-content/uploads/2022/05/Ghana-NCD-Policy-2022.pdf>
25. MOH. Ghana's roadmap for attaining universal health coverage 2020-2030 [Internet]. Ministry of Health; 2020 Jan [cited 2025 Mar 4]. Available from: <https://www.moh.gov.gh/wp-content/uploads/2021/08/UHC-Roadmap-2020-2030.pdf>
26. UNDP. Tobacco control as an accelerator for the sustainable development goals [Internet]. UNDP; 2024 [cited 2024 Mar 4]. Available from: https://www.undp.org/sites/g/files/zskgke326/files/2024-12/tobacco_control_as_an_accelerator_for_the_sdgs_in_ghana.pdf
27. World bank. Ghana [Internet]. World Bank Gender Data; 2025 [cited 2025 Mar 4]. Available from: <https://genderdata.worldbank.org/en/economies/ghana>
28. Welsh C. Russia, Ukraine, and Global Food Security: A Two-Year Assessment. 2024 Feb 27 [cited 2025 Mar 8]; Available from: <https://www.csis.org/analysis/russia-ukraine-and-global-food-security-two-year-assessment>
29. Anaafo D. Tracking the Progress on the Localization of the SDGs: Lessons for the West African Sub-region from Ghanaian Local Governments [Internet]. Accra, Ghana: Good Governance Africa West African Regional Office (GGA – WARO) The Paragon, 3rd Floor Master Bannor Street / 9th Lane, Osu Behind the Trust Hospital, Osu-Accra; 2021 Jul [cited 2023 Jan 28] p. 91. Available from: <https://www.africaportal.org/documents/21672/Localization-of-the-SDGs-in-Ghana.pdf>
30. Issahaku G, Abdul-Rahaman A, Amikuzuno J. Climate change adaptation strategies, farm performance and poverty reduction among smallholder farming households in Ghana. *Clim Dev*. 2021;13(8):736–47.

31. UNDP. Under-representation of Women in Leadership in Ghana: Action needed to achieve the Sustainable Development Goals [Internet]. The United Nations Development Programme (UNDP); 2023 [cited 2025 Mar 4]. Available from: https://www.undp.org/sites/g/files/zskgke326/files/2023-09/undp_ghana_paper-_women_representation_in_governance_in_ghana-.pdf
32. CSPG. Progress on the SDGs: Telling the Ghanaian story through the lens of citizens [Internet]. Ghana: Civil Society Platform Ghana; 2019 Jun [cited 2023 Jan 28] p. 91. Available from: <https://action4sd.org/wp-content/uploads/2019/10/VNR-Shadow-Report-from-the-Ghana-CSOs-Platform-on-SDGs-June-2019.pdf>
33. MOI. Affirmative Action Act, 2024 (Gender Equity) Passed by Parliament | Newsroom - Ministry of Information, Ghana [Internet]. Ministry of Information. 2024 [cited 2025 Mar 8]. Available from: <https://moi.gov.gh/newsroom/2024/08/affirmative-action-act-2024-gender-equity-passed-by-parliament/>
34. Lelea MA, Konlan LM, Ziblila RC, Thiele LE, Amo-Aidoo A, Kaufmann B. Strategies to Promote Sustainable Development: The Gendered Importance of Addressing Diminishing African Locust Bean (*Parkia biglobosa*) Resources in Northern Ghana's Agro-Ecological Landscape. Sustainability [Internet]. 2022;14(18). Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85138746731&doi=10.3390%2fsu141811302&partnerID=40&md5=d51badd98c2096f7302f5350efe4ab4f>
35. Yakovleva N, Vazquez-Brust DA, Arthur-Holmes F, Abrefa Busia K. Gender equality in artisanal and small-scale mining in Ghana: Assessing progress towards SDG 5 using salience and institutional analysis and design. Environ Sci Policy. 2022;136:92–102.
36. Doherty B. Gender equality and women's empowerment through fair trade social enterprise: Case of divine chocolate and Kuapa Kokoo [Internet]. Contemp. Issues. Entrep. Res. Emerald Group Publishing Ltd.; 2018. 151 p. (Contemporary Issues in Entrepreneurship Research; vol. 8). Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85065486318&doi=10.1108%2fS2040-724620180000008014&partnerID=40&md5=4abb6c5809120dc40ac372820549f72f>
37. Gbagbo FY, Nkrumah J. Breastfeeding-friendly policies and programs in three public Universities in Ghana. Int Breastfeeding J [Internet]. 2022;17(1). Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85128073087&doi=10.1186%2fs13006-022-00468-7&partnerID=40&md5=44994cb55118e6210823a075dd06809f>
38. UNICEF. Ghana Education Fact Sheets 2020 [Internet]. UNICEF; 2020 [cited 2025 Mar 4]. Available from: https://data.unicef.org/wp-content/uploads/2019/07/Ghana_Fact_Sheets_Digital.pdf
39. Friedman R, Hirons MA, Boyd E. Vulnerability of Ghanaian women cocoa farmers to climate change: a typology. Clim Dev. 2019;11(5):446–58.
40. Akazili J, Kanmiki EW, Anaseba D, Govender V, Danhouno G, Koduah A. Challenges and facilitators to the provision of sexual, reproductive health and rights services in Ghana. Sex Reprod Health Matters [Internet]. 2020;28(2). Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85096368313&doi=10.1080%2f26410397.2020.1846247&partnerID=40&md5=75d2ed9202c5d8c593030596efbf7345>
41. DHS. Ghana 2022 Demographic and Health Survey Summary Report [Internet]. Ghana Demographic and Health Survey; 2022 [cited 2025 Mar 8]. Available from: https://ghs.gov.gh/wp-content/uploads/2024/01/Ghana%20DHS%202022_Summary%20Report.pdf

42. RCN Ghana. Partners – WASH Ghana – RCN Ghana [Internet]. 2025 [cited 2025 Mar 8]. Available from: <https://washghana.org/sponsors/>
43. Safe Water Network. Safe Water Network Ghana [Internet]. Safe Water Network. 2025 [cited 2025 Mar 8]. Available from: <https://safewaternetwork.org/our-work/ghana/>
44. WaterAid. Ghana | WaterAid Global [Internet]. WaterAid. 2025 [cited 2025 Mar 8]. Available from: <https://www.wateraid.org/where-we-work/ghana>
45. Wilberforce M. Ghana's Buz Stop Boys: The young professionals helping to clean up Accra [Internet]. 2024 [cited 2025 Mar 8]. Available from: <https://www.bbc.com/news/articles/c2l9kdznkzko>
46. Cobbinah PB, Kosoe EA, Diawuo F. Environmental planning crisis in urban Ghana: Local responses to nature's call. *Sci Total Environ*. 2020 Jan 20;701:134898.
47. Odonkor ST, Dei EN, Sallar AM. Knowledge, attitude, and adaptation to climate change in Ghana. *Sci World J* [Internet]. 2020;2020. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85097676046&doi=10.1155%2f2020%2f3167317&partnerID=40&md5=c58b8f56b35e8ff2ba62f358a57d7796>
48. Asante LA, Sasu A. The Persons with Disability Act, 2006 (Act 715) of the Republic of Ghana: The Law, Omissions and Recommendations. *Journal of Law, Policy and Globalization*. 2015;36.
49. Abrokwah R, Aggire-Tettey EM, Naami A. Accessing healthcare in Ghana: Challenges encountered and strategies adopted by persons with disabilities in accra. *Disabil CBR and Incl Dev*. 2020;31(1):120–41.
50. Ofosu B, Ofori D, Ntummy M, Asah-Opoku K, Boafor T. Assessing the functionality of an emergency obstetric referral system and continuum of care among public healthcare facilities in a low resource setting: an application of process mapping approach. *BMC Health Serv Res*. 2021 Dec;21(1):402.
51. Umar S, Fusheini A, Ayanore MA. The shared experiences of insured members and the uninsured in health care access and utilization under Ghana's national health insurance scheme: Evidence from the Hohoe Municipality. *PLoS ONE*. 2020 Dec 23;15(12):1–21.
52. International Budget Partnership. Ghana: Budget Credibility and the Sustainable Development Goals - Publications [Internet]. International Budget Partnership. 2022 [cited 2023 Jan 23]. Available from: <https://internationalbudget.org/publications/ghana-budget-credibility-and-the-sustainable-development-goals/>
53. Akologo SZ. Bringing the Sustainable Development Goals (SDGs) to Life in Ghana: An assessment report on Implementation status [Internet]. Ghana: Caritas Ghana; 2016 Oct [cited 2023 Jan 28] p. 54. Available from: <https://www.caritas-ghana.org/wp-content/uploads/2018/06/Bringing-SDGs-to-life-in-Ghana-A-Caritas-Ghana-Assessment-Report.pdf>
54. Forkuo DE. Mainstreaming Sustainable Development Goals (SDGs) into Local Development Planning: A Comparative Study of Adentan and Lankwantanang- Madina Municipal Assemblies. [Internet] [Master's thesis]. [Ghana]: University of Ghana; 2019 [cited 2023 Jan 23]. Available from: [https://ugspace.ug.edu.gh/bitstream/handle/123456789/35824/Mainstreaming%20Sustainable%20Development%20Goals%20\(SDGS\)%20into%20Local%20Development%20Planning%20A%20Comparative%20Study%20of%20Adentan%20and%20Lankwantanang-%20Madina%20Municipal%20Assemblies.pdf?sequence=1&isAllowed=y](https://ugspace.ug.edu.gh/bitstream/handle/123456789/35824/Mainstreaming%20Sustainable%20Development%20Goals%20(SDGS)%20into%20Local%20Development%20Planning%20A%20Comparative%20Study%20of%20Adentan%20and%20Lankwantanang-%20Madina%20Municipal%20Assemblies.pdf?sequence=1&isAllowed=y)

55. Ankiilu M. Is Ghana on Track to Meet the Sustainable Development Goals? [Internet]. African Eye Report. 2022 [cited 2023 Jan 23]. Available from: <https://africaneyereport.com/is-ghana-on-track-to-meet-the-sustainable-development-goals/>
56. Assan A, Takian A, Aikins M, Akbarisari A. Challenges to achieving universal health coverage through community-based health planning and services delivery approach: A qualitative study in Ghana. BMJ Open [Internet]. 2019;9(2). Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85062083388&doi=10.1136%2fbmjopen-2018-024845&partnerID=40&md5=449385872247671ac3b399b9f7898e5d>
57. Ward CL, Guo MZ, Amukele TK, Abdul-Karim A, Schroeder LF. Availability and Prices of WHO Essential Diagnostics in Laboratories in West Africa: A Landscape Survey of Diagnostic Testing in Northern Ghana. J Appl Lab Med. 2021;6(1):51–62.
58. Sheff MC, Bawah AA, Asuming PO, Kyei P, Kushitor M, Phillips JF, Kachur SP. Evaluating health service coverage in Ghana's Volta Region using a modified Tanahashi model. Global Health Action [Internet]. 2020;13(1). Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85081736298&doi=10.1080%2f16549716.2020.1732664&partnerID=40&md5=72140136abe2140c64b2cf8f23e08ede>
59. Quarshie PT, Antwi-Agyei P, Suh NN, Fraser EDG. Tackling post-COVID-19 pandemic food crises through the adoption of improved maize seeds and technologies by smallholder farmers: The case of Ejura Sekyeredumase in Ghana. Front Sustain food Syst [Internet]. 2022;6. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85140074748&doi=10.3389%2ffsufs.2022.804984&partnerID=40&md5=5b36a422e6ed54e7d0f29adb55322095>
60. Quarshie AM, Gyasi SF, Kuranchie FA, Awuah E, Darteh E. Conceptual Behaviour Underpinning the Occurrence of Nonfaecal Matter in Faecal Sludge in Some Urban Communities, Ghana. Okosun IS, editor. Journal of Environmental and Public Health. 2021 May 10;2021:1–10.
61. Foggitt E, Cawood S, Evans B, Acheampong P. Experiences of shared sanitation – towards a better understanding of access, exclusion and 'toilet mobility' in low-income urban areas. J Water Sanit Hyg Develop. 2019;9(3):581–90.
62. Antwi-Agyei P, Dougill AJ, Doku-Marfo J, Abaidoo RC. Understanding climate services for enhancing resilient agricultural systems in Anglophone West Africa: The case of Ghana. Clim Serv [Internet]. 2021;22. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85103130570&doi=10.1016%2fj.cliser.2021.100218&partnerID=40&md5=cea63d9ef93d0fe7f08a6e4d9de80106>