

Newsletter Quarterly Gross Domestic Product (QGDP) Second Quarter 2023



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Main points

- Ghana provisional real Gross Domestic Product (GDP) in volume terms was estimated to have increased by 3.2% in quarter two (April to June) of 2023 compared to the same period in 2022.
- When seasonally adjusted, Ghana real GDP increased by 0.7 % in quarter two (April to June) of 2023; a 0.1 percentage point lower than what was recorded in quarter one (January to March) of 2022.
- Information & Communication, Mining and Quarrying, Fishing, Health, Livestock, Crops, Public Administration, Defense & Social Security, Transport

and Storage were the main drivers of GDP growth for the second quarter of 2023.

- Main sub-sectors with more than 10 percentage expansion in quarter two of 2023 are:
 - 1. Information & Communication (26.4%)
 - 2. Fishing (12.2%)
 - 3. Health & Social Work (11.0%)
- Six sub-sectors contracted in quarter two of 2023. These are:
 - 1. Construction (-11.7%)
 - 2. Wholesale and retail trade; repair of motor vehicles and motorcycles (-5.3%)
 - 3. Electricity (-5.1%)
 - 4. Forestry (-4.2%)
 - 5. Water Supply, Sewerage, Waste Management & Remediation Activities (-3.3%)
 - 6. Manufacturing (-0.5%)

Things you need to note about this release.

Gross Domestic Product (GDP) growth is the main indicator of economic performance. There are three approaches used to measure GDP: the output approach, the expenditure approach, and the income approach.

This Statistical Release contains independently compiled quarterly estimates of the Gross Domestic Product (GDP) for the 2nd quarter of 2023 using the production approach. The estimates are based on the 2008 System of National Accounts (SNA), the International Standard Industrial Classification (Rev.4) published by the United Nations, and the Quarterly National Accounts Manual: Concepts, Data Sources and Compilation prepared by the International Monetary Fund (IMF). This means that the methodology, concepts, and classifications are in accordance with the guidelines and recommendations of an internationally agreed system of national accounts. The estimates of real GDP are expressed in terms of the base year, 2013. The Annual GDP estimates are derived independent of the quarterly estimates. Short-term indicators are used to estimate the quarterly GDP (see IMF's Quarterly National Accounts Manual: Concepts, Data Sources and Compilation) and benchmarked to the annual GDP.

Current or Nominal GDP is the value of final goods and services evaluated at current quarter prices.

Constant or Real GDP is the value of final goods and services evaluated at base year prices. In Ghana, the base year is 2013. By using the prices from the base-year

(or holding prices constant over time), we eliminate the impact of rising prices on GDP to get a measure of "Real" economic activity.

Seasonal Adjustment

The quarterly value added, and GDP estimates have been seasonally adjusted. Seasonal adjustment is the process of estimating and removing seasonal effects from time series to reveal non-seasonal features. This process is to provide a clearer view of short-term movements and trends and to allow early identification of turning points.

Revision Policy

While most revisions are made to the four most recent quarters of the series, there is no restriction on when an estimate of the quarterly series for a given period can be revised. The main causes of revisions are as follows:

- a) Incorporation of additional and improved data: Most revisions reflect the incorporation of a wider range of data. Some data that was not available at the release date are incorporated through revisions into subsequent releases.
- b) Reconciliation of quarterly and annual measures: The process of reconciling the quarterly measures with the annual measures can lead to further revisions. The quarterly measures of these series are based on a smaller range of data than the annual measures.
- c) The rebased provisional quarterly GDP estimates may be revised further and finalized based on the availability of additional data. The next revision of the quarterly and annual GDP estimates will be done in September 2023.

Related Publications

Users may refer to other publications on GDP on the **GSS website:** www.statsghana.gov.gh

Quarterly real GDP growth: April to June 2023

Provisional real quarterly gross domestic product (QGDP) growth rate including Oil and Gas, is 3.2% (year on year) in the second quarter of 2023. In the same period of 2022, the growth was 3.5%.

GDP growth rate without oil and gas (Non-Oil GDP) for second quarter of 2023 is 3.2% which compares to the same period in 2022 with a growth rate of 4.8%.

The Services sector recorded the highest growth of 6.3%, followed by the Agriculture sector with a growth of 6.0% and the Industry sector with a contraction of 1.9 percent growth rate.

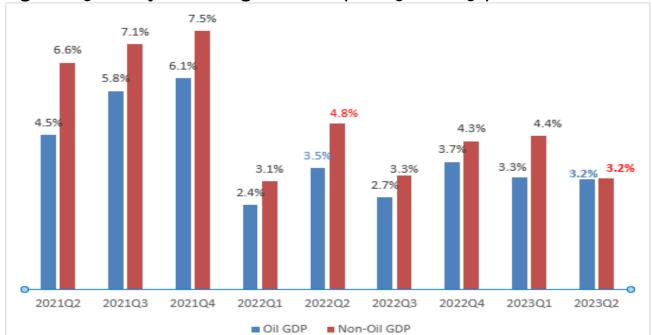


Figure 1: Quarterly real GDP growth rate (2021Q2-2023Q2)

Real quarterly gross domestic product: April to June 2023

The **GDP** (Including Oil & Gas) estimate at constant 2013 prices for the 2nd quarter of 2023 was **GH¢42,110.1 million** compared to **GH¢40,800.6 million** in the 2nd quarter of 2022.

The **Non-oil GDP** at constant 2013 prices for the 2nd quarter of 2023 was **GH¢39,699.2 million** compared to **GH¢38,457.6 million** in the 2nd quarter of 2022.

Table 1: Year-on-year growth rates in 2nd quarter of 2023

Sector	Expanding sub-sectors		Contracting sub-sectors	
	Fishing 12.2%		Forestry &	-4.2
Agriculture (6.0%)	Livestock 6.9%		Logging	
	Crops and cocoa 6.3%			
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			C	-11.7%
	Mining & Quarrying	3.5%	Construction	-11.7%
	8 1 6 111 9 8		Electricity	5.1%
			Water Supply,	
Industry			Sewerage,	
(-1.9%)			Waste Management &	
			Remediation	
			Activities	-3.3%
			Manager	0.5%
			Manufacturing	-0.5%
	Information &	26.4%		
	Communication		Trade, Repair of Vehicle, Household Goods	-5.3%
	Health & Social Work	11.0%	Household Goods	
	Public Administration			
Services (6.3%)	Defense, Social Security	6.8%		
(3.373)	Transport & Storage	6.0%		
	Education	5.4%		
	Other Personal Service Activities	5.5%		
	Real Estate	4.2%		
	Professional, Administrative & Support	3.5%		
	Hotel & Restaurant	3.4%		
	Finance & Insurance	0.4%		

Nominal quarterly gross domestic product: April to June 2023

The GDP estimate at current prices in purchaser's value for the 2^{nd} quarter of 2023 was **GH¢185,618.8million** compared to **GH¢130,657.5 million** in the 2^{nd} quarter of 2022.

The **Non-oil GDP** (GDP without Oil and Gas) estimate at current prices for the 2nd quarter of 2023 was **GH¢175,124.4 million** compared to **GH¢121,411.4 million** in the 2nd quarter of 2022.

GDP sectoral shares

The Services sector continue to be the largest sector of the Ghanaian economy in the first quarter of 2023 with a share of 47 percent of GDP at basic prices. The GDP share of Industry and Agriculture were 32 percent and 21 percent respectively.

Agriculture GH¢38,745.8 (22.6%)

Services GH¢76,503.6 (44.6%)

Industry GH¢56,382.4 (32.8%)

Figure 2: Sectoral distribution (%) of nominal GDP at basic prices

Seasonally Adjusted GDP

The Provisional quarter-on-quarter 1 seasonally adjusted Real Gross Domestic Product (including Oil) growth rate for the 2^{nd} quarter of 2023 was 0.7 percent.

For the 2^{nd} quarter of 2023, the quarter-on-quarter seasonally adjusted growth rates (see Table 2) were as follows:

¹ Quarter-on-quarter GDP estimates provide a short term (within three months) picture of current economic developments. Estimates are influenced by seasonal patterns that are caused by economic behavior or recurrent exogenous factors such as weather patterns, holidays, religious events, festive seasons, etc.

- The Agriculture sector expanded by 1.3 percent in the 2nd quarter of 2023 compared to 2.0 percent in the 1st quarter of 2023. The Livestock subsector decreased by 0.2 percentage points from 1.6 percent in the 1st quarter 2023 to 1.4 percent in the 2nd quarter of 2023. In the second quarter of 2023, the growth of Crops & Cocoa sub-sector reduced by 0.7 percentage points, growing at 1.3 percent compared to 2.0 percent in the 1st quarter of 2023. The Fishing subsector improved, growing at 2.8% in the second quarter of 2023 from a contraction of -0.7 percent recorded in the 1st quarter of 2023. The Forestry and Logging sub-sector decreased marginally by 0.7 percentage points from 0.4 percent in the 1st quarter of 2022 to -1.1 percent in the 2nd quarter of 2023.
- Within the Industry sector which grew at-0.4 percent (quarter on quarter), the Mining & Quarrying sub-sector improved marginally from -0.5 percent in the 1st quarter of 2023, to 0.8 percent in the 2nd quarter of 2023. The Electricity subsector declined from 0.9 percent in the 1st quarter of 2023 compared to -1.2 percent in the 2nd quarter of 2023. The manufacturing sub-sector improved slightly to 0.1 percent in the second quarter of 2023 from -0.4 percent in the 1st quarter of 2023. There was minimal improvement in the Water Supply, Sewerage, Waste Management & Remediation Activities -07% in the 2nd quarter of 2023 from -1.3% in 1st quarter 2023. Construction declined to -3.1% in the 2nd quarter of 2023 compared to -1.5% in the 1st quarter 2023.

In the Services sector, Information & Communication sub-sector grew from 4.7 percent in the 1st quarter of 2023 to 5.6 percent in the 2nd quarter of 2023. Health recorded a marginal decline, growing at 2.9% in the 2nd quarter of 2023 from a growth of 3.0% in the 1st quarter of 2023. Public Administration, Defense & Social Security and Education grew at the rates of 1.7 percent and 1.3 percent in quarter two of 2023 from 2.2 percent and 2.1 percent respectively in quarter one of 2023. The growth in Finance & Insurance activities declined by 1.9 percentage points from 2.0 percent in quarter one of 2023 to 0.1 percent in quarter two of 2023. Transport & Storage slowed to 1.4 percent in the 2nd quarter of 2023 from 1.8 percent in the 1st quarter of 2023. Real Estate grew at 1.2 percent in the 2nd quarter of 2023 from 1.0 percent in the 1st quarter of 2023. The activities of Professional, Administrative & Support Services expanded by 0.5 percentage points from the 0.8 percent recorded in quarter one of 2023 to 1.3 percent in quarter two of 2023.

Trade, Repair of Vehicle, Household Goods declined to -0.9 percent in quarter two of 2023 from 0.9 percent in quarter one of 2023.

Table 2: Quarter-on-quarter seasonally adjusted growth rates in 2023Q2

Sector	arter-on-quarter seasonally adj Expanding sub-sectors	_	Contracting sectors	sub-
Agriculture (1.3%)	Fishing	2.8%	Forestry & Logging	-1.1%
	Livestock Crops	1.4%	Dossins	
	Mining & Quarrying	0.8 %	Construction	-3.1%
Industry (-0.4%)			Electricity	-1.2%
			Manufacturing	-0.1%
			Water Supply, Sewerage, Waste Management & Remediation Activities	-0.7%
	Information & Communication	5.6%		
	Health & Social Work	2.9%	Trade; Repair of Vehicles, Household Goods	-0.9%
	Public Administration & Defense, Social Security	1.7%	110 40011014 00040	
	Other Personal Service Activities	1.5%		
Services (1.4%)	Transport and Storage Education	1.4% 1.3%		
	Professional, Administrative & Support	1.3%		
	Real Estate Hotels & Restaurants	1.2%		
		0.3%		
	Finance & Insurance	0.1%		

2013_02	Appendix 1- Quarterly Gross Domestic Product at current prices by economic activity and respective sectoral distribution													
2013_01									1					
2013 Q2 5,521.8 10,753.2 12,632.2 28,907.2 1,507.6 30,414.8 8,289.1 28,715.7 19.1 37.2 43.7 100.0 27.3 2013 Q3 5,937.7 10,335.5 1,666.1 28,935.2 1,514.2 30,449.4 8,646.8 28,944.8 20.5 35.7 43.8 100.0 28.4 2013 Q4 7,202.2 10,288.8 14,822.4 31,983.5 1,822.4 33,805.9 10,196.6 32,149.4 22.5 32.6 35.6 38.1 100.0 31.3 30.014 Q1 8,084.1 18,838.4 11,653.6 30,514.3 3,189.8 33,741.2 10,550.5 32,301.4 26.2 35.6 38.1 100.0 31.3 30.014 Q1 8,961.1 14,750.1 15,872.6 39,528.8 4,222.8 43,766.6 12,555.7 40,924.6 2.7 37.2 40.1 100.0 26.4 30.1 10.0 25.7 30.1 10.0 3,13.1 1	Year Quarter	Agriculture	Industry	Services	Total Value Added (GDP_@_basic prices)	Net indirect Taxes	Total (GDP in purchaser's value)	ow InformalGDP in purchaser's value	Total Non-Oil (GDP in purchaser's value)	Agriculture	Industry	Services	Total Value Added (GDP_@_basic_prices)	ow Informal GDP in purchaser's value
2013 Q3	2013_Q1	6,698.2	11,056.7	10,733.0	28,487.9	1,319.6	29,807.5	9,155.8	28,038.9	23.5	38.8	37.7	100.0	30.7
2013 QA 7,202 10,288 8 14,692 4 31,983 5 1,822 4 33,805 9 10,196 4 32,149.4 22.5 32.2 45.3 10.00 30.2 2014 Q1 8,008.4 10,889.4 11,653.6 30,551.4 3,189.8 33,741.2 10,558.9 32,201.4 26.2 35.6 38.1 10.00 31.3 2014 Q2 6,749 9 12,717.3 14,930.9 34,398.1 3,365.1 47,756 6 19,973.4 35,479.4 19.6 37.0 43.4 10.00 25.4 2014 Q4 8,961.1 14,725 0 15,872.6 19,558.8 4,227.8 47.8 6.6 12,525.7 40,924.6 22.7 37.2 40.1 10.00 25.4 2015 Q1 1,535.0 13,115.1 17,669.7 40,309.2 3,652.8 43,962.1 13,105.1 42,016.2 23.6 32.5 43.8 10.00 25.8 2015 Q1 7,885.1 15,330.2 18,629.0 41,844.3 3,602.4 45,446.7 11,785.8 44,003.5 18.8 36.6 44.5 10.00 25.9 2015 Q3 8,712.4 13,393.0 18,115.6 40,766.0 3,776.1 44,542.1 12,441.7 43,807.7 21.4 34.2 44.4 10.00 27.9 2015 Q3 8,712.4 13,393.0 18,115.6 40,766.0 3,776.1 44,542.1 12,441.7 43,807.7 21.4 34.2 44.4 10.00 27.9 2015 Q3 1,652.8 14,984.2 22.94.6 43,638.3 3,801.2 41,543.4 3,454.4 3,444.4 3,444.4 10.00 27.9 2015 Q3 1,658.3 14,882.7 23,556.0 48,129.0 4,355.5 52,484.5 14,364.4 52,440.4 20.1 30.9 48.9 10.00 27.4 2017 Q2 10,039.7 19,210.8 29,674.0 48,245.4 43.1 68,238.3 18,555.6 65,330.0 20.0 33.5 45.5 10.00 27.2 2017 Q3 12,688.8 24,276.5 13,773.8 5,374.4 4,411.1 6,283.3 18,556.6 6,330.0 20.0 33.5 45.5 10.00 27.2 2017 Q3 12,688.8 24,276.9 13,783.6 5,368.0 78,761.7 19,791.2 74,147.8 17.7 34.6 47.7 10.00 27.9 2018 Q1 12,793.5 25,402.2 35,079.9 73,333.6 5,368.0 78,761.7 19,791.2 74,147.8 17.7 34.6 47.7 10.00 27.9 2019 Q1 17,536.5 26,301.3 3,373.8 5,369.5 1,369.5 1,369.5 2,369.5 1,369.5 2,369.5 1,369.5 2,369.5 1,369.5 2,369.5 1,369.5 2,369.5 1,369.5 2,369.5 1,369.5 2,369.5 1,369.5 2,369.5 1,3	2013_Q2	5,521.8	10,753.2	12,632.2	28,907.2	1,507.6	30,414.8	8,289.1	28,715.7	19.1	37.2	43.7	100.0	27.3
2014_Q1	2013_Q3	5,933.7	10,335.5	12,666.1	28,935.2	1,514.2	30,449.4	8,646.8	28,924.8	20.5	35.7	43.8	100.0	28.4
2014_Q2	2013_Q4	7,202.2	10,288.8	14,492.4	31,983.5	1,822.4	33,805.9	10,196.4	32,149.4	22.5	32.2	45.3	100.0	30.2
2014_04	2014_Q1	8,008.4	10,889.4	11,653.6	30,551.4	3,189.8	33,741.2	10,558.9	32,301.4	26.2	35.6	38.1	100.0	31.3
2014_QA	2014_Q2	6,749.9	12,717.3	14,930.9	34,398.1	3,358.4	37,756.5	9,973.4	35,475.4	19.6	37.0	43.4	100.0	26.4
2015_01	2014_Q3	7,356.8	15,459.3	16,912.4	39,728.6	3,671.1	43,399.7	11,138.6	40,426.8	18.5	38.9	42.6	100.0	25.7
2015_Q2 7,885_1 15,330_2 18,629_0 41,844_3 3,602_4 45,446_7 11,785_8 44,003_5 18_8 36_6 44_5 100_0 25_9 2015_Q3 8,712_4 13,938_0 18,115_6 40,766_0 3,776_1 44,542_1 12,441_7 43,680_7 21_4 34_2 44_4 100_0 27_9 2015_Q4 10,547_8 14,732_3 19,941_5 45_221_7 4,353_0 49,574_7 14,686_6 49,133_4 23_3 32_6 44_1 100_0 27_9 2016_Q1 12,099_8 14,969_4 22,294_6 49,363_8 3,801_2 53_165_0 16,582_3 53,070_6 24_5 30_3 45_2 100_0 31_2 2016_Q2 9,690_3 14,882_7 23,556_0 48,129_0 4,355_5 52,484_5 11,364_4 52,440_4 20_1 30_9 48_9 100_0 27_4 2017_Q2 10,039_7 19,210_8 29,674_0 58,924_5 4,331_0 63,255_5 15,792_4 61,179_2 17_0 32_6 50_4 100_0 25_0 2017_Q3 12,688_8 21,206_5 29,499_0 63,395_2 4,843_1 68,238_3 18,555_6 65_330_0 20_0 33_5 46_5 100_0 27_2 2017_Q4 16,199_7 19,895_0 27,679_1 63,773_8 5,261_4 69,035_1 21,647_0 66,361_0 25_4 31_2 43_4 100_0 31_4 2018_Q1 15,053_6 24,271_9 32,874_8 72,200_3 5,242_7 77,443_0 21,286_2 72,938_6 20_8 33_6 45_5 100_0 27_5 2018_Q2 12,228_9 23,411_3 13,201_3 66_841_3 4,917_0 71,758_3 18,142_1 67,897_1 18_3 35_0 46_7 100_0 25_3 2018_Q3 12,983_5 25,402_2 35,007_9 73,393_6 5,368_0 78,761_7 19,791_2 74,147_8 17_7 34_6 47_7 100_0 25_1 2019_Q1 17,536_5 26,376_3 38,436_5 82,349_4 5,752_2 88,101_5 24,127_3 82,086_7 21_3 32_0 46_7 100_0 27_9 2019_Q1 13,595_0 26,911_4 39,874_0 80,380_4 5,528_6 85,99_0 20,531_7 80,556_8 16_9 33_5 49_6 100_0 23_8 2019_Q1 14,227_0 29,533_8 41,504_1 85,264_8 5,691_6 90,956_4 21,683_5 87,070_5 19_2 32_8 48_0 100_0 25_9 2020_Q1 19,997_3 29,326_4 46,717_8 96,001_5 4,589_2 100,990_7 29,125_4 96,590_2 20_8 30_5 48_7 100_0 25_2 2020_Q1 19,997_3 39,326_6 54,722_1 18,326_0 5,218_7 88,747_7 24,074_8 85,860_6 21_0 33_1 45_8 100_0 25_2 2020_Q1 19,997_3 39,326_6 46,717_8 96,001_5 4,589_2 100,990_7 29,125_4 96,590_2 20_8 30_5 48_7 100_0 25_2 2020_Q1 19,997_3 30,326_6 54,747_2 108,299_7 5,723_1 114,02_8 87,77_8 109,446_5 19_9 30_8 48_4 100_0 25_2 2020_Q1 19,997_3 30,326_6 54,743_1 121,529_0 9,521_4 7,014_9 106,562_2 25_333_3 9,865_0 21_3 31_4 47_3 100_0 25_2 2020_Q2 27_8 40,486_6 54,243_1 121,529_0 9,	2014_Q4	8,961.1	14,725.0	15,872.6	39,558.8	4,227.8	43,786.6	12,525.7	40,924.6	22.7	37.2	40.1	100.0	28.6
2015_03	2015_Q1	9,528.0	13,111.5	17,669.7	40,309.2	3,652.8	43,962.1	13,105.1	42,016.2	23.6	32.5	43.8	100.0	29.8
2015_Q4	2015_Q2	7,885.1	15,330.2	18,629.0	41,844.3	3,602.4	45,446.7	11,785.8	44,003.5	18.8	36.6	44.5	100.0	25.9
2016_Q1	2015_Q3	8,712.4	13,938.0	18,115.6	40,766.0	3,776.1	44,542.1	12,441.7	43,680.7	21.4	34.2	44.4	100.0	27.9
2016_Q2 9,690.3 14,882.7 23,556.0 48,129.0 4,355.5 52,484.5 14,364.4 52,440.4 20.1 30.9 48.9 100.0 27.4 2017_Q2 10,039.7 19,210.8 29,674.0 58,924.5 4,331.0 63,255.5 15,792.4 61,179.2 17.0 32.6 50.4 100.0 25.0 2017_Q3 12,689.8 21,206.5 29,499.0 63,395.2 4,843.1 68,238.3 18,555.6 65,330.0 20.0 33.5 46.5 100.0 27.2 2017_Q4 16,199.7 19,895.0 27,679.1 63,773.8 5,261.4 69,035.1 21,647.0 66,361.0 25.4 31.2 43.4 100.0 31.4 2018_Q1 15,053.6 24,271.9 32,874.8 72,200.3 5,242.7 77,443.0 21,286.2 72,938.6 20.8 33.6 45.5 100.0 27.5 2018_Q3 12,983.5 25,402.2 35,007.9 73,393.6 5,368.0 78,761.7 19,791.2 74,147.8 17.7 34.6 47.7 100.0 25.1 2018_Q4 15,701.0 23,125.5 35,702.4 74,528.9 6,095.5 80,624.4 22,502.7 76,632.8 21.1 31.0 47.9 100.0 27.4 2019_Q1 17,536.5 26,376.3 38,436.5 82,349.4 5,752.2 88,101.5 24,127.3 82,086.7 21.3 32.0 46.7 100.0 27.4 2019_Q1 13,595.0 26,376.3 38,436.5 80,380.4 5,5638.0 85,091.0 20,531.7 80,556.8 16.9 33.5 46.6 100.0 23.9 2019_Q4 16,406.5 28,091.3 41,133.6 85,631.4 5,945.9 91,577.3 23,708.5 87,070.5 19.2 32.8 48.0 100.0 25.9 2020_Q1 19,957.3 29,326.4 46,717.8 96,001.5 4,589.2 100,590.7 29,125.4 96,590.2 20.8 30.5 48.7 100.0 27.2 2020_Q2 17,508.8 27,587.8 38,159.4 83,256.0 99,254.4 7,014.9 106,536.2 25,332.7 102,988.5 19.4 30.7 49.9 100.0 27.2 2020_Q1 21,590.9 33,326.6 53,472.2 108,299.7 5,723.1 114,022.8 28,747.8 109,446.5 19.9 30.8 49.4 100.0 25.2 2021_Q2 204.4 12,500.9 33,326.6 53,472.2 108,299.7 5,723.1 114,022.8 28,747.8 109,446.5 19.9 30.8 49.4 100.0 25.2 2021_Q3 22,277.4 32,826.6 54,547.2 108,299.7 5,723.1 114,022.8 28,747.8 109,446.5 19.9 30.8 49.4 100.0 25.5 2021_Q4 26,479.9 34,791.5 58,660.2 119,911.5 10,227.4 130,139.0 34,328.1 124,184.2 22.1 29.0 48.9 100.0 25.5 2021_Q4 26,479.9 34,791.5 58,660.2 119,911.5 10,227.4 130,139.0 34,328.1 124,184.2 22.1 29.0 48.9 100.0 25.5 2021_Q4 26,479.9 34,791.5 58,660.2 119,911.5 10,227.4 130,139.0 34,328.1 124,184.2 22.1 29.0 48.9 100.0 25.5 2022_Q4* 36,799.4 40,486.6 54,243.1 121,529.0 9,128.5 10,657.5 34,580.5 124,314.4 22.1 33.3 34.6 100.0 25.5 2022_Q4*	2015_Q4	10,547.8	14,732.3	19,941.5	45,221.7	4,353.0	49,574.7	14,686.6	49,133.4	23.3	32.6	44.1	100.0	29.6
2017_Q2	2016_Q1	12,099.8	14,969.4	22,294.6	49,363.8	3,801.2	53,165.0	16,582.3	53,070.6	24.5	30.3	45.2	100.0	31.2
2017_Q3	2016_Q2	9,690.3	14,882.7	23,556.0	48,129.0	4,355.5	52,484.5	14,364.4	52,440.4	20.1	30.9	48.9	100.0	
2017_Q4	2017_Q2	10,039.7	19,210.8	29,674.0		4,331.0	63,255.5	15,792.4	61,179.2	17.0	32.6	50.4	100.0	25.0
2018_01	2017_Q3	12,689.8		29,499.0		4,843.1	68,238.3	18,555.6	65,330.0	20.0	33.5	46.5	100.0	27.2
2018_02	2017_Q4						69,035.1	21,647.0		25.4	31.2	43.4	100.0	
2018_Q3	2018_Q1							-						
2018_Q4	2018_Q2								67,897.1					
2019_Q1	_						·	•						
2019_Q2	_						ŕ							
2019_Q3	•													
2019_Q4	1 -				·	•	·	-	·					
2020_Q1 19,957.3 29,326.4 46,717.8 96,001.5 4,589.2 100,590.7 29,125.4 96,590.2 20.8 30.5 48.7 100.0 29.0 2020_Q2 17,508.8 27,587.8 38,159.4 83,256.0 5,218.7 88,474.7 24,027.4 85,869.6 21.0 33.1 45.8 100.0 27.2 2020_Q3 17,129.9 29,668.3 42,528.7 89,326.9 7,012.3 96,339.1 22,928.4 92,699.6 19.2 33.2 47.6 100.0 23.8 2020_Q4 19,299.7 30,516.6 49,705.0 99,521.4 7,014.9 106,536.2 25,332.7 102,988.5 19.4 30.7 49.9 100.0 23.8 2021_Q1 21,500.9 33,326.6 53,472.2 108,299.7 5,723.1 114,022.8 28,747.8 109,446.5 19.9 30.8 49.4 100.0 25.2 2021_Q2 20,499.4 30,144.0 45,451.0 96,094.3 6,852.7 102,947.0 26,553.3 97,865.0 21.3 31.4 47.3 100.0 25.8 2021_Q3 22,277.4 32,882.4 51,686.1 106,846.0 7,740.2 114,586.1 29,250.0 109,117.8 20.9 30.8 48.4 100.0 25.5 2021_Q4 26,479.9 34,791.5 58,640.2 119,911.5 10,227.4 130,139.0 34,328.1 124,184.2 22.1 29.0 48.9 100.0 26.4 2022_Q1* 26,991.3 44,110.4 62,409.2 133,460.9 7,655.1 141,116.0 35,998.1 133,234.5 20.2 33.1 46.8 100.0 25.5 2022_Q2* 26,799.4 40,486.6 54,243.1 121,529.0 9,128.5 130,657.5 34,580.5 121,411.4 22.1 33.3 44.6 100.0 25.5 2022_Q3* 33,073.7 48,031.9 60,978.5 142,084.1 10,310.7 152,394.8 42,125.6 142,537.9 23.3 33.8 42.9 100.0 26.6 2022_Q1* 40,653.7 64,224.4 94,855.0 199,733.0 12,513.5 212,246.5 54,637.4 201,480.4 20.4 32.2 47.5 100.0 25.7	_							•						
2020_Q2				·			·							
2020_Q3	_						·	•						
2020_Q4	2020_Q3													
2021_Q2	2020_Q4	19,299.7	30,516.6	49,705.0	99,521.4	7,014.9	106,536.2	25,332.7	102,988.5	19.4	30.7	49.9	100.0	23.8
2021_Q3	2021_Q1	21,500.9	33,326.6	53,472.2	108,299.7	5,723.1	114,022.8	28,747.8	109,446.5	19.9	30.8	49.4	100.0	25.2
2021_Q4	2021_Q2	20,499.4	30,144.0	45,451.0	96,094.3	6,852.7	102,947.0	26,553.3	97,865.0	21.3	31.4	47.3	100.0	25.8
2022_Q1* 26,941.3 44,110.4 62,409.2 133,460.9 7,655.1 141,116.0 35,998.1 133,234.5 20.2 33.1 46.8 100.0 25.5 2022_Q2* 26,799.4 40,486.6 54,243.1 121,529.0 9,128.5 130,657.5 34,580.5 121,411.4 22.1 33.3 44.6 100.0 26.5 2022_Q3* 33,073.7 48,031.9 60,978.5 142,084.1 10,310.7 152,394.8 42,125.6 142,537.9 23.3 33.8 42.9 100.0 27.6 2022_Q4* 38,559.4 56,615.9 78,818.4 173,993.7 12,060.2 186,053.9 49,554.7 180,099.2 22.2 32.5 45.3 100.0 26.6 2023_Q1* 40,653.7 64,224.4 94,855.0 199,733.0 12,513.5 212,246.5 54,637.4 201,480.4 20.4 32.2 47.5 100.0 25.7	2021_Q3	22,277.4	32,882.4	51,686.1	106,846.0	7,740.2	114,586.1	29,250.0	109,117.8	20.9	30.8	48.4	100.0	25.5
2022_Q2* 26,799.4 40,486.6 54,243.1 121,529.0 9,128.5 130,657.5 34,580.5 121,411.4 22.1 33.3 44.6 100.0 26.5 2022_Q3* 33,073.7 48,031.9 60,978.5 142,084.1 10,310.7 152,394.8 42,125.6 142,537.9 23.3 33.8 42.9 100.0 27.6 2022_Q4* 38,559.4 56,615.9 78,818.4 173,993.7 12,060.2 186,053.9 49,554.7 180,099.2 22.2 32.5 45.3 100.0 26.6 2023_Q1* 40,653.7 64,224.4 94,855.0 199,733.0 12,513.5 212,246.5 54,637.4 201,480.4 20.4 32.2 47.5 100.0 25.7	2021_Q4	26,479.9	34,791.5	58,640.2	119,911.5	10,227.4	130,139.0	34,328.1	124,184.2	22.1	29.0	48.9	100.0	26.4
2022_Q3* 33,073.7 48,031.9 60,978.5 142,084.1 10,310.7 152,394.8 42,125.6 142,537.9 23.3 33.8 42.9 100.0 27.6 2022_Q4* 38,559.4 56,615.9 78,818.4 173,993.7 12,060.2 186,053.9 49,554.7 180,099.2 22.2 32.5 45.3 100.0 26.6 2023_Q1* 40,653.7 64,224.4 94,855.0 199,733.0 12,513.5 212,246.5 54,637.4 201,480.4 20.4 32.2 47.5 100.0 25.7	2022_Q1*	26,941.3	44,110.4	62,409.2	133,460.9	7,655.1	141,116.0	35,998.1	133,234.5	20.2	33.1	46.8	100.0	25.5
2022_Q4* 38,559.4 56,615.9 78,818.4 173,993.7 12,060.2 186,053.9 49,554.7 180,099.2 22.2 32.5 45.3 100.0 26.6 2023_Q1* 40,653.7 64,224.4 94,855.0 199,733.0 12,513.5 212,246.5 54,637.4 201,480.4 20.4 32.2 47.5 100.0 25.7	2022_Q2*	26,799.4	40,486.6	54,243.1	121,529.0	9,128.5	130,657.5	34,580.5	121,411.4	22.1	33.3	44.6	100.0	26.5
2023_Q1* 40,653.7 64,224.4 94,855.0 199,733.0 12,513.5 212,246.5 54,637.4 201,480.4 20.4 32.2 47.5 100.0 25.7	2022_Q3*										33.8	42.9	100.0	27.6
	2022_Q4*													
2023 Q2** 38,745.8 56,382.4 76,503.6 171,631.9 13.986.9 185.618.8 50.052.2 175.124.4 22.6 32.9 44.6 100.0 27.0														
	2023_Q2** *revised			76,503.6	171,631.9	13,986.9	185,618.8	50,052.2	175,124.4	22.6	32.9	44.6	100.0	27.0

Appendix 2 - Quarterly value added and GDP at constant 2013 prices by economic activity Quarterly Value Added (GHc Million) Year-on-Year change (%) ow Informal GDP in purchaser's value DP in value) value Total Value Addec basic GDP (Non-oil GDP ö GDP Agriculture **Agriculture** Total (Oil GDP) GDP)*** (Non /ear ndustry Services prices) Services Industry indirect ourchaser's ırchaser's Informal @ ō Total ((GDP Total Net otal (Š Б 2013_Q1 6.698.2 11.056.7 10.733.0 28.487.9 1.319.6 29.807.5 9.155.8 28.038.9 2013_Q2 5,521.8 10,753.2 12,632.2 28,907.2 1,507.6 30,414.8 8,289.1 28,715.7 2013 Q3 5,933.7 12,666.1 28,935.2 1,514.2 30,449.4 8,646.8 28,924.8 10,335.5 2013 Q4 7,202.2 10,288.8 14,492.4 31,983.5 1,822.4 33,805.9 10,196.4 32,149.4 11,780.5 -10.8 2014 Q1 6,594.6 9,859.3 28,234.3 1,243.8 29.478.1 9.206.1 27,670.0 -1.5 9.8 -1.1 0.5 -1.3 2014_Q2 5,534.3 10,803.0 13,432.7 29,770.0 1,549.1 31,319.1 8,432.7 29,627.1 0.2 6.3 3.0 1.7 3.2 0.5 2014_Q3 6,065.7 11,178.2 13,825.6 31,069.5 1,761.0 32,830.5 9,034.1 31,013.8 8.2 7.8 2.2 9.2 4.5 7.2 2014 Q4 7,389.6 11,073.6 14,115.4 1,826.6 34,405.3 10,412.7 32,455.8 -2.6 1.0 32,578.6 2.6 7.6 1.8 2.1 2015 Q1 6,818.0 10,852.6 13,698.7 31,369.4 1,298.9 32,668.3 9,814.2 30,825.5 3.4 10.1 16.3 10.8 6.6 11.4 2015 Q2 13,985.7 1,653.0 8,651.2 30,582.9 3.2 5.575.5 11.129.0 30.690.2 32.343.2 0.7 3.0 4.1 3.3 2.6 2015_Q3 6,161.5 10,456.1 12,965.0 29,582.6 1,713.6 31,296.2 9,011.6 29,563.9 1.6 -6.5 -6.2 -4.7 -0.2 -4.7 2015_Q4 -0.6 7,555.5 10,970.4 14,033.4 32,559.3 1,881.2 34,440.5 10,642.2 32,363.5 2.2 -0.9 0.1 2.2 -0.3 2016_Q1 6,891.9 10,870.9 13,415.6 31,178.4 1,350.0 32,528.3 9,858.6 31,058.9 1.1 0.2 -2.1 -0.4 0.5 0.8 2016 Q2 5,746.5 10,551.5 13,679.6 29,977.7 1,564.1 31,541.8 8,708.0 30,807.0 3.1 -5.2 -2.2 -2.5 0.7 0.7 2016_Q3 6,355.9 12,036.7 14,407.1 32,799.7 1,979.6 34,779.3 9,546.6 32,969.0 3.2 15.1 11.1 11.1 5.9 11.5 5.4 2016_Q4 7,829.8 11.825.4 14,688.8 34,344.0 1,965.5 36,309.5 11,042.9 34,069.5 3.6 7.8 4.7 3.8 5.3 2017_Q1 7,302.5 12,643.8 13,654.3 33,600.6 1,410.9 35,011.6 10,400.1 32,731.3 6.0 16.3 1.8 7.6 5.5 5.4 2017 Q2 5,980.8 12,483.0 15,311.9 33,775.8 1,699.7 35,475.5 9,338.5 33,248.0 4.1 11.9 12.5 7.2 7.9 18.3 2017_Q3 6,907.8 13,664.5 14,719.2 35,291.6 1,930.3 37,221.9 10,246.2 34,049.8 8.7 13.5 2.2 7.0 7.3 3.3 2017_Q4 8.299.8 34.838.4 4.8 13.564.1 14.442.5 36.306.4 2,130.6 38.437.0 11.577.7 6.0 -1.7 5.9 2.3 14.7 2018_Q1 7,825.8 14,475.4 14,989.2 37,290.4 1,532.0 38,822.4 11,000.5 35,992.5 7.2 14.5 9.8 10.9 5.8 10.0 2018_Q2 6,440.1 13,606.8 14,783.9 34,830.7 1,823.3 36,654.0 9,524.6 34,119.6 7.7 9.0 3.3 2.0 2.6 -3.4 6.8 2018_Q3 6,996.0 15,403.5 15,110.5 37,510.1 2,160.7 39,670.8 10,307.7 36,365.3 1.3 12.7 2.7 6.6 0.6 2018_Q4 8.618.1 14.368.6 14,877.8 2.195.2 40.059.8 11.814.9 36.554.8 4.2 2.0 4.9 37.864.6 3.8 5.9 3.0 2019_Q1 8,307.1 15.641.9 15,629.0 39.578.0 1.525.5 41,103.5 11,698.7 37.938.7 6.2 8.1 4.3 5.9 6.3 5.4 2019_Q2 6,773.7 15,503.7 15,703.7 37,981.1 2,001.1 39,982.2 10,181.7 36,692.3 5.2 13.9 9.1 6.9 7.5 6.2 2019_Q3 2,146.6 41,766.5 10,871.8 37,948.4 7.5 4.4 7,313.6 16,060.1 16,246.2 39,619.9 4.5 4.3 5.3 5.5 2019 Q4 12,403.7 8.876.7 14.331.6 16.737.8 39.946.1 2.509.2 42,455,3 38.795.8 3.0 12.5 6.0 5.0 -0.36.1 2020_Q1 12,230.0 9.158.2 15.855.7 17,286.0 42.299.8 1.443.0 43.742.8 40.340.5 10.2 1.4 10.6 6.4 4.5 6.3 2020_Q2 7,152.7 14,519.4 14,263.1 35,935.2 1,791.1 37,726.3 9,614.0 34,424.1 5.6 -6.3 -9.2 -5.6 -5.6 -6.2 2020_Q3 7,545.6 14,938.5 15,749.1 38,233.3 2,172.8 40,406.0 10,250.6 37,114.2 -7.0 -3.3 -5.7 -2.2 3.2 -3.1 5.7 2020 Q4 9,692.2 14,687.6 17,456.3 41,836.1 2,446.0 44,282.1 12,710.7 40,990.4 9.2 2.5 4.3 4.3 2.5 2021_Q1 18,649.5 43,984.7 1,465.3 45,450.0 12,317.4 42,465.4 9.527.6 15.807.7 4.0 -0.3 7.9 3.9 0.7 5.3 2021_Q2 7,990.9 13,791.9 15,886.2 37,669.0 1,745.8 39,414.8 10,313.6 36,690.5 11.7 -5.0 11.4 4.5 7.3 6.6 2021_Q3 8,132.3 14,890.2 17,593.6 40,616.1 2,115.9 42,732.0 10,744.0 39,755.0 7.8 11.7 7.1 -0.3 5.8 4.8 2021_Q4 10,735.1 15,224.4 18,690.4 44,649.8 2,345.4 46,995.2 13,490.1 44,064.1 10.8 6.1 7.5 3.7 7.1 6.1 2022_Q1* 19,557.0 45,290.7 1,269.4 12,852.2 43,796.9 3.1 9.964.5 15.769.2 46.560.1 4.6 -0.2 4.9 2.4 4.3 2022_Q2* 8,308.9 14,387.8 16,715.7 39,412.3 1,388.3 40,800.6 10,769.6 38,457.6 4.0 4.3 5.2 3.5 4.4 4.8 2022_Q3* 8,508.0 1,981.6 15.035.5 18,345.9 41,889.3 43,870.9 11.190.2 41,065.5 4.6 1.0 4.3 2.7 4.2 3.3 15,074.5 13,999.6 45,957.1 2022 Q4* 11,116.3 20,106.1 46,296.9 2,436.5 48,733.4 3.6 -1.0 7.6 3.7 3.8 4.3 4.4 2023_Q1* 10,607.0 15,360.1 20,797.2 46,764.3 1,310.3 48,074.6 13,589.4 45,745.2 6.4 -2.6 6.3 3.3 5.7 3.2 2023_Q2*† 8,811.5 14,121.5 17,762.1 40,695.1 1,415.0 42,110.1 11,385.3 39,699.2 6.0 -1.9 6.3 3.2 5.7 ** provisional *revised