

3RD GHANA ECONOMIC UPDATE

# AGRICULTURE AS AN ENGINE OF GROWTH AND JOBS CREATION

AFRICA REGION

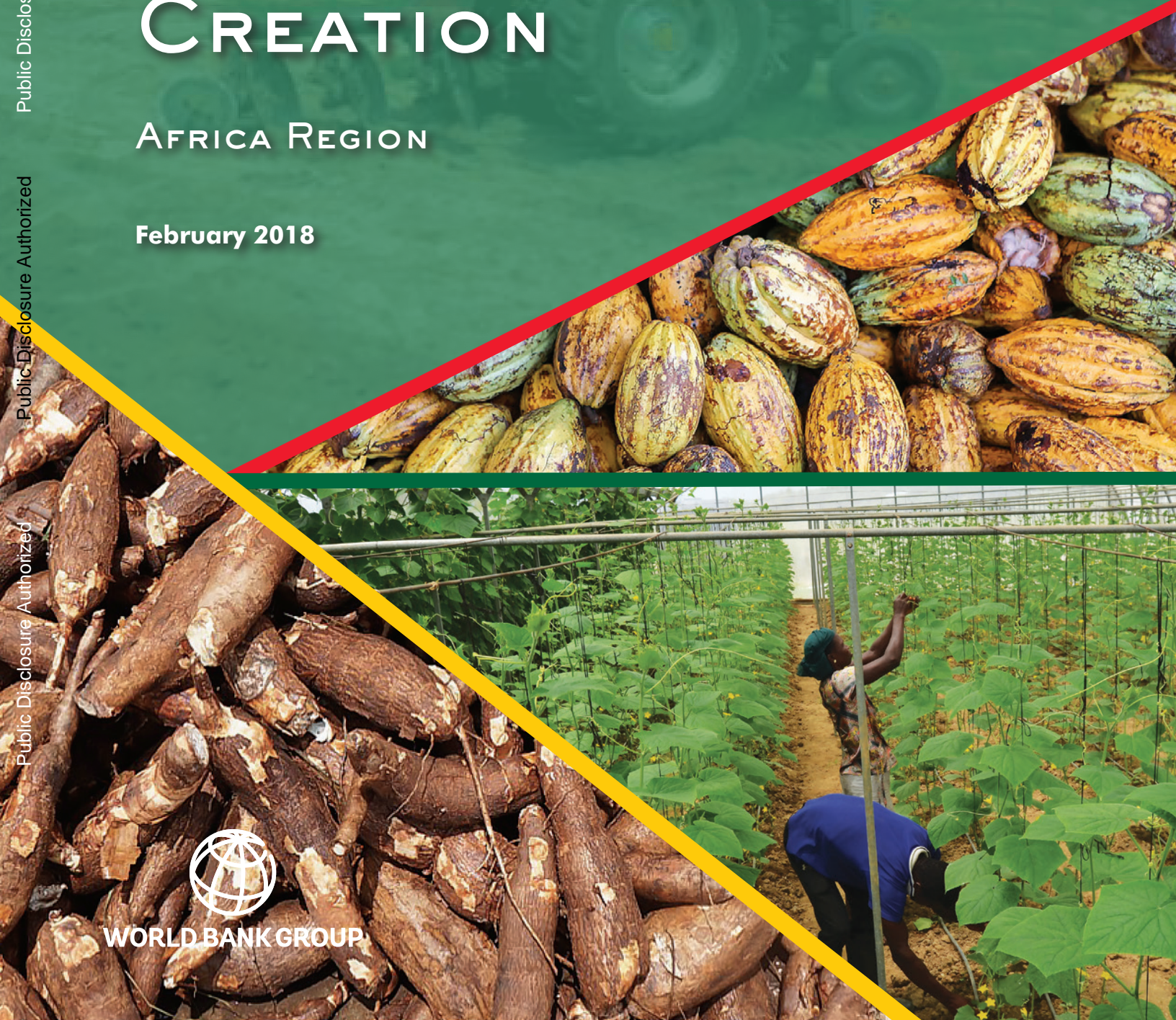
February 2018

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This edition of the Ghana Economic Update is the third of a bi-annual series on Ghana's economic prospects. Every edition includes both a broad overview of the country's macroeconomic, political, and structural dynamics, and a special topic dedicated to one theme. In this update, the focus is on agriculture and jobs creation as reflected in the title. The report was prepared by Michael Geiger (Sr. Economist and Co-TTL), Kwabena Gyan Kwakye (Economist and Co-TTL), Hardwick Tchale (Sr. Agriculture Economist), and

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## ABBREVIATIONS AND ACRONYMS

ADMARC	Agricultural Development and Marketing Corporation	GSS	Ghana Statistical Services
AQR	Asset Quality Review	ICT	Information and Communication Technology
BoG	Bank of Ghana	IFPRI	International Food Products Research Institute
BPS	Basis Points	JSR	Joint Sector Review
COCOBOD	Ghana Cocoa Board	LBC	Licensed Buying Companies
CRI	Crops Research Institute	METASIP	Medium Term Agriculture Sector Investment Plan
CSDS	Cocoa Sector Development Strategy	MoFA	Ministry of Food and Agriculture
DSA	Debt Sustainability Analysis	MPC	Monetary Policy Committee
DTF	Distance to Frontier	NPECLC	National Program for the Elimination of Worst Forms of Child Labor in Cocoa
EBA	Enabling the Business of Agriculture	NPL(s)	Non-Performing Loan(s)
ECOWAS	Economic Community of West African States	NSEZ	Northern Savannah Ecological Zone
EMDEs	Emerging Markets and Developing Economies	OCTP	Offshore Cape Three Points
EOCO	Economic and Organized Crime Office	PPP	Public-Private Partnership
ESLA	Energy Sector Levy Act	R&D	Research and Development
FASDEP	Food and Agriculture Sector Development Plan	REER	Real Effective Exchange Rate
FIC	Financial Intelligence Centre	SARI	Savannah Agricultural Research Institute
GCAP	Ghana Commercial Agriculture Project	SDI	Specialized Deposit-Taking Institution
GCLMS	Ghana Child Labor Monitoring System	SOE	State Owned Enterprises
GCMS	Ghana Customs management Systems	SRID	Statistics, Research and Information Directorate
GEMS	Ghana Economic Management Strengthening Technical Assistance	SSA	Sub-Saharan Africa
GIDA	Ghana Irrigation Development Authority	TEN	Tweneboa, Enyenra, Ntomme
GIFMIS	Financial Management Information System	TFP	Total Factor Productivity
GLSS	Ghana Living Standards Survey	TOR	Tema Oil Refinery
GRA	Ghana Revenue Authority	TRIPS	Total Revenue Integrated Processing System
		VRA	Volta River Authority
		WFCL	Worst Forms of Child Labor



# EXECUTIVE SUMMARY

## Recent Economic Developments

**In September 2017, Ghana's economy expanded for the fifth successive quarter by 9.3 percent compared to just 4.3 percent in September 2016.** This reflects continued high levels of growth in the industry sector, driven by mining and petroleum. Oil production rose by 16.6 percent compared with a contraction of 11.2 percent for the similar period of 2016, as production increased in all existing oil fields and some new production came online. For instance, the Jubilee Fields increased production with the resolution of technical difficulties that arose in March 2016; and new production came online in the Offshore Cape Three Points (OCTP) Fields.

**The service sector bounced back from the weak performance in the first quarter but the momentum in the agriculture sector seems to be waning.** Growth in the services sector improved to 5.6 percent from 3.7 percent in Q1 but is still below the June 2016 level of 6.6 percent. The pick-up of the services sector is due to improved growth in information and communication technology (15.6 percent); health and social work (18.3 percent); education (9.6 percent); and real estate (7.6 percent) sub-sectors. The rise of the extractive industries appears to be constraining agriculture sector growth as an emergent sign of Dutch Disease. The year 2011, which marked the start of oil production in Ghana resulting in GDP growth of 14 percent also saw the lowest growth in the agriculture sector of 0.8 percent. In contrast, the industrial sector grew by over 41 percent in the same year. The agriculture sectors contribution to real GDP declined from 31 percent in 2008 to 18.9 percent in 2016, with growth averaging 4.3 percent, which was below the sector growth target of 6 percent.

**Ghana's fiscal deficit of 4.6 percent of GDP for the first three quarters of 2017 suggests that fiscal policy is on track to meet the full-year target of 6.3 percent of GDP.<sup>1</sup>** This lower deficit was achieved even though total revenue (including grants) underperformed by 9.3 percent, equivalent to 1.4 percent of GDP. All revenue categories underperformed compared to targets. In response to these shortfalls, expenditures were reduced. Flexibility in spending can be a good signal for fiscal management, but expenditure cuts may not be sustainable as pressures rise to implement election promises. The primary balance improved from a deficit of 1.4 percent of GDP at the end of 2016 to a surplus of 0.2 percent of GDP at the end of September 2017. The fiscal performance to date suggests that the Government is on course to achieving the current IMF Extended Credit Facility program fiscal targets for 2017. As a result of the fiscal consolidation, the debt to GDP ratio is expected to decline from 73.4 percent in December 2016 to 70.5 percent in December 2017.

**Ghana's external position improved.** The external position at the end of June 2017 brightened considerably, primarily due to continued increases in gold and oil exports. The trade balance improved to a surplus equivalent to 3.2 percent of GDP at end-June 2017, from a deficit of 3.3 percent of GDP in June

<sup>1</sup> The budget target for 2017 was set to reach a deficit of 6.5 percent. Under the IMF program the target was set at 6.3 percent. The latter is used as the target value in this Economic Update.

2016. Merchandise imports have decreased sharply with 13 percent from the June 2016 levels to US\$5.7 billion due to decreases in both oil and non-oil imports. Hence, at the end of June, the current account deficit narrowed significantly to 0.2 percent of GDP. The Ghanaian cedi remains stable after a short period of turbulence in the first quarter of the year.

## Economic Outlook and Challenges

**The annual GDP growth is expected to rebound to 6.1 percent in 2017, from the 2016 level of 3.7 percent. Considering the higher performances in the second and third quarters of 2017, there is an upside to this projection, which is reflected in the government’s estimated growth of 7.9 percent for 2017.** The rebound will be driven by further investments in the oil and gas and mining sectors. Increased oil production at the Sankofa and Tweneboa, Enyenra, Ntomme (TEN) fields, and new production in the Offshore Cape Three Points (OCTP) Field will continue to boost overall growth. In addition, gold output and cocoa production will likely remain high. Non-oil GDP growth could, however, decline in 2017, in part reflecting the fiscal consolidation and slowdown in agriculture. An average of 6.6 percent non-oil growth is projected in the medium term. Total Factor Productivity (TFP) is expected to marginally decline in the medium term as growth is largely driven by capital accumulation and not structural changes. This buttresses the need for more private sector diversification through non-traditional exports and improved agroindustry.

**Inflation will likely fall within the Bank of Ghana Monetary Policy target range of 8 percent ( $\pm 2$  percent) by 2018.** Headline inflation fell from more than 19 percent in March 2016 to around 12 percent since May 2017 (11.6 percent in October 2017). Movements in headline inflation are largely determined by movements in non-food inflation while food inflation either reinforces or mitigates the impact of non-food inflation. Thus, since September 2016, inflation has been on an overall decreasing trend driven by consistent decreases in both food and non-food prices. With the strong focus on price stability and better coordination between monetary and fiscal policy stances, the inflation targeting framework is expected to be more effective in curbing inflation in line with the medium-term target.

**The fiscal deficit for 2017 is expected to be reduced to the target of 6.3 percent of GDP, down from 9.3 percent for 2016, despite limits to the flexibility in expenditure adjustments.** The fiscal deficit target is consistent with a 2.5 percent primary adjustment needed to reduce the debt stock from 73.4 percent to 70.5 percent by the end of 2017. Expenditure cuts have kept the fiscal performance on track but this may result in the accumulation of new statutory payments arrears, as revenue performance remains weak. However, if the authorities can sustain the good performance of 4.6 percent of GDP achieved in the first three quarters of the year, it is expected that the full-year target will be met with policy-induced improvements for revenues expected to materialize by the end of the year.

**Ghana’s economic prospects over the medium term lie with its ability to regain and sustain its economic stabilization program.** The Ghanaian authorities have expressed a commitment to embark on a steep fiscal consolidation path, as evidenced in the half-year fiscal performance. The Bank of Ghana (BoG) is also expected to stick to the strategies towards achieving the medium-term inflation target. To maintain the momentum of fiscal consolidation, two areas are particularly relevant over the medium-term. *First*, improvement in revenue mobilization through tax compliance and efforts to broaden the tax base is an imperative, with an additional urgent need to streamline tax incentives. *Second*, better and more forward-looking expenditure planning, including containment of the wage bill, will need to remain the focus of fiscal management.

**But fiscal consolidation will only be sustainable when social and economic activities can thrive in an expanding and diverse economy.** Fiscal consolidation can have negative growth effects through the Keynesian multiplier effect. On the other hand, the medium-term GDP growth outlook is over-reliant on natural resource extraction, which in turn has the potential for intensified Dutch Disease and long-term decline of non-natural resource exports. To ease the effects of the anticipated decline in oil production in the medium term, there is need to invest Ghana's current natural resource wealth in non-natural resource sectors for sustainable growth in the medium-to-long-term. The Government needs to improve on the economy's competitiveness for private sector-led investments in the non-oil sector for growth.

## Agriculture as Engine of Growth and Jobs Creation

**As the importance of the extractive sector has risen, it appears agriculture sector growth has slowed down.** The agriculture sector experienced its lowest growth (0.8 percent) in more than two decades in 2011, the same year in which Ghana started oil production in commercial quantities. In contrast, the industrial sector grew by over 41 percent in the same year. Since then, even though the agriculture sector has shown some recovery, it has never fully recovered its former vibrancy. Thus, its share of GDP has declined, relative to both the services and the industrial sector. The share of the agriculture sector in total GDP has fallen from 29.8 percent in 2010 to 18.9 percent in 2016. Ghana's agricultural Terms of Trade, measured as a ratio of food and non-food price indices has been steady in the early 2000s, but has been on a declining path over recent years. While the impact of the extractive industries on Ghana's non-resource economy has not yet been fully analyzed, it is striking to see that the sharp deterioration in non-resource Terms of Trade began in 2011, which coincides with the start of Ghana's oil production. However, this could have also been exacerbated by the sharp decline in public spending on the agriculture sector from 2011 onwards.

**Nevertheless, the agriculture sector remains an important contributor to Ghana's export earnings and a major source of inputs to the manufacturing sector.** Two-thirds of non-oil manufacturing depends on agriculture for raw materials as agriculture and agribusiness account for a major share of all economic activities and livelihoods among smallholder farmers. Cocoa accounts for 25 percent of total foreign exchange earnings and Ghana accounts for about 20 percent of global cocoa exports.

**Agriculture is also the most important sector for jobs and livelihoods in the rural areas.** The agribusiness sector has a very large multiplier effect on employment, creating over 750 jobs for every additional US\$1million of output. However, the structure of the agriculture sector continues to be dominated by primary production, with limited agro-processing and value-addition. The dynamics of employment in the agriculture sector has changed only slightly as over 70 percent of employment still reside in rural areas, only engaging in rudimentary agriculture. Only limited progress has been made in pulling labor out of agriculture into other productive and industrial jobs due to low productivity of labor in agriculture as well as limited dynamism in the non-agriculture private sector.

**But climate change will add to the complexity of managing the agriculture sector in the future.** Two areas stand out: *Extreme precipitation and drought.* The catastrophic floods in 2007 immediately followed by drought were indicative of the high variability in climate and hydrological flows in Northern Ghana. But the Northern Savannahs have been affected by frequent droughts and flooding, both accompanied by high temperatures and intense heat, resulting in economy-wide impacts, including crop failure or losses, outbreaks of diseases, and dislocation of human populations.

**Despite agriculture’s importance, the fiscal appropriation to the sector is relatively small, and the ongoing fiscal consolidation puts further pressure on sectoral spending.** The agriculture sector has benefited from just 5.2 percent of total Government spending between 2001 and 2014. This is well below the level committed under the 2003 Maputo Declaration, in which signatories committed to allocate at least 10 percent of their national budget to agriculture by 2008. By 2014, Government of Ghana’s agriculture spending was as low as 1.3 percent of the total budget, far below the rates of regional comparators.

**This analysis of the agriculture sector points to three overarching areas for policy reforms to improve the sector.** Given the importance of the agriculture sector in the Ghanaian economy and for jobs creation, a comprehensive consideration of the three areas is needed. The following offers some reflections of issues within each of the three areas.

- **Improving the quality and effectiveness of public expenditure in agriculture would be important in the context of limited fiscal space.** There is need to channel scarce resources into investments in agricultural research and development and the expansion of irrigation networks to generate significant productivity growth. To boost rural income through agriculture, there is a need to re-direct sector expenditures to better target the commercialization of smallholder farmers and integrate these farmers into the agriculture value chain.
- **Improving the environment for agriculture businesses is key to adding value to the existing production and for job creation.** There is the need to deepen and quicken the reforms in legal, regulatory, and administrative systems that affect the quality and efficiency of public sector services to agribusinesses and other stakeholders that need to invest in the agricultural value-chain (e.g., financiers, transports, information technology service providers, input dealers, etc.).
- **Fixing the cocoa sector is essential given the large size of the cocoa economy.** There is a case for more cooperation between Ghana and Cote d’Ivoire, the two main cocoa producers of the world. This could unleash efficiency gains in production and minimize incentives for smuggling and illegal activities due to domestic price differentials. It would also allow for better capitalization of the joint market power of more than 60 percent of the international market. In Ghana alone, there is need for reforms to strengthen the governance arrangements of COCOBO to ensure the inclusion of all key stakeholders in decision-making within the sector. There is also a need to finalize, approve, and implement the Cocoa Sector Development Strategy (CSDS II). To sustain the productivity of the sector, there is need to improve productive and social infrastructures in the cocoa producing areas, and strengthen the role of women and youth in the sector, while adhering to international commitments restricting the use of child labor in cocoa production.

# RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

1

*In September 2017, Ghana's economy expanded for the fifth successive quarter by 9.3 percent compared to just 4.3 percent in September 2016. This growth is despite the rise of the extractive industries appearing to constrain agriculture sector growth as an emergent sign of Dutch Disease. Preliminary 2017 data (up to September) suggests that fiscal policy is on track to meet the full-year deficit target of 6.3 percent of GDP. Ghana's external position continued to improve (at end of June 2017), which reflects steady increases in gold and oil exports. The Ghanaian cedi remains stable after a short period of turbulence in the first quarter of the year. Inflation continues its moderating trend and was 11.6 percent in October 2017. The downward trend in inflation created room for easing of monetary policy. Looking forward, GDP is projected to rebound to 6.1 percent in 2017 (as the Government projects 7.9 percent) despite a non-oil growth slowdown to 4.3 percent (while Government projects non-oil growth of 5.9 percent). Ghana's economic performance over the medium term will, to a large extent, depend on the success of the economic stabilization program through a return to fiscal sustainability. But to sustain the momentum of fiscal consolidation, two areas are particularly relevant over the medium-term: domestic resource mobilization and expenditure controls. This needs to be flanked by growth-enhancing efforts to bring about more sustainability to the consolidation program.*

## Global Economic Performance

**Global economic growth continues to experience a broad-based recovery and is expected to strengthen in the medium term.** The outlook is supported by expected growing investment and trade trends; but the world economy is still subject to downside risks including heightened policy uncertainty, possible financial market turbulence, and weaker potential growth in the long run (World Bank 2018a). Global growth accelerated to 3 percent in 2017, above the June 2017 forecast of 2.7 percent, and up from 2.4 percent in 2016. The broad-based new global growth momentum, which

saw more than half of the world's economies experience a significant expansion, was mainly attributed to a rebound in investment. The growth of investment accounted for three quarters of global growth from 2016 to 2017. In emerging markets and developing economies (EMDEs), growth recovered to 4.3 percent, marginally higher than the June 2017 projection of 4.1 percent (World Bank 2018a). Similarly, growth in the advanced economies has recovered to 2.3 percent in 2017 driven by capital spending, strengthening external demand and a turnaround in inventories. The improvements occurred in all advanced economies with the highest growth occurring in the Euro Area. Growth within the Sub-Saharan Africa (SSA) region was 2.4 percent in 2017, 0.4 percent less than the June 2017 projections, but up from the low 1.3 percent in 2016. This dampening in the recovery trend was influenced by a lower-than-expected growth scenario in Nigeria. However, the region benefited from an uptick in metals prices and recoveries in the agricultural sector, while growth was stable in non-resource-intensive countries with infrastructure as their backbone. While global growth will further increase in 2018 to 3.1 percent and moderate at average of 3 percent in 2019–2020, growth in the EMDEs will inch up to 4.5 percent in 2018, but further rise to an average of 4.7 percent in 2019–2020. Growth in the SSA region is projected to rise to 3.2 percent in 2018 and to 3.5 in 2019, on the back of firming commodity prices and gradually strengthening domestic demand. However, growth will remain below pre-crisis averages, partly reflecting a struggle in larger economies to boost private investment (World Bank 2018a).

**A modest increase in commodity prices in 2017 has supported the growth in commodity-exporting economies in Africa.** Rising commodity

prices, especially of oil price, have supported growth in the Africa region in 2017. Stability of these prices will remain key to the recovery process in 2018 and beyond. Oil prices are anticipated to average \$53/bbl in 2017 and rise to \$56/bbl in 2018 on strong oil demand and restraint in OPEC and non-OPEC production (despite projected increases in U.S. shale production) (World Bank 2017a). Ghana, in line with many commodity-exporting countries in Africa, has experienced continued benefits from high commodity prices in the 2000s but a substantial decline in prices since 2013 had significant negative impact on growth (on top of a fiscal crisis unfolding since 2011). As indicated in the 2nd Ghana Economic Update, continued volatilities in prices of cocoa, gold and oil remain a major source of risk to the economy (World Bank 2016b). Despite the projected firming of activity among EMDEs over the forecast horizon, their underlying potential growth—which has fallen considerably over the past decade—appears likely to further decline over the next 10 years, reflecting a more subdued pace of capital accumulation, slowing productivity growth, and less favorable demographic trends (World Bank 2018a). Global outlook risks are still on the downside but more balanced than the previous forecasts reflecting a stronger-than-expected growth in the larger advanced economies and EMDEs; specifically represented by more pronounced investment-led recovery in United States and Euro Area, or a faster rebound in large commodity markets. Never the less, downsides risks such as global financial markets volatility could trigger turbulence which could disrupt the gains made so far. Higher borrowing costs and its adverse effects still remain a concern to the EMDEs with high external financing needs (World Bank 2018a).

## Real Sector

**Ghana's economy expanded for the fifth successive quarter in September 2017 by 9.3 percent compared to just 4.3 percent in September 2016.** The expansion was largely on the back of the good performance of the industry sector (with significant

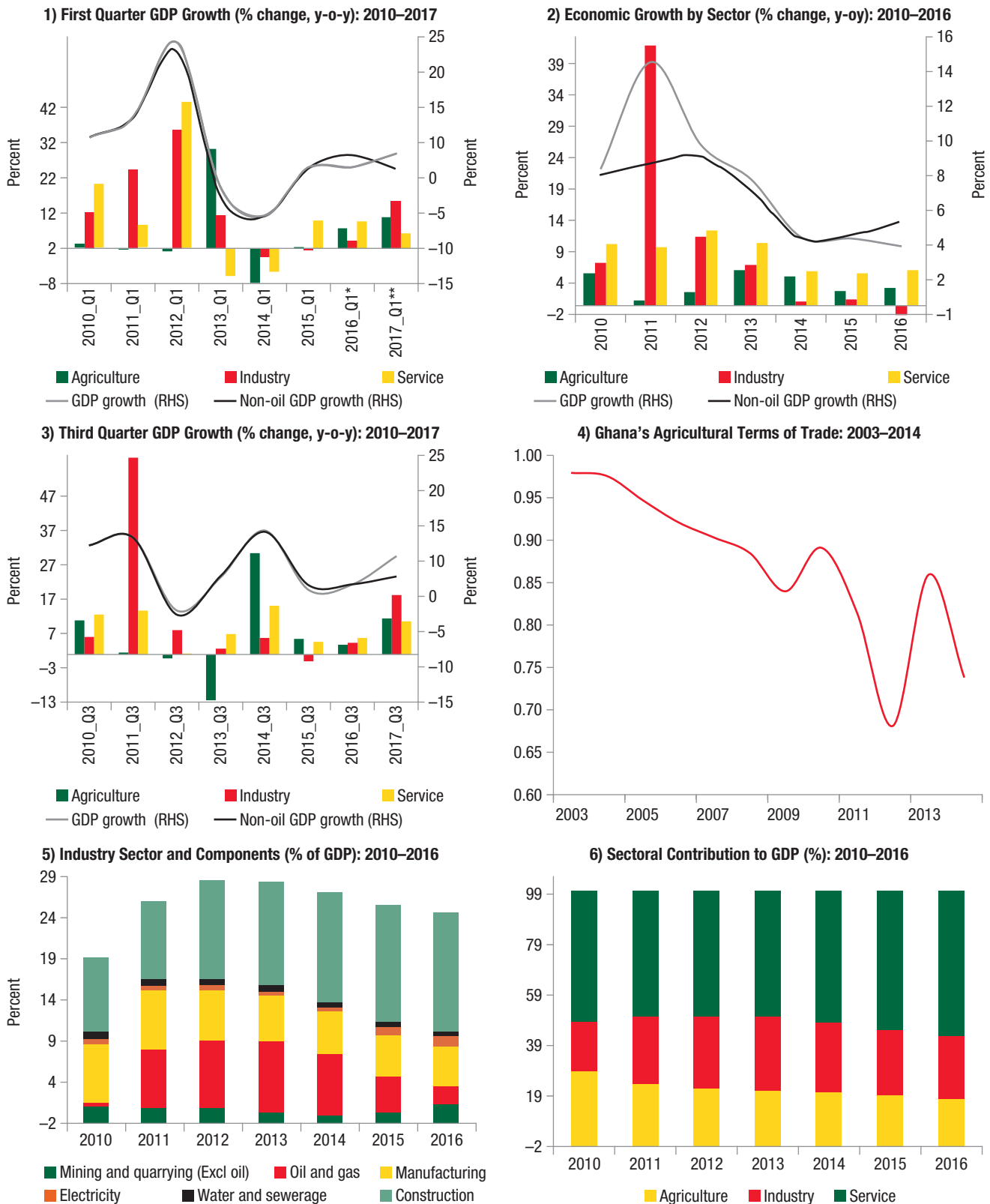
contribution from mining and petroleum), which recorded the highest growth of 16.6 percent, compared to 11.5 percent in March 2017 and a contraction of 11.2 percent in September 2016 (Figures 1.1.1 to 1.1.3). The improvement in oil sector was due to increased oil production at the Sankofa field and the Tweneboa, Enyenra, Ntomme (TEN) offshore field, as well as the resolution of the technical difficulties that arose in March 2016 in the Jubilee Fields and new production in the Offshore Cape Three Points (OCTP) Fields. The actual 2017 third-quarter growth of 9.3 percent provides an upside effect to growth for the entire 2017 as well as the medium term.

**Growth in the agriculture sector bounced back in the third quarter as the sector's growth accelerated to 10 percent compared to the growth of 2.8 percent for the same period in 2016.** Indeed, the third-quarter growth performance of the agriculture sector shows a significant regaining of momentum from the sector's second-quarter growth of 3.4 percent (Figures 1.1.2 and 1.1.3). There is need to place much more attention on improving productivity and reducing post-harvest losses within the crops, fisheries and cocoa sub-sectors. This will help achieve the projected growth of 6 percent, up from the 2016 level of 3 percent. Growth in the services sector improved marginally to 5.7 percent from the second-quarter level of 5.6 percent above the September 2016 level of 4.5 percent. The pick-up of the services sector is due to improvements in the information and communication (10.7 percent); health and social work (24 percent); education (14.4 percent), public administration (13 percent) and real estate (9.4 percent) sub-sectors. The growth in the non-oil sector picked up to 5.9 percent in September 2017 from 4.6 percent for the same period in 2016.

**The rise of the extractive industries appears to be constraining agriculture sector growth as an emergent sign of Dutch Disease.** The year 2011, which marked the start of oil production in Ghana, resulting in GDP growth of 14 percent, also saw the lowest growth in the agriculture sector of 0.8 percent. In contrast, the industrial sector grew by over 41 percent in the same year. Ghana's agricultural Terms of



**FIGURE 1.1: Real Sector**



Source: 2.1–3: Ghana Statistical Service; 2.4–6: Ghana Public Expenditure Review, World Bank, 2017d. (calculations based on SRID and World Bank data).  
Notes: 2.4: Expressed as the ratio of the food to nonfood price indices.

Trade, measured as a ratio of food and non-food price indices was steady in the early 2000s, but has been on a declining path over recent years. While the impact of the extractive industries on Ghana's non-resource economy has not yet been fully analyzed, it is striking to see that the sharp deterioration in its Terms of Trade started in 2011 when Ghana started oil production (Figure 1.1.4). This could be an early sign of Dutch Disease in the economy. However, this could have also been exacerbated by the sharp decline in public spending on the agriculture sector since 2011.

**Another source of evidence for a possible occurrence of Dutch Disease is the consistent reduction in the agriculture sector's contribution to GDP since the inception of oil production in Ghana in 2011.** Agriculture has now been surpassed by both the services and the industry sector; both benefit from the oil and gas boom. The share of the agriculture sector has deteriorated from 29.8 percent in 2010 to 18.9 percent in 2016. The services sector continues to expand its share of GDP while agriculture continues to lose its importance. After a marginal decrease from 51.1 percent in 2010 to 49.1 percent in 2011, the services sector has consistently increased its contribution to GDP to a high of 56.9 percent in 2016, while the share of the industrial sector has remained at 26 percent since 2010.

**Rising food imports also suggest a distortion in the economy in line with Dutch Disease symptoms.** The deterioration of Terms of Trade also coincided with an increase in food imports. Ghana is currently a net importer of basic foods (raw and processed) such as rice, poultry, sugar, and vegetable oils—and the import bill is growing. The annual food import bill now exceeds the estimated \$2 billion earned from cocoa exports. While food imports constituted around 13 percent of all imports in 2000, the share increased to around 17 percent in 2016. Population growth, high rates of urbanization, and increasing incomes are driving the demand for imported foodstuffs because of increased demand for more quality and safe foodstuffs such as meat, dairy, and fresh and processed vegetables. The food import bill is projected to increase

fourfold over the next 20 years, unless local production is increased (World Bank 2017e). Growth of the agriculture sector showed some signs of recovery in 2012 and 2013 but fell off in 2014 and 2015 with a marginal improvement in 2016. In terms of shares of GDP, the services sector continues to expand while agriculture continues to decline. After a marginal decrease from 51.1 percent in 2010 to 49.1 percent in 2011, the services sector has consistently increased its contribution to GDP to a high of 56.9 percent in 2016. The share of the industrial sector, on average, has remained at 26 percent since 2010, and the share of the agriculture sector has fallen from 29.8 percent in 2010 to 18.9 percent in 2016 (Figures 1.1.5 and 1.1.6).

## Fiscal Sector

**Ghana has been in macroeconomic and fiscal difficulties since 2011 and its effects were still at the forefront of the fiscal challenges in 2017.** For most of the past six years, large and persistent fiscal and current-account deficits, rising debt burden, mounting inflationary pressures, and currency depreciation have posed an increasingly serious policy challenge. Protracted fiscal imbalances, a relatively loose monetary policy stance, and successive external shocks contributed to the deterioration of the macroeconomic environment. Meanwhile, the establishment of a single-spine salary structure (SSSS) for the public sector in 2010, coupled with a sharp rise in energy-subsidy costs and fiscal transfers, radically increased public spending. Over the next several years a series of exogenous factors contributed to the development of a full-fledged fiscal crisis. The rupturing of the West African Gas Pipeline in 2012 severed the gas supply from Nigeria and drove up energy costs, while falling prices for key commodity exports, especially gold, cocoa, and oil weakened the Terms of Trade. The fiscal deficit rose from 3.2 percent of GDP in 2011 to 11.6 percent in 2012, the current-account deficit widened from 9 to 11 percent of GDP, and Government arrears rapidly accumulated. The twin

fiscal and current-account deficits remained in double digits through 2013 and 2014, despite a multiyear deficit-reduction plan. Between 2012 and 2014, the central bank covered 20 percent of the fiscal deficit, and the overall inflation rate increased from 8.8 to 17 percent, with nonfood inflation rising from 11.6 to 23.9 percent. Despite the Government's multiyear deficit-reduction plan, the fiscal deficit remained far elevated (and above its target levels), reaching 10.7 percent of GDP in 2013 and 10.1 percent in 2014 (World Bank 2017d).

**The 2016 fiscal targets were missed by a large margin (again) with the fiscal deficit on a cash basis estimated at 9.3 percent of GDP compared with the target of 5.2 percent.** The slippage was largely due to the failure to adjust overall expenditure in the face of revenue shortfall. This was compounded by weak fiduciary institutions and control environment, including issues around the Ghana Integrated Financial Management Information System (GIFMIS) recording of purchasing orders. In effect, not all expenditures were recorded in the system and hence could not be curtailed as needed. While public expenditures remained close to the IMF program target, the spending pressures ahead of the general elections led to overspending in capital expenditure as well as goods and services.

**Ghana's fiscal deficit of 4.6 percent of GDP from January to September of 2017 suggests that fiscal policy is on track (again) to meet the full-year deficit target of 6.3 percent of GDP<sup>2</sup>** (Table 1.1). Total revenue (including grants) underperformed by 9.3 percent equivalent to 1.4 percent of GDP, as all the revenue categories underperformed, but expenditures were reduced in response to the underperforming revenues. The primary balance improved from a deficit of 1.4 percent of GDP at the end of 2016 to a surplus of 0.2 percent of GDP at the end of September 2017.

**The revenue underperformance occurred across all categories,** shown in Figure 1.2.1. Direct tax collection, excluding the oil sector, amounted to 4.1 percent of GDP at the end of September 2017, below the budget target of 4.4 percent. The shortfall in direct

taxes is attributed mainly to under performances in corporate income tax (-13.6 percent) and the self-employed category (-11.9 percent). Nevertheless, collection of corporate income tax at the end of September was an improvement on the end-June proceeds as some top taxpayers (especially in the mining sector) who filed nil returns in the 1st quarter favorably revised their estimates in the 3rd quarter. Likewise, trade taxes, which amounted to 1.8 percent of GDP was lower than the budget target of 2.3 percent of GDP, owing to lower than expected imports, since the nominal CIF value of imports at the end of September 2017 shrank by 1.3 percent compared to a growth of 2.3 percent in the same period in 2016. Also, indirect taxes, which accounted for 4.8 percent of GDP at the end of September 2017, underperformed slightly compared with 4.9 percent target, due to the overall reduction in the consumption of goods and services. The disbursement of grants from Ghana's development partners amounted to 0.5 percent of GDP, just below the projected level of 0.6 percent of GDP for the period (Figure 1.2.1).

**Ghana's tax revenue performance continues to be below its potential levels with tax-to-GDP ratio averaging 17.6 percent since 2008.** Performance on revenue mobilization, in 2014 for instance, fell short of some of its regional comparators such as South Africa (25.5 percent), Mozambique (20.3 percent), and Senegal (19.1 percent) (Figure 1.2.2). The underperformance of revenue mobilization is attributed to several factors. First, the Ghanaian tax authorities do not have a robust method of estimating the tax gap, which is the pre-requisite for working towards achieving the potential tax levels. Second, the country's tax-expenditure regime is high, which this cost the Government an estimated 5.2 percent of GDP in foregone revenue in 2013 alone. There is an urgent need to rationalize tax expenditure, which includes a wide range of tax exemptions and various forms of preferential tax treatment. While many countries use tax expenditures to support the growth of specific

<sup>2</sup> Ibidem.

sectors or advance fiscal-equity objectives, these policies complicate revenue collection.

**In response to the poor revenue performance for the first three quarters of 2017, the Government made cuts to both recurrent and capital expenditures, as well as some statutory transfers.** This is shown in Figure 1.2.3. At the end of September, total expenditure including arrears clearance amounted to GH¢37 billion (18.3 percent of GDP) compared to the budgeted amount of GH¢41 billion (20.3 percent of GDP). Specifically, cuts were in goods and services (4.8 percent of GDP), and most significantly, domestic financed capital expenditure (0.6 percent of GDP) and clearance of Arrears (0.7 percent of GDP). Cuts in all other expenditure categories such as compensations of employees, transfers to statutory bodies, tax refunds, Energy Sector Levy Account (ESLA) transfers, and foreign financed capital expenditure amounted to 1.6 percent of GDP (Figure 1.2.3).

**Although flexibility in expenditures may be a good signal for fiscal management, expenditure cuts may not be sustainable as pressures rise to implement election promises.** Expenditure cuts, especially those related to statutory payments are essentially expenditure postponement and this may have repercussions for the accumulation of arrears. At the end of 2016, new arrears and outstanding commitments amounted to GH¢5.1 billion (US\$1.2 billion, or 3 percent of GDP), of which about 2 percent of GDP occurred outside the GIFMIS (IMF 2017). While the audit of the new arrears accumulated in 2016 is yet to be completed, the Government had only liquidated a net arrears amount of GH¢0.8 billion by the end of September 2017 compared to the target of GH¢2.2 billion. Based on the September performance, the initial 2017 arrears clearance projections of GH¢3.7 billion has been revised to GH¢2.7 billion. Going forward, the Government has set a target to clear all arrears by the end of 2021, to mitigate the risks they pose on the financial sector.<sup>3</sup>

**There are fiscal implications of the decision to keep the producer price of cocoa unchanged for the 2017/2018 season despite a 40 percent reduction**

**in the world market prices.** Due to the fall in prices, and subject to the practice of collateralization, COCOBOD could only secure a US\$1.3 billion in its syndicated loan signed on 20<sup>th</sup> September 2017. With the producer price unchanged, the implication is that the projected receipts of sale of cocoa for the season will barely cover COCOBOD's expenditures for the season on a one-on-one basis. The possible options to manage the situation are to utilize the existing, inadequate stabilization fund held by COCOBOD, while the Government forfeits its share of cocoa FOB receipts for the year with a possible worsening of the underperforming domestic revenue. In addition, COCOBOD will be expected to cut down on the usual capital expenditures, including works on roads directly linked to the cocoa producing areas in the country to which the central Government will be required to commit funds. In addition to these measures, when the above measures are not enough to cover the costs, COCOBOD will be expected to raise funds from the local market through bridge financing and this, in some cases, may have repercussions on private sector access to credit from the banks. Going forward, not only is it crucial to sustain and raise the productivity in the cocoa sector, but there is also the need to add more value to the cocoa sector to reduce the risk of being price-takers on the international market.

**Over the years, overall budget management has been complicated by the increasing off-budget activities through revenue earmarking, exacerbated by activities of quasi-fiscal entities.** To address this, the Government passed legislation in 2017—the *Earmarked Funds Capping and Realignment Act*—which caps transfers to statutory funds to 25 percent of tax revenues. Before the new legislation pre-determined expenditure through earmarking accounted for about 30 percent of revenues and 20 percent of expenditure. Budget flexibility was further limited through quasi-fiscal operations on the part of State Owned Enterprises (SOEs). Furthermore, budget

<sup>3</sup> Government of Ghana's 2018 Budget Statement, November 2017.

TABLE 1.1: Fiscal Indicators (% of GDP): 2013 to 2017

	2013	2014	2015	2016	2017		Jan-Dec Proj.
	Outturn	Outturn	Outturn	Est.	Q1-Q3 Proj.	Q1-Q3 Est.	
<b>Total revenue* and grants</b>	<b>16.7</b>	<b>18.4</b>	<b>19.6</b>	<b>17.3</b>	<b>14.3</b>	<b>13.0</b>	<b>18.8</b>
Taxes	14.4	15.9	15.9	15.7	11.9	11.1	15.7
Direct taxes	6.7	7.5	6.4	5.4	4.6	4.4	6.4
Indirect taxes	5.0	5.5	6.8	7.4	4.9	4.8	6.7
Trade taxes	2.5	2.7	2.5	2.6	2.3	1.8	2.5
Grants	0.5	0.7	2.0	0.7	0.6	0.5	0.7
<b>Total expenditure</b>	<b>27.0</b>	<b>28.5</b>	<b>26.6</b>	<b>26.6</b>	<b>19.1</b>	<b>17.6</b>	<b>25.1</b>
Compensation of employees	11.0	9.7	9.4	8.7	5.9	6.1	8.3
o/w Wages and salaries	8.9	8.3	7.7	7.2	5.2	5.3	7.2
Goods and services	1.0	1.6	1.0	1.9	1.0	0.9	1.1
Interest Payments	4.7	6.2	6.6	6.9	5.1	4.8	6.5
Domestic	4.1	5.4	5.3	5.5	4.0	3.7	5.2
Foreign	0.7	0.9	1.3	1.4	1.1	1.1	1.3
Subsidies	1.2	0.4	0.0	0.0	0.0	0.0	0.0
Social transfers	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Grants to Other Government Units	2.3	2.1	3.1	3.3	2.1	2.1	3.7
Other expense**	2.1	3.1	1.2	1.2	2.5	1.8	3.0
Net acquisition of nonfinancial assets	4.6	5.4	5.2	4.6	2.3	1.8	2.3
Domestic financing	1.8	1.1	0.9	1.2	0.8	0.2	0.5
Foreign financing	2.8	4.3	4.3	3.4	1.5	1.6	1.7
<b>Overall balance (Net lending/borrowing)</b>	<b>-10.3</b>	<b>-10.1</b>	<b>-7.0</b>	<b>-9.3</b>	<b>-4.8</b>	<b>-4.6</b>	<b>-6.3</b>
Discrepancy	0.0	0.0	0.6	1.0	0.0	-0.2	0.0
<b>Overall balance (Including Discrepancy)</b>	<b>-10.3</b>	<b>-10.1</b>	<b>-6.4</b>	<b>-8.3</b>	<b>-4.8</b>	<b>-4.8</b>	<b>-6.3</b>
<b>Financing</b>	<b>10.3</b>	<b>10.1</b>	<b>6.4</b>	<b>8.3</b>	<b>4.8</b>	<b>4.6</b>	<b>6.3</b>
Foreign (net)	3.4	5.2	4.3	1.8	-0.2	0.0	-1.8
Borrowing (Foreign)	4.3	6.4	6.3	4.5	1.5	1.3	1.1
Amortization (due)	-0.9	-1.2	-2.0	-2.8	-1.7	-1.3	-2.9
Domestic (net)	8.9	7.8	1.8	8.6	5.1	4.4	7.9
Banking	5.3	5.0	-0.8	5.3	0.9	-3.6	0.6
Non-banks	3.6	2.8	2.6	3.3	4.2	7.9	7.2
Others	-2.1	-2.9	0.3	-2.1	-0.1	0.2	0.2

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**TABLE 1.1: Fiscal Indicators (% of GDP): 2013 to 2017** (continued)

	2013	2014	2015	2016	2017		
	Outturn	Outturn	Outturn	Est.	Q1-Q3 Proj.	Q1-Q3 Est.	Jan-Dec Proj.
Primary Balance	-5.6	-3.8	0.2	-1.4	0.3	0.2	0.2
Gross Domestic debt	29.2	31.0	28.5	32.1	—	31.6	—
Gross External debt	28.0	39.1	43.7	41.3	—	36.9	—
Gross (public) debt	57.2	70.2	72.2	73.4	—	68.6	—
Wages and salaries (including Wage Arrears)	10.1	8.8	8.3	7.2	5.2	5.2	7.2
<b>GDP (nominal)</b>	<b>93,416</b>	<b>113,343</b>	<b>136,957</b>	<b>167,316</b>	<b>202,010</b>	<b>202,010</b>	<b>204,078</b>

Source: IMF; World Bank; Ministry of Finance, Ghana.

\*Revenues are net of Ghana Revenue Authority (GRA) retentions and tax refunds, and include net Internally Generated Funds channeled through the Consolidated Fund.

\*\*Includes repayment of arrears and unpaid commitments.

execution remains unpredictable due to weaknesses in treasury management such as cash-flow forecasting methods and cash-investment procedures. This often results in delays in payments to service providers and accumulation of arrears. While the establishment of the treasury single account has improved cash management, the account's coverage is not yet comprehensive. The large wage bill is yet another element of fiscal rigidity that limits the room for maneuvering when the unexpected happens or priorities need to change. Public sector wages are the single largest component of Government expenditure, surpassing capital spending in 2010, and accounting for 7.2 percent of GDP in 2016 and about 47 percent of tax revenues (Figures 1.2.4 and 1.2.5). Regaining control of the wage bill is a high priority for the Government and a crucial part of its fiscal consolidation strategy.

**Since 2012, fiscal consolidation efforts have not fully led to the expected outcome and this has contributed to the rise in public debt.** Following the macroeconomic instability which emerged in 2012, the fiscal effects of which were exacerbated by the escalating cost of the public-sector wage bill and energy subsidies, the Government's budget in 2013 targeted a fiscal deficit of 5 percent of GDP, but the actual overall fiscal deficit remained double that level at 10.7 percent of GDP. In 2014, there was only a marginal

improvement as the overall deficit remained high at 10.1 percent of GDP. With 2016 as an election year, the slippage was unsurprisingly high as fiscal deficit reached 9.3 percent of GDP against the target of 5.3 percent. The debt stock, therefore, remained high at 73.7 percent of GDP compared to the 2015 levels of 72.2 percent. As at June 2017, the gross public debt stood at GH¢138.5 billion (US\$31.7 billion) equivalent to 68.1 percent of GDP. This figure is expected to be 70.5 percent of GDP by close of 2017. The June 2017 stock comprises external and domestic debt of GH¢74.6 billion (US\$17.1 billion) and GH¢ 63.9 billion (US\$14.6 billion) respectively and this translates into 36.7 percent of GDP for external debt and 31.4 percent of GDP for domestic debt (Figure 1.2.6).

**Going forward, the Government has committed to three key legislative actions to further cement the fiscal consolidation path and ensure long-term fiscal sustainability.** *First*, it is taking steps to amend the Public Financial Management Act, 2016 (PFMA), Act 921 to entrench all the elements of a fiscal responsibility law, to cap the fiscal deficit at a maximum 5 percent of GDP from 2018 onward. *Second*, the Government has proposed the establishment of a Fiscal Council through an amendment of the 2016 PFMA Act, which would ensure credibility of fiscal projections, setting up medium-term policy anchors

to guide fiscal policy, and monitoring compliance with the fiscal policy rules. *Third*, the Government intends to include in the PFMA Act a provision requiring all Government payments to have a corresponding purchase order in GIFMIS, which is an effective way of controlling expenditure.

**The Government's current focus on reducing debt is expected to steer fiscal policy over the medium term.** The Government proposed (in the 2017 budget statement) to give legal backing to a Fiscal Council through an amendment of the 2016 PFMA Act. The mandate of the Fiscal Council would include: ensuring credibility of fiscal projections, setting up medium-term policy anchors to guide fiscal policy, and monitoring compliance of fiscal policy rules. The Government has embarked on a domestic debt re-profiling program, which aims to extend the tenor of Government debt by issuing longer-term bonds to replace short-term debt. Following the approval of the 2017 budget and economic statement in March 2017, the Government made a record bond issuance of GH¢2.25 billion in April, mostly subscribed by non-resident investors. This has resulted in a sharp rise in the foreign sector's share of domestic debt from 17 percent in 2013 to over 23 percent at the end of June 2017 (Figure 1.2.7). Interest savings arising from the re-profiling of domestic debt is projected at GH¢600 million for 2017. The share of foreign participation in the domestic bond market has been increasing since 2014, indicating improved confidence; but this renders the economy susceptible to capital flight in the event of investor fright. At the end of June 2017, share of foreign holdings of domestic debt had increased to 34.6 percent of total domestic debt, up from the end 2014 levels of 17.1 percent.

**Following a US\$750 million Eurobond issuance in September 2016, Ghana's credit spreads began narrowing** (Figure 1.2.8). The proceeds of this Eurobond were partly used to buyback the Eurobond maturing in 2017, with some \$200 million set aside to finance full repayment at maturity in October 2017, with the aim of reducing the vulnerabilities associated with resettlement of Eurobond on a bullet basis. There

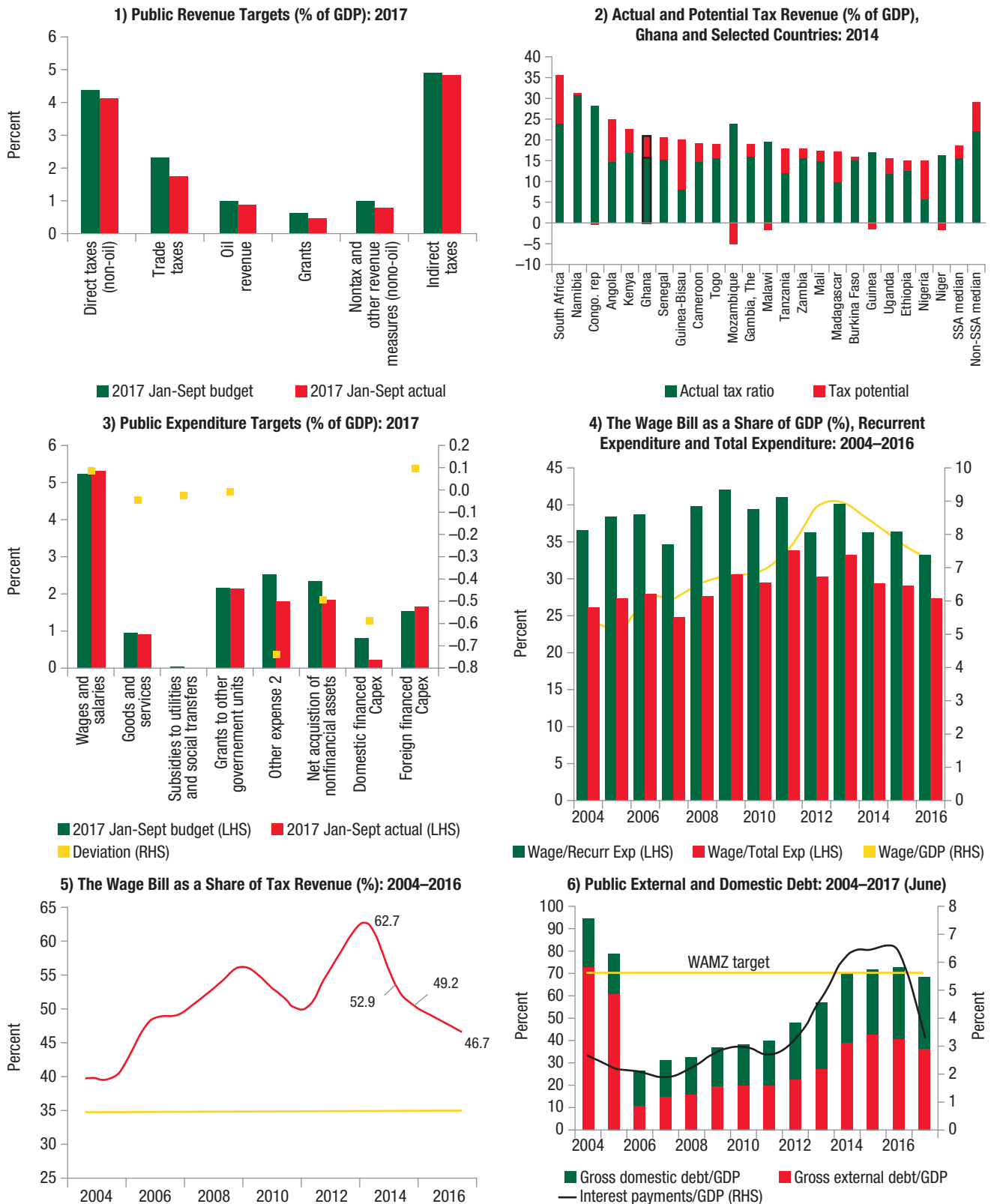
was a general decline in treasury-bill yields with the 91-day T-bill rate falling to as low as 12.5 percent at the end of July 2017 from 22.8 percent in 2016; and the 181-day T-bill declining from 24.6 percent in July 2016 to 12.97 percent in July 2017.

**Nevertheless, Ghana's large financing needs represent a significant vulnerability.** Nonresidents currently hold more than 60 percent of total debt. In addition, significant contingent liabilities could arise from the SOE sector, especially energy-related SOEs; the financial sector; and the unpaid claims currently being audited. According to the latest Debt Sustainability Analysis (DSA) of August 2017, jointly conducted by the World Bank and the IMF, Ghana's risk of debt distress is expected to remain "high" over the medium term.

**Agriculture is one of the areas with large financing needs, which are largely unmet.** Over the years, public spending on agricultural development in Ghana has been low both by regional and international standards, and spending levels have declined in recent years (World Bank, 2017e). Spending in the sector has been just 5.2 percent of total spending between 2001 and 2014). Moreover, agricultural spending began to decline in 2007, and this trend worsened in 2011. Nominal spending fell from GH¢576 million in 2011 to an estimated GH¢400 million in 2014, while the sector's share in total spending dropped from 4.2 to just 1.2 percent. Agricultural spending has also declined sharply relative to sectoral output, and by 2014, it equaled just 1.3 percent, far below the rates of regional comparators, such as Burkina Faso (8 percent), Ethiopia (6 percent), Uganda (5 percent), and Kenya (4 percent) (Figures 1.2.9 and 1.2.10). Considering the fiscal consolidation agenda of government as well as the revenue underperformance in recent times, changing this trend in the agricultural sector may be difficult. So, the key will be to increase the efficiency of spending in the sector to maximize impact.

**Under the 2003 Maputo Declaration, all African countries, including Ghana, committed to allocate at least 10 percent of their national budget**

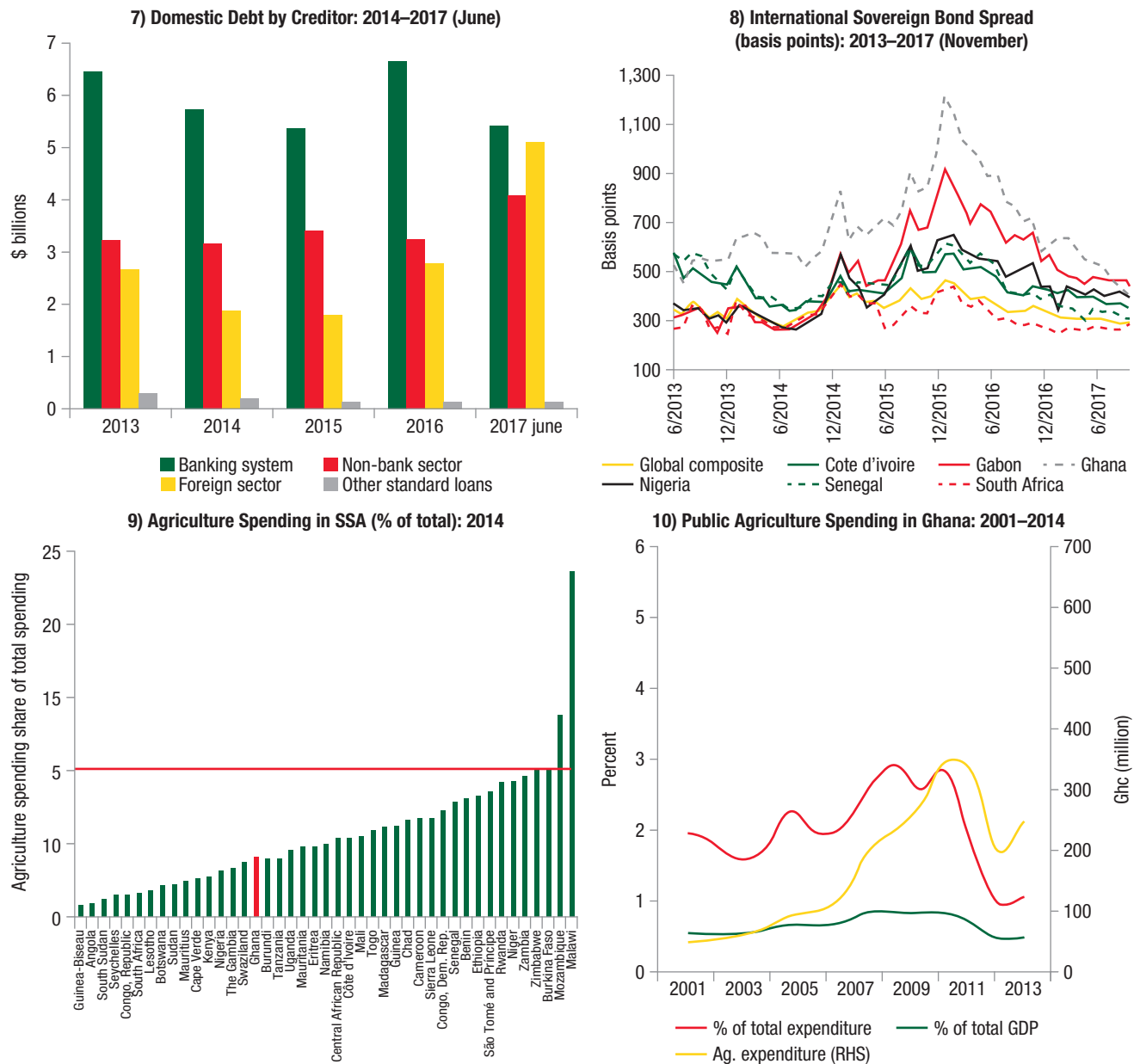
**FIGURE 1.2: Fiscal Sector**



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**FIGURE 1.2: Fiscal Sector** (continued)



Source: 1.1: Ghanaian Ministry of Finance; 1.2: IMF Regional Economic Outlook (October 2015); 1.3: Ghanaian Ministry of Finance; 1.4–5: Ghanaian Ministry of Finance and World Bank; 1.6–7: Ghanaian Ministry of Finance; 1.8: J.P Morgan; 1.9: 3: World Bank (2016) based on data from IFPRI (2015); 1.10: World Bank PER (2017).

**to agriculture by 2008.** Ghana is also a signatory to the common agricultural policy of the Economic community of West African States (ECOWAS), which includes similar objectives. Recent studies have indicated that Ghana may never have achieved the 10 percent expenditure target, and that classification

issues might be the underlying factor complicating this assessment (Benin 2014; and Kolavalli et al. 2015). And indeed, Ghana’s agricultural spending was well below that of most regional comparators in 2014, more recent comparable data is not available (Figure 1.2.9).

## External Sector

**Ghana's external position further improved at the end of September 2017, reflecting stronger performance in earnings from oil, gold, and cocoa, as well as higher capital inflows.** Provisional data for the period January-September show a substantial narrowing of the current account deficit on the back of substantial surplus in the trade balance and higher private transfers. The trade balance improved to a surplus equivalent to 1.5 percent of GDP at end-September 2017, from a deficit of 4.3 percent of GDP in September 2016 (Figure 1.3.1). The value of merchandise exports increased to US\$10 billion (21.5 percent of GDP) from the September 2016 level of US\$8 billion (18.7 percent of GDP), driven by increased export earnings especially from gold, cocoa and oil. For instance, earnings from crude oil exports amounted to US\$2 billion at end-September representing an almost three-fold nominal increase over the September 2016 value of US\$773 million. In total, gold, oil and cocoa accounted for 83.6 percent of total export earnings in the first three quarters of 2017 (Figures 1.3.2 and 1.3.3 and Table 1.2).

### **Merchandise imports remained subdued.**

The reduction of merchandise imports was 5.6 percent, from US\$9.8 billion (20 percent of GDP) in September 2016 to US\$9.3 billion (23 percent of GDP), due to decreases in both oil and non-oil imports. At the end of September, the current account deficit narrowed significantly to US\$1.1 billion (equivalent to 2.4 percent of GDP), from as high as US\$2.1 billion (4.9 percent of GDP) a year ago (Table 1.2). The smaller deficit was financed by both FDI inflows (5.9 percent of GDP) and portfolio investment (5.5 percent GDP). Gross official reserves were estimated at US\$4.9 billion at the end of September 2017, equivalent to 2.8 months of imports, up from US\$3.1 billion at the September 2016, equivalent to 1.7 months of imports.

**The Ghanaian cedi remains stable after a short period of turbulence in the first quarter of the year.** The value of the cedi has been quite volatile over the past few years, as is evidenced by two large

depreciations against the U.S. dollar (34 percent in 2014 and 16 percent in 2015). Pressure on Ghana's flexible exchange rate regime has persisted over the years with continued macroeconomic underperformance attributed to large fiscal slippages. At the beginning of 2017, the cedi witnessed a sharp decline in value due to increased seasonal demand pressures from import demand and dividend payments, which was exacerbated by speculative activities. Cumulatively, the cedi depreciated by 2.7 percent against the U.S. dollar on year to date basis in March 2017, compared with a depreciation of 0.9 percent during the same period of 2016. This was also reflected in the Real Effective Exchange Rate (REER), which showed a depreciation over the same period; this indicates a slight improvement in the competitiveness of the economy measured by the REER. The cedi's performance has turned around since mid-March (Figure 1.3.4) due to improved liquidity as a result of substantial inflows of foreign exchange related to non-residents participation in the domestic bond market.

## Monetary and Financial Sector

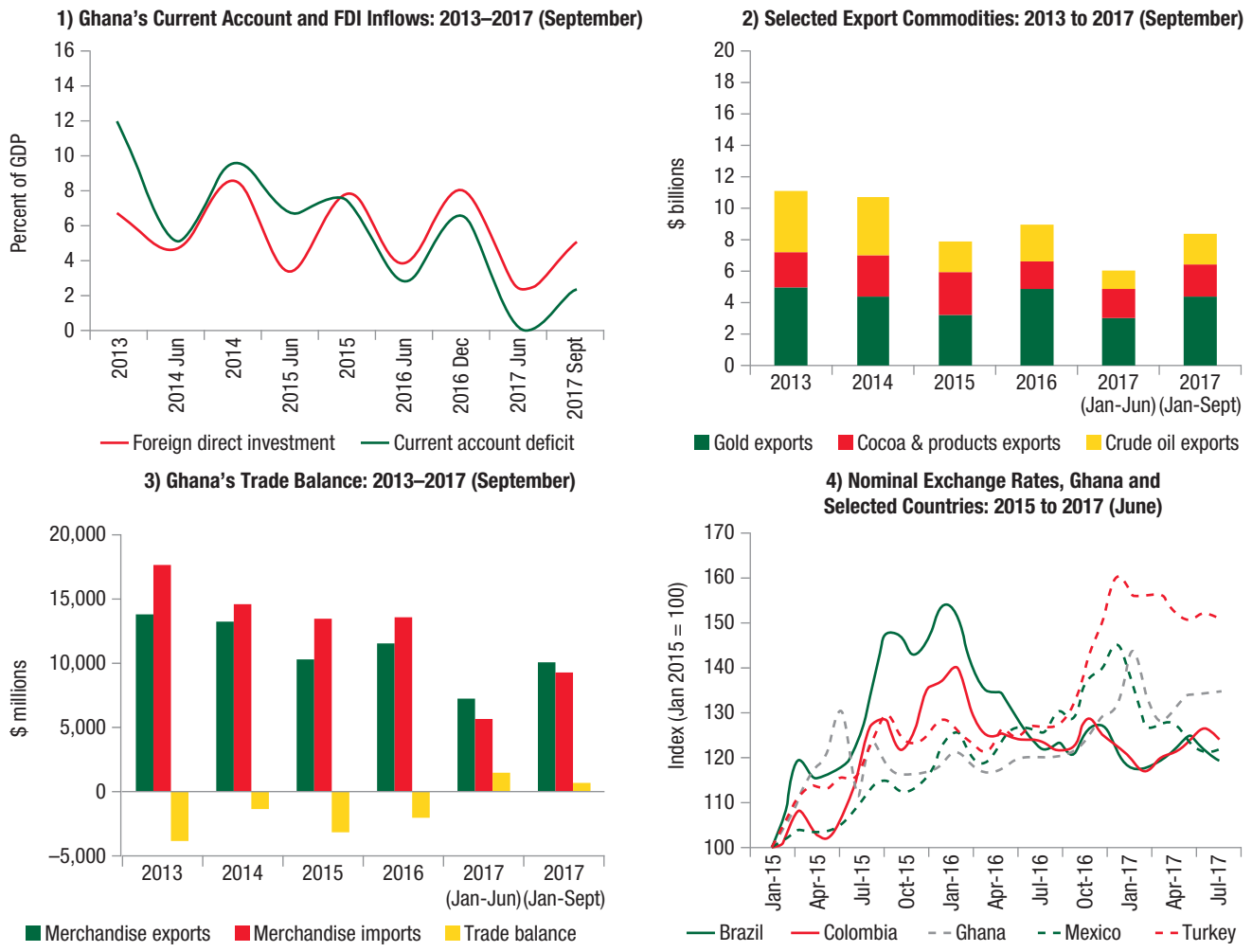
**The inflation rate continued to moderate since the last quarter of 2016, allowing the central bank to cut back on its policy rate.** Headline inflation fell from more than 19 percent in March 2016 to around 12 percent since May 2017 with the October 2017 rate at 11.6 percent (Figure 1.4.1). Movements in headline inflation are largely determined by movements in non-food inflation while food inflation either reinforces or mitigates the impact of non-food inflation. Thus, since September 2016, inflation has been on an overall decreasing trend driven by consistent decreases in both food and non-food prices except for the month of April 2017 when the inflation rate increased marginally to 13 percent from 12.8 percent in March. This was because of an increase in non-food inflation resulting from the pass-through effects of the increases in transport fares implemented in April. The recent trends in inflation is supported by the relative stability in the cedi.

**TABLE 1.2: Balance of Payments, 2014 to September 2017 (% GDP)**

	2014	2015	2016 Q1-Q3	2016 Annual	2017 Q1-Q3	2017 Proj. Annual
<b>Merchandise Exports (f.o.b.)</b>	<b>34.1</b>	<b>27.4</b>	<b>18.8</b>	<b>26.1</b>	<b>21.5</b>	<b>28.1</b>
o/w Oil exports	9.6	5.1	1.8	3.2	4.2	5.9
Non-oil	24.5	22.3	17.0	23.0	17.3	22.2
<b>Merchandise Imports (f.o.b.)</b>	<b>-37.7</b>	<b>-35.7</b>	<b>-23.0</b>	<b>-30.3</b>	<b>-20.0</b>	<b>-27.4</b>
Non-Oil	-28.1	-30.3	-19.7	-26.0	-16.7	-23.1
Oil	-9.5	-5.4	-3.4	-4.3	-3.3	-4.3
Net exports of goods under merchandising	0.0	0.0	0.0	0.0	0.0	0.0
<b>Merchandise Trade Balance</b>	<b>-3.6</b>	<b>-8.3</b>	<b>-4.3</b>	<b>-4.2</b>	<b>1.5</b>	<b>0.7</b>
<b>Services and income net</b>	<b>-11.1</b>	<b>-6.1</b>	<b>-3.5</b>	<b>-5.9</b>	<b>-8.1</b>	<b>-11.0</b>
<b>Services (Net)</b>	<b>-6.7</b>	<b>-3.1</b>	<b>-1.4</b>	<b>-3.0</b>	<b>-4.0</b>	<b>-5.5</b>
Services Exports	5.3	16.3	11.0	14.8	9.7	12.7
Services Imports	-12.0	-19.4	-12.3	-17.9	-13.7	-18.2
<b>Income (Net)</b>	<b>-4.4</b>	<b>-3.0</b>	<b>-2.1</b>	<b>-2.9</b>	<b>-4.1</b>	<b>-5.6</b>
Transfers	5.2	6.9	2.9	3.4	4.2	5.5
Official transfers (Net)	0.0	0.6	0.0	0.1	0.1	0.1
Private transfers (Net)	5.2	6.3	2.8	3.4	4.1	5.4
<b>Current Account (incl. official transfers)</b>	<b>-9.5</b>	<b>-7.5</b>	<b>-4.9</b>	<b>-6.6</b>	<b>-2.4</b>	<b>-4.8</b>
<b>Capital and Financial Account</b>	<b>9.7</b>	<b>8.3</b>	<b>1.0</b>	<b>6.0</b>	<b>3.7</b>	<b>6.8</b>
<b>Capital Account</b>	<b>0.0</b>	<b>1.3</b>	<b>0.5</b>	<b>0.6</b>	<b>0.4</b>	<b>0.5</b>
<b>Financial Account</b>	<b>9.7</b>	<b>7.0</b>	<b>0.6</b>	<b>5.4</b>	<b>3.2</b>	<b>6.3</b>
<b>Net official capital (Med/Long term)</b>	<b>2.1</b>	<b>1.9</b>	<b>0.1</b>	<b>-0.1</b>	<b>-0.3</b>	<b>-0.6</b>
<b>Private Capital</b>	<b>-2.8</b>	<b>-3.9</b>	<b>2.5</b>	<b>-3.5</b>	<b>-3.4</b>	<b>-3.8</b>
Foreign Direct Investment (Net)	8.7	7.9	5.9	8.1	5.1	7.0
other investment	0.0	0.0	0.0	0.0	0.0	0.0
Portfolio Investment (Net)	2.2	2.4	1.6	1.3	5.5	5.5
Short-term Capital	-0.4	-1.2	-4.6	-0.5	-3.7	-1.7
Errors and Omission	-0.4	-0.8	0.6	1.2	-0.5	0.0
Government Oil Investment	-0.4	0.1	-0.1	-0.1	-0.3	-0.4
<b>Note</b>						
Current Account Balance (US\$ billion)	-3.7	-2.8	-2.1	-2.8	-0.1	-2.2
Gross International Reserves (months of import of coverage)	2.1	2.6	1.7	2.8	2.8	3.0

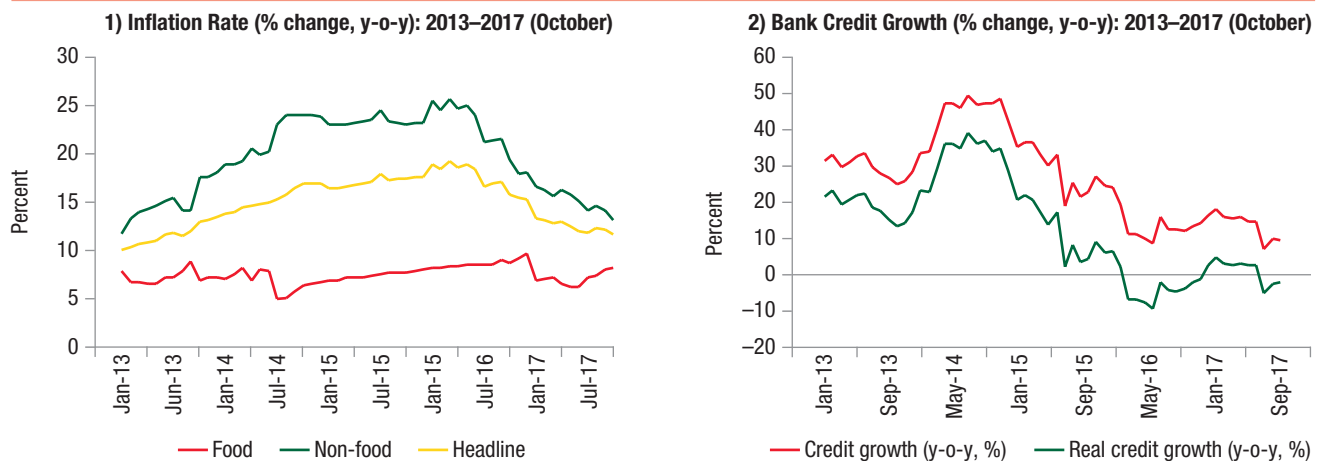
Source: Bank of Ghana.

**FIGURE 1.3: External Sector**



Source: 4.1–2 and 4.4: Bank of Ghana; 4.3: World Bank.

**FIGURE 1.4: Monetary Sector**



Sources: 5.1: Ghana Statistical Service; 5.2: Bank of Ghana.

**The downward trend in inflation created room for monetary policy easing.** Consequently, the Monetary Policy Committee (MPC) of the Bank of Ghana (BoG) cut the policy rate by 450 basis points (bps) over the last seven months to 21.5 percent in July 2017. Also, the T-bill rates have consistently declined since December 2016 in line with the declining trend of inflation. The average rate on the 91-day bill fell from 16.8 percent in December 2016 to 12.1 percent in June 2017; while the rates on the 182-day T-bill rate declined from 18.5 percent in December 2016 to 13.3 percent in June 2017. As the cost of borrowing decreased, broad money expanded in the first seven months of 2017 by 28.7 percent, compared with 25.9 percent for the same period in 2016. However, growth in credit to the private sector slowed to 14.5 percent in July 2017 down from 16.0 percent for the same period in 2016 (Figure 1.4.2). Nevertheless, banks' nonperforming loans remain high at 21.2 percent of total gross loans at the end of June 2017 reducing slightly to 20.9 percent in July 2017, mainly attributed to the weak

non-oil sector and the lingering problems of the energy-related state-owned enterprises (Table 1.3 and 1.4).

**The overall banking sector remains profitable, even though some weaknesses persist.** Returns on assets and returns on equity for the first half of 2017 were at 2.4 percent and 17.7 percent, respectively (Table 1.3). However, a recent Asset Quality Review (AQR) indicated provisioning and capital shortfalls as the BoG required some banks to reclassify loans, increase provisions, and implement recapitalization plans. Some banks exceeded single obligor limits, with capital erosion following the AQR, generating further pressures. There were also instances where a few banks were granted single obligor exemptions under the previous Banking Act, mainly to the energy sector. However, waivers granted under the previous legislation are being phased out considering that the new Banks and Specialized Deposit-Taking Institution (SDI) Act does not provide for waivers of single obligor exposures. Some banks have accessed the BoG's emergency liquidity facility for more than

**TABLE 1.3: Banking Sector Financial Soundness Indicators: 2010 to 2017 (June)**

	2010	2011	2012	2013	2014	2015	2016	June 2017
<b>Capital</b>								
Regulatory capital to risk weighted assets	19.1	17.4	18.6	18.5	17.7	17.8	17.8	14.8
Regulatory Tier I capital to risk-weighted assets	18.6	15.5	16.4	14.7	15.2	14.6	14.4	12.9
<b>Asset Quality</b>								
Nonperforming loans net of loan-loss provision to capital	29.2	10.4	9.4	8.3	11.2	14.7	15.8	17.9
Nonperforming loans to total gross loans	17.6	14.1	13.2	12.0	12.0	14.7	17.3	21.2
<b>Earnings</b>								
Return on assets	2.7	2.8	3.6	4.5	4.6	3.3	2.5	2.4
Return on equity	28.6	27.2	34.6	42.5	44.5	31.6	27.1	17.7
<b>Liquidity</b>								
Liquid asset to total assets	25.3	27.8	24.1	21.7	26.2	26.4	27.2	25.4
Liquid asset to short-term liabilities	32.9	35.3	30.7	28.2	34.4	34.2	35.1	32.5
Liquid assets/total deposits	37.3	38.4	33.6	33.7	43.6	40.6	42.8	40.4

Source: Bank of Ghana.

**TABLE 1.4: Non-Performing Loans: June 2016 to June 2017**

	Jun-16		Apr-17		Jun-17	
	Share in Total Credit	Share in NPLs	Share in Total Credit	Share in NPLs	Share in Total Credit	Share in NPLs
<b>a. Public Sector</b>	<b>12.6</b>	<b>12.7</b>	<b>13.7</b>	<b>2.5</b>	<b>13.1</b>	<b>5.1</b>
i. Government	1.9	1.4	1.4	1.0	1.6	1.0
ii. Public Institutions	2.6	2.0	5.0	0.1	4.3	0.1
iii. Public Enterprises	8.0	9.2	7.4	1.4	7.2	4.0
<b>b. Private Sector</b>	<b>87.4</b>	<b>87.3</b>	<b>86.3</b>	<b>97.</b>	<b>86.9</b>	<b>94.9</b>
i. Private Enterprises	70.0	80.9	70.8	91.4	71.2	89.3
o/w Foreign	9.2	7.9	8.5	12.5	8.9	12.1
Indigeneous	60.8	73.0	62.3	78.9	62.3	77.2
ii. Households	14.9	6.0	14.2	5.6	14.3	5.1
iii. Others	2.5	0.4	1.3	0.5	1.4	0.5

Source: Bank of Ghana.

the three-month maximum stipulated in the regulations. This has been attributed to the weak economy and problems in the energy sector with significant adverse impact on the banking system, as indicated by the high level of nonperforming loans.

**Even though the capital adequacy ratio of 14.8 percent is well above the regulatory requirement of 10 percent, there are some vulnerabilities as this buffer could be eroded by the increasing number of non-performing loans (NPLs).** The ratio of NPLs increased from 12 percent in December 2014 to 21.2 percent in June 2017 with some individual banks having even higher NPL ratios. The private sector, being the largest recipient of outstanding credit balances also accounted for the greater proportion of banks' NPLs. The share of private sector NPLs in total NPLs increased from 87.3 percent in June 2016 to 94.9 percent in June 2017 while the proportion of banks' NPLs attributable to the public sector declined from 12.7 percent to 5.1 percent over the same period. Most private sector non-performing loans were debts of local enterprises accounting for 77.2 percent of total NPLs in June 2017, from 73.0 percent in June 2016. There were marginal reductions of NPLs of the three largest sectors in terms of outstanding credit balances,

namely, the commerce and finance, the services, and the electricity, gas and water sectors, from 65.7 percent in June 2016 to 63.6 percent of total NPLs in June 2017. The share of NPLs attributable to the commerce and finance sector (the sector accounting for the largest share of NPLs) declined from 42.4 percent in June 2016 to 36.8 percent in June 2017. The agriculture, forestry and fishing sector was, however, the sector with the highest proportion of its loans (39.3 percent) classified as non-performing as at end-June 2017. It was followed closely by the commerce and finance sector with a sectoral NPL ratio of 30.3 percent (Table 1.4).

**The share of public sector NPLs declined from 12.7 percent in June 2016 to 5.1 percent June 2017. It is expected to decline further at the end of 2017 as Government takes steps to address SOE debt.** This is because SOE NPLs, which usually form the larger part of public sector NPLs, have significantly declined due to the recent restructuring of SOE debt, particularly those related to the Tema Oil Refinery (TOR) and the Volta River Authority (VRA). See *Box 1* with an overview of the most pressing issues in the state-owned energy sector in Ghana. Through the Energy Sector Levies Act 2015 (Act 899), the

Government introduced the energy sector levy to repay Government/SOEs non-performing debts to banks and energy companies. Pursuant to Act 899, the Government opened an auction for GH¢6 billion cedi-denominated energy sector bonds on Tuesday, 24 October 2017 to refinance a part the energy sector debt, including to the banking sector. The GH¢6 billion (US\$1.4 billion) is part of the total amount of GH¢10.8 billion (US\$2.5 billion) owed by five major energy utilities—Electricity Company of Ghana, Volta River Authority, Ghana Grid Company, Ghana Gas, and Tema Oil Refinery—at the end of June 2016. An amount of GH¢2.4 billion was accepted in seven-year bonds at a rate of 19 percent, while only GH¢2.8 billion was received in offers for the 10-year bond at a rate of 19.5 percent against a target of GH¢3.6 billion. The bonds were sold through a special-purpose vehicle (SPV) backed by flows from the Energy Sector Levy Act (ESLA) of December 2015. While this transaction could reduce banks' NPLs and ease liquidity pressures in the short-term, it is also important to address the underlying factors that led the SOEs to accumulate arrears and overdue debts in the first place.

## Macroeconomic Outlook and Policy Options

**GDP is projected to rebound to 6.1 percent in 2017.**<sup>4</sup> The rebound is expected to be driven by further investments in the oil, gas, and mining sectors. Growth could remain high at around 8 percent in 2018 and moderate to 6 percent in 2019 (Figures 1.5.2 and 1.5.3). Oil production at the Sankofa offshore, the TEN fields, and new production in the Offshore Cape Three Points (OCTP) Fields, which had significant impact on the 2017 first quarter performance, will continue to boost growth throughout the remainder of 2017. Also, gold output will likely remain high (based on data from the Minerals Commission) while cocoa production is expected to grow above 900 thousand tons. Considering the acceleration of growth in the natural resource sector, there is an upside to the 2017 growth projection given the very strong second and

third quarters and this may support the government's higher projection of 7.9 percent growth for the year.

**However, non-oil growth is expected to slow to 4.3 percent.** The improved power situation will not be able to offset the negative real sector growth effects of the ongoing fiscal consolidation and consequently the lower consumption and investment from the public sector. An average of 6.6 percent growth is projected for the non-oil sector over the medium term. TFP is projected to decline marginally over the medium term and growth will largely be from capital accumulation, while the services sector remains saturated with labor. This reinforces the need for more private sector diversification through non-traditional exports and improved agroindustry (Figure 1.5.4).

**Over the medium term, monetary policy will remain focused on price stability. The Government's medium-term inflation target is 8±2 percent.** As monetary and fiscal policy stance are better coordinated, the inflation targeting framework is expected to be more effective in curbing inflation in line with the medium-term target. This would allow for the gradual lowering of the policy rate to facilitate increases in domestic credit to the private sector in line with the medium-term growth objective. Ghana operates a flexible exchange rate regime with the BoG intervening to prevent excessive volatility in exchange rate movements.

**The outlook faces a number of domestic and external risks.** On the domestic front, the substantial fiscal challenges, which are manifesting through weak domestic revenue mobilization and difficulties in containing the wage bill could undermine overall macroeconomic stability while the recent exchange rate depreciation could militate against efforts to contain inflation. Thus, Ghana's economic performance over the medium term will, to a large extent, depend on the success of the economic stabilization program through a return to fiscal sustainability. The Ghanaian

<sup>4</sup> This is based on World Bank staff projections that take into account the first quarter growth rate of 6.6 percent as published in the 2017 Macro-Poverty Outlook (October).

authorities have expressed their commitment to embark on a steep fiscal consolidation, as evidenced in the first three quarters fiscal performance, while the BoG maintains the strategies towards achieving the medium-term inflation target. Importantly too, Ghana is likely to face high financing costs in both the domestic and external markets in the context of a strong U.S. dollar and rising global bond yields. The country's heavy reliance on primary commodities, including cocoa, gold, and oil—all prone to volatility in international commodity prices—create uncertainty about its actual future paths for growth, inflation, export receipts, and domestic revenue.

**To sustain the momentum of fiscal consolidation, two areas are particularly relevant over the medium-term: domestic resource mobilization and expenditure controls, which need to be flanked by growth-enhancing efforts to bring about more sustainability to the consolidation program.** The fiscal deficit target for the full year 2017 was set to be 6.3 percent of GDP; based on the trend for the period between January and September 2017 it is expected to be met even though there are limits to the flexibility in expenditure adjustments. The fiscal deficit target is consistent with a 2.5 percent primary adjustment needed to reduce the debt stock from 73.4 percent to 70.5 percent by close of the year. With the deficit at 2.7 percent for the first half of the year, it is expected that the full-year target will be met (Figure 1.5.1) or even surpassed, as policy-induced improvements for revenues will continue to materialize through the end of the year. Flexibility in expenditure adjustments will remain a Government priority but will face limits. Expenditure cuts have improved the fiscal performance in the first half of the year, but this may result in the accumulation of new statutory payments arrears, as revenue underperformance remains a risk to the budget. With the end-year 2016 stock of debt of more than 73 percent of GDP and with Ghana already at a high risk of debt distress, any further fiscal slippage could have significant adverse impact on the debt dynamics with implications for investors' confidence. In addition, Ghana still faces high financing

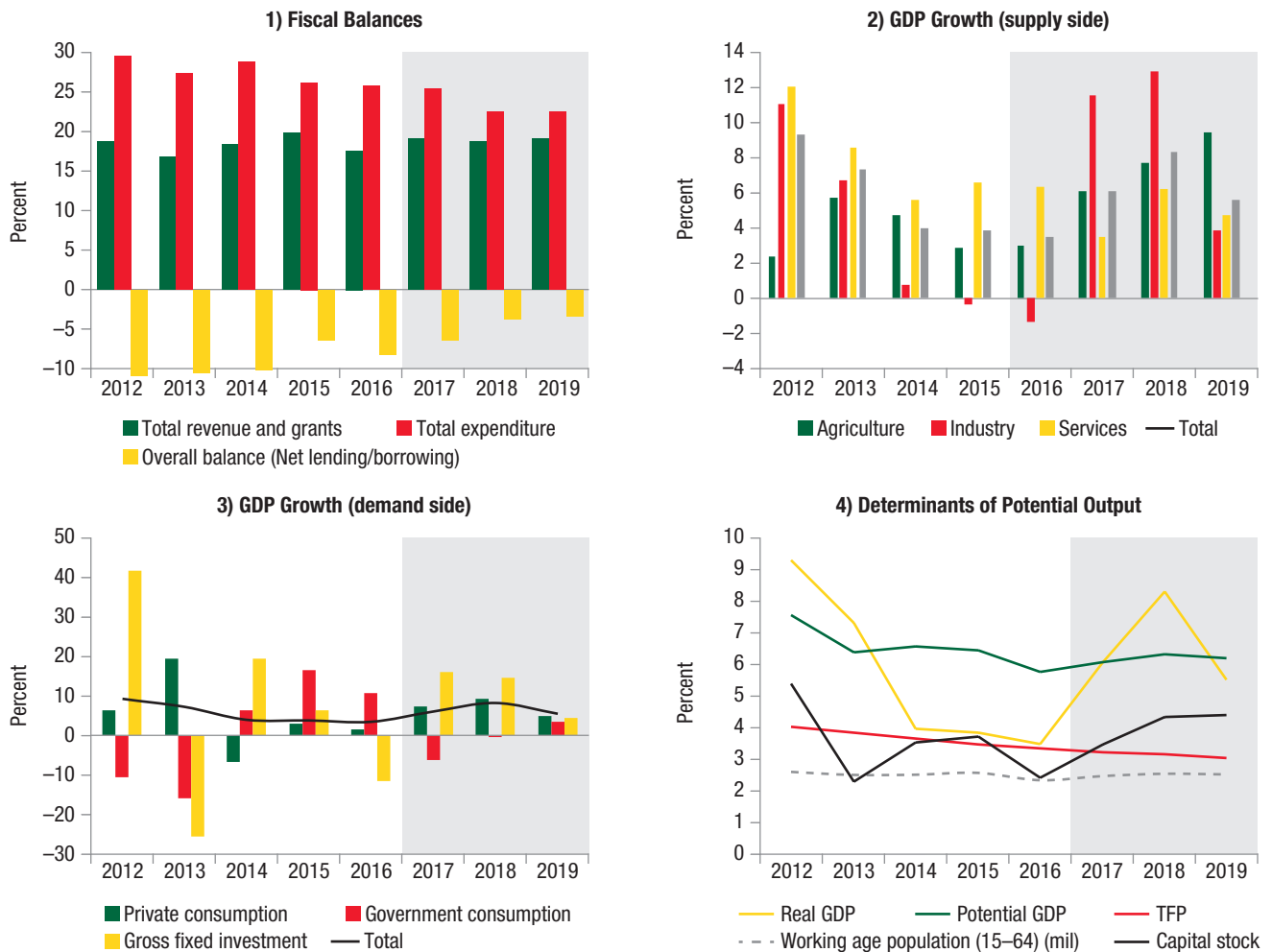
costs in both the domestic and external markets and interest rates remain susceptible to the actions of the U.S. Federal Reserves with gradual increases in its benchmark interest rate.

**To improve revenue mobilization, improved tax compliance and the broadening the tax base are imperatives.** To improve compliance, the tax authorities need to rapidly advance the use of taxpayer information through integration of data and analytical reporting. Currently, the Ghana Revenue Authority (GRA) is in the process of bringing together the Total Revenue Integrated Processing System (TRIPS) and the Ghana Customs management Systems (GCMS) into an Integrated Data Warehouse, with support under the World Bank's Ghana Economic Management Strengthening Technical Assistance (GEMS-TA). Government has also committed to the use of third party information from various sources such as Ghana Integrated Financial Management Information System (GIFMIS) and other regulatory bodies such as the Financial Intelligence Centre (FIC) and Economic and Organized Crime Office (EOCO) to help improve the business intelligence system of GRA. There is need to expedite action on these initiatives, which will enable tax officials to identify taxpayers (especially in the informal sector) not yet captured and obtain accurate information on the existing ones. The data warehouse and the business intelligence system will help the tax authority in the areas of audits, enforcements, and tax policy formulation.

**In addition, there is an urgent need to streamline tax incentives.** As recommended in the 2017 World Bank's Public Expenditure Review, tax expenditures have a considerable fiscal cost. These should be reviewed against their social and economic objectives to allow prioritization of the tax regime. For instance, zero-rating tends to reduce prices more than outright VAT exemptions and hence, zero-rating may serve as a policy option in a case where Government intends to reduce tax burden on consumers. On the other hand, tax expenditures targeting consumer goods that produce no positive social or economic spillovers could be rationalized.



FIGURE 1.5: Economic Outlook



Source: 5.1: World Bank and Ministry of Finance; 5.2: Ghana Statistical Service and World Bank; 5.3: World Bank and Ministry of Finance; 5.4: Ghana Statistical Service and World Bank (2017).

**Better and more forward-looking expenditure planning is needed.** This would not only keep public debt at sustainable levels, but also prevent further arrear accumulation. The enforcement of the Public Financial Management Law and the expanded roll-out of the Ghana Integrated Financial Management Information System (GIFMIS) will be instrumental in those efforts. Likewise, there is the need for a swift and further improvement of the Treasury Single Account to strengthen debt and cash management.

**In addition, containment of the wage bill needs to remain a focus of overall expenditure**

**management.** The Government has committed to curbing the wage bill increases through various policy measures such as (i) the removal from the payroll of public employees without listed bank accounts; (ii) the suspension and verification of salary payments to employees without social security numbers; (iii) the implementation of a biometric validation exercise for all employees on the automated payroll system; (iv) the establishment of the electronic wage payment system to enable monthly staff verification by all department heads before payments are made; (v) a payroll security assessment conducted through an audit of the payroll

databases; (vi) the migration of subvented<sup>5</sup> organizations onto the automated payroll databases;<sup>6</sup> and (vii) a large-scale public payroll management audit designed to identify the officials responsible for irregularities and inform any legal action the Government may pursue. There is the need for Government to halt the practice of enrolling employees at work several months before onboarding processes are completed. This will help curb some wage arrears usually experienced in the health and education sectors.

**Fiscal consolidation will only be sustainable when social and economic activities can thrive in an expanding and diverse economy.** Fiscal consolidation can have negative growth effects through the Keynesian multiplier effect. And the medium-term GDP growth outlook is over-reliant on natural resource extraction, which in turn has the potential for intensified Dutch Disease and long-term decline of non-natural resource exports. To ease the effects of the anticipated decline in oil production in the medium term, there is need to invest Ghana's current natural resource wealth in non-natural resource sectors for sustainable growth in the medium-to-long-term. The Government needs to improve the economy's competitiveness for private sector-led investments in the non-oil sector for growth.

**The agriculture sector will be in the spotlight in the efforts for a more diversified economy and as a sector able to provide employment and livelihoods to the people.** This is the prime reason that the sector will be analyzed in Chapter 2 of this economic update. Agriculture contributes more than one-fifth of Ghana's GDP, and agricultural exports—principally cocoa—are a key source of foreign exchange. Yet, Ghana's agricultural sector's contribution to real GDP growth has been declining for the past five years. Still, the potential for agriculture and agribusiness to bring about structural change and poverty reduction is significant in Ghana as it is in other developing economies. The agriculture sector employs more people, particularly in the rural areas where the sector is the main employer of last resort.

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<sup>5</sup> "Subvented" refers to organizations that are publicly financed but not part of the central Government (e.g., universities).

<sup>6</sup> As of September 2015, these agencies had a total staff of 176,575, 40 percent of which were National Service Personnel, while 22 percent were employed by the country's eight public universities, all of whom will be migrated to the automated payroll system. The remaining one-third are employees of subvented agencies that will have their internal payroll mechanisms strengthened, and will not be migrated to the automated payroll system.

## BOX 1: Overview of the Energy Sector in Ghana

State Owned Enterprises (SOEs) play a key role in Ghana's economy, including service delivery, and are critical to the management of public finances and public policy. A World Bank assessment in 2015 found 39 wholly-owned SOEs, concentrated largely in critical sectors of the economy such as energy, finance, and infrastructure (World Bank 2015a). However, many of these SOEs underperform, resulting in inefficient service delivery, wasted resources, financial losses, and an accumulation of debt. In the energy sector, which is the focus sector of this Box, the ECG recorded electricity distribution losses equivalent to about 25 percent of electricity consumption. SOEs account for more than half of all public-sector arrears even though SOE budgets are not included in fiscal accounts.

The accumulation of arrears, particularly by SOEs in the energy sector have contributed to the deterioration in Ghana's fiscal position and have adversely affected growth. This was compounded by large expenditures on fuel subsidies, which were subject to removal through the Government's fiscal consolidation program in 2015. Subsidies reached the equivalent of 1.2 percent of GDP in 2013, but fell since then and have been negligible since 2016. In the energy sector, underinvestment, particularly in generation capacity, has resulted in higher structural cost of production throughout the economy, including from businesses having to self-provide for electricity, with adverse effects on the manufacturing sector. The costs of leasing and operating private diesel generators have been estimated at 1.9 percent of GDP, while the costs of lost sales have been estimated at 3.9 percent of GDP.

The ratio of non-performing loans (NPLs) particularly among banks with significant exposures to the energy sector have been rising. The ratio of NPLs for the entire banking system increased from 11.2 percent in December 2014 to 17.3 percent in December 2016 and further to 21 percent in May 2017 but dropped slightly to 20.9 percent in July 2017. To reduce these NPLs, the Government introduced the Energy Sector Levy Act (ESLA) for a target source of revenues to service the energy-related State-Owned Enterprise (SOE) debt. The Government opened an auction for GH¢6 billion cedi-denominated energy sector bonds on October 24, 2017 to refinance a part the energy sector debt, including to the banking sector. The GH¢6 billion (US\$1.4 billion) is part of the total amount of GH¢10.8 billion (US\$2.5 billion) owed at the end of June 2016 by five major energy utilities: Electricity Company of Ghana (ECG), Volta River Authority (VRA), Ghana Grid Company (GRIDCo), Ghana Gas, and Tema Oil Refinery (TOR). Given the economy's vulnerability to energy supply risk, the issues including sector revenue gap as well as risks from gas supply bottlenecks of the electricity sector will require immediate and urgent solutions. To this end, three important and pressing issues in the sector are (World Bank 2017b):

**Revenue shortfall and debt stock amount to US\$1.4 billion of net external debt by end-December 2016** caused by inefficiencies such as system losses and poor collections. The Government increased the electricity tariff by 57 percent in December 2015, which ended up reducing customer demand—indicating that the tariffs are at the limit of affordability and that important adjustments need to be made on the revenue management side to address operational losses.

**Expected excess power generation capacity.** To address the power shortfall, emergency power projects were contracted mostly without a competitive process. The contracted emergency capacity together with other Independent Power Producers (IPPs) resulted in more Power Purchase Agreements (PPAs) being entered into than necessary, vastly exceeding the power generation gap in Ghana. While a number of the projects have now been halted, or delayed, up to 1,900 MW of excess capacity project are currently still proceeding as planned and, if not stopped or delayed, could cost the sector up to US\$700 million per year in unnecessary capacity payments by 2018

**Risk of Sankofa gas being stranded.** The Sankofa Gas Project being supported by the World Bank is expected to help resolve the gas supply shortfall, but Ghana currently does not have an interconnected gas transportation system, which would link most of the thermal power generation capacity situated in the east (around Tema—near Accra) to the domestic offshore oil and gas fields situated in Western Ghana. If Sankofa gas cannot be transported from West to East, there will be significant financial consequences, including: (i) capacity payments on thermal generation plants (790 MW) continuing to be idle in the east around Tema; and (ii) non-utilization of Sankofa gas while incurring capacity charges annually.

The World Bank is currently supporting a number of reforms to comprehensively address the challenges in the energy sector. In the meantime, Government has moved to establish cost-reflective tariffs, reform the power utilities, and implement Revenue Allocation Mechanism at the ECG in which the Public Utilities Regulatory Commission (PURC) will ensure that ECG revenue goes directly into an escrow account and is then allocated based on an agreed tier of creditors.



# AGRICULTURE AS ENGINE OF GROWTH AND JOBS CREATION: TRANSFORMING THE SECTOR AND CREATING AGRIBUSINESS OPPORTUNITIES<sup>7</sup>

2

The agricultural sector accounts for one-fifth of Ghana's Gross Domestic Product (GDP), employs nearly half of the workforce and is the main source of livelihood for most of the country's poorest households. Two-thirds of non-oil manufacturing depend on agriculture for raw materials. Agriculture and agribusiness account for a major share of all economic activities and livelihoods among smallholder farmers. Yet, medium-sized farms are the dominant segment in Ghana's agriculture sector both in terms of growth and land under cultivation. The major export crop, cocoa, accounts for 20–25 percent of total foreign exchange earnings. Agribusiness has a very high multiplier effect on employment, creating over 750 jobs for every additional US\$1 million of output. Yet, agricultural growth is affected by declining yields and competitiveness in the face of a growing extractive sector (especially oil) which poses the threat of "Dutch Disease effect." At the same time, agriculture has tremendous opportunities to develop and significantly support economic and social development in Ghana. This analysis points to three overarching opportunities for policy reforms to improve the sector for better future outcomes: (1) improving the quality and effectiveness of public expenditure in agriculture would be important in the context of limited fiscal space; (2) improving the environment for agriculture businesses is key to adding value to the existing production and for job creation; and (3) fixing the cocoa sector is essential given the large size of the cocoa economy.

## Ghana's Agriculture Sector

**The agriculture sector contributes more than one-fifth of Ghana's GDP; agricultural exports—principally cocoa—are a key source of foreign exchange.** Still, overall sector growth has remained low (Ministry of Food and Agriculture [MoFA] 2015). This was confirmed by the recent Joint Sector Review (JSR) of the implementation of the Food and Agriculture Sector

Development Plan (FASDEP) and the Agriculture Sector Investment Plan (METASIP II). Moreover, and until oil production came on board in 2011, an estimated two-thirds of Ghanaian manufacturing depended on agricultural inputs; hence agriculture's performance has also been important for the competitiveness of non-oil manufacturing (World Bank, 2009; and Breisinger 2008). While agricultural output is increasing, the sector's growth performance has been highly erratic, and the average annual agricultural growth rate is well below both the overall GDP growth rate and the target, which is set at 6 percent per annum.

**Ghana's agricultural sector's contribution to real GDP growth has been declining for the past five years.** The sector's contribution to real GDP has declined from 31 percent in 2008 to 18.9 percent in 2016 (Figure 2.1.1). This could be attributed to the slow rate of growth over the period 2008–2016, averaging around 4.3 percent. In 2016, even though agricultural growth slightly improved to 3 percent from the 2015 level of 2.8 percent, this was significantly below the target growth rate of 6 percent (Figure 2.1.2).

<sup>7</sup> **Agriculture** refers to on-farm production. It includes crops and livestock but not floriculture, fisheries, or forestry. **Agribusiness** denotes organized firms—from SMEs to multinational corporations—involved in input supply or in downstream transformation. It includes commercial agriculture that involves some transformation activities (even if they are basic). It includes smallholders and micro-enterprises in food processing and retail to the extent that they are market oriented—indeed these producers and enterprises make up the bulk of agribusiness activity in Africa today (World Bank, Growing Africa 2016).

## BOX 2: The Role of Agriculture in Structural Change and Poverty Reduction in Africa

There is a renewed interest in the role of agriculture/agribusiness in structural change and poverty reduction, particularly in agro-based developing economies. There is ample evidence that increasing agricultural productivity has lifted millions of people out of poverty through higher incomes, cheaper food, rejuvenation of rural economic activities, which strengthens the backward and forward linkages with other sectors of the economy (i.e., the case of green revolution in Asia). It is also known that higher productivity in agriculture determines the pace of structural change as productive resources, including labor, move out of agriculture to other more productive sectors, thereby improving overall economic growth. Globally, agricultural growth has been shown to be more effective for poverty reduction among the very poorest because most of the poor work in agriculture. However, while no poor country can achieve significant poverty reduction without first increasing agricultural productivity, agricultural growth is not a sufficient condition for sustained long-term poverty reduction.

For Ghana, this implies that agricultural growth needs to be promoted as a basis for economic transformation beyond the lower-middle income status. Policies, institutional reforms, and investments made since the 1990s have led to some level of growth, which may be attributed to the country's graduation towards the lower-middle income status. However, further growth beyond this would have to derive from structural transformation towards agribusiness and non-farm services sector, as this is likely to create better jobs than the primary agricultural sector.

Source: Adapted from M. Honorati and Sara Johansson da Silva 2016.

**The potential for agriculture and agribusiness to bring about structural change and poverty reduction is significant in Ghana as it is in other developing economies.** The pathways through which agriculture and agribusiness spur economic growth and poverty reduction have been described extensively in the development literature (see World Bank 2016). High productivity in agriculture raises farm incomes and increases demand for products and services mostly from the non-farm sector. It also leads to more and cheaper food, and generates patterns of development that are employment-intensive, benefiting both the farm and non-farm sectors (Box 2).

**The agriculture sector employs more people, particularly in the rural areas where the sector is the main employer of last resort.** According to the 2015 Ghana Labor Force Report, there were 9.3 million people who were formally employed in 2015. Of the total number, 3.3 million (about 36 percent) were employed in agriculture. However, in the rural areas, total employment recorded was 4.6 million (49.1 percent of total employed). Of the total rural employment, 70.6 percent were employed in the agriculture sector (Table A.2.3.2 in Annex A). This is most likely an understatement, as the Labor Force study only covered formal wage employment. However, in the

rural areas agriculture is the employer of last resort and hence total agriculture employment—formal and informal—is even higher than the labor force study suggests. Box 3 summarizes informal employment in the agriculture sector in Ghana.

**Most of the people employed in agriculture are likely to be underemployed, and are likely to be in the rural areas.** The 2015 Labor Force Report shows that 46.6 percent of the underemployed persons were in the agriculture, forestry, and fishing sector, with about 13.9 percent in wholesale and retail trading and 13.4 percent in manufacturing. Seven in every ten (70.2 percent) of the underemployed in the rural areas are engaged in the agriculture, forestry, and fishing sector compared to 13.3 percent of those in the urban areas. Those underemployed in urban areas are about three times more likely (22.8 percent) than those in rural areas (7.6 percent) to be engaged in the wholesale and retail trade sector (Ghana Statistical Services 2016).

**More than 80 percent of the workforce in Ghana is employed in the informal sector.** Most of those employed in the informal sector operate in three main occupational categories: agriculture and fisheries (55 percent), craft and related trading (13 percent), and agro-related services and sales (13 percent). This

### BOX 3: Informal Jobs in the Agricultural Sector in Ghana

Over 80 percent of those employed in agriculture are involved in informal activities such as: (i) agricultural activities—predominantly farming units, dependent on family labor made up of many small farmers in the rural and semi-urban areas. The farmers are mostly illiterate or semi-illiterate and have no formal training. Farming skills are acquired through learning from parents. Family labor and low-technology pooled labor is what is usually available and land is acquired typically on usufruct basis—i.e., to have the right to use the property and enjoy the fruits of it without legally owning it—from family and community assets; (ii) fishing and fish processing activities, mostly along Ghana’s coastline and are mainly composed of married males aged between 18 and 40 years. These predominantly illiterate workers acquire practical skills through experience. The value added and processing activities that include smoking and marketing of the fish are mostly undertaken by women who are either wives or close relatives of the fishermen; and (iii) rural agro-based processing activities, which include processing cassava into gari, cassava dough, palm kernel, groundnut and copra oils, palm wine tapping, pito (local brew), local gin distillery, and traditional soap-making. These activities are dominated by married female workers who are predominantly illiterate. Their skills are acquired from within the family.

In all these occupations, seasonal underemployment is pronounced because the jobs are available mostly for a few months of the year. Most of the people in these informal jobs face considerable risk as they lack social security protection.

Source: Osei-Boateng and Empratwum 2011.

implies that most of those employed in agricultural and agro-related informal sector jobs are affected by all the challenges associated with informality such as lack of proper regulation and very low wages. This partly explains why most of the poor are likely to be employed in the informal agriculture sector jobs.

**The dominant source of employment is crop and livestock production and hunting.** Most of these activities are predominant among rural households, most involve production and selling of primary commodities, which fetch low prices on the market. As seen in Table A.2.2 in Annex A, on average, households engaged in agricultural activities as their major form of employment earn about GH¢4,200 (about US\$1,000) per annum.<sup>8</sup> As such, a combination of low prices and low productivity for both crops and livestock suppresses average earnings from agricultural activities.

**Low productivity is the major cause of low earnings and underemployment in the agricultural sector.** The agriculture sector is characterized by low yields for staple as well as for cash crops. This is not unusual for an African country; in fact, TFP growth in agriculture in Africa relative to other world regions is generally low (see USAID ERS Agriculture Productivity Tables) often because of lower technical change due to inconsistent public investment in

Research and Development (R&D), and unsustainable cultivation practices. Average cereal yield<sup>9</sup> in Ghana is estimated at 1.7t/ha, which compares quite well with many countries in Sub-Saharan Africa, but is lower than Cote d’Ivoire (2.7t/ha), Madagascar (2.6t/ha), Malawi, Rwanda and Uganda (2t/ha).<sup>10</sup> As in almost all countries in Sub-Saharan Africa, Ghana’s average cereal yield is only about a quarter of the potential yield estimated at over 5t/ha<sup>11</sup> (Table A.2.3.1 in Annex A). For cash crops, cocoa yields in Ghana average between 400–450 kg/ha, which is among the lowest in the world (Ghana COCOBOD, 2015).

**Yet, there is a thriving medium farm segment in Ghana’s agriculture economy which points to the existence of dynamic elements to build upon**

<sup>8</sup> Total earnings divided by total number of households employed in agriculture.

<sup>9</sup> Cereal yield, measured as kilograms per hectare of harvested land, includes wheat, rice, maize, barley, oats, rye, millet, sorghum, buckwheat, and mixed grains. Production data on cereals relate to crops harvested for dry grain only. Cereal crops harvested for hay or harvested green for food, feed, or silage and those used for grazing are excluded. FAO allocates production data to the calendar year in which the bulk of the harvest took place. Most of a crop harvested near the end of a year will be used in the following year.

<sup>10</sup> Actual farmers’ yields estimated through the national crop estimates by the Ministry of Food and Agriculture; potential yields estimated from research trials.

<sup>11</sup> World Bank staff own calculations, based on World Development Indicators (WDI).

**TABLE 2.1: Growth in Number of Farms, 1992–2013**

Ghana	Number of farms		% growth in number of farms	% of total cultivated area	
	1992	2013		1992	2013
0–2 ha	1,458,540	1,82,034	8.5	25.1	14.2
2–5 ha	578,890	998,651	72.	35.6	31.3
5–10 ha	116,800	320,441	174.3	17.2	22.8
10–20 ha	38,690	117,722	204.3	11.0	16.1
20–100 ha	18,980	37,421	97.2	11.1	12.2
> 100 ha	—	1,740	—	—	3.5
Total	2,211,900	3,057,978	38.3	100	100

Source: GLSS (various years).

**for the future.** Table 2.1 shows the growth in farms (by size) between 1992 and 2013. All farm sizes have grown, but it is actually the medium-size segment that showed the largest growth, not the smallholder farms which often are associated primarily with agriculture development in Ghana. These account for the majority (>50 percent) of the total cultivated area in Ghana. So, the most dynamic segments in Ghana’s farming sector are the farms with sizes between 5 and 100 ha. This may indicate a good starting point to venture into agribusiness in Ghana, where scale production in a dynamic sector would be a definitive advantage.

**Increasing total output of staples has been an important objective of Ghana’s agriculture policy.** Yet, the data over the last decade indicate that while total output has increased (Tables A2.3.3 and A2.3.4 in Annex A), productivity growth has lagged, suggesting that expansion in area cultivated has been the main driver of output growth. While output has been growing at about 4 percent per year (for cereals) and over 10 percent per year for roots and tubers, annual productivity growth over the same period averaged 1.7 percent for cereals and less than 5 percent for roots and tubers.

**Crop production accounts for more than 75 percent of total output of the sector, while live-stock, fishing, and forestry comprise the remaining 25 percent (see Figure 2.1.5).** Ghana is the world’s

second-largest cocoa producer after Côte d’Ivoire, and cocoa represents about 10 percent of agricultural production. Other key crops include staple foods such as maize, cassava, and yam. While domestic rice production is on the rise, imports still account for about half of the country’s rapidly growing demand. Growth in agriculture has also largely lagged behind all the other key sectors (Table A.1.2 in Annex A).

**The agriculture sector is a primary source of employment for most of the 300,000–350,000 new workers who enter the labor force each year.** The extractive industry, which grows faster relative to many sectors, including agriculture, is highly capital intensive and employs only a small proportion of unskilled workers. Agriculture employs a huge number of unskilled workers and provides livelihoods for more than 70 percent of the rural population, including a large share of the country’s poorest households. The agricultural sector will likely continue to contribute to net job growth over the medium term (World Bank 2016a), and improving agricultural output will remain vital to poverty reduction. In this context, the agricultural sector’s slowing growth rate and declining Terms of Trade (Figures 2.1.2 and 1.1.4) raises development policy concerns that extend well beyond its immediate macroeconomic impact.

**Ghana’s impressive record of poverty reduction since the 1990s is closely linked to agriculture.** Ghana realized significant poverty reduction and



shared prosperity over the last almost three decades. The country achieved the goal of reducing the poverty rate by half, in line with the first Millennium Development Goal target, without increasing income inequality. Three major factors contributed to the reduction in poverty: better-educated labor force, increased production of cocoa and other crops, and internal migration. But even though inequality (measured by the Gini index) did not increase, spatial inequality intensified, as poverty is closely linked to a difference in employment opportunities across regions. Private and public-sector wage jobs are concentrated in well-off urban areas, especially in Greater Accra. In contrast, agriculture is by far the most dominant sector of employment among households in Volta and the northern regions. Unlike other regions where the climate is suitable for cocoa and other cash crop production, farmers in Volta and the northern regions are mainly engaged in subsistence agriculture. Agriculture in these regions is typically rain-fed, and is characterized by traditional farming systems. Farmers use few modern inputs, receive inadequate extension services, and have limited access to irrigation. In recent years, rainfall patterns have become even more volatile, and crop failure is becoming more frequent. In addition, unsustainable agricultural practices have led to lower soil quality, higher erosion, and lower agricultural output in these regions.

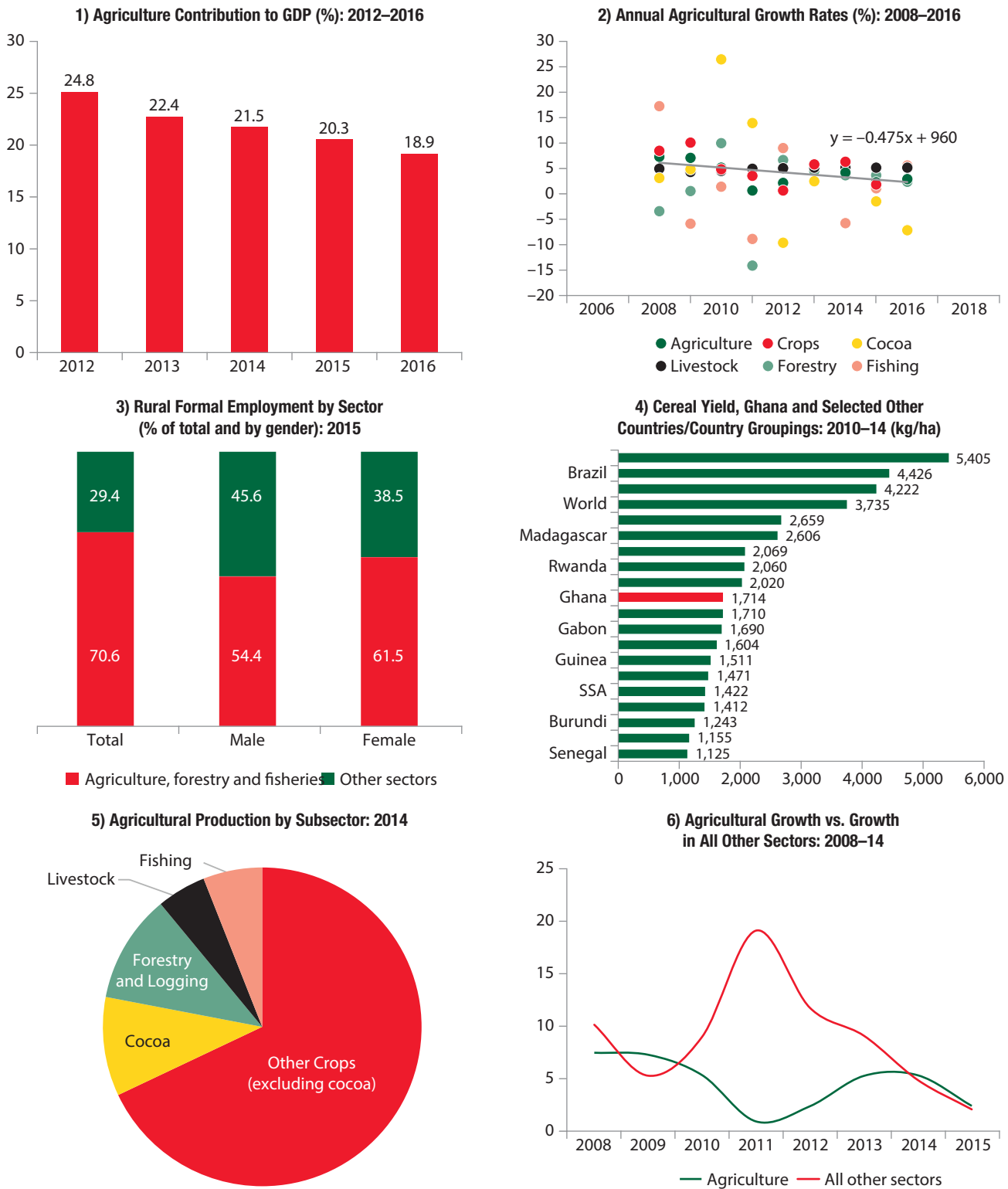
**Hence, the importance of the agricultural sector in job creation and poverty reduction cannot be underestimated.** The analysis in the private sector diagnostic indicates that agribusiness has among the highest multipliers (1.8) and creates 750 jobs for every additional U.S. million dollars of output (World Bank 2017). Following significant progress in poverty reduction over the past decade, moderate and extreme poverty rates as well as inequality have hardly changed in recent years (World Bank 2016b). Meanwhile, the international experience has shown that agricultural growth reduces poverty by about three times as much as non-agricultural growth (Christiansen et al. 2013; and Christiansen and Kaminski 2015). In addition to fostering poverty

reduction and inclusive growth, investments and policies designed to support agricultural productivity will be critical to facilitate the structural transformation of the Ghanaian economy and to manage the ongoing process of urbanization.

**Growth in agriculture is, on average, at least twice as effective in benefiting the poorest than growth generated in nonagricultural sectors.** There is evidence that many countries that had relatively high agricultural growth rates saw substantial reductions in poverty. For example, China's rapid growth in agriculture and reforms favoring agriculture were initially responsible for the rapid decline in rural poverty from 53 percent in 1981 to 8 percent in 2001. Agriculture was also the key to India's slower but still substantial long-term decline of poverty. Ghana has reduced rural poverty by 24 percentage points over 15 years, mainly due to strong agricultural performance. But success in agriculture does not always reduce poverty. In Bolivia and Brazil, where agricultural growth has been concentrated in a dynamic export-oriented sector of large capital-intensive farms, agricultural employment declined and shifted to higher-skilled, higher-wage workers, with little poverty reduction effects (World Bank 2008).

**The agricultural sector has experienced a sharp deterioration in its Terms of Trade since 2011.** As previously illustrated in Figure 1.1.4, Ghana's agricultural Terms of Trade, measured as a ratio of food and non-food price indices, has been on the decline, with a sharp fall after 2011. While the impact of the extractive industries on the non-resource economy has not yet been fully analyzed, the agricultural sector experienced a sharp deterioration in its Terms of Trade from 2011 when Ghana started its oil production. However, this could have also been exacerbated by the sharp decline in public spending on the sector (Figure 1.2.10). The other issue of concern is the high concentration of agricultural exports on very few commodities, with cocoa taking the largest share. This limits trade potential, increases the exposure to global economic shocks and undermines the capacity to create jobs (AfDB et al. 2015).

**FIGURE 2.1: Agriculture Sector in Ghana**



Source: 1.1: Authors' calculations based on World Bank (2016); 1.2: MOFA (2016); 1.3: MOFA (2017); 1.4: FAOSTAT; 1.5: MOFA (2015); 1.6: SRID and World Bank data.  
 Notes: 1.2–3: Sector performance reviewed as part of the 2017 Joint Sector Review undertaken by the Ministry of Food and Agriculture (MOFA) and development partners.

### **Climate change will add to the complexity of managing the agriculture sector in the future.**

Two areas stand out: *Extreme precipitation*—the catastrophic floods in 2007 immediately followed by drought was indicative of the high variability in climate and hydrological flows in Northern Ghana. In the decade 1986 to 1995 parts of the country have had the most devastating rainfall events and a relatively high number of 24-hour maximum rainfall events. Increases in temperature have been observed over all basins. *Drought*—the Northern Savannas have been affected by frequent droughts and flooding, both accompanied by high temperatures and intense heat. Notable effects of climate change, such as insufficient rainfall during the major cropping season (the last major severe drought was in 1982–83), affect more than 12 million people. The impacts are economy wide, including crop failure or losses, outbreaks of diseases, and dislocation of human populations.

## **Constraints to Agricultural Transformation, Sector Growth, and Job Creation**

### **Quality and volume of Ghana's Public Expenditure in Agriculture**

**Public spending on agriculture is low both by regional and international standards, and have declined in recent years.** Agricultural expenditure was 5.2 percent of total spending between 2001 and 2014. Agricultural spending began to decline in 2007, and this trend accelerated in 2011. Nominal spending fell from GH¢576 million in 2011 to an estimated GH¢400 million in 2014, while the sector's share in total spending dropped from 4.2 to just 1.2 percent. Agricultural spending has also declined sharply relative to sectoral output, and by 2014 it equaled just 1.3 percent, far below the rates of regional comparators, such as Burkina Faso (8 percent), Ethiopia (6 percent), Uganda (5 percent), and Kenya (4 percent) (see also Figures 1.2.9 and 1.2.10).

### **A large share of agricultural spending is devoted to the cocoa subsector.**

A considerable share of agricultural spending goes to the cocoa sub-sector. Excluding the cocoa subsector has a major impact on the estimated size of agricultural spending in Ghana, as COCOBOD's expenditures are very high relative to the value of cocoa production.<sup>12</sup> For example, between 2006 and 2011, the share of public agricultural spending devoted to the cocoa subsector averaged three times the subsector's share in total agricultural output (World Bank 2013). Removing COCOBOD from the equation cuts agricultural spending as a share of total spending by up to 50 percent, from an average of 5.2 percent to an average of just 2.6 percent over the period.

**Most of the public spending in agriculture is on operating expenses.** A large share of agricultural spending finances the MoFA's routine operating expenses. Salaries and other forms of recurrent spending account for two-thirds of the MoFA's total budget, leaving a very modest envelope for investment (Akroyd and Smith 2007). Since 2011, the MoFA's expenditures have risen sharply in nominal terms, even as overall spending for the sector has declined. Development partner's donors' account for much of the increase in MoFA spending. Donor contributions to the MoFA rose from GH¢98.5 million in 2013 to GH¢160.1 million in 2014, while domestic public spending for the MoFA fell from GH¢108.2 million to GH¢73.0 million. Thus, donor financing expanded from 17 percent of the MoFA's budget in 2006 to over 50 percent in 2014.<sup>13</sup>

**Public spending on agriculture is not well targeted and efficiency is low.** Agricultural spending is not well targeted. Major Government (MoFA) initiatives such as the Agricultural Mechanization Program, the Block Farming Program, the National Food Buffer Stock Company, and the Fertilizer Subsidy Program have produced mixed results (see Box 4).

<sup>12</sup> According to African Union directives, spending by COCOBOD should be excluded when calculating public agricultural spending.

<sup>13</sup> In 2006, the MoFA was known as the Ministry of Agriculture.

#### BOX 4: Ghana’s Fertilizer Subsidy Program

Average fertilizer use in Ghana is about 8 kg/ha, low even by African standards. The National Fertilizer Subsidy Program is one of Government’s major agricultural interventions instituted in 2008 as a direct response to increased global fertilizer and food prices with the goal of increasing fertilizer use among smallholder farmers and to prevent a decline in crop production below the 2007 output levels. Even though the food crisis has long subsided, the fertilizer subsidy program continues until today. During 2008–2009, a coupon system was used that basically involved a 50 percent subsidy. In 2010 the coupon system gave way to a waybill system to reduce the cost of administering the program and stem diversion of fertilizers from intended target beneficiaries. Under the waybill system fertilizer companies are reimbursed for the difference between the purchase price as stipulated in the contract with the Government, and the price at which the companies’ agents (or district offices of MoFA where there are no agents present) sell the fertilizer to farmers. The difference is supposed to reflect average transportation and handling costs between the port and the destination, as well as agents’ commission and margins. In 2013, some changes were made to the fertilizer (and seed) subsidy program, including improved targeting (focus on smallholders in the north), limiting the quantity per farmer and, most importantly, reducing the subsidy element for fertilizer to less than 30 percent.

The goal of the subsidy program was to increase fertilizer use rate to at least 50 kg/ha as recommended in the Medium Term Agricultural Sector Investment Plan (METASIP). One of the stated objectives of the Fertilizer Subsidy Program is to raise the profitability of farm production. However, subsidies alone are not sufficient to reach optimal levels of fertilizer use, let alone to increase the profitability of farming. While evaluations carried out under controlled conditions at research stations suggest a substantial yield response from higher levels of fertilizer use, research by the International Food Products Research Institute (IFPRI) (in collaboration with the Crops Research Institute (CRI) and the Savannah Agricultural Research Institute (SARI) found that yield response (and therefore profitability) to fertilizer use under actual farmer’ conditions—where other factors that determine yield may not be available at optimal levels—is much lower.

It is also important to note a number of other important pitfalls of the fertilizer subsidy program in Ghana. The first concerns the timeliness of the program—both farmers and retailers complain about subsidized fertilizer arriving late, especially in the south where the growing season starts earliest. Second, fertilizer distributors feel that procedures associated with the waybill system remain cumbersome, including a lack of clarity of the procedures for all aspects of the operations. Overall, the fiscal cost of the agricultural input subsidy program is substantial relative to the benefits. This aspect lowers the overall efficiency of public spending in the agricultural sector.

Source: Adapted from Kolavalli et al. 2015.

Moreover, these programs tend to crowd out investment in proven strategies for promoting sustainable long-term productivity growth, such as encouraging the use of improved seeds and fertilizers, expanding irrigation networks, and investment in public R&D (Asare and Essegbey 2016). A 2016 World Bank Agriculture Public Expenditure Review indicated that Ghana remains one of the front runners of spending on agriculture research in Africa; but this is only because just six countries in Africa had agriculture research expenditure above 1 percent of their respective agriculture GDP —Swaziland, Cabo Verde, South African, Botswana, Namibia, and Mauritius. Using an average annual growth rate for the period 2000 to 2011, Ghana is among the top six in terms of growth rate of agriculture research spending: half the countries in Africa have zero or negative spending

growth (Figures 2.2.1–2.2.2) (World Bank 2016d). Investment in irrigation development is especially low at about 3 percent of agricultural spending. The Ghana Irrigation Development Authority (GIDA) receives no investment budget from the Government, which provides financing for salaries only.<sup>14</sup> From 2008 to 2014, real public spending on agriculture was negatively correlated with agricultural output growth (–0.39), suggesting an inefficient allocation of expenditures.

**Donor financing plays an increasingly important role in the MoFA’s investment budget.** Donor funding rose from 40 percent of the MoFA’s total

<sup>14</sup> Ghana currently has less than 20,000 hectares under irrigation, and most irrigation systems are inadequately maintained. Under the World Bank-financed Ghana Commercial Agriculture Project, most irrigation schemes are being rehabilitated, and the institutions that govern the irrigation subsector are being reformed.

investment expenditures in 2006 to 61 percent in 2011. In 2017, GH¢501.5 million was allocated to the Ministry of Food and Agriculture, of which GH¢322.1 million is from the Government of Ghana budget, GH¢4.1 million is from internally generated funds and over GH¢175.3 is from development partners.<sup>15</sup>

**Sector policies are inconsistent, and in some instances, are reversed or unpredictable.** Examples include the lack of Government's commitment toward fiscal decentralization, which has affected the functionality of local governments. First, while the decentralization policy has been implemented, with extension service provision devolved to the district councils, there is limited budgetary support to the councils, which cripples the provision of extension services. Second, significant productivity growth in agriculture requires a vibrant agricultural input supply system, particularly for seed. However, although Ghana's seed sector has undergone some significant changes in the past few years, including the approval of a new seed law and regulations, the appointment of a National Seed Council, and the emergence of a more diversified commercial seed sector, there are still regulatory and administrative bottlenecks affecting full liberalization of the seed sector. Trip and Mensah-Bonsu (2013) reviewed factors critical to the development of the seed sector, including procedures for variety release, seed quality inspection and certification, consumer protection, access to breeder seed, provision of information to farmers, and seed prices and subsidies. They also evaluated the traits of major public-sector crop varieties, the nature of farmers' seed demand, and the composition of the local seed industry. They concluded that the seed system in Ghana is still largely dependent on public support (with minimal private sector participation), and the seed value-chain (from the production of breeder seed, foundation seed, its multiplication, and the production and distribution of certified seed) has inherent cost inefficiencies that invariably affect the competitiveness of the domestic seed industry. Furthermore, with the limited development of the private sector

in this important area, access to good quality seed among smallholder farmers remains a major issue. In the cocoa sector, Government's direct intervention in markets and price setting is another example of distortions that result from policy inconsistency.

### **Quality and efficiency of legal and regulatory framework affecting private sector investment in agriculture**

#### **The legal and regulatory framework for attracting private sector investment into agriculture is weak.**

According to the 2017 World Bank's Enabling the Business of Agriculture (EBA) report, reforms are needed to improve the quality and efficiency of regulatory systems that govern access to key agricultural factors such as seed, fertilizer, machinery, finance, markets, transport and information and communication technologies. Ghana fares well compared to other countries in terms of access to fertilizer, finance, water, and ICT but needs improvement in terms of seed regulation, machinery, markets, and transport (see Figures 2.2.3 and 2.2.4).<sup>16</sup> In an earlier assessment of the agribusiness indicators undertaken in 2012, it was observed that Ghana's regulatory environment was not so conducive to attracting strong private sector investment, relative to other comparator countries. The regulations governing access to key factors required for agribusiness investment were still seen to be somehow restrictive or limiting, relative to the best practice benchmarks (World Bank 2012). Improvements have been achieved, but the 2017 EBA assessment indicates that the pace of reform is slow and it may take longer before Ghana catches up with the best practices.

<sup>15</sup> Agriculture Analysis of the 2017 Budget: <https://www.modernghana.com/news/759593/agriculture-analysis-on-the-2017-budget-ilapi-ghana.html>.

<sup>16</sup> The Enabling the Business of Agriculture (EBA) measures the quality and efficiency of the regulatory systems that facilitate access to seed, fertilizer, machinery, finance, markets, transport, water, and ICT. EBA measures are provided in terms of ranking of countries based on their Distance to Frontier (DTF) scores. DTF score benchmarks countries on a scale from 0-100 with respect to the regulatory best practice.

**Without a strong regulatory framework, it is challenging for investors to invest in the agricultural sector.** The agribusiness sector is very important for vibrant sector performance and creation of high quality jobs because the private sector can invest in other activities beyond the primary level, such as agro-processing, transport, finance, ICT, etc., which enhance agricultural value-added, and create better and higher-wage jobs. During the past 5 years, Ghana has seen growth in private sector investment in agriculture (as seen from an increase in non-traditional agricultural exports). However, the country needs to deepen and broaden reforms to attract more private sector players into the sector as a basis for sustaining growth and creating more and better jobs.

### *Specific challenges in Ghana's cocoa sector*

**Cocoa is Ghana's most important agricultural export, and the sector is a major employer with over**

### **1 million households involved in cocoa production.**

Ghana is the world's second-largest cocoa producer, representing over one-fifth of global cocoa production (Table 2.2). The cocoa subsector accounts for about 12 percent of total agricultural value added, 7 percent GDP, and 20–25 percent of export earnings. Cocoa is a key source of foreign exchange and the country's largest non-resource export. However, after peaking at 1 million tons in 2011–12, cocoa production seems to have plateaued at an average of around 800,000 tons per year. It is clear that the cocoa subsector is operating far below its potential. There are many challenges facing the cocoa sub-sector.

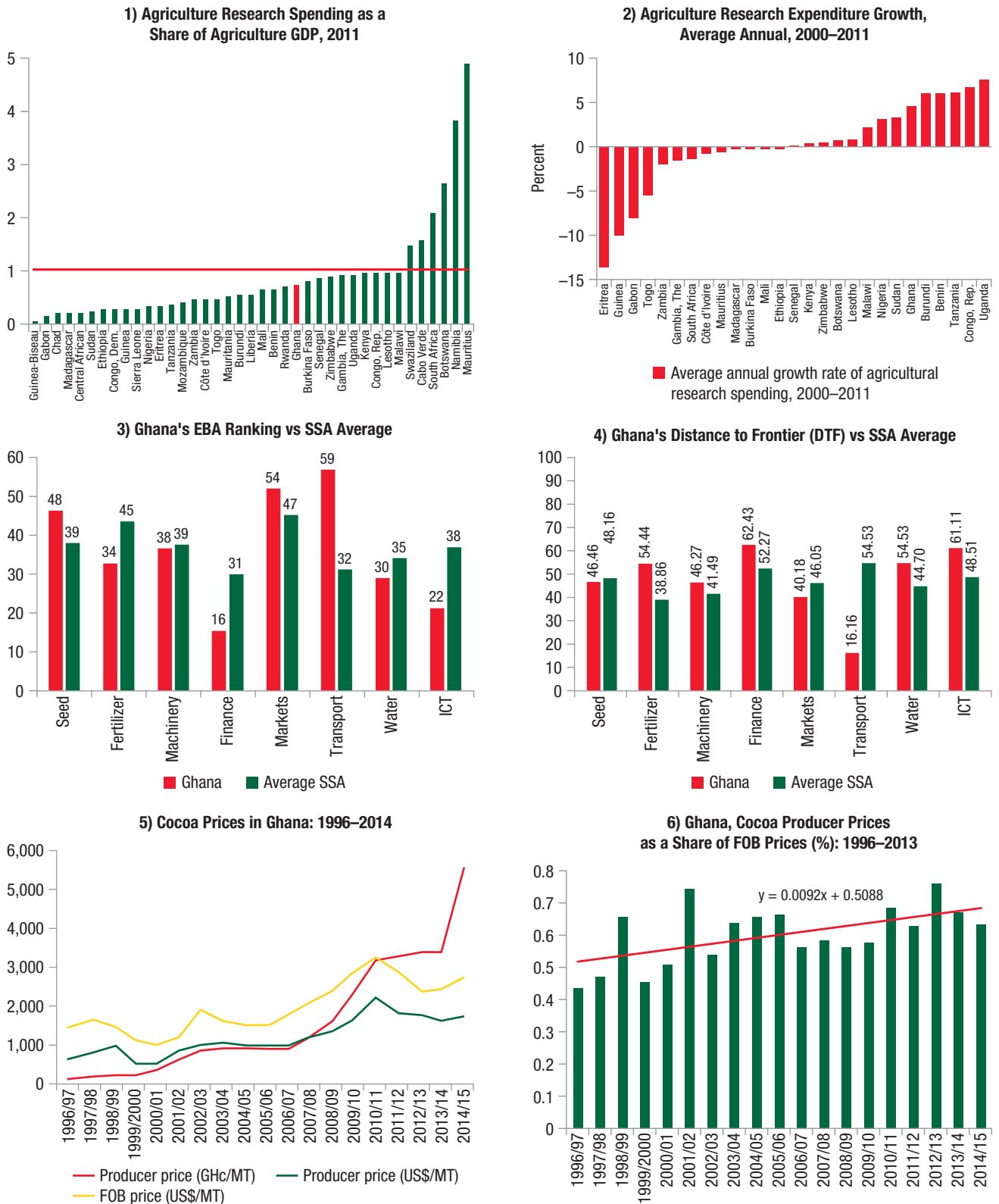
**Ghana and Cote d'Ivoire account for a combined more than 60 percent of global cocoa supply.** Their main export markets are the Netherlands, United States, Belgium, and Japan. Cocoa farming has evolved around these two countries because of the optimal weather and soil conditions for the crop around the equator. Other countries such as Ecuador and the

**TABLE 2.2:** Ghana's Position in Global Cocoa Supply

	2014/15	% of global supply	2015/16	% of global supply	2016/17	% of global supply
Cameroon	232	5.4	211	5.3	250	5.5
Cote d'Ivoire	1796	42.1	1581	39.9	1900	41.7
Ghana	740	17.4	778	19.6	850	18.7
Nigeria	195	4.6	200	5.0	230	5.1
Others	110	2.6	141	3.6	135	3.0
<b>Total Africa</b>	<b>3074</b>	<b>72.1</b>	<b>2911</b>	<b>73.4</b>	<b>3365</b>	<b>73.9</b>
Brazil	230	5.4	140	3.5	190	4.2
Ecuador	261	6.1	232	5.9	270	5.9
Others	286	6.7	285	7.2	306	6.7
<b>Total America</b>	<b>777</b>	<b>18.2</b>	<b>657</b>	<b>16.6</b>	<b>766</b>	<b>16.8</b>
Indonesia	325	7.6	320	8.1	330	7.2
Papua New Guinea	36	0.8	36	0.9	41	0.9
Others Asia & Oceania	39	0.9	41	1.0	50	1.1
<b>Total Asia &amp; Oceania</b>	<b>400</b>	<b>9.4</b>	<b>397</b>	<b>10.0</b>	<b>421</b>	<b>9.2</b>
<b>World Total</b>	<b>4261</b>	<b>100</b>	<b>3965</b>	<b>100</b>	<b>4552</b>	<b>100</b>

Source: ICCO Quarterly Bulletin of Cocoa Statistics, Vol. XLIII, No.1, published 28–02–2017.

**FIGURE 2.2: Research and Business of Agriculture in Ghana**



Source: 2.1–2: World Bank (2016d); 2.3: World Bank (2016c) based on data from IFPRI (2015); 2.4–6: World Bank (2016) and World Bank (2017c).

United States have been increasing their participation but from a low base. Cote d'Ivoire and Ghana are not likely to lose their supply dominance in the medium term. However, cocoa farming in west Africa faces significant structural challenges that could affect the long-term sustainability of global cocoa supply. This analysis aims to provide some policy options for Ghana's cocoa sector's longer-term viability (IFC 2017).

**Ghana and Cote d'Ivoire chose very different paths to deal with the recent decline in international cocoa market prices.** In Cote d'Ivoire, the cocoa sector was reformed in 2012 with the Coffee and Cocoa Council (CCC) fixing the price at 60 percent of the reference export price. The fixed farmgate price guarantees minimum revenue to farmers and aims to reduce price volatility. However, low prices and excessive supply prompted the CCC in Oct 2017 to set the minimum cocoa farm price at 700 CFA Francs (US\$1.26) per Kg, lower than previous season's 1,100 CFA Francs and the lowest since 2012 (IFC 2017). This is a pointed difference to the policy response in Ghana. There, the domestic market price was left unchanged. Besides having important fiscal implications, Ghana's decision to keep prices unchanged led to a wide gap between prices in Ghana and Cote d'Ivoire and increased the likelihood of smuggling cocoa from Cote d'Ivoire to Ghana to the point that security forces were deployed in Cote d'Ivoire to increase surveillance of border areas and reduce smuggling.

**The cocoa sector in Ghana faces a number of challenges, including from the differential domestic policies vis-à-vis Cote d'Ivoire.** It is important to reflect on how to harmonize current domestic policies in the sector to create the appropriate conditions for improved farmer income and enhanced private sector for domestic value addition. In this context, three areas seem to be important entry points for reforms. First, through the establishment of a joint commission between the two countries the harmonization of policies could be advanced. Second, it would be beneficial to think through the design of mechanisms to reinforce the ability of the two countries to strengthen their influence on the global commodity prices, including

possibly through a domestic commodity exchange for cocoa. Third, what would be the most appropriate strategy to enhance domestic value addition? Could derivative products of cocoa be identified that correspond to the comparative advantage of the two countries as well as the binding constraints that prevent the realization of this market potential. For the latter, an in-depth understanding of the opportunities and challenges through the Cocoa Global Value Chains would be instrumental (IFC 2017).

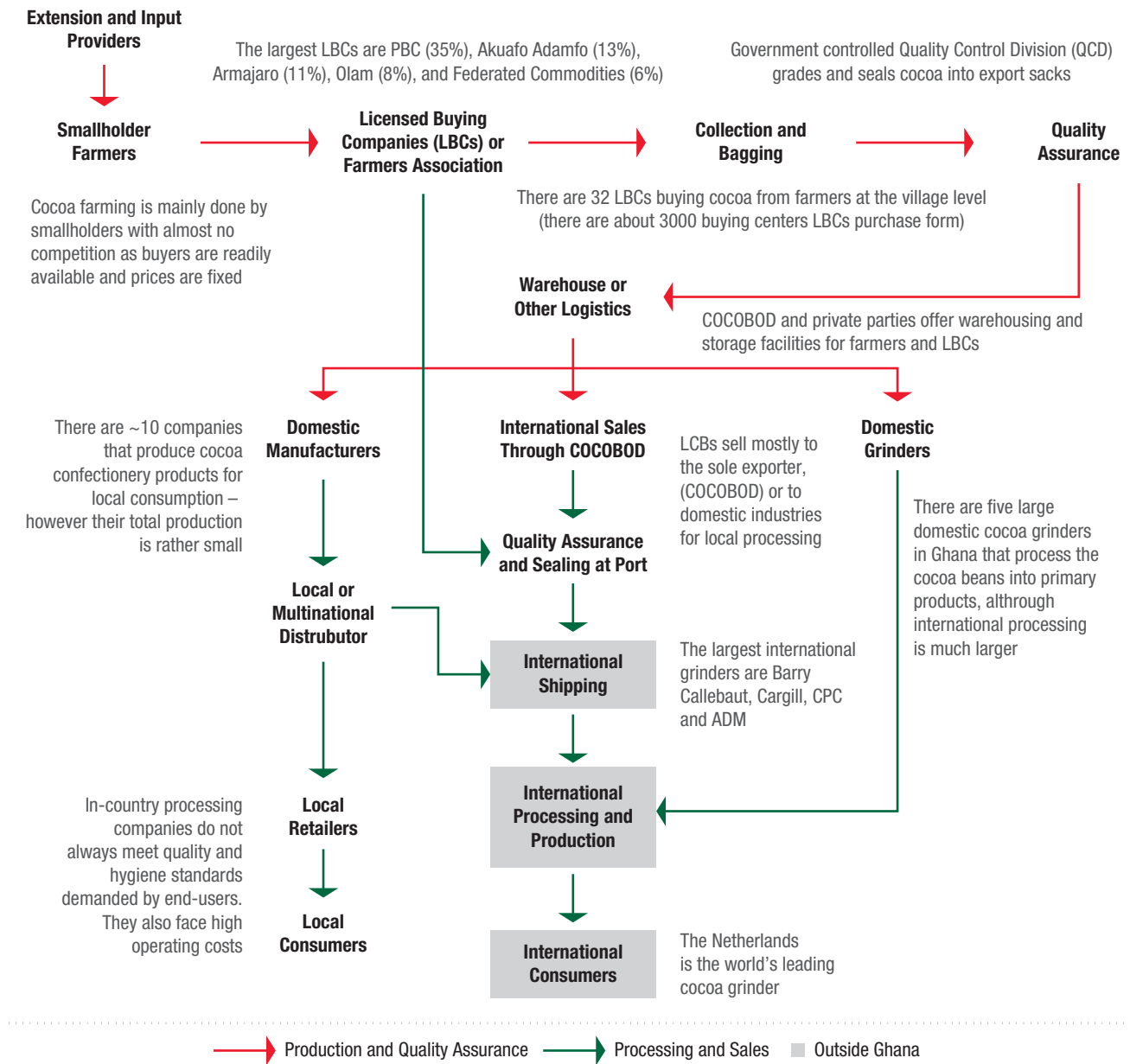
**One of the key challenges in Ghana is that, unlike other crops, cocoa production operates under a controlled marketing system.** COCOBOD manages the subsector under the authority of the Ministry of Finance.<sup>17</sup> It controls the marketing of cocoa exports and, via its subsidiaries, delivers inputs, research and extension services, pest and disease control, and some forms of infrastructure. Thus, the cocoa value chain is quite complicated and subject to Government intervention (Figure 2.3). COCOBOD purchases cocoa through Licensed Buying Companies (LBCs), which sell primarily to the Cocoa Marketing Company (CMC), another COCOBOD subsidiary. The subsector's current structure results from the partial privatization of a state-owned monopoly.

**While COCOBOD's intervention has several important advantages, there are also several issues emanating from its direct intervention that affect the development of the cocoa sub-sector.** First, COCOBOD has managed to increase the share of the export price received by farmers without fully liberalizing domestic and export markets, and the way in which internal cocoa marketing is organized assures that farmers are paid promptly. COCOBOD's quality-control apparatus is also effective, and as a result Ghanaian cocoa receives a price premium of 3–5 percent on the world market. In addition, the Cocoa Marketing Company's use of forward contracts mitigates the price and exchange-rate risks faced by buyers, though it does so by effectively transferring

<sup>17</sup> Under the new Government, it has been announced that the cocoa sub-sector will be under the Ministry of Food and Agriculture (MoFA).



**FIGURE 2.3: Organization of the Cocoa Value-Chain in Ghana**



Source: Cocoa Sector Scenario Planning, World Bank Staff.

these risks to farmers. Finally, the Cocoa Research Institute, which is also a COCOBOD subsidiary, is among the country’s most important agricultural research agencies.

**The COCOBOD has not been able to fully achieve one of its most important goals, which is to stabilize farm-gate prices at levels that permit**

**farmers to earn a decent return on investment.**

Instead, successive Governments have prioritized revenue collection, while implicitly levying a tax on the producer price paid to cocoa farmers. COCOBOD’s price-setting mechanism distorts economic incentives to farmers. COCOBOD sets yearly producer prices in advance of the harvest season, and the Cocoa

### BOX 5: Lessons from Commodity Boards and Producer Price Interventions in Africa

Many countries in Sub-Saharan Africa have intervened in setting commodity prices, either directly or indirectly through the management of the exchange rate system. Many countries have reformed such policies and no longer intervene directly in commodity markets. However, other countries still maintain such policies. Examples are numerous and include (but not limited to) the COCOBOD in Ghana, and the Agricultural Development and Marketing Corporation (ADMARC) in Malawi. Similar boards still exist in most countries in southern, eastern, and western Africa. The establishment of such institutions seem to be justified on the basis of protecting producers and/or consumers, and in some cases because of revenue generation. However, experience has shown that the use of public policy to exert control on the commodity marketing system, though widespread, does not often work. Price interventions often exert an implicit and sometimes direct taxation on the smallholder farmers and in the long-run undermines productivity and competitiveness objectives. In the case of Ghana's COCOBOD for example, total direct taxation—defined as the sum of COCOBOD's costs, industry costs and explicit taxes—can be estimated at between 25 and 30 percent of the FOB price. This has distorted the incentives and discourages productive investments thereby leading to long-run decline in growth.

There are examples where the removal of state control on commodity prices has led to increased incomes and profitability of smallholder sector. For example, in the case of the liberalization of the Gum Arabic Board in Sudan in 2009, the average price received by small producers of the gum has increased due to the competition generated by over 30 private companies that have entered the gum market. Similar experiences apply in the case of the liberalization of the cocoa market in Cote d'Ivoire where the average price for cocoa paid to farmers is relatively higher than in other countries, including Ghana. Commodity boards curtail the development of the private sector market, because they often are associated with inconsistent and incoherent policies, which is a disincentive for private sector players. They also represent a significant fiscal burden as most them have cost-inefficiencies that tend to be absorbed by the Government. In an era where private sector commodity exchanges are taking shape, it is important for Governments to continue reforms to create the space for the development of the private sector in commodity marketing.

Source: World Bank Agriculture Analysis, Various Countries; and World Bank Sudan Country Economic Memorandum 2016.

Marketing Company sells about 70 percent of the country's cocoa exports via forward contracts. The producer price is based on a cost-plus principle, which reflects the expected export price, the operating costs of COCOBOD and its subsidiaries, explicit taxes, and farmers' production costs. Through this system, COCOBOD pays producers at least 70 percent of the so-called "net free-on-board (FOB) price," which it defines as the FOB price minus allowances for "industry costs" and direct marketing costs.<sup>18</sup> Industry costs have been rising over time and are now estimated at close to 15 percent of the FOB price. They mainly include the cost of input supply programs and social programs targeting cocoa farmers. Direct marketing costs include transportation, storage and quality control. Thus, the producer price is often different from the real FOB price (Figure 2.2.5), and the producer share in the real FOB price is typically below 70 percent, even when there is an upward swing in international prices, as observed in recent years (Figure 2.2.6). This price setting mechanism may be distorting the incentives for producers to invest in productivity enhancing practices (see Box 5).

**Even though the official tax on cocoa exports has fallen over time to about 3–4 percent, the Government retains a substantial share of the FOB price, which is effectively a form of direct taxation.** Cocoa is the only export commodity from which foreign-exchange earnings flow directly into the central bank. Although no official data are available, total direct taxation—defined as the sum of COCOBOD's costs, industry costs and explicit taxes—can be estimated at between 25 and 30 percent of the FOB price. In addition, the depreciation of the cedi since 2011 has acted as a form of implicit taxation. The export margin in Ghana is roughly double that of Côte d'Ivoire and many times higher than the margins of most Asian cocoa exporters. In addition, COCOBOD's marketing and quality-control subsidiaries have little incentive to increase their efficiency, and their shares of the FOB price have increased even as production levels have risen.

<sup>18</sup> The term "FOB price" refers to an export's final value in the exporting country.

## BOX 6: The Ghana Cocoa Sector Development Strategy II

For Ghana to continue as a key leader in the global cocoa supply chain, there is need to have a strategy to guide the development of the sector as well as provide a framework for public-private partnerships to leverage stronger investment in this key sector. Ghana's Cocoa Sector Development Strategy (CSDS II) developed by COCOBOD seeks to modernize Ghana's cocoa sector and produce climate smart cocoa through increased farm productivity. The vision and strategy for modernizing Ghana's cocoa sector is based on three pillars: competitiveness, resilience, and robustness. To modernize and have a more sustainable cocoa sector, Ghana needs to be more: (i) competitive by increasing the productivity of cocoa producers and improve cost efficiency along the cocoa supply chain; (ii) resilient to challenges and risks related to global cocoa markets (demand and supply), and climate change; and (iii) robust by being an industry leader through innovation and differentiation by focusing on high quality cocoa and niche markets. The strategy was developed following several scenario planning exercises in 2015, supported by the World Bank, World Cocoa Foundation, the Royal Netherlands Embassy, and other stakeholders. However, while it has just been adopted by the COCOBOD, its implementation has yet to take effect.

**Ghana's COCOBOD has just adopted its development strategy for the cocoa sub-sector, but its implementation is yet to take effect.** The sub-sector's development strategy, which should provide the direction and guidance on many issues affecting the development of cocoa, is still yet to be implemented (see Box 6).

**The other source of inefficiency is that COCOBOD's pricing mechanism limits competition in the cocoa subsector.** The fixed price that LBCs pay farmers based on minimum quality standards effectively eliminates the possibility of price competition or product differentiation, and it discourages farmers from investing in quality beyond the minimum standard required. Moreover, prices are uniform across the country and do not reflect regional differences in production costs or local environmental and social impacts. However, even in the absence of meaningful price competition among buyers, farmers have benefited from a marked decrease in the collusion that characterized contract negotiations in the past when the state was the sole buyer.

### Key Opportunities and Policy Options to Transform Agriculture for Economic Growth, Job Creation and Food Security

#### Key opportunities

**Ghana's lower middle-income status combined with the emerging oil economy imply a growing**

**middle-class, whose demand for quality and safe foodstuff is rapidly increasing.** This derived demand will push producers and other players in the food value-chain to look for better ways to expand their production and trading practices to meet rapidly changing market requirements. The rapidly increasing demand for quality and safe foodstuffs and the fact that Ghana's food markets are currently stocked largely with imported commodities, imply ample opportunity for import substitution. Given the current consumer tastes, shaped largely by imported foodstuffs, import substitution will not simply be about improving productivity, but would also involve food quality and safety issues, improved post-harvest management at farm-level, agro-processing, etc. Primary producers and food processors adaptation to these changing consumer tastes and preferences is what will continue to drive the transformation of the production systems and innovations throughout the food value chain.

**Ghana is currently a net importer of basic foods such as rice, poultry, sugar, vegetable oils, and the import bill is growing.** The annual food import bill now exceeds the estimated annual \$2 billion earned from cocoa exports (Table 2.3). Population growth, high rates of urbanization, and increasing incomes are driving the demand for imported foodstuffs because of increased demand for more quality and safe foodstuffs such as meat, dairy, and fresh and processed vegetables. In 2015, food imports account for 16.8 percent of total merchandise imports estimated at US\$13.3

billion,<sup>19</sup> and the food import bill is projected to increase fourfold over the next 20 years, unless local production is increased (World Bank, 2017e)). The food import bill is large enough to create adequate space for investors to increase investment in the sector to take advantage of import substitution. Rapid urbanization and associated shifts in consumer preferences are also boosting demand for processed foods, much of which is currently satisfied by imports. Food demand in urban areas is projected to increase fourfold over the next 20 years. Ghana currently produces less than 30 per cent of the raw materials needed by its agro-based industries. The Government has introduced incentives (e.g., tax holidays) to promote food processing but the response has been low as major bottlenecks such as lack of space, infrastructure, finance, erratic power supply, etc. remain (USAID 2017). Therefore, an opportunity exists to venture into import substitution for raw materials for the agro-processing industry as this will also lead to the creation of more and better jobs.

**Ghana is endowed with areas of high agricultural production potential that can support the growing of a wide-range of commodities.** For example, the Northern Savannah Ecological Zone (NSEZ), Afram plains, the Accra plains, and other high agricultural potential areas are endowed with abundant and fertile land to produce a wide range of commodities. Given its vast size, low population density and availability of water resources, the Northern Savannah Ecological Zone (NSEZ) is considered to have one of the highest potentials for agricultural production in Ghana. The NSEZ covers 54 percent of the country's surface area (comprising the Upper East, Upper West and the Northern Regions as well as the northern districts of Brong-Ahafo and Volta Regions). The NSEZ has about six million hectares of arable land, with great potential for commercial production of cereals/grains, sugar cane, cassava, cotton, shea, and livestock.

**The existing agricultural potential of the NSEZ is estimated to attract between US\$1.9 and US\$2.3 billion of private investment in agriculture.** This includes downstream processing and irrigation

infrastructure. This could create over 400,000 permanent jobs along the targeted value-chains. Per the Masterplan for the “Inclusive Agriculture-led Economic Transformation of the NSEZ,” the area is endowed with key features that are associated with significant agricultural growth potential. These include: *Large tracts of land available for agricultural expansion:* More than 6 million hectares of arable land which is suitable for a wide range of crops, livestock, forestry, and aquaculture production. *Significant irrigation potential:* The NSEZ has 23 large and medium sized dam sites which can be developed for multiple uses such as hydropower generation, irrigation development, flood control, aquaculture. Some of these dams are estimated to be able to command 209,000 to 547,000 hectares of irrigable land. There are also an estimated 104 small dam sites across 95 catchment areas with potential to harness over 104,000 hectares under irrigation.

**Despite its potential, the NSEZ remains the poorest region in the country.** According to the Ghana Living Standards Survey (GLSS), the northern regions collectively are home to more than one-third of all poor households in the country. Social indicators such education, health, access to safe water, as well as maternal and child health are among the lowest in the country. Furthermore, the generally poor state of infrastructure means that the vast agricultural and other productive potentials that the region possesses remain largely unexploited, resulting in low per capita incomes and a relatively low contribution to Gross Domestic Product (GDP). While Ghana is a lower-middle income country, the northern regions, with over 40 per cent of the land area and 30 per cent of its population, remain the least developed. While Ghana has achieved the extreme poverty reduction goal (as per the Millennium Development Goals), the northern regions have consistently lagged behind the rest of the country.

**Another opportunity to spur agricultural transformation could emanate from better design and**

<sup>19</sup> World Bank staff own calculations, based on World Development Indicators (WDI), Global Merchandise Imports.

**TABLE 2.3: Summary of Ghana's Merchandise Imports**

	2000	2015
Total imports value (US\$ million) <i>of which (% of total)</i>	2,973	13,291
Food	13	17
Agricultural raw materials	2	1
Fuels	22	4
Ores and metals	1	1
Manufactures	62	77

Source: World Bank, World Development Indicators (2016).

**implementation of a sector strategy in line with the new flagship program—the Planting for Food and Jobs.** The MoFA recently launched the Planting for Food and Jobs program, which aims to rapidly increase food production to achieve food self-sufficiency and create jobs. The program focuses on five key staple crops: maize, rice, soybean, sorghum, and vegetables. Its implementation is anchored on five pillars: (i) provision of improved seeds; (ii) supply of fertilizers; (iii) provision of extension services; (iv) marketing arrangements and reduction of post-harvest losses; and (v) an electronic platform to capture and monitor program implementation. The program targets 200,000 farmers in all 216 districts of the country. The program's targets for 2017 are 1 million metric tons of additional food output and creation of over 750,000 jobs within the agricultural value chain. The program cost is estimated at GH¢560 million (about US\$140 million) and the estimated incremental production is valued at over GH¢1.3 billion (about US\$420 million). Although this is a public-sector driven program, the delivery of the key inputs will be done through the private sector.

## Policy Options to Improve the Agriculture Sector

**This analysis of the agriculture sector points to three overarching areas with policy options to improve the sector.** Two of these relate to the agriculture sector

as a whole, and the third refers to improvements specifically in the cocoa sector. Given the importance of the agriculture sector in the Ghanaian economy in general and the jobs creation potential in particular, comprehensive consideration of the three areas is needed. The following offers some reflections of issues within each of the three areas.

### *Improving the quality and effectiveness of public expenditure in agriculture is an imperative in the context of limited fiscal space*

**In the context of chronic agricultural underinvestment, enhancing the efficiency and quality of sectoral spending could generate substantial gains in productivity, employment, and rural poverty reduction without compromising the Government's ongoing fiscal consolidation program.** From 2008 to 2014, real public spending on agriculture was negatively correlated with agricultural output growth (-0.39), suggesting an inefficient allocation of expenditures (Younger 2015). Public spending on the livestock, fisheries, and forestry subsectors is significantly higher than their respective shares in agricultural output. Spending on cocoa exceeds its share in agricultural output by a factor of three; however, a recent study by IFPRI (Benin 2016) concluded that the rate of return to public spending in the non-cocoa sector is significantly higher than in the cocoa sector.

**The international experience shows how better expenditure targeting can drive agricultural growth.** Agricultural research is crucial for increasing productivity and competitiveness, yet it remains chronically underfunded. Refocusing sectoral resources on the commercialization of smallholder farming and the integration of smallholder farmers into agricultural value chains could significantly boost production. Efforts to link smallholder farmers to markets or to aggregate production throughout grower schemes could accelerate rural income growth. Eliminating price distortions that discourage investment in the cocoa subsector could boost export earnings. A new

strategy for agricultural investment and policy reform that effectively targets these bottlenecks could deliver major gains in poverty reduction, employment growth, social development and food security at a relatively low fiscal cost (World Bank PER 2017).

**Robust expenditure oversight and regular data collection are necessary to ensure the effectiveness of public spending.** The available data are not sufficient to enable a reliable analysis of the returns to different types of expenditures, and no information on agricultural investment by region is currently available. Ideally, the MoFA should produce spatially disaggregated time-series data showing spending on agricultural subsectors, functions, and activities in each region. Increasing investment in systematic data collection should be a priority objective of a Government-wide effort to enhance information management and improve public expenditure targeting. The MoFA is currently seeking assistance from Ghana's development partners to strengthen its data-collection capacity (World Bank PER 2017).

*Improving the environment for doing agriculture businesses is key to adding value to the existing production and creating jobs*

**Ghana presents overall favorable conditions for agribusiness.** It has vast expanses of arable land across the country with access to large resources of freshwater (for example, the Volta river, which runs through the entire length of the country). Ghana also enjoys rapidly growing domestic and regional markets, easy and preferential access to the European Union (EU)/U.S. markets, political stability, and resourceful English-speaking workers and farmers (World Bank CPSD 2017).

**But there is need to deepen and quicken the pace of reforms required to attract private sector investment in agriculture/agribusiness.** If the sector is to achieve the scale of transformation required to sustain its growth and to create decent jobs, there is need to deepen reforms in legal, regulatory and

administrative systems that affect the quality and efficiency of public sector services to agribusinesses and other stakeholders that need to invest in the agricultural value-chain. This will enhance the growth of the agro-industry, which is critical to raise agricultural value-added through agro-processing and value-addition. These create enough space for more decent jobs compared to the primary production. Reform in land administration and governance is critical to speed-up the processing of land and property transactions in a transparent and accountable manner. This is important in view of Ghana's complex land tenure systems.

**Linking farmers to markets is essential to agricultural development and rural poverty reduction and is also critical for job creation.** Integrating smallholders into value chains boosts incomes, encourages technology transfer, supports diversification, and facilitates agribusiness investments. The Ghana Commercial Agriculture Project (GCAP) attempts to leverage the benefits of integration by supporting the commercialization of smallholder farming through Public-Private Partnership (PPP)-type arrangements with large agricultural investors. The project also helps to improve smallholder productivity and tighten market linkages via the nucleus farmer/out-grower model, while building the Government's investment-promotion capacity, strengthening land tenure, promoting sustainable land-access arrangements, supporting private investors through matching grants, expanding and rehabilitating irrigation networks, and promoting institutional reform in the irrigation subsector.

**Skills-development, particularly focusing on technical, managerial, and organizational skills required for agribusiness investment is critical.** If Ghana's agricultural transformation is to boost job creation, there is need to strengthen the capacity of local agribusinesses and farmers, including the youth, in the technical, managerial, and organizational skills. One way to do this is to enhance the creation of productive alliances between foreign agribusinesses and farmers throughout-grower arrangements. This helps the out-growers to gain skills and experience on how to deal

with organized supply chains, while also having ready access to the market for their produce. Furthermore, it is essential to promote entrepreneurship and business start-up training to create the “demonstration effect” to attract investors, including young people into the agricultural sector.

### ***Fixing the cocoa sector is important given the large size of the cocoa economy***

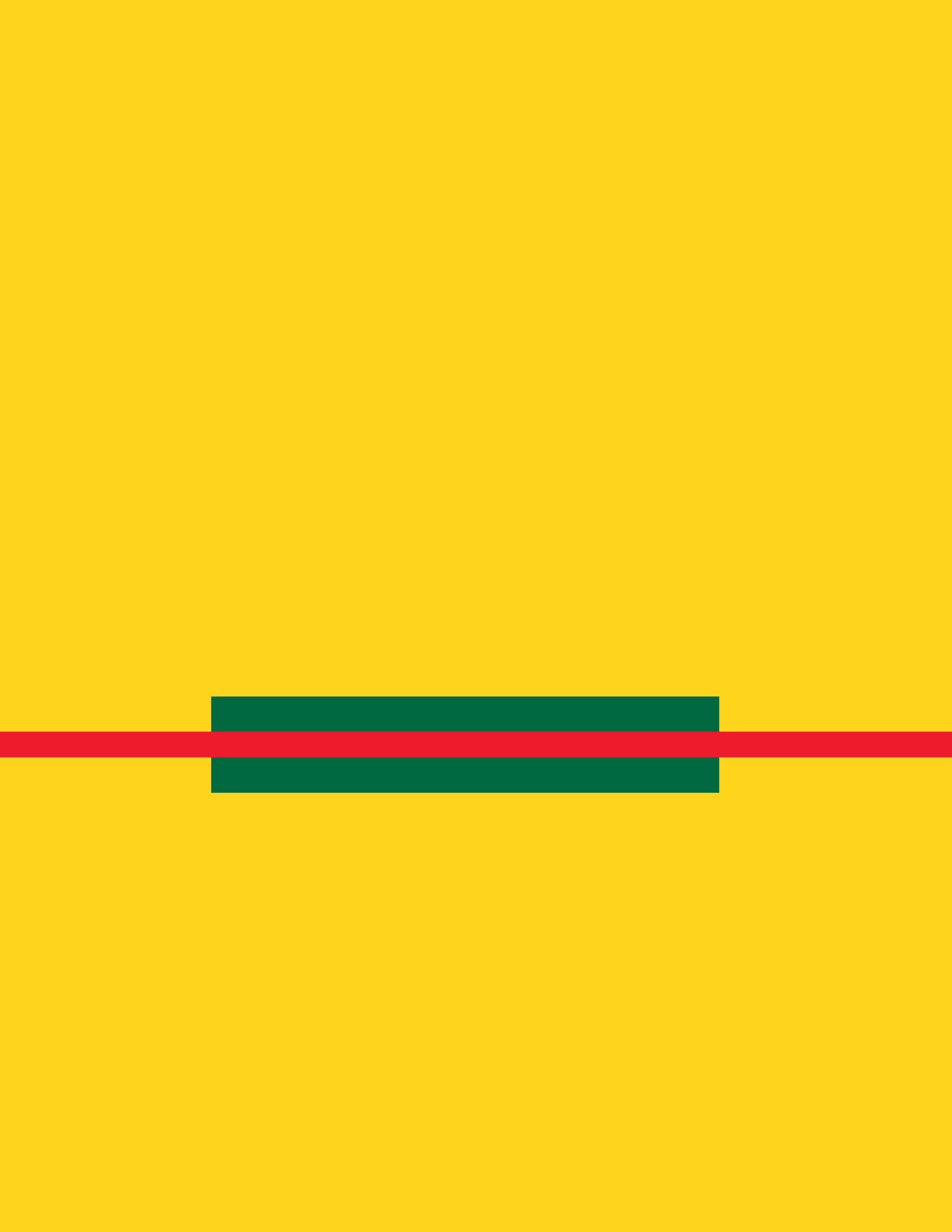
**Better coordination of policies between Ghana and Cote d’Ivoire would allow more efficiency in the sector to flourish.** Coordination of domestic price management would minimize the propensity for smuggling and illegal activities. Cooperation of the two cocoa economies, which account for more than 60 percent of cocoa supply in the world, would allow more market power in international negotiations. And a coordinated approach to domestic value addition would minimize competition on crowded segments on the world market.

**The COCOBOD’s current organizational structure and functions need to be reformed to make the institution operate in a more efficient manner and deliver value to farmers.** There is need to improve data collection and analyses, mapping and registration of farmers to promote farm and farmer identification, introduce digital accounting and management information systems, improve the logistical, quality control and traceability systems, tree rehabilitation, cocoa agroforestry, sustainable land use management, and better coordination of programs and projects. International experiences on how to improve the efficiency of centralized

marketing schemes can be important inputs in the COCOBOD reform efforts.

**Strict adherence to social certifications in the cocoa sector is important for international cocoa trade.** There is need to improve productive and social infrastructures in the cocoa producing areas, and strengthen the role of women and youth in the sector, while adhering to international commitments restricting the use of child labor in cocoa production. For more than four years, Ghana has not submitted a national report on efforts to eliminate the worst forms of child labor (WFCL) in cocoa in compliance with the Harken-Engel Protocol. This breach may have dire consequence for the country in terms of cocoa trading. The Ghana Child Labor Monitoring System (GCLMS) developed to monitor WFCL and remediate children at risk of trafficking has lacked funding and institutional support. It is recommended that the Government resumes funding to revitalize the National Program for the Elimination of Worst Forms of Child Labor in Cocoa (NPECLC) to coordinate and report on public and private sector efforts in this area.

**Not only are cocoa yields low, but are also under threat of further decline; hence sustaining and raising the productivity in the cocoa sector is crucial.** In view of the aging of the trees, the attack from pests and diseases, as well as the effects of climate change, productivity enhancement is essential if Ghana is to maintain its enviable position as one of the leading countries in the global cocoa supply chain. Adoption of climate-smart cocoa technologies is also required, but this implies proper planning given the potential effect of replanting programs on the livelihoods of the cocoa dependent farmers.





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## ANNEX: TABLES

**TABLE A.1.1: Ghana: Selected Macroeconomic Indicators**

Indicator	2012	2013	2014	2015	2016	2017 (p)
Real GDP (% growth)	8.0	7.3	4.0	3.8	3.5	6.1
Real GDP(non-oil)	7.3	6.7	4	4.1	4.8	4.3
GDP per capita (U.S. dollars)	1,683	1,870	1,479	1,372	1,551	1,608
Consumer prices (end of period %)	8.1	13.5	17	17.7	15.4	10
Exchange rate (end of period L\$/US\$)	1.9	2.16	3.2	3.8	4.2	—
Exports, f.o.b (US\$ Millions)	13,552	13,752	13,217	10,321	11,137	12,045
Imports, f.o.b (US\$ Millions)	17,763	17,600	14,600	13,465	12,910	13,494
Current account balance incl. grants (% of GDP)	-11.7	-11.9	-9.5	-7.5	-6.7	-5.8
Gross official reserves (US\$ Millions)	5,348	4,587	3,824	4,403	4,862	5,783
Gross official reserves (months of imports)	2.9	2.5	2.1	2.6	2.8	3.0
Broad Money (% Change)	24.3	19.1	36.8	23.0	28.3	24.1
Credit to the private sector (% change)	32.9	29.0	42.0	24.7	9.1	11.0
Revenues and Grants (% of GDP)	18.5	16.7	18.4	19.6	17.3	18.9
Expenditures (% of GDP)	30.1	27.3	28.5	26.6	26.6	25.2
Overall surplus / deficit (incl. grants)	-11.6	-10.7	-10.1	-7.0	-9.3	-6.3
Primary Balance			-3.9	-0.4	-2.4	0.2
Central Government Debt (% of GDP)	49.1	56.2	70.2	72.2	73.4	70.5
Public sector domestic debt (% of GDP)	27.2	32.3	31.0	28.5	32.1	32.5
Public sector external debt (% of GDP)	21.8	24.0	39.1	43.7	41.3	38.0
Nominal GDP (GH¢ Millions)	75,315	93,416	113,343	136,957	167,315	204,078

Source: IMF, World bank, Ministry of Finance, Ghana Statistical Service, Bank of Ghana.

**TABLE A.1.2: Ghana: Medium Term Macroeconomic Indicators**

	2014	2015	2016 f	2017 f	2018 f	2019 f
<b>Real GDP growth, at constant market prices</b>	4.0	3.8	3.5	6.1	8.3	5.5
Private Consumption	-6.9	3.1	1.7	7.5	9.3	4.8
Government Consumption	6.5	16.8	10.7	-6.2	-0.4	3.4
Gross Fixed Capital Investment	19.7	6.4	-11.8	16.4	14.6	4.5
Exports, Goods and Services	-5.8	8.1	-8.4	6.8	9.0	12.0
Imports, Goods and Services	-14.4	7.9	-5.6	8.8	10.4	9.0
<b>Real GDP growth, at constant factor prices</b>	4.0	3.8	3.5	6.1	8.3	5.5
Agriculture	4.6	2.8	3.0	6.1	7.6	9.4
Industry	0.8	-0.3	-1.4	11.5	12.9	3.9
Services	5.5	6.6	6.3	3.5	6.2	4.7
<b>Inflation (Private Consumption Deflator)</b>	18.5	17.1	15.4	11.2	10.0	8.0
<b>Current Account Balance (% of GDP)</b>	-9.6	-7.6	-6.6	-5.8	-5.4	-5.0
<b>Fiscal Balance (% of GDP)</b>	-10.1	-7.0	-9.3	-6.3	-3.8	-3.2
<b>Debt (% of GDP)</b>	69.3	73.1	73.4	70.5	66.1	62.8
<b>Primary Balance (% of GDP)</b>	-3.8	-0.5	-3.0	0.6	2.2	2.2

Source: World Bank, Macroeconomics and Fiscal Management Global Practice, and Poverty Global Practice.

**TABLE A.2.1: Households Engaged in Agricultural Activities by Locality, Region and Type of Activity**

Type of locality/ Region*	Households employed in agriculture	Agricultural Activity		
		Crops	Livestock	Game
Ghana	2,203,965	1,538,005	2,157,928	2,180,905
Urban	428,065	241,758	417,984	426,790
Rural	1,775,900	1,296,247	1,739,944	1,754,115
Western	255,479	163,643	252,689	252,465
Central	247,438	174,697	243,295	244,995
Greater Accra	40,673	16,795	38,727	40,673
Volta	255,611	179,586	254,111	254,102
Eastern	384,850	206,536	383,229	384,850
Ashanti	251,944	161,884	251,944	247,804
Brong Ahafo	325,672	273,546	324,692	324,699
Northern	294,672	268,127	268,984	283,833
Upper East	70,652	57,506	63,425	70,652
Upper West	76,831	35,685	76,831	76,831

Source: Ghana Statistical Services, 2015 Labor Force Report.

\* Most households engage in more than one activity.

**TABLE A.2.2:** Estimated Total Annual Income from Sales of Agricultural Commodities by Locality, Region and Type of Activity (GH Cedis Million)

Type of locality/ Region	Total annual earnings (GH Cedis Million)	Agricultural Activity		
		Crops	Livestock and fishing*	Game
Ghana	9,257	4,029	—	5,227
Urban	715	510	—	205
Rural	8,524	3,519	—	5,023
Western	1,104	926	—	178
Central	306	303	—	3
Greater Accra	57	23	—	34
Volta	444	443	—	1
Eastern	691	684	—	7
Ashanti	469	469	—	-
Brong Ahafo	435	431	—	4
Northern	666	657	—	9
Upper East	47	46	—	1
Upper West	5,037	47	—	4,990

Source: Ghana Statistical Services, 2015 Labor Force Report.

\* Incomes estimated at less than GH Cedis 1 million.

### Table A.2.3 Agriculture Sector in Ghana: Selected Tables

**TABLE A.2.3.1:** Actual and Potential Crop Yields in Ghana (mt/ha)

Commodity	Potential	2008	2009	2010	2011	2012	2013	2014	Actual as % of Potential
Maize	5.0	1.7	1.7	1.9	1.7	1.4	1.7	1.7	35.0
Rice (paddy)	6.0	2.3	2.4	2.7	2.4	2.5	2.6	2.7	45.0
Cassava	48.7	13.5	13.8	15.4	15.8	16.7	18.3	18.6	38.0
Yam	49.0	14.2	15.3	15.5	14.5	15.6	16.8	16.6	34.0
Sorghum	2.0	1.2	1.3	1.3	1.2	1.2	1.1	1.1	57.0
Cowpea	3.0	1.2	1.7	1.8	1.6	1.8	1.2	1.2	41.0

**TABLE A.2.3.2: Ghana Formal Employment by Sector (2015)**

Sector	All Employment (Million)			Rural Employment (Million)		
	Male	Female	Total	Male	Female	Total
Agriculture, forestry and fishing	1.85	1.48	3.33	1.54	1.29	2.83
Other sectors	2.43	3.50	5.93	0.64	1.08	1.72
<b>TOTAL</b>	<b>4.28</b>	<b>4.98</b>	<b>9.26</b>	<b>2.18</b>	<b>2.37</b>	<b>4.55</b>

**TABLE A.2.3.3: Crop Production (000' Metric Tons)**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Maize	1171	1189	1220	1470	1620	1872	1684	1950	1765	1762	1692
Rice	237	250	185	302	391	492	464	481	570	604	688
Cassava	9567	9638	10218	11351	12231	13504	14241	14547	15990	16524	17213
Yam	3923	4288	4376	4895	5778	5861	5855	6639	7075	7119	7296
Sorghum	305	315	155	331	351	353	287	280	257	259	264
Soybeans	39	54	50	75	113	145	165	152	139	141	142
Millet	185	165	113	165	113	194	246	219	183	180	—
Cowpea	144	167	119	180	205	219	237	223	200	201	—

**TABLE A.2.3.4: Area Cultivated (000' Hectares)**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Maize	740	793	790	846	954	992	1023	1042	1023	1025
Rice	120	125	109	133	162	181	197	189	216	224
Cassava	750	790	801	840	886	875	889	869	875	889
Yam	300	325	324	348	379	385	204	426	422	428
Sorghum	305	320	208	276	267	253	243	231	226	227
Soybeans	45	52	47	62	77	91	86	85	85	87
Millet	185	200	163	182	187	177	180	172	—	—
Cowpea	180	185	139	161	163	167	182	169	162	166

Source: 1.1 - SRID (2010, 2011); MoFA (2011, 2012, 2014); 2008–10: "Agriculture in Ghana – Facts and Figures (2010)" Statistics, Research and Information Directorate (SRID), MoFA (2011); 2011: "Agriculture in Ghana – Facts and Figures (2011)" Statistics, Research and Information Directorate (SRID), MoFA (2012); 2012–15 and potential yields: MoFA (2014); MoFA (2015), 1.2 - Authors' own calculation based on the 2015 Labor Force Report – Ghana Statistics Services; Ghana Statistical Service, Revised 2014 Annual GDP Bulletin (June, 2015); 1.3 and 1.4 - MoFA (2015), Ghana Statistical Service, Revised 2014 Annual GDP Bulletin (June, 2015).



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