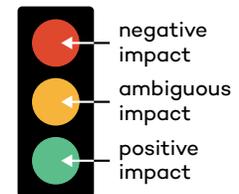


Ghana:

Timeline of Agricultural Transformation, 1960 – 2015

Using a “traffic light” system, the timeline shows the reader our assessment of the impact of policy actions at a specific time and in a specific context. The impact refers to a country’s progress (or regression) within and between the phases of agricultural transformation. Green means the policy action had a positive impact, yellow is an ambiguous impact and red is a negative impact. The traffic light approach is not intended to provide a normative judgment of the policy itself, since the impact of a policy depends on where, when and how it is implemented. Policy actions are organized into four categories: public investments, price interventions, macroeconomic policies and institutional reforms. The assessment is based on quantitative data and over 250 sources of literature. "Find out more" links will take you to a reference for the policy event. To learn more about this project, visit <https://iisd.org/agricultural-transformation/>



Background Note on Transformation Phase

1961 - 1983

From 1961 to 1983 there were only 10 years of positive per capita GDP growth (1961–1963, 1967, 1969–1971, 1974, 1977–1978). The state-led industrialization strategy that Ghana pursued from its early post-independence years until the late 1980s failed to create an industrial sector (Brooks et al., 2009; Breisinger et al., 2011; World Bank, 2019).

MACROECONOMIC POLICIES

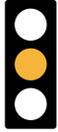


Monetary Policy and Exchange Rates

1965 - 1982



The collapse of global cocoa prices in 1965 triggered a macroeconomic crisis in Ghana. Taxes on cocoa had long been used to fund public expenditures, but with the collapse in prices the government began to print money to compensate. The government also introduced a fixed exchange rate that resulted in a huge overvaluation of the currency. Market exchange rates were almost 44 times the official rate by 1983. The local currency was devalued several times throughout the 1970s (Kolavalli & Vigneri, 2011), but not before the overvalued exchange rates had a negative impact on the competitiveness of agricultural exports (Breisinger et al., 2011).



PUBLIC INVESTMENTS

R&D and Extension Services

1968 - 1991



Public expenditure on agriculture in Ghana was relatively low in this period, particularly for the non-cocoa sector, but nevertheless had a positive effect. Cocoa, by comparison, has long been one of the country's main cash crops, with much of production destined for export. Research and funding is overseen by COCOBOD, the state marketing board. At less than 1 million (constant 2011 PPP dollars) per 100,000 farmers per year, research spending was low relative to other African countries from 1981 to 1984. Spending was significantly increased in the mid-1980s, reaching USD 2 million (constant 2011 PPP dollars) in 1986. However, spending remained lower than the African average through the 1980s. Although research spending was low, it had a large positive impact on productivity. Research into new maize cultivars and inorganic fertilizer had a 74 per cent rate of return on investment in the period of 1968 to 1991. Maize is an important food crop in Ghana as well as being widely marketed, with 16.8 per cent of revenues of poor households coming from the sale of maize in 1987 (Masters, Bedingar, & Oehmke, 1998; Morris, Tripp & Dankyi, 1999; FAO, 2018; ASTI, 2019).



MACROECONOMIC POLICIES

Economic Diversification

1969 - 1982



The 1969/1970 budget contained incentives aimed at developing non-traditional export sectors, primarily manufacturing. These incentives included income tax rebates for manufacturing, export bonuses, automatic renewal of import licences for manufacturing inputs and a waiver on taxes for exported goods. The Ghana Export Promotion Council was also established in 1969 to provide advice, marketing support, financial assistance and information on markets to exporters and the government. These instruments, among others, were renewed throughout the 1970s. However, there was little progress made in developing non-traditional export sectors over the period. This was due in part to a high real exchange rate and lack of a comprehensive trade strategy (Jebuni et al., 1992).

Agriculture as a Contributor to Growth

1970 - 2008



PRICE INTERVENTIONS

Trade Policy

1970 - 1983



Ghana's trade policy regime following independence was largely driven by an import substitution policy, and sought to protect domestic producers from foreign competition with high tariffs and quantitative import restrictions (Laryea & Akuoni, 2012).



PRICE INTERVENTIONS

Price Policies and Anti-Agricultural Bias

1970 - 1982



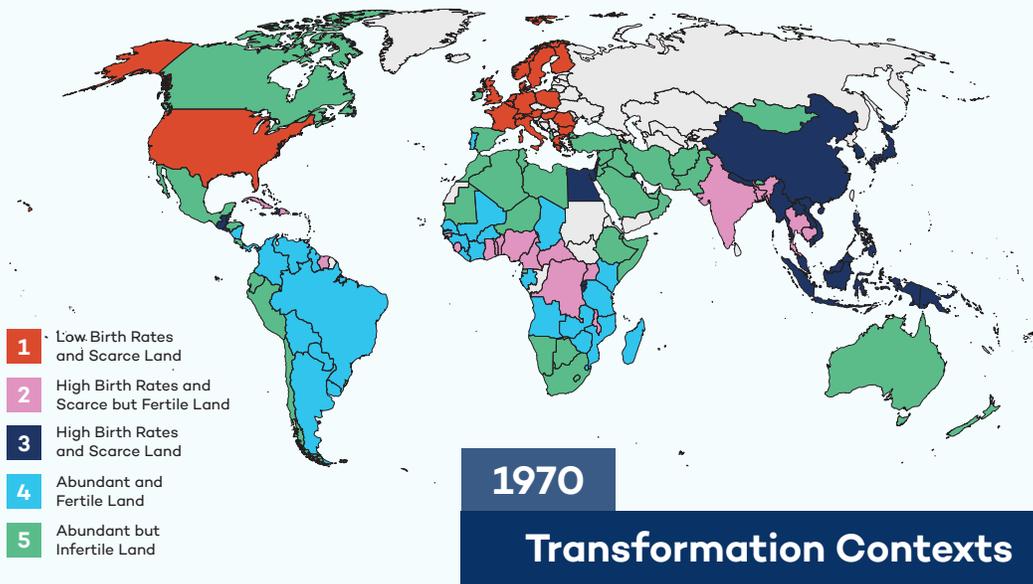
General agricultural policy in Ghana through the 1970s and into the 1980s included price controls, subsidies on inputs and credit, and state involvement in production, distribution and marketing, particularly in cocoa through the Cocoa Marketing Board (since renamed COCOBOD). The collapse of the cocoa sector due to the rising costs of the COCOBOD and falling cocoa prices contributed to large government debts (Brooks, Croppenstedt, & Aggrey-Fynn, 2009). Agricultural policy in Ghana is split between the cocoa and non-cocoa sector, with the cocoa sector, overseen by COCOBOD, historically receiving more attention and funding (Benin, forthcoming).

BIG PICTURE

Structural Context: High Birth Rates and Scarce but Fertile Land

1970 - 2015

What pathway should a given country take to best chart its course through agricultural transformation? By understanding the structural context of a country, we can answer this question better. The development transition can be achieved through an emphasis on higher agricultural productivity (the push strategy, because it counts on rural areas driving growth), or through higher productivity in non-agricultural sectors (the pull strategy, because it requires growth in the non-farm economy to pull people out of agriculture); and often a mix of both. To understand the structural context of countries, we clustered countries based on three dimensions: a metric of relative land endowment (abundant/scarce), a metric of land fertility (fertile/infertile), and a metric of demographic change to reflect population pressure and to differentiate trajectories based on per capital endowments (low/high birth rates).



PRICE INTERVENTIONS

Trade Policy 1983 - 2007



The Economic Recovery Program implemented in 1983 included a policy of trade liberalization, as the government moved from an import substitution policy to an export-driven policy. Tariff rates were lowered between 1983 and 1986. The import licensing program was replaced by tariffs in 1988. A second round of tariff reductions took place from 1987 to 1991. By 1994, Ghana had three major tariff rate categories: 0 per cent for primary products, capital goods and some consumer goods; 10 per cent for raw materials, intermediate inputs and some consumer goods; and 25 per cent for final consumer goods. The average tariff rate was 12.7 per cent by 2007. COCOBOD maintained control over the export of cocoa and has pursued a policy of maintaining high quality and passing a greater portion of the world price on to producers from COCOBOD (Laryea & Akuoni, 2012; Kolavalli & Vigneri, 2011).

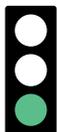


MACROECONOMIC POLICIES

Economic Diversification 1983 - 1992



After 1983, many of the export diversification strategies were kept in place but made less restrictive, particularly foreign exchange controls. However, many of the export diversification strategies benefited traditional sectors as well, allowing mineral extraction and agriculture, particularly cocoa, to remain dominant. Changes to macroeconomic and trade policy in support of exports were the largest difference in diversification policy before and after 1983 (Jebuni et al., 1992).



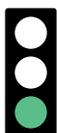
MACROECONOMIC POLICIES

Monetary Policy and Exchange Rates

1983 - 1992



In order to address the crisis, the Economic Recovery Project (ERP) was initiated in 1983 and included adjustments to the exchange rate in order to reduce overvaluation. The goal of the ERP was to correct price discrepancies between the official and black market and to provide macroeconomic stability in order to attract private capital following implementation of the ERP, inflation fell from more than 100 per cent in 1983 to 10 per cent in 1992. (Breisinger et al., 2011). After initial adjustments to reduce overvaluation of the currency, the exchange rate was transitioned to a market-determined system by 1988. Exchange rate policy played a central role in the economic recovery program and all but eliminated the black market in cocoa by the early 1990s (Brooks et al, 2009).



PRICE INTERVENTIONS

Price Policies and Anti-Agricultural Bias

1983 - 1989



With the collapse of the cocoa sector, the government reformed agricultural policy in the 1980s. This included privatization of state farms, removal of price controls (except for cocoa), and the reduction of subsidies. The recovery of the cocoa sector in 1983 was partly due to policy changes that increased the farm gate prices paid to producers relative to surrounding countries, reducing the prevalence of smuggling (Brooks et al., 2009).

BIG PICTURE

Background Note on Transformation Phase

1990 - 2007

Ghana has become an economic success story, with poverty reduction and sustained GDP growth since the early 1990s. Real GDP annual average growth was 4.1 per cent from 1991 to 2000, increasing to an average of 5.2 per cent from 2001 to 2005. Per capita GDP growth remained positive from 1990 to 2007, with a high of 3.7 per cent in 2006. Total factor productivity grew 2.31 per cent annually from 1991 to 1999, and 2.71 per cent annually from 2000 to 2006 (Breisinger et al., 2011; World Bank, 2019).



PUBLIC INVESTMENTS

R&D and Extension Services

1992 - 1999



Ghana undertook a priority-setting process in 1992 to identify important crops and livestock and required research support to improve performance. The first priority crops included roots, tubers and cereals. Ghana set up 17 research programs to address select issues, along with forming Research Extension Linkage Committees to support the programs' implementation and connect farmers to new technologies. These policy changes were not accompanied by a funding increase, as public expenditure per 100,000 farmers remained below the African average (Frempong, 1999; ASTI, 2019).



PRICE INTERVENTIONS

Price Policies and Anti-Agricultural Bias

1992 - 2007



In 1992, responsibility for domestic cocoa procurement was shifted from the COCOBOD to six private companies, with more companies entering the market in the following years. Although COCOBOD maintains control of prices, these companies have brought several benefits, including through upfront payments, credit and marketing infrastructure. These reforms helped annual cocoa production increase from 159,000 tons in 1982 to 400,000 tons in 1995. Cocoa production again increased in the 2000s, in part due to subsidies for fertilizer (Vigneri & Santos, 2009; Kolavalli & Vigneri, 2011).



MACROECONOMIC POLICIES

Monetary Policy and Exchange Rates

1995 - 2000



Mounting public deficits were financed by printing money, which led to a return to high inflation. This reached 60 per cent in 1995, before falling to 25 per cent in 2000 (Brooks et al., 2009).



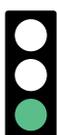
INSTITUTIONAL REFORMS

Land and Labour Reform

1999 - 2012



The Land Administration Project established in 1999 set out to strengthen land administration and security of tenure, with gender issues included in 2009. The program has faced difficulty reconciling the complex customary tenure system with land registration and titling. In addition, the legal framework addressing gender equality has faced issues of entrenched discrimination in land tenure (Spichiger & Stacey, 2014).



PUBLIC INVESTMENTS

Rural Health and Education

2000 - 2007



Total government spending averaged an annual increase of 2.5 per cent from 2000 to 2007, with the majority of the increase allocated to health and education, while spending on agriculture remained stagnant (Benin, forthcoming).



PUBLIC INVESTMENTS

Rural Infrastructure

2000 - 2015



Public expenditure on irrigation averaged 8.2 per cent of government agricultural expenditures in the non-cocoa sector from 2001 to 2015. Spending on irrigation was lower than on fertilizer and seed subsidies, despite subsidies having only short-term benefits compared to spending on irrigation. Overall, government agricultural expenditures in the non-cocoa sector have been declining. Expenditure in the cocoa sector was larger than in the non-cocoa sector, though land productivity growth rates are similar between the sectors (Benin, 2019; Benin, forthcoming).



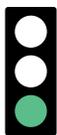
PUBLIC INVESTMENTS

Rural Infrastructure

2000 - 2006



Public spending on “feeder roads,” or those roads that connect to larger or more trafficked roads, over the 2001 to 2006 period was found to have a substantial positive impact on agricultural productivity, as roads provide greater access to inputs, marketing, and other services (Benin et al., 2009). However, the level of spending remained relatively constant from 2000 to 2007 (Benin, forthcoming).



PUBLIC INVESTMENTS

R&D and Extension Services 2001 - 2008



COCOBOD introduced various interventions aimed at improving farm practices in the cocoa sector, including assistance with adopting new technologies that helped to increase productivity in the cocoa sector beginning in 2001. This productivity was also supported by other factors, including high cocoa world prices (Kolavalli & Vigneri, 2011).



PUBLIC INVESTMENTS

R&D and Extension Services 2001 - 2015



From 2001 to 2015, the level of government spending on research and extension for the non-cocoa sector declined because of shifting priorities, despite the long-term productivity benefits of such spending (Benin, 2019).

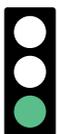


PRICE INTERVENTIONS

Price Policies and Anti-Agricultural Bias 2008 - 2009



The Fertilizer Subsidy Program for the non-cocoa sector implemented in 2008 increased the use of fertilizer and resulted in higher yields and profits for participating farmers (Mulangu, 2017). Along with fertilizer subsidies, the government also implemented programs to subsidize mechanization services. The subsidy program indicates a renewed interest by the government in the non-cocoa agricultural sector, with food crops being the major target of the program. These crops included maize, rice and soybeans, among others (Benin, forthcoming).



PRICE INTERVENTIONS

Trade Policy 2008 - 2015



In reaction to high grain prices following 2008, the government removed import duties on rice, wheat, yellow corn and vegetable oil (Mulangu, 2017).

Agriculture Integrated into the Macro Economy

2009 - 2015

BIG PICTURE

Background Note on Transformation Phase

2009 - 2015

The growth rate of agricultural value added averaged 4 per cent between 2009 and 2016. The rate of economic growth from 2010 to 2016 averaged 7.1 per cent, which resulted in decreased poverty levels. Per capita GDP growth peaked at 11.3 per cent in 2011, before falling to negative 0.1 per cent in 2015, the first negative growth rate since 1983. However, these gains were not shared equally, with poverty rates in Northern Ghana between 50 and 70 per cent. Despite this, Ghana scored higher than the regional average on various food and nutrition security metrics (Mulangu, 2017; World Bank, 2019).



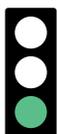
MACROECONOMIC POLICIES

Monetary Policy and Exchange Rates

2010 - 2015



Maize price volatility caused by the high inflation rate and high international prices is a cause of food insecurity in Ghana, as food prices are highest when households have run out of stored food and are saving money for inputs for the growing season (Mulangu, 2017).



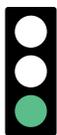
PUBLIC INVESTMENTS

Rural Health and Education

2010 - 2015



In 2010, Ghana mainstreamed the Ghana School Feeding Program into social protection policy to encourage school enrolment, improve retention and reduce hunger. The program provides students with one meal per day, with food sourced from local producers in order to provide income support to farmers. The program increased participation in agriculture by 5 per cent, and increased kindergarten enrolment by 11 per cent (Mulangu, 2017).

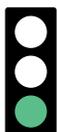


INSTITUTIONAL REFORMS

Credit 2010 - 2015



Review of the Medium-Term Agriculture Sector Investment Plan 2011 to 2015 showed that farmers felt there has been an increase in the availability of credit and finance. While Ghana scored better than the regional average for access to credit, there were persistent issues with high interest rates and a lack of interested borrowers (Mulangu, 2017; Boateng & Nyaaba, 2014).

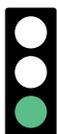


PRICE INTERVENTIONS

Price Policies and Anti-Agricultural Bias 2010 - 2015



The Block Farms Program that began in 2010 grouped individually owned farms into large blocks and provided farmers with subsidized inputs and mechanization services. The program led to increased production of maize, rice, soybeans, and other crops (Mulangu, 2017).



PUBLIC INVESTMENTS

Rural Infrastructure 2011 - 2015



A review of the Medium-Term Agriculture Sector Investment Plan 2011 to 2015, using surveys and focus groups, found that Ghanaian farmers felt there had been improvements in access to irrigation, despite this access being lower than in surrounding countries. Ghana performed well compared to neighbouring countries on access to road networks and transport times (Mulangu, 2017; Boateng & Nyaaba, 2014).



MACROECONOMIC POLICIES

Economic Diversification 2014 - 2015



Ghana's main exports continue to be commodities, including cocoa, which makes up about a fifth of the sector's exports. A lack of finance for manufacturing and entrepreneurship, combined with instability in the macroeconomy brought on by high debt levels caused by low global commodity prices, has hurt diversification efforts (Papadavid, 2017).

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