

DEVELOPMENTAL STATE AND AGRICULTURE FOR DEVELOPMENT:  
LESSONS FOR GHANA FROM EAST ASIA

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By  
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# DEVELOPMENTAL STATE AND AGRICULTURE FOR DEVELOPMENT: LESSONS FOR GHANA FROM EAST ASIA

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## ABSTRACT

Comparative studies between Sub-Saharan Africa and East Asia have shown divergence in economic growth and development. This study argues that in order for Sub-Saharan Africa to make progress in its quest for development, countries in the region must carefully and seriously study the development experiences of late-industrializing economies in East Asia. They must adopt where possible those practices that led to their structural transformation and economic success. The case of Ghana and Malaysia provide an excellent example of two nations similar at independence but different today. In explaining their divergence, economy-wide and sector-specific comparisons are made to highlight their experiences and formulate lessons for Ghana's development. Fieldwork in Central Region, Ghana and Sarawak, Malaysia is used as a backdrop to discuss agricultural transformation and rural development. In explaining the divergent development experiences of these two nations, the analytical toolset of heterodox development economists is extensively used. Concepts such as the developmental state, embedded autonomy and social legitimacy are used to highlight the role of the state in the process of economic change, and theories of modern money and institutional adjustment are discussed in relation to the creation of a Ghanaian developmental state.

## APPROVAL PAGE

The faculty listed below, appointed by the Dean of the School of Graduate Studies have examined a dissertation titled “Developmental State and Agriculture for Development: Lessons for Ghana from East Asia”, presented by Richard B. Dadzie, candidate for the Doctor of Philosophy degree, and certify that in their opinion it is worthy of acceptance.

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## CHAPTER 1

### INTRODUCTION

*“The 21<sup>st</sup> century will be shaped by what happens not just in Rome or Moscow or Washington, but by what happens in Ghana as well [...] Africa’s future is up to Africans”- (President Obama’s speech delivered to the Ghanaian Parliament in Accra, July 11th, 2009)*

The geography of economic development over the past fifty years presents fascinating and disturbing facts about the progress of countries in various regions of the world. The growth and development of many countries in East Asia<sup>1</sup> has been phenomenal and the limited progress in sub-Saharan Africa (SSA) has been baffling, frustrating and disturbing for scholars and policymakers. The search for successful and replicable policies from the East Asian experience has been ongoing and many scholars recognize the need for country and sector-specific analysis of development experiences if important and replicable lessons are to be found.

In recognizing the need for such analyses, scholars know the importance of historical, cultural, geographical and sociological similarities and differences to the adoption of successful policy initiatives across countries. Researchers and policymakers are also fully aware that policies that are adopted must have the potential of being adapted to fit the specific conditions of the countries where they are to be implemented.

The growth and development of Ghana and Malaysia since their independence presents a unique opportunity for such country and sector-specific analysis because of the similarities of the two nations especially at independence. A comparison of these two

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<sup>1</sup> East Asia is broadly defined to include first tier countries (South Korea, Taiwan, Hong Kong and Singapore) and second tier nations (Malaysia, Thailand and Indonesia). It is important to note that this definition of East Asia does not conform to the geographical definition of the region; however, analytically East Asia is used to refer to these countries plus Japan in publications (see World Bank 1993).

countries today shows a divergence of development, the achievement of structural transformation in Malaysia and the continued struggle of the Ghanaian economy.

Chapter 2 provides a background to Ghana and Malaysia and highlights the historical and geographical similarities between the two nations. The dynamics of the overall population and the rural-urban population is presented.

Chapter 3 focuses on the divergent development paths of the two nations by carefully studying structural change. An overview of the two economies is provided, followed by a review of the literature on the economic development of Ghana (and SSA) and Malaysia (and East Asia). Major explanations for the divergent growth trajectories are discussed. The purpose of this literature review is not only to identify explanations of divergence, but also to shed light on the limited country and sector-specific analyses of SSA and East Asian development and to encourage more of such research.

Chapter 4 is the theoretical backbone of this dissertation. A thorough discussion of the developmental state and economic development is undertaken from a historical perspective. Major themes in development thinking before and after World War II (WWII) are discussed. Insights from the historical analysis are used in a discussion on reclaiming policy space in SSA.

Chapter 5 provides sector-specific analysis of agriculture using the Central Region of Ghana and the Malaysian state of Sarawak as a case study. Comparisons of agricultural development are undertaken and lessons for agriculture in Ghana's Central Region are identified. Discussions in this chapter draw on field work in the two regions.

Chapter 6 concludes the dissertation. The discussion uses heterodox perspectives to discuss issues of replication of the East Asian developmental state in Ghana and SSA. The

challenges and promises Ghana faces as it seeks to achieve its development goals are discussed. Using a modern money perspective, I deem financing the developmental state to be theoretically possible. Directions of future research are highlighted followed by concluding remarks.

It is important to note that chapters two and three provide country-specific analysis, chapter four provides the glue to the dissertation with the discussion of the developmental state and chapter five offers an example of the developmental state at work by discussing agricultural transformation and stagnation.

### 1.1 Purpose of Study

With a per capita real GDP of \$713 in 2010, Ghana continues to struggle to develop an economy that has always showed so much promise. For many individuals, the promise of hope and progress that independence brought has been naught and hollow. Countries that were once considered contemporaries like Malaysia and South Korea, have far outpaced Ghana. The overall objective of this work is to present evidence on the divergence of the development paths of Ghana and Malaysia and to ascertain replicable lessons for Ghana as the country moves forward.

The focus on Ghana and Malaysia is not meant to obfuscate the important lessons that can be learnt from the experiences of other countries in East Asia. A secondary but complimentary objective is to identify the keys to successful structural change particularly in the area of agricultural transformation and development. The objective of this work does not assume a one-size fits all development policy. Rather, it recognizes the path dependency of development experiences. The objective, however, assumes that for Ghana to be successful

in transforming its economy it must look to countries that have successfully achieved structural change and development in the last five decades.

In achieving this objective, best practices that explain the success of Malaysia and many countries in East Asia will be identified. The role of the state is highlighted. It will be demonstrated that although no one model of East Asian development exists, several important themes rooted in the history of development thinking can be found and often, these themes run counter those generally accepted in conventional discussions of development<sup>2</sup>.

## 1.2 Methodology

The method of this dissertation is qualitative. Descriptive and historical analysis of literature and data is used in addition to a case study based on a focused ethnographic study in Ghana and Malaysia. Comparative analyses are used throughout this dissertation. Fieldwork in the Central Region of Ghana and Sarawak, Malaysia provide additional comparative analysis and fill gaps in data. Critical analyses of development theory and thinking since the Tudor plan of fifteenth century England until the modern period is used to provide the theoretical basis for the dissertation. Theoretical foundations of the dissertation are based on the work of heterodox development economists whose contributions have broadened the understanding of the role of the state in structural and economic change particularly in East Asia over the last five decades.

The choice of qualitative methods was influenced by the purpose of the dissertation. First, this method allows me to learn from the perceptions of individuals I come in contact with in both nations. Second, the issue of unequal availability and quality of data is mitigated with this methodology. As is usually the case in developing countries, readily available data

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<sup>2</sup> The foundations of development thinking can be traced to Tudor England through Arthur Lewis up to the development experiences of East Asian countries over the last 50 plus years.

is hard to come by<sup>3</sup>. This methodology allows me to add to the scant data as well as enrich the research by adding humanness to it.

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<sup>3</sup> The data problem is particularly daunting in Ghana. For Malaysia, data on development indicators and agricultural statistics are readily available online at the website of the Jabatan Perangkaan (Department of Statistics) and Jabatan Pertanian (Department of Agriculture).

## CHAPTER 2

### BACKGROUND TO GHANA AND MALAYSIA

*“Within the developing world itself there are marked differences in levels of poverty. If we compare the years 1985 and 2000, the number of people in poverty (as defined by the World Bank) has fallen most sharply in East Asia [...] in sub-Saharan Africa, however, slow economic growth and rapid population growth have meant a significant increase in levels of poverty”- (Hodder 2000)*

Ghana and Malaysia are many miles apart, but the historical, geographical and socio-cultural similarities between two nations bring them closer. While some of the similarities are not perfect, they present an interesting case of two nations with similar conditions that have diverged in their growth and development. It also points to an even important fact, which is that for Ghana to develop its economy, it must try to mimic the Malaysian model in ways that fit with its own economy (Asare and Wong 2004, Khan 2009 and Ocampo, J., KS, Jomo., and Vos, R 2007).

The purpose of this chapter is to provide an introduction and background to these two nations using the development geography approach developed by Rupert Hodder and many other geographers. Development geography studies standards of living, quality of life, social and spatial inequalities within and between countries by carefully looking at history, population dynamics (demography), dynamics of rural-urban populations and agglomeration and the role of the state in economic development (Hodder 2000, Scott and Garofoli 2007).

#### 2.1 Historical and Geographical Introduction

Ghana and Malaya (now peninsular Malaysia) gained their independence from Britain on March 6<sup>th</sup>, 1957 and August 31<sup>st</sup>, 1957 respectively. After various negotiations present-day Malaysian states of Sarawak and Sabah and now independent Singapore joined Malaya

on July 10<sup>th</sup>, 1963 to form the Federation of Malaysia<sup>1</sup> (Rawlins 1965, Reece 2004 and *Encyclopedia of Malaysia: Volume 11, 2007*).

Modern Ghana was once a collection of British territories with the centerpiece being the Gold Coast Colony. After World War II (WWII), parts of German controlled Togoland were ceded to the British to form the modern day Volta Region of Ghana. The push for independence was intensified after riots on February 28<sup>th</sup>, 1948 in Accra and the actions of Dr. Kwame Nkrumah and other nationalists from the United Gold Coast Convention against the British colonial administration led to independence in 1957<sup>2</sup>.

The Malaysian struggle for independence intensified in the period around WWII when the superiority of the British was put into doubt especially after the Japanese overrun the peninsular and the northern territories of Borneo. The Japanese invasion and occupation in 1941 spurred nationalism across what is now Malaysia. The ruthlessness and brutality of Japanese rule brought unity as well as division among the various ethnic groups in Malaysia. However, the tireless efforts of Dato Onn Bin Ja'afar, Tunku Abdul Rahman and others led

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<sup>1</sup> Sarawak was ceded to Britain in 1946 after about 100 years of rule by the Brooke family and a short period under Japanese occupation during World War II. Sabah was controlled by the North Borneo Company. On August 9<sup>th</sup>, 1965, Singapore was no longer a member of Malaysia and subsequently became its own country.

<sup>2</sup> The riots of 1948 occurred after African ex-servicemen who fought on behalf of Britain during WWII were killed at Christianborg castle by an English as the veterans attempted to request their pensions which were 3 years past due. The superiority of the English was also in serious doubt after WWII. Dr. Nkrumah who arrived in the Gold Coast around this time at the call of the United Gold Coast Convention had countless run-ins with then Governor Arden- Clarke. Arden-Clarke documented his meetings with Dr. Nkrumah and the difficulties Britain faced as Ghana fought for her independence (See "Gold Coast into Ghana: Some Problems of Transition", *International Affairs*, 34(1): 49-56 and 1958 "Eight Years of Transition in Ghana", *African Affairs*, 57(226): 29-37). In his documents, Governor Arden-Clarke remarked about the pious but yet ferocious nature of Dr. Nkrumah and other nationalists. Governor Arden-Clarke also provides another unique similarity between Ghana and Malaysia since he served as the first governor of Sarawak after Vyner Brooke relinquished control over the territory.

to “Merdeka” (independence) in 1957<sup>3</sup>.

Circa independence, the two nations were agricultural and commodity-based economies largely serving British colonial purposes. Ghana’s economy was defined by cocoa cultivation and gold mining and Malaysia’s economy was largely dependent on rubber production and tin mining. More than half of the labor force in both nations was engaged in the production of primary products; with a significant portion of their exports heading to Britain as would have been the case during the colonial era.

Socio-culturally, Ghana and Malaysia are similar. Ethnic, linguistic and religious diversity exists in both nations. Ethnically, there are over 20 groups in both nations. In Ghana, the major groups are the Akan (45%), Mole-Dagbon (15%), Ewe (12%) and Ga Adangme (7%). In Malaysia, the major groups are the Melayu or Malay (51%), Chinese (24%), Indians (mostly Tamil; 8%). Minor ethnic groups in Ghana include the Guan, Gurma, Grusi and Nzema. In Malaysia minor ethnic groups include the Kelabits, Bidayus, Kayans, Penans and Lun Bawungs.

Linguistically, various languages are spoken in both nations and most citizens speak one or more of the native languages and some English. The official language of Ghana and Malaysia is English and Bahasa Malaysia, respectively although English is the second official language of Malaysia. Religious diversity characterizes both nations. In Ghana Christianity accounts for over 60% of the religious population and Islam and native religions are freely practiced. In Malaysia, Islam is the official religion but constitutional provisions

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<sup>3</sup> Armed resistance on the Peninsular begun with the Perak War in 1875 after the death of colonialist J. W. W. Birch. Uprisings in Pahang (1891-1895), North Borneo now Sabah (1895), Kelantan (1915), Terengganu (1928) and the revolt against colonization in Sarawak (1949) were all important events in the struggle for statehood in Modern Malaysia (see Encyclopedia of Malaysia: Government and Politics, p. 6-22). Japanese rule in Malaysia was ruthless and barbaric in several instances. *Sook Ching* (clean-up) initiated and carried out by Japanese forces was blamed on Colonel Masanobu Tsuji. This “clean-up” referred to the massacre of many Chinese mostly in Singapore and the peninsular.

allow the practice of other religions like Christianity, which is especially common among native peoples of Borneo like the Lun Bawungs. Buddhism, Hinduism, Confucianism and Taoism are also practiced in Malaysia (Bodomo 1996, *Ghana 2000 Population and Housing Census*, *Encyclopedia of Malaysia*: Volume 9, 10, 12 and 13, Reece 2004 and *Yearbook of Statistics Malaysia* 2008).

Geographically, Ghana and Malaysia are located near the equator and in the tropics. Their capital cities are Accra and Kuala Lumpur. Ghana is located almost at the geographical center of world's geographical grid at 5 degrees north and 2 degrees west with the Greenwich meridian going through the city of Tema. Malaysia is located at 2 degrees 30 minutes north and 112 degrees 30 minutes east. The two nations are located in West Africa and Southeast Asia respectively. The estimated population in 2010 was 24 million for Ghana and 28 million for Malaysia. Ghana shares a border to the north with Burkina Faso, to the east with Togo and to the west with Côte d'Ivoire. The Gulf of Guinea provides important marine resources and global access via sea routes for Ghana. Peninsular Malaysia shares a border to the north with Thailand and to the south with Singapore. Eastern Malaysia forms the northern portion of the Island of Borneo and shares a southern border with Kalimantan, Indonesia. The South China Sea provides marine resources for Malaysia and the Strait of Malacca form an important waterway for the nation as it provides the easiest route to the Indian Ocean.

The total land area of Ghana is 238,535 sq. km (92,099 sq. miles) with a coastline of 335 miles. Peninsular and East Malaysia combine for a total land area of 329,845 sq. km (127,354 sq. miles) with a coastline of 2,905 miles. The most important geographical feature of Ghana's land area is the Volta Lake which runs north to south in the eastern half of the country and covers 8,502 sq. km (3,283 sq. miles). Malaysia's terrain is characterized by

mountainous interior and coastal lowlands. The highest point in Ghana is the 2,625 feet above-sea-level Mount Afadjato in the Volta Region. Mount Kinabalu in Sabah is the highest point in Malaysia and sits at 13,435 feet above sea level in Sabah. Figures 1 and 2 are maps of Ghana and Malaysia.



Figure 1: Map of Ghana retrieved from, [http://images.nationmaster.com/images/motw/africa/ghana\\_rel95.jpg](http://images.nationmaster.com/images/motw/africa/ghana_rel95.jpg)



Figure 2: Map of Malaysia retrieved from [www.biologie.uni-hamburg.de/.../malaysia.htm](http://www.biologie.uni-hamburg.de/.../malaysia.htm)

Ecologically, the two nations are similar. They both have tropical forests (rain and moist semi-deciduous) covering most of their land area. Ghana has more varied ecological zones than Malaysia implying that the agricultural capabilities of Ghana will likely be more varied than Malaysia's. Figure 3 and 4 show the various ecological zones of the two nations.

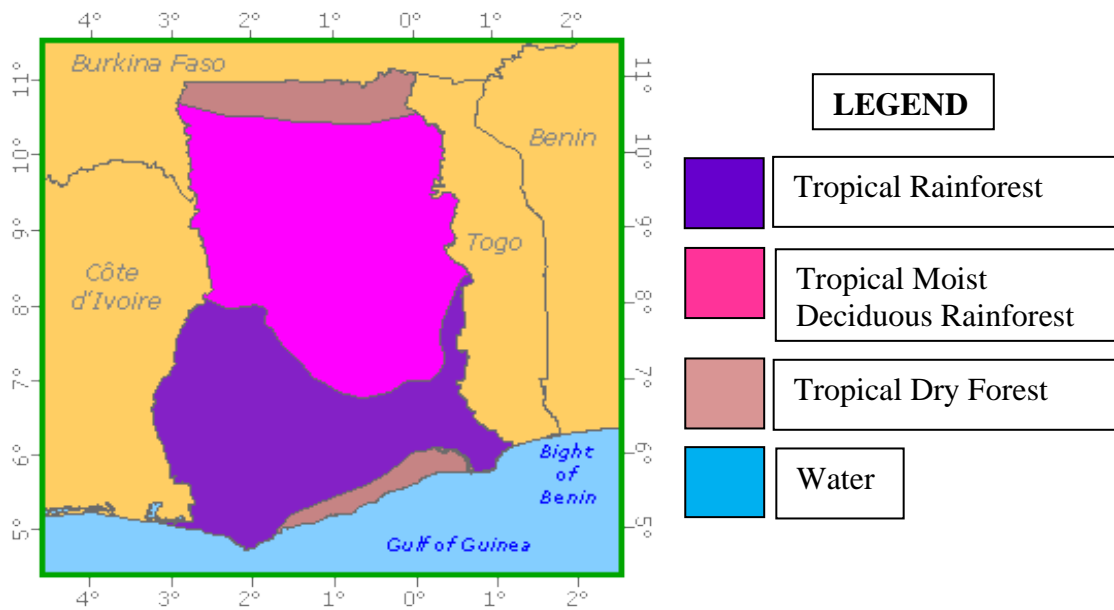


Figure 3: Ecological Zones, Ghana. Adapted from [www.fao.org](http://www.fao.org)

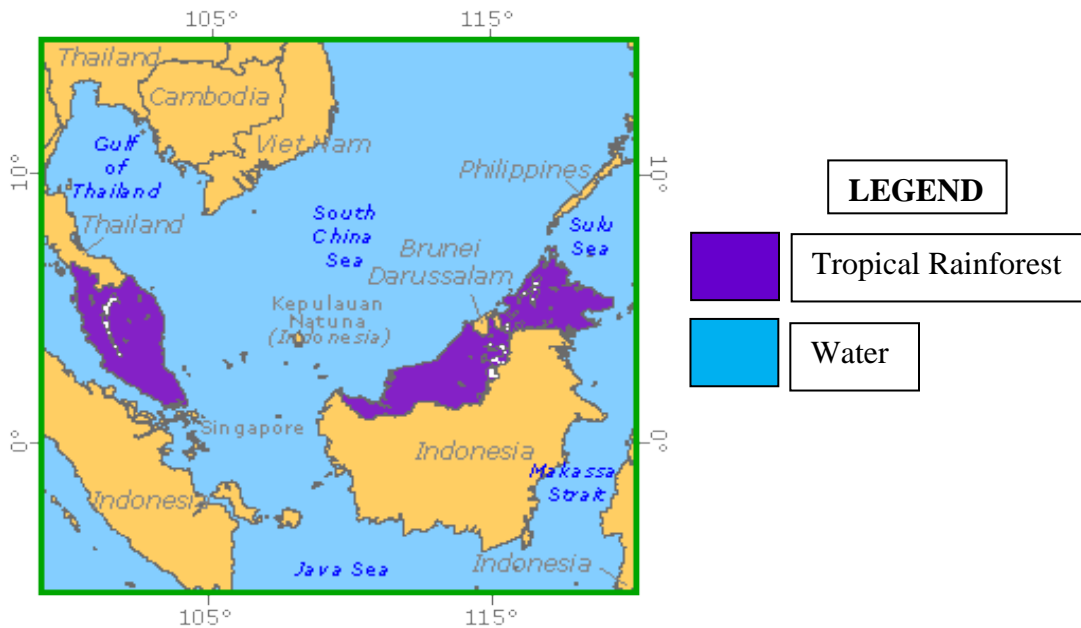


Figure 4: Ecological Zones, Malaysia. Adapted from [www.fao.org](http://www.fao.org)

## 2.2 Population Dynamics

The relationship between population growth and economic development is not completely clear but in recent years, there appears to be a consensus position. First, population growth is not the primary cause of low levels of living, gross inequalities, or the limited freedom of choice that characterize much of the developing world. Second, the problem of population is not simply one of numbers, but rather involves the quality of life and material well-being. Third, rapid population growth does serve to intensify problems of underdevelopment and makes the prospects for development much more difficult (Cassen 1994, Todaro and Smith 2009, p. 302-303). Table 1 presents information on the population levels by decades for the two nations.

Table 1: Population (in millions)

	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2010</u>
Ghana	6.8	8.7	10.7	15.6	23.8
Malaysia	8.1	10.9	13.8	18.1	28.3

Source: World Development Report 2000/2001 and World Development Indicators. Average population growth rates for Ghana and Malaysia were 3% for the 1960s and 70s and 2.4% and 2.3% respectively for Ghana and Malaysia afterwards.

The population age composition has changed for both countries from 1960 to present. The data shows that dependency ratios were identical in 1960 but different in 2007. Figure 5 shows that in 1960 53% of Ghana's population was supporting the remaining 47% and in Malaysia, 51% of the population was supporting the remaining 49% who were too young or too old. In 2007, 58% of the Ghanaian population was supporting the remaining 42% and 65% of the Malaysian population was supporting the remaining 35%.

The phenomenon in Figure 5 has dual implications for both countries. For Ghana, it implies that in the short period, dependency ratios are high, since a smaller portion of the population is supporting a comparatively bigger portion, however, in the long period; Ghana

has the potential to add more of its citizens to its active population (ages 15-64). In the Malaysian case, the reverse is true. In the short period, a smaller portion of the population has to be supported by the working age population but in the long period (say 20 years into the future), the aged population (65 years and above) will be increasing faster than the growing population (0-14 years) and thus fewer citizens will be added to its labor force in comparison to Ghana.

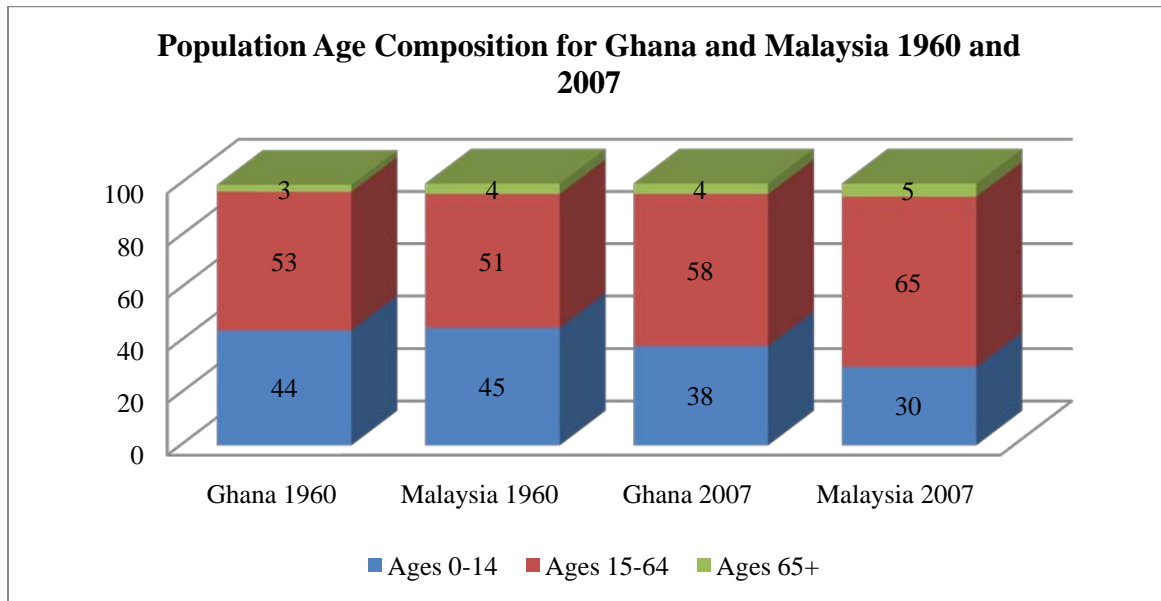


Figure 5: Population Age Composition. Calculations based on various editions of World Development Indicators, World Tables and Yearbook of Statistics-Malaysia 2008

Figure 6 is a Lorenz curve showing the distribution of income across various quintiles of the population of both countries over a 10 year period. Gini<sup>4</sup> indices are calculated for each of the periods. For Ghana in 1997, the Gini was 0.327 and in 2006 it was 0.428. For Malaysia, the Gini was 0.485 in 1995 and 0.379 in 2004. Based on the evidence from 1960 and 2007, income distribution across the population of Ghana worsened and improved in Malaysia.

<sup>4</sup> Gini closer to 0 implies that incomes are more equally distributed across the population. Gini closer to 1 implies that incomes are more unequally distributed across the population.

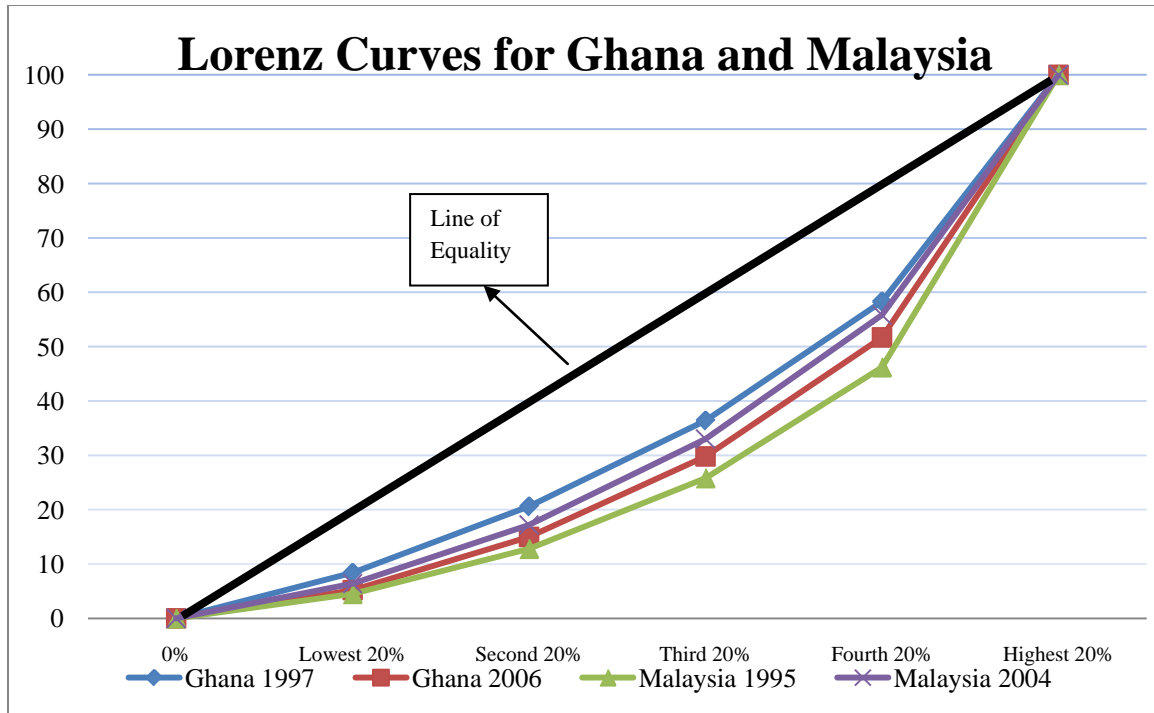


Figure 6: Distribution of Income for Ghana and Malaysia. Calculations based on various editions of World Development Indicators and World Tables

### 2.3 Dynamics of Rural-Urban Populations

Urbanization in the last decade of the 20<sup>th</sup> century was spearheaded by Asia and Africa. Rural-urban migration in countries in these parts of the world has been very aggressive. African and Asian cities have increasingly become major players in the global economy and poverty, once considered a rural issue has become increasingly urban. Historically, the preconditions that have supported urbanization have been two-fold. First surplus products needed to sustain populations in the non-agricultural sector has to be available. Second, social and infrastructural development must be high enough to support a larger population. In developing countries in Asia and Africa, urbanization and agricultural productivity have gone hand in hand. For example, cities in Malaysia and Indonesia grew on the basis of rubber and oil palm production and cities in Ghana have grown on the basis of cocoa production (Clark 1996 and 1998, Todaro and Smith 2009).

The dynamics of rural urban populations for Ghana and Malaysia have been similar and both have become more urban. Figure 7 presents evidence on the trends in rural and urban populations. In the 1960s, both nations had less than 30% of their population in urban areas, but 50 plus years later more than 50% of the population of these nations were in urban areas (Ghana 50.2% and Malaysia 70.4% in 2008). In Ghana, the urban population surpassed the rural population in 2007 and Malaysia, this urbanization of the population occurred in the 1990s.

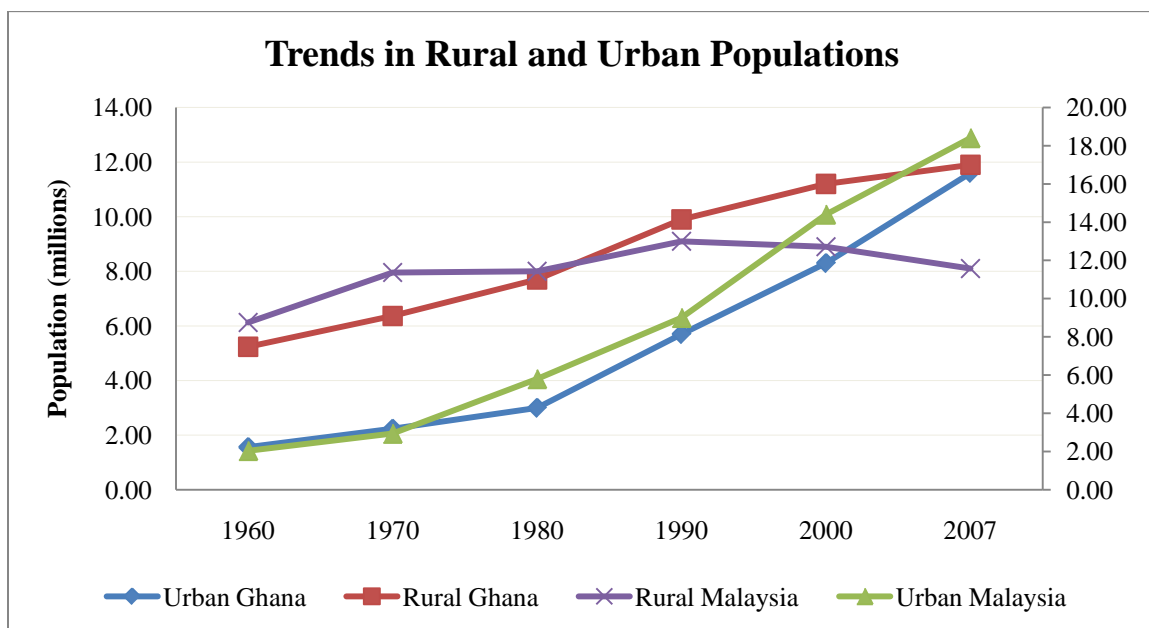


Figure 7: Trends in Rural and Urban Populations of Ghana and Malaysia, 1960-2007. Calculations following Todaro and Smith 2009, Chapter 7 and based data retrieved from various editions of World Development Indicators and World Development Reports.

The urbanization of poverty is evident across major African cities. Figure 8, presents evidence on urbanization across time and income levels. The relationship between the urban population and real GDP per capita (in 2005 US dollars) is plotted for both countries to show minimal variation between real GDP per capita and the urban population in Ghana. In Malaysia, however, as urban populations rose, so did real GDP per capita. It could be inferred that, rural-urban migration in Ghana has yielded minimal income gains on average

for the average Ghanaian and has yielded positive income gains on average for the average Malaysian.

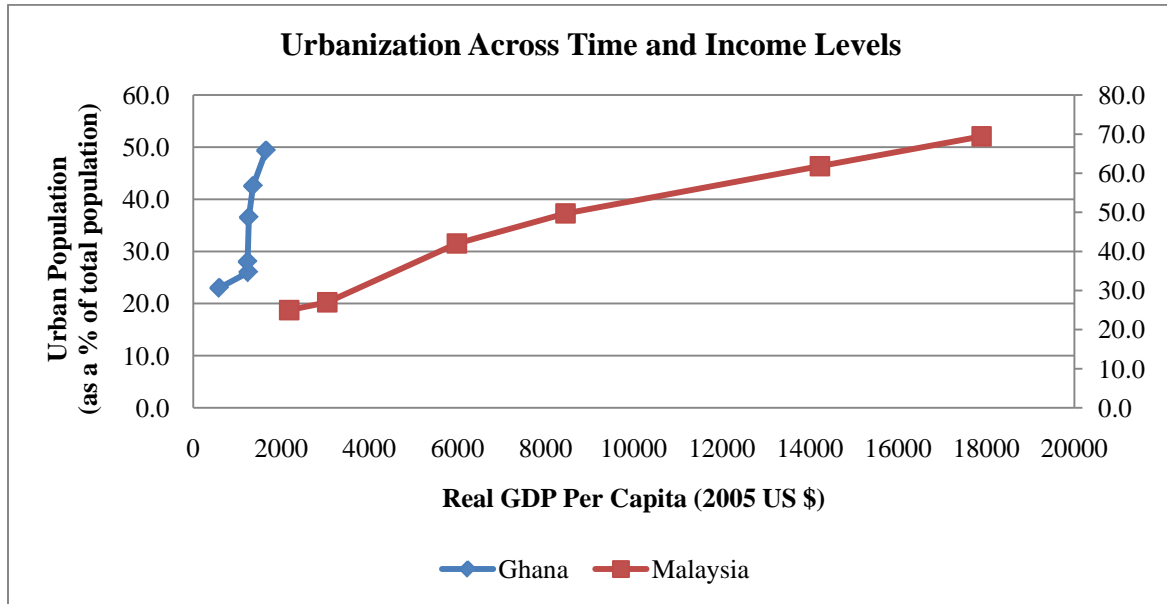


Figure 8: Urbanization across Time and Income Levels for Ghana and Malaysia. Calculations followed Todaro and Smith 2009, Chapter 7 and data retrieved from various editions of World Development Indicators, World Development Reports and Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.3, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, August 2009.

Chapter three follows this overview of the two nations by discussing the divergence in their development experiences since their independence. This chapter reviews specific literature on the subject and provides evidence of the divergence. An explanation of the divergence is also provided and discussed.

## CHAPTER 3

### ECONOMIC DEVELOPMENT IN COMPARATIVE PERSPECTIVE: THE CASE OF GHANA AND MALAYSIA SINCE INDEPENDENCE

*“Rapid and sustained economic growth in the most successful developing countries has involved a process of late industrialization in which the production structure has shifted from the primary sector to manufacturing, alongside a progressive move from less to more technology- and capital-intensive activities both within and across sectors, allowing countries to build competitiveness in a range of activities established in more advanced countries [...] such a process of sustained rapid growth has generally been absent in SSA”-* (Akyuz and Gore 2001)

The development path of Ghana and Malaysia since their independence provides an excellent example of the divergence of development between SSA and East Asia. The goal of this chapter is to review literature on this divergence, present evidence of the divergence and discuss factors that help explain it.

The discussion in this chapter should prompt Ghanaians in two ways. First, it should remind them of the mistakes made thus far and second, it should encourage them about the chances<sup>1</sup> of development especially if they draw on the experiences of Malaysia and East Asia.

#### 3.1 Review of Literature

Recently, interest in comparative studies of development between Ghana and Malaysia has been on the rise. Contributions by Asare and Wong (2004) and Khan (2009) have been important in this regard. Ghana’s National Development Planning Commission (GNDPC) has also added to the interest by way of chapter 1 of its seven year plan published in 2008. Comparative studies between SSA and East Asia have also been on the rise. The United Nations Conference on Trade and Development (UNCTAD) provided excellent

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<sup>1</sup> Especially with the stable democracy that is now 19 years old and the recent discovery of commercial quantities of oil.

analyses in their “African Development in Comparative Perspective” (1999) and “Economic Development in Africa Series” (2001-2007). The Cambridge Journal of Economics (2001) also released a special edition of the journal dedicated solely to comparative studies of development between SSA and East Asia.

Asare and Wong (2004) presented evidence on the similarities and differences between the two nations. They argued that the main factors explaining divergence was political instability, poor human development, lack of a diversified economy and a domestic entrepreneurial group, and the negative impact of the West African regional economy. Little advice on policy actions for Ghanaian development is offered. The authors conclude by focusing their discussion on what donor countries and agencies can do to assist Ghana.

Khan (2009) focused on the political instability explanation for divergence. His analysis focused on the connections between politics and economic development. Excellent historical and political backgrounds to the two nations are presented. The study lacks in data and evidence on divergence. Khan concluded that while Malaysia had maintained a stable political environment which had been instrumental in the execution of development plans, Ghana’s political stability had been sporadic at best.

Chapter 1 of the GNDPC’s seven year development plan (2008) discussed the development of Ghana and Malaysia in a comparative perspective. The chapter suggested that the main reason for the slow pace of Ghana’s development had been the lack of adherence to national development plans. Evidence is presented to show that ad hoc planning and poor implementation of development plans has contributed to Ghana’s poor development record. Malaysia’s success in executing development plans is highlighted along with the active role of the state in structural change and economic transformation.

On a regional scale and using a heterodox perspective, Akyuz and Gore (2001) provided analyses of divergence between SSA and East Asia. They argued that conventional explanations of poor economic performance in SSA in the post-independence period (1957- ) failed to pay adequate attention to the causal mechanisms of growth, decline and stagnation. They noted that many African countries experienced investment booms after independence; however the inability to sustain investment levels contributed to their failure to establish a virtuous cycle of growth where savings, investment and exports were interconnected<sup>2</sup>.

The external vulnerability of African economies due to their reliance on primary products and post-colonial policy dilemmas are argued to have contributed to the continent's poor development. Two arguments used by mainstream economists to explain poor economic development in SSA are identified and discredited by the authors<sup>3</sup>. They argued that these reasons failed to account for the complex interplay of internal and external factors in the African growth and development experience.

The authors reached three important conclusions. The first was that the central policy task for countries in SSA should be to raise rates of private investment in productive activity, and establish a strong nexus between savings, investment and exports. The second was that SSA should learn from East Asia but must recognize the structural differences between the

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<sup>2</sup> They showed that in East Asia the engine of structural change was the rapid pace of capital accumulation made possible only through high rates of investment and the strong nexus between investment and profits. Profits provided simultaneously the incentives of firms to reinvest and their capacity to finance new investment. Investment raised the profits by enlarging the stock of productive capital. The role of foreign and domestic savings is discussed and the savings-investment-exports nexus is argued to have provided the necessary virtuous cycle needed for growth and development.

<sup>3</sup> The roots of the first reason can be found in the Berg Report (1981) which focused on the policy mistakes made by states in SSA. This report demonized the African state and provided ammunition to neoliberal policy measures which were carried out in SSA. The second reason is rooted in the works of Sachs (1997) and Easterly (1997). The argument of these scholars dwelled on deep rooted institutional and structural constraints including geography, ethno-cultural divisions and demography. Trezzini (2001) argued that ethnic divisions allowed for an increased role of the state in order to achieve its developmental goals in Malaysia. He also argued that there is no direct relationship between ethnic divisions and economic development. He stressed that if that were the case then Malaysia should be nowhere near its current levels of development.

regions. The third conclusion was that an active role for the government is necessary<sup>4</sup>. In addition to their conclusions, the authors noted that a major lesson from the East Asian development experience for SSA was that institutional capacities for growth and development are built up through a learning process and that institutional capacities are socially engineered phenomena.

“Economic Development in Africa: Reclaiming Policy Space” was the eighth publication in UNCTAD’s Economic Development in Africa Series. This 2007 publication discussed issues of domestic resource mobilization and ways to improve it in SSA. Suggestions for raising and channeling domestic savings into productive enterprise are discussed. It is argued that financial systems of SSA are simply not up to the task of supporting private enterprise since huge portions of the population do not use banks and other financial entities (the report estimated that in Ghana only 5-6% of the population has access to the banking sector).

The developmental state advocated by UNCTAD is discussed in chapter 3. It is argued that the actions of such states in East Asia played an important role in their resource mobilization for development. It is argued that mobilization of resources for development in SSA depends on the ability of states in SSA to achieve the developmental state status reached by many states in East Asia. The challenges of nurturing such states in SSA are highlighted. It is argued that simply replicating the so-called East Asian model will not suffice. It was suggested that policy initiatives must be made with an awareness of international and geopolitical influences since some of these may run counter to national development goals.

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<sup>4</sup> This role must go beyond the minimalist state of neoclassical economists and must include a bold vision of development that incorporates a comprehensive and realistic assessment of institutional capacities.

UNCTAD's study asserts in the strongest terms that errors from policy initiatives must be expected and welcomed as learning opportunities by states in SSA if they are to develop as their counterparts in East Asia did. Like Akyuz and Gore (2001), the report accepts that institutional capacities for growth and development are socially engineered.

One of the most important conclusions of this report was that;

Advocating the use of government policy to correct some of the egregious excesses of the market is not tantamount to a return to statist or protectionist economic policies. Rather it is a call to move away from the preoccupations with policies based on the ideological divide of *laissez-faire* and *dirigisme* to a set of more refined and eclectic policy measures that combine features of both, but tailored to the specific development challenges or circumstances of each country. In other words, it is a move to a kind of *a la carte* development policy menu [...] a developmental state must be committed to a *development ideology* as a long-term predictable strategy. The escape of sub-Saharan Africa from poverty may be more challenging in the present circumstances than for East Asia, but fatalism is unwarranted, and the means of escape could yet be found in the *developmental state* paradigm (p. 86 and p. 88).

The review of the literature highlights two important facts. First, a serious commitment to development in SSA is needed and second, a new form of developmentalism that draws on the experiences of East Asia must be adopted.

### 3.2 Divergence in the Ghanaian and Malaysian Economies

When Ghana and Malaysia achieved their independence in 1957, they were perfect examples of archetypal single crop economies. Ghana was (and is still) well known for its cocoa. Malaysia was famous for its natural rubber. These two crops along with mining activities accounted for more than half of the foreign exchange earnings for both nations (Clark 1998).

In the post-independence era, the connection between savings, investment and exports and the growth in real GDP (in absolute and per capita terms) has been dismal for Ghana and astounding for Malaysia. Table 2 shows average growth rates for real GDP and real GDP per

capita. In Ghana, the period 1971-1990 were characterized by low growth. Over the same period in Malaysia, growth rates were above 5% percent and the highest average growth rates were close to 8%. Growth rates in Malaysia have been over 5% for more than four decades, a feat achieved in Ghana starting from 2001-2008.

Table 2: Growth Rates of Real GDP and Real GDP per Capita (%), period averages

<b>Real GDP</b>	<u>1961-70</u>	<u>1971-80</u>	<u>1981-90</u>	<u>1991-2000</u>	<u>2001-2008</u>
Ghana	3.04	0.52	2.28	4.3	5.58
Malaysia	6.49	7.87	6.03	7.3	5.07
<b>Real GDP per Capita</b>	<u>1957-67</u>	<u>1968-77</u>	<u>1978-87</u>	<u>1988-97</u>	<u>1998-2008</u>
Ghana	0.26	5.09	-0.64	0.46	3.18
Malaysia	2.72	6.53	3.13	7.13	3.34

Source: World Development Indicators and Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.3, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, August 2009

Figure 9, shows the trend in real GDP growth. Growth rates have been mostly positive for Malaysia except for notably deviations in 1999 during the Asian financial crisis and in 2001 in the global economic recession. Negative growth rates are also observed in the mid 1950s, 1970s and 1980s. In Ghana, growth rates have been wildly erratic.

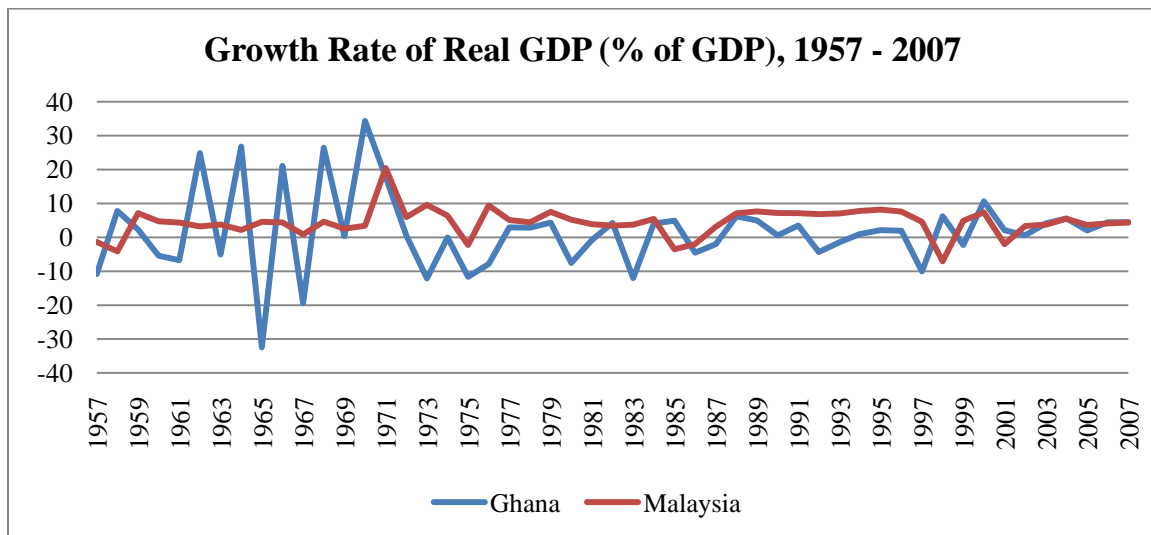


Figure 9: Growth Rate of Real GDP per Capita. Calculations based on Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.3, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, August 2009

Figure 10 shows the trend in per capita incomes. It reveals an astounding divergence in the income levels of the two countries from 1960-2008. In 1960, average incomes were \$179 and \$300 in Ghana and Malaysia respectively. In 2008, average incomes were \$713 and \$8,209.

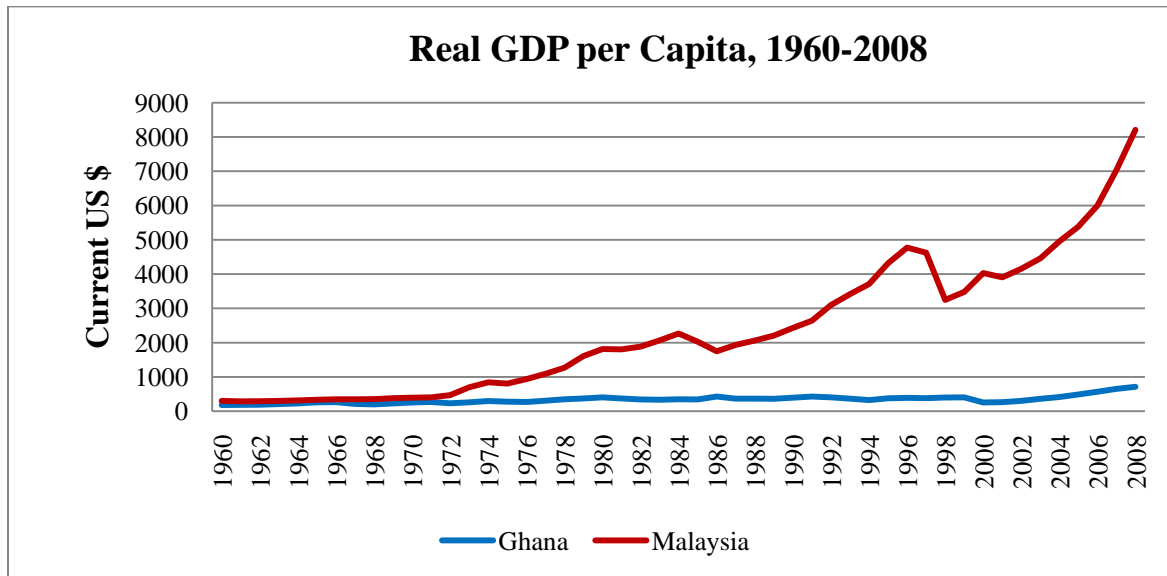


Figure 10: Real GDP per Capita 1960-2008. Calculations based on World Development Indicators 2009

Table 3 presents evidence on GDP, investment, savings and exports. In 1960, the GDP of Malaysia was twice that of Ghana, but in 2008, it was thirteen times larger. Gross capital formation (a proxy for investment) was identical in the first fifteen years after independence, but since the 1970s, Malaysia has outpaced Ghana in the addition of new fixed assets to the economy (as shown in figure 11). Savings rates have also been higher in Malaysia. The role of exports in the Malaysian (and East Asian) development experience is well documented. Since the 1960s, exports as a percent of GDP have risen each decade up to the current period. Comparatively, the role of exports in Ghana has been minor and largely restricted to the exports of crude agricultural products.

The link between savings-investment-exports has been superb in Malaysia and other East Asian countries particularly since the 1960s. The strength of this nexus created and continues to create a virtuous cycle of growth necessary for development (Stein 1996, Akyuz and Gore 2001, p. 266-268).

Table 3: Key Indicators

<b>GDP (US \$ Billions)</b>	<u>1960</u>	<u>1980</u>	<u>2000</u>	<u>2008</u>
Ghana	1.2	4.4	4.9	16.7
Malaysia	2.4	24.9	93.7	222
<b>Gross Capital Formation (% of GDP)</b>	<u>1960-75</u>	<u>1976-90</u>	<u>1991-2006</u>	<u>2007</u>
Ghana	15	8	23	34
Malaysia	19	27	31	22
<b>Exports of Goods and Services (% of GDP)</b>	<u>1960-75</u>	<u>1976-90</u>	<u>1991-2006</u>	<u>2007</u>
Ghana	20	12	33	40
Malaysia	42	56	102	110
<b>Gross Savings (% of GDP)</b>	<u>1975-87</u>	<u>1988-1997</u>	<u>1998-2007</u>	<u>2008</u>
Ghana	8	13	19	7
Malaysia	24	32	36	38
<b>Domestic Credit to Private Sector (% of GDP)</b>	<u>1960-75</u>	<u>1976-90</u>	<u>1991-2006</u>	<u>2007</u>
Ghana	7.6	3.4	9.7	..
Malaysia	18	82	154	100
<b>External Debt Stock (% of GNI)</b>	<u>1970-80</u>	<u>1981-90</u>	<u>1991-2000</u>	<u>2008</u>
Ghana	29	51	85	31
Malaysia	20	57	45	35

Source: World Bank, World Development Indicators 2009

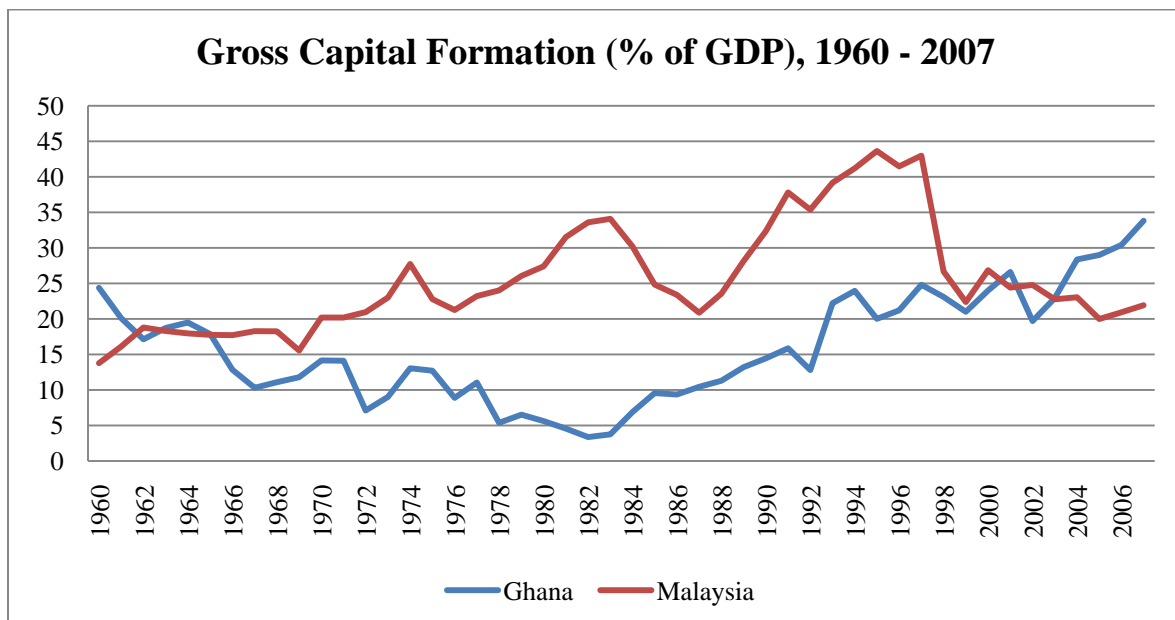


Figure 11: Gross Capital Formation (% of GDP). Calculations based on World Development Indicators 2009

A careful look at figure 11 shows that from 1960-1965, Ghana added more fixed assets to its economy than Malaysia but since 1966, Malaysia outpaced Ghana until about 2003. Thirty-seven years of infrastructural development in Malaysia through investments in fixed assets has contributed to its current development level.

Improvement in the quality of life is also an important indicator of economic development. Table 4 presents data on selected social indicators of development. These indicators provide insights into the state of education, health facilities and infrastructure in these countries. Life expectancy, literacy rates and percentage of roads paved in Ghana are well below the levels in Malaysia. Infant mortality is about 8 times higher in Ghana and for children under the age of 5, 14% of them are afflicted by malnutrition. The social indicators presented show that the quality of life is much higher in Malaysia.

Table 4: Selected Social Indicators of Development

<b>Most Recent Estimates (latest year available, 2002-08)</b>	<b><u>Ghana</u></b>	<b><u>Malaysia</u></b>
Life Expectancy at Birth (years)	57	74
Infant Mortality (per 1000 live births)	51	6
Child Malnutrition (% of children under 5)	14	..
Access to an improved water source (% of population)	80	99
Literacy (% of population age 15 +)	65	92
Roads Paved (% of total roads)	15	79

Source: World Bank, World Development Indicators 2009: Country at a glance series

### 3.3 Structural Change in the Ghanaian and Malaysian Economies

Structural change is an important indicator of development and evidence of it is best shown by looking at the contributions (in terms of value added to GDP) and the share of labor force engaged in agricultural, industrial and service activities in an economy. The ability of an economy to move from largely agricultural to industrial and service oriented activities reflects structural change. Tables 5 and 6 show the structure of the two economies and tables 7 and 8 show share of the labor force employed by each sector.

Table 5: Ghana – Structure of the Economy (value added as % of GDP)

Sector	1960-9	1970-9	1980-9	1990-9	2000-7
Agriculture	40	51	52	40	36
Industry	19	17	13	23	25
Services	38	32	35	37	39

Table 6: Malaysia – Structure of the Economy (value added as % of GDP)

Sector	1960-9	1970-9	1980-9	1990-9	2000-7
Agriculture	31	28	20	13	4
Industry	25	33	39	43	48
Services	34	39	41	44	48

Source: World Development Indicators 2009

In 1960, the structure of the Ghanaian and Malaysian economies were similar. About a third of the value added as a percent of GDP was from agricultural activities. Five decades later, the structure of the Ghanaian economy has remained the same while that of Malaysia has become more oriented to industrial and service activities.

Table 7: Ghana - Share of Labor Force in Agriculture, Industry and Services (%)

Sector	1960	1970	1980	1990	2000	2007
Agriculture	64	58	53	63	55	56
Industry	14	17	20	10	14	13
Services	22	25	27	27	31	31

Source: Various Editions of Quarterly Digest of Statistics, Ghana Statistical Service. World Tables 1984 and various editions of World Development Indicators 2009

Table 8: Malaysia - Share of Labor Force in Agriculture, Industry and Services (%)

Sector	1960	1970	1980	1990	2000	2007
Agriculture	63	56	50	21	14	14
Industry	12	14	16	32	31	31
Services	25	30	34	47	55	55

Source: World Tables 1984, World Development Indicators 2009, and Yearbook of Statistics-Malaysia 2008

Tables 7 and 8 show that in 1960, the share of the labor force in both nations was similar. Over 60% of the labor force was engaged in agricultural activities (cocoa cultivation or rubber tapping). Five decades later, over 50% of Ghana's labor force is still employed in

agricultural activities compared to Malaysia's 14%. Tables 5-8, show that structural change has occurred in Malaysia and not in Ghana. This change in Malaysia has been accompanied by advances in the distribution of income as shown in figure 6 of chapter 2. A rising tide seems to have lifted all boats in Malaysia.

### 3.4 Why Divergence? – An Explanation

The review of literature and evidence presented shows two nations similar at independence, but different five decades later. From the literature, factors explaining the divergence have included political instability and corruption, the absence of a connection between savings, investment and exports, poor investment in human development, a lack of diversification in economic activities, an absence of an entrepreneurial class, poor regional spillover effects and influence from the regional economy, and the role of foreign direct investment in building up capacities in various sectors of the economy especially in industry.

Asare and Wong (2004) and Khan (2009) stressed the importance of political instabilities to the divergence of development between Ghana and Malaysia. Political instability in Ghana started with a coup d'état against the government of Dr. Kwame Nkrumah in 1966. Subsequent coup d'états in 1972, 1978 and 1981 interrupted efforts to build a stable atmosphere for the pursuit of development goals. Years of coup d'états have corresponded with declines in real GDP. Real GDP declined by 2.5% following the 1972 and 1978 coups and in 1982, a 6.9% decline in real GDP was experienced after the 1981 coup d'état. In Malaysia, the only blemish on political stability occurred on May 13<sup>th</sup>, 1969. Ethnic violence between Chinese and Malay groups in Kuala Lumpur, then part of the state of Selangor threatened political stability. In the aftermath of the events of May 13<sup>th</sup>, government

was strengthened and various incarnations of the same party (now Barisan Nasional) has won every election (BBC, “Two countries’ contrasting tales”, April 4<sup>th</sup>, 2005).

The connection between savings, investment and exports has been poor in Ghana and SSA as Akyuz and Gore (2001) observed. Political instability and corruption have interrupted efforts to create and sustain this nexus. Recent advances by the Ghana Export Promotion Council are a step in the right direction but, aggressive efforts to build such a nexus are needed and the state’s role in such efforts cannot be underestimated.

Commitment to education, health and infrastructural development has also been poor in Ghana. To make matters worse, Ghana is among the leading countries affected by brain-drain. Many young and skilled Ghanaians have either left or are leaving the country in search of greener pastures. Malaysia’s commitment to improving education, health and infrastructure is evidenced in the development indicators reported. According to Schatz (2007), the provision of primary and secondary education played an instrumental role in the economic development of small towns like Lawas in Sarawak, Malaysia.

In Ghana, the economy remains undiversified as agriculture continues to be the most important sector. Creating value in the agriculture has been missing because of the failure to link the sector with industry. In Malaysia, government action towards diversification in and between agriculture and industry improved productivity. For example, industrial capacity was built up in the oil palm industry through the tactful use of tariffs and the establishment of agro-processing plants by the state and private sector. In general, economy-wide diversification has allowed Malaysia to better withstand changing international conditions that affect several of the products the country produces.

The role of domestic entrepreneurial activity in economic development is crucial no matter how that entrepreneurship arises. Unlike Ghana, domestic entrepreneurship in Malaysia is truly unique because it is overwhelmingly dominated Chinese entrepreneurs<sup>5</sup>. While there is no reason to believe that a particular group of people are inherently endowed with certain entrepreneurial proclivities, the role of the Chinese in Malaysia is truly phenomenal. Their entrepreneurship is perhaps because of the non-bumiputera (non-*sons of the soil*) or non-preferred status that they occupy in Malaysia. In other parts of East Asia, domestic entrepreneurial activity has been aggressively created and/or driven by state action by creating the institutional framework that engenders and supports such entrepreneurship.

The Association of Southeast Asian Nations (ASEAN) has been an important economic bloc for Malaysia. Many of the countries in the bloc have showed tremendous progress in recent years. At the very least, ASEAN has presented to Malaysia and the world a stable region for which to trade and do business with. Besides ASEAN, countries in northeast Asia, particularly Japan and South Korea have provided excellent examples of growth and development for Malaysia. Dr. Mahathir Mohammed's *Look East* initiative drew some inspiration from the progress made by other East Asian nations. In contradistinction to ASEAN, the Economic Community of West African States (ECOWAS) has spent most of its

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<sup>5</sup> After waves of migration to Malaysia, the Chinese have taken over and controlled economic activity all over Malaysia. Petty trading, automotive repairs, civil engineering, cement production, and any other activity that one may think of is more likely than not going to be owned by a Chinese entrepreneur. In the case that it is not owned by a Chinese, there is a high possibility that Chinese individuals will be involved in the technical staff responsible for the execution of tasks. In their discussion of the Chinese in Sarawak, Malaysia, T'ien, Ju-K'ang (1997), trace the origins of the industriousness of current day Malaysian Chinese to their ancestors who travelled up large and dangerous rivers like the Rajang to establish shop-houses. Many of these shop-houses remain today, even in traditionally Malay societies along the coastline and in the interior regions of Borneo. In my travels through Sarawak, Malaysia, I was truly amazed to find Chinese shop-houses, restaurants, plywood firms etc in places like Tebedu (along the Indonesian border), Santubong, Kuala Lawas (traditionally Malay community), Trusan (near Lawas Town). In Kuching and Kota Samarahan, Sarawak, it appeared that Chinese entrepreneurs owned nearly all *sendirian berhad*s (enterprises).

time on issues of civil strife and political turmoil. The region also hosts many of the world's poorest nations.

The role of foreign direct investment (FDI) in Malaysia's economic development is well documented. "Generally, FDI has played an important role in the development of the manufacturing sector in Malaysia [and] Malaysia received substantial amounts of FDI [...] higher than other ASEAN-4 countries namely Thailand, Indonesia and the Philippines" (Tsen 2005, p. 92-94). FDI inflows helped Malaysia to build up necessary capacities in agriculture and industry as well as improve its export performance in several sectors.

On the contrary, FDI flows to Ghana have been limited for many reasons including the political risk that international investors associate with the West African sub-region. Abor, Adjasi and Hayford (2008) analyzed FDI data from 1991-2002 to show that changes in policy to encourage FDI in growth enhancing sectors like agriculture can improve development in Ghana by boosting export performance.

In conclusion, development indicators for Ghana and Malaysia have shown divergence. Further understanding of East Asian development is required if Ghana is to learn from that experience. A deeper analysis of the role of the state in the process of economic change must be understood to provide a complete understanding of the divergence observed. Chapter 4 is dedicated to this task and discusses the role of the developmental state in economic development.

## CHAPTER 4

### DEVELOPMENTAL STATE AND ECONOMIC DEVELOPMENT

*“Wealth creation is no longer considered just a function of nature and markets; effective statecraft is involved as well. Eliciting entrepreneurship and facilitating the creation of new productive capacities require a more complicated involvement in the affairs of citizenry than simply eliciting loyalty and good behavior. The capacity required for what I will call the states ‘transformative role’ is correspondingly greater”-(Evans 1995)*

Economic development<sup>1</sup> as a bona fide field in economics was born after WWII. The focus of this new field was to broaden the understanding on the necessary steps to increase capital accumulation and the general well-being of war ravaged countries in Europe as well as Japan. The rise of newly independent countries particularly in Africa increased the importance of this new field. In the earliest literature on development, little emphasis was placed on how development in these countries had occurred in the past and what lessons that past held for the future.

Defining the appropriate role of the state in development and social progress has been a central concern of policymakers since the beginning of capitalism and the rise of development economics after WWII made this aspect of economics even more important (Chang 2003). Earliest scholars and practitioners of development focused on ways through which government-engineered growth could be achieved given the superiority of Keynesian economics<sup>2</sup> but, the declining importance of Keynesianism and the rise of neoliberalism in the 1970s shifted the focus of scholarly work in economic development towards market (in

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<sup>1</sup> Arthur Lewis’s “Economic Development with Unlimited Supplies of Labor” was influential in the birth of development economics. Lewis also served as Ghana’s chief economic adviser from 1957-58.

<sup>2</sup> Simon Kuznets (1971) and others attempted to provide a detailed account of past development patterns, however, their efforts were not the main focus of the newly found field in economics. The dominant theoretical force in the post WWII era was Keynesianism given its triumphs during the Great Depression. Given that Keynesianism was blowing through the air, most of the early theories of economic development were heavily influenced by the contributions of John. M. Keynes (see Toye 2003).

the neoclassical sense) inspired growth (Chang 2003, Toyé 2003, Jomo KS and Reinert, E 2005 and Fine 2006).

The discussion in this chapter is geared towards reintroducing the role of the state in development. This chapter will discuss the developmental state theory widely accepted by heterodox development economists and shed light on development thought prior to the 1940s and 1950s. The goal of this chapter two fold. First to reiterate the importance of the developmental state paradigm to countries like Ghana and many others in SSA gripped by the cold hands of underdevelopment and second, to identify important features of development throughout the history of development policy making.

#### 4.1 Developmental State Paradigm

Chalmers Johnson<sup>3</sup> (1982) argued that credit for the exceptional development of Japan after WWII should go to the tactful government policies dating back at least to the 1920's. He also praised the work of Castells (1992) and Onis (1991) as advancing and refining the concept of the developmental state (Johnson 1999, p. 36).

Castells (1992) added to the concept by providing a definition of the developmental state. He stated that “a state is developmental when it establishes as its principle of legitimacy, its ability to promote and sustain development, understanding by development the combination of steady high rates of economic growth and structural change in the productive system, both domestically and in its relationship to the international economy” (p. 56).

Onis (1991) summarized literature on the developmental state in his article “The Logic of the Developmental State”. His summary of Johnson (1982), Deyo (1987), Amsden

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<sup>3</sup> His “MITI and the Japanese Miracle: the Growth of Industrial Policy, 1925-1975” was the seminal work in developmental state theory. He also coined the term developmental state to refer to the policies of the Japanese state that led to rapid industrialization and economic development.

(1989) and Wade (1990) provided a better understanding of the “institutional and sociopolitical basis underlying the capacity of the East Asian states to implement effective and coherent development strategies” (p.110). He concluded that “the logic of developmental state rests precisely on the combination of bureaucratic autonomy with an unusual degree of public-private cooperation” (p. 115).

What then are the attributes of the developmental state? Below are excerpts from Johnson’s seminal 1982 work revealing the defining attributes of the developmental state.

1. The developmental state is CONSISTENT in its pursuit of development objectives.

There is an unwavering COMMITMENT to development. He noted the following:

[A] State’s first priority will define its essence...for more than 50 years the Japanese state has given its priority to economic development. Some of the Japanese states priorities for economic development, such as the imperialism of the Pacific War, were disastrous, but that does not alter the fact that its priorities have been consistent (p. 305-306).

Overcoming the depression required economic development, war preparation and war fighting required economic development, postwar reconstruction required economic development, and independence from U.S. aid required economic development. The means to achieve development for one cause ultimately proved to be equally good for other causes. There are striking continuities among the state’s various policy tools over the prewar and postwar years (p. 308).

2. The developmental state is an ACTIVIST state. It is not an overseer but rather an active participator in the development process. Trial and error, soliciting private sector involvement and engaging the private sector to ensure the achievement of development goals is its biggest priority. The development state EVOLVES in light of the changing needs of the society in which it is embedded in. Change is welcomed so long as it does not detract from the overall developmental objective.

All states intervene in their economies for various reasons... The United States is a good example of a state in which the regulatory orientation predominates, whereas Japan is a good example of a state in which the developmental orientation predominates. A regulatory, or market-rational, state concerns itself with the forms and procedures – the rules, if you will – of economic competition, but it does not concern itself with substantive matter (p.17-19).

The fundamental problem of state-guided, high-growth system is that of the relationship between the state bureaucracy and privately owned business... Japan developed and attempted to implement three different solutions to this problem – namely, self-control, state control, and cooperation. None of them is perfect, but each is preferable to pure laissez faire or state socialism as long as forced development remains the top priority of the state (p. 309-310).

3. The developmental state is WELL-STAFFED, RISK-TAKING, LEGITIMATE and DEMOCRATIC<sup>4</sup>.

The first element of the [Japanese] model is the existence of a small, inexpensive, but elite state bureaucracy staffed by the best managerial talent available in the system. The second element... is a political system in which the bureaucracy is given sufficient scope to take initiative and operate effectively. The third element... is the perfection of market-conforming methods of state intervention in the economy. The fourth and final element... is a pilot program like MITI (p. 314-320).

Johnson's description of the Japanese economic miracle received mixed reviews among academics and policymakers. In academic circles, many considered his work as heresy. Hollerman (1983) and Yamamura (1983) argued that "economists will incidentally quibble with some of Johnson's formulations" and that "Johnson has unnecessarily alienated many economists" (referring to neoclassical economists). Beason and Weinstein (1995) also

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<sup>4</sup> According to Johnson (1982), in the first element of the Japanese model, the duties of the bureaucratic staff include the identification of industries to be developed (industrial structure policy), the best means of rapidly developing the chosen industries (industrial rationalization policy) and to oversee competition in those sectors to ensure their economic health and effectiveness as well as their focus on the overall developmental agenda. In the second element of the model, he showed that the legislative and judicial branches of government were restricted to safety valve functions. Thus their roles were to ensure compliance, while the role of bureaucratic staff was to assist in the building up of entrepreneurial capacities in the economy. In the third element of the model, Johnson highlighted the importance of the creation of governmental financial institutions to provide credit to entrepreneurs as strategic capabilities were being established and grown. Finally in the fourth element, he stresses the internal democracy that existed in MITI. See pages 314-320 for more details on the four elements identified by Johnson.

criticized the role of the Japanese government in its economic miracle. They argued that Japanese industrial policy transferred resources from high to low growth sectors and added that 'industrial policy stories are fundamentally unconvincing for most economists' because they are rarely supported with data.

In spite of the criticism Johnson's work received, his ideas served as a foundation for research on the role of the state in the economic development of other East Asian countries. Amsden (1989), Castells (1992), Wade (1990), Evans (1995) and many others have built on the developmental state theory of Chalmers Johnson to help broaden the understanding on the role of the state in East Asian development.

Amsden (1989) discussed South Korea's developmental state. In chapter 4 of her seminal work "Asia's Next Giant", she made a case for the Korean state as an entrepreneur of last resort and showed that even though the canons of conventional economic theory were violated by Korea, its economy was able to grow at astounding rates. Like Johnson, Amsden credited the judicious use of intervention from the Korean state for their economic transformation. As an example of government intervention, Amsden used the example of the creation of the Pohang Iron and Steel Company (POSCO)<sup>5</sup>. She showed that POSCO was instrumental in making Korea a world power in the production of steel and steel products all of which helped the country's automotive and shipbuilding industries. Amsden noted that the strength of the Korean bureaucracy allowed for excellent relationships to be established

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<sup>5</sup> In the 1970s and 80s, POSCO became one of the largest producers of steel products in the world and surpassed all of the steel producers in the US. POSCO was also efficient haven't benchmarked and borrowed production technologies from Nippon Steel in Japan. Further, POSCO was able to capture over half of the market share for imported steel from Japan. The Kwangyang Steel plant also made tremendous strides in making Korea one of the world's leading producers of steel products. See Amsden 1989 (p. 295-297). Kwan S. Kim (1995) argued that Korea's development success was brought forth by a neo-mercantilist model which was characterized by a series of government interventions which go beyond the minimalist advocated by neoclassical and market-oriented economists.

between the state and industry (*chaebols*). Further, the bureaucracy was staffed with the brightest students from the top universities across the country.

According to Castells (1992) East Asian developmental states succeeded because of their ability to construct an efficient and technocratic state apparatus. He stressed that “the fundamental element in the ability of developmental states to fulfill their project [of development] was their political capacity to impose and internalize their logic on societies” (p. 64). Thus the ability to control state-society relationships was essential to success in these nations.

Wade (1990) discussed the central role of the Kuomintang government in the economic transformation of Taiwan. He showed that Taiwanese institutions like the Council on Economic Planning and Development (CEPD) and the Industrial Development Bureau (IDB), acted like Japan’s MITI. Bureaucrats, planners, engineers and technicians from the top universities in Taiwan formed the staff at these institutions. The main objective of the CEPD and IDB was to ensure that public and private sector activity was in accordance with national development plans. He showed that state-owned enterprises (SOE’s) were used at a great extent but not to the detriment of private sector activity. As in Korea, SOE’s were instruments of industrial and economic development. Wade added that strategic interventions in increasing return sectors and the ability of the state to *govern*<sup>6</sup> the market created the atmosphere for rapid accumulation and development<sup>7</sup>.

As a response to the rising tide of literature on the role of the state in the economic transformation of East Asia, the World Bank published its famous *East Asian Miracle*:

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<sup>6</sup> Wade argued that the Taiwanese state was involved in a variety of sectors and its ability to “filter out” unnecessary investments ensured that the developmental focus was always intact and that private sector activities were governed in such a way as to maximize the social benefit. The bureaucracy was crucial and an apt civil service was essential to the execution and success of the governments’ initiatives.

<sup>7</sup> Also see Brautigam (1996, p. 173).

*Economic Growth and Public Policy* in 1993. The treatise accepted the role of the state in the economic transformation of first and second tier East Asian economies but argued that this role had been overemphasized in some circles. The report argued further that if East Asian states did not intervene as much as they did, development in the region would have been even faster especially since they had the basics right, a claim vehemently opposed by the work of Evans (1995), Stein (1996), Fine and Jomo KS (2005) and Chang (2002, 2003, 2007 and 2008).

Evans (1995) critically assessed the neo-utilitarian view of the state accepted by mainstream economists. He argued that this model was simplistic, asocial and insufficient in explaining the dealings of the state in the process of economic transformation especially in East Asia and suggested that a newer model based on the insights of economists like Polanyi, Gerschenkron and Hirschmann was needed. He suggested a comparative institutional approach and introduced the concept of embedded autonomy. Evans (1995) argued that;

What the comparative institutional tradition offers is a spelling out of some roles that the state might be called on to fulfill if the process of economic transformation is to move forward, and some suggestions as to what kind of institutional characteristics might be necessary for the state to have a chance at playing these roles (p. 32)

Evans identified four important roles that the state might be called on to fulfill. They are custodial, demiurge, midwife and husbandry roles. As a custodian, the state serves as a regulator and provides caretaking in the sense of protection and policing. The neoclassical ‘minimalist state plays the custodial role’ (p. 78). In the demiurge role, the state becomes directly involved in the production activities. The states’ involvement may be complementary to private enterprise although it is often a complete replacement for private enterprise. “Playing demiurge implies strong assumptions about the inadequacy of private capital” and

“SOE’s are the concrete embodiments of demiurge” (p. 79). As Amsden (1989) showed with the example of POSCO, the role of demiurge was particularly important in Korea.

Rather than playing the role of demiurge, Evan’s argues that the state can assist entrepreneurs in risk taking. The state can achieve this by guaranteeing credit and by helping reduce the uncertainty that surrounds the activity. Wade (1990) and Brautigam (1996) presented several examples of the careful use of credit by the Taiwanese state to promote private sector entrepreneurial activity. This role of the state is referred to as midwifery by Evans.

The fourth role described by Evans is husbandry. This role involves cultivating, nurturing and prodding those entrepreneurial activities that have been awakened by the ‘midwife’ state. Husbandry is a more refined midwifery role. Midwife involves drawing entrepreneurs into particular sectors, and the role of husband takes those entrepreneurs further to make to make them successful. Husbandry is less demanding than midwifery because it represents more of a public-private initiative but it is more difficult because of the risk of vested interests capturing the state (p. 80-81).

Evans argued that the ability of states’ to effectively execute their roles depended on the ‘embedded autonomy’ they had. Embeddedness “implies a concrete set of connections that link the state intimately and aggressively to particular social groups to whom the state shares a joint project of transformation” (p. 59). Autonomy refers to the states’ ability to “provide institutionalized channels for the continual negotiation and renegotiation of goals and policies” (p. 59). Thus embedded autonomy requires strong state-society relationships, a strong commitment to developmental goals and a strong and efficient bureaucracy with the ability to execute those goals.

To further explain his concept, Evans discussed three different states: predatory, developmental and intermediate. The predatory state “preys on its citizenry, terrorizing them, despoiling their common patrimony, and providing little in the way of services in return” (p. 45). The predatory state is a strong state, but what it is lacking is the bureaucracy necessary for it to execute its roles. The predatory state is also autonomous if we define autonomy as the ability simply do whatever it wants, however, this autonomy is not embedded because it is not shaped by societal forces. Evans noted that neoclassical economists often lump all states in with the predatory state<sup>8</sup> and unfairly judge the state as well as its capacity to bring about development.

In the developmental state, “individual maximization must take place via conformity to bureaucratic rules rather than via exploitation of individual opportunities presented by the invisible hand” (p. 49). The developmental state has a strong and efficient bureaucracy that allows for exceptional delivery of services that engender, support and sustain private sector ingenuity to meet overarching developmental goals. Further, the developmental state is embedded in the society, but is also autonomous.

The intermediate state lies between the predatory and the developmental states’. Embeddedness and autonomy in this state is stronger than the predatory state but less than the developmental state. “Imbalance could take the form of either excessive clientelism or an inability to construct joint projects with potential industrial elites” and “joint projects may be possible in certain sectors or certain periods but degenerate into clientelism or isolated autonomy in other sectors or other periods” (p. 60). Thus in the intermediate state there is incoherence and inconsistency of policies.

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<sup>8</sup> Many states in SSA bear close resemblance to the predatory state. These states are often embedded along ethnic and tribal lines rather than national lines. Evans noted further that the generalization that all states will tend towards the predatory state is misguided especially if we look at East Asian states.

Figure 12, below shows the policy spaces of the predatory, developmental and intermediate states. Let the following be true;

E: Embedded and A: Autonomy, Then  $(E \cap A)$  represents 'Embedded Autonomy'. In the predatory state, there is no intersection of embeddedness and autonomy. This feature is common in most states in SSA. In the developmental state, the intersection of embeddedness and autonomy is what allows the state to carry out its roles effectively. The size of the intersection of E and A distinguishes the developmental and intermediate states.  $(E \cap A)$  for intermediate state  $<$   $(E \cap A)$  for developmental state as shown in the third diagram.

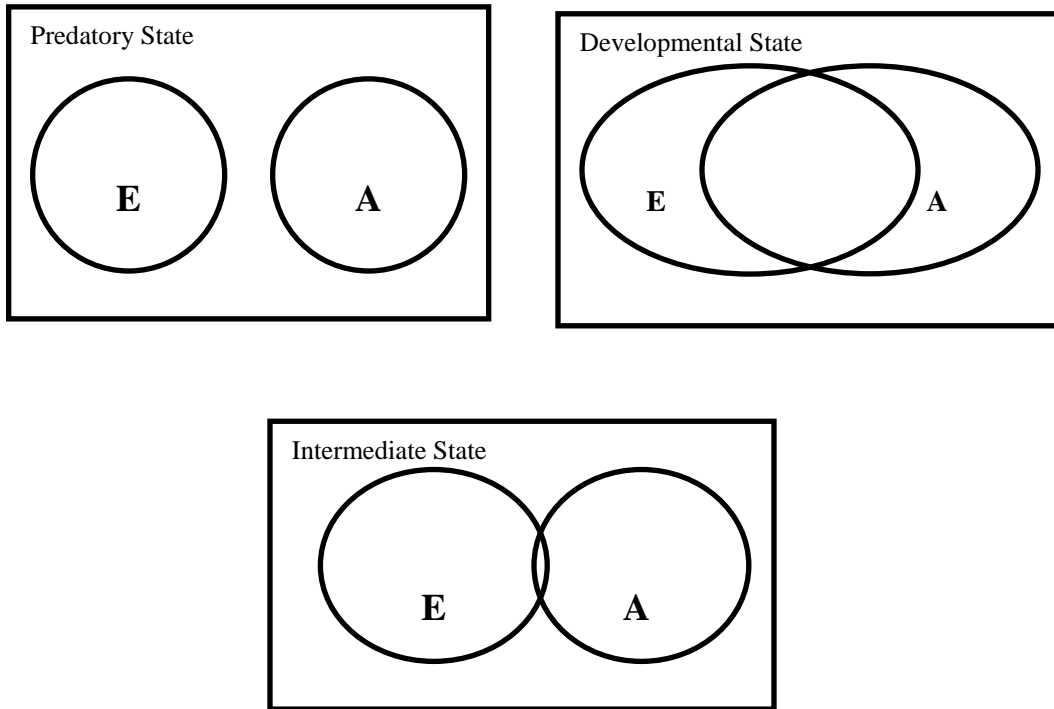


Figure 12: Predatory, Developmental and Intermediate States. Based on Evans (1995)

Mkandawire (2001) and Ikpe (2008) have also advanced knowledge on developmental states. In *Thinking about Developmental States in Africa*, Mkandawire (2001), sought to clarify the characteristics of the developmental state and ponder on its possibility in SSA. He noted that the developmental state should “not be deified into some kind of omnipotent and omniscient leviathan that always gets what it wants” (p. 291). He stressed the

importance of the social engineering process that created developmental states and dispelled attacks by neoclassical theorists that developmental state theory was a call to dirigisme.

Mkandawire presented convincing arguments on the possibility of democratic developmental states in SSA. He pointed to the fact that during the 1960's, SSA had states that were developmental in their aspirations as well as in their economic performance. He argued that developmental states were consistent with democracy and democratic developmental states such as Botswana and Mauritius pointed to their possibility in SSA<sup>9</sup>.

Ikpe (2008) made very important contributions to the discussion of developmental states. She asserted that the developmental state paradigm continues to be a powerful tool in explaining structural change in developing countries even in the era of globalization (which pushes for a greater role of the market over the state). She noted that dynamism has characterized the developmental state especially in the era of globalization. "Rather than postulating the death knell for the developmental state, one may observe the evolution of the DSP's scope as an analytical tool" (p. 7)

Ikpe took the discussion of the developmental state further by engaging the issue of the developmental state and the agriculture<sup>10</sup>. She contended that the successes of developmental states were heavily based on the ability of their states to channel surplus generated in the agricultural sector into the industrial sector. Drawing on the insights of Clute (1982), Akyuz, Chang and Kozul-Wright (1998) and Francks (1999), she argued that agricultural development is very important to the developmental state's ability to implement industrial policy and achieve structural transformation. She noted that the recognition of this

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<sup>9</sup> Using Botswana and the island nation of Mauritius as examples, Mkandawire presented evidence on the growth rate of real GDP in SSA and East Asia to show the superior performance of many countries in SSA.

<sup>10</sup> Ikpe sought to reintroduce the discussion of agricultural development with the developmental state especially since most scholars of developmental states tend to focus on industry.

fact was especially crucial in SSA given the continued importance of the sector to many countries in the region.

In addition to her emphasis on agriculture, Ikpe made an important theoretical contribution with her argument that;

The term developmental state is premised upon outcomes and...is an ex-post accolade following economic success [...] rapid and sustained economic growth and the structural transformation of the economy as evidenced by the experiences of Japan, South Korea and Taiwan (p. 5)

Lastly, Ikpe argued that the relevance of the developmental state paradigm in SSA suffers because many countries in SSA simply do not have an example of a developmental state to emulate<sup>11</sup>.

#### 4.2 Thoughts on Development Prior to World War II

Regarding thoughts about development, “what happened after World War II was only a separation (rather than a birth) of ‘development economics’ from the body of economics in general” (Szentes 2002, p. 156). The roots of development thinking and its entire tool of analysis can be traced back to William Petty and his experiences in and around the Cromwell period in Ireland (Goodacre 2005). A careful look at the classical development economics of Arthur Lewis, Albert Hirschmann and others shows an astonishing continuity of thought since the mercantile period (Jomo KS and Reinert 2005).

#### 4.3 Mercantilist Thought on Economic Development

Mercantilism was dominant until Adam Smith sharply criticized its logic and usefulness in his *Wealth of Nations* (1776). In the mercantile period, government-created

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<sup>11</sup> Asare & Wong (2004) made a similar argument in their discussion of divergent development between Ghana and Malaysia. Also it is important to note that Mkandawire’s (2001) assertion that developmental states are possible in Africa and that Botswana is an example to be emulated is in contradistinction to Ikpe’s argument on the lack of valid examples in Africa.

monopolies ruled and the exchange of goods and services through international trade was important. The accumulation of bullion and a focus on exports rather than imports were essential to national wealth. The mercantile system was an import substitution system, the main goal of which was to create and sustain comparative advantages in areas of the economy where increasing returns to scale existed. Once comparative advantages were achieved, free trade was to follow (Porter 1990, Reinert, E and Reinert, S 2005).

In the context of development, mercantilist thought pointed to three important facts about the development process. First, mercantilism involved setting national benchmarks. Second, it involved the identification of backward and forward linkages in and between various sectors of the economy. Development was activity-specific, and targeting those activities with the most connections to other sectors of the economy was important. Third mercantilist thought justified the protection of local industry on the grounds that it created employment, wealth and the capacity for the country to increase its accumulation.

#### *National Benchmarking*

“One of the key tools of mercantilism, as well as its inspiration, was benchmarking successful and less successful nations” (Reinert, E and Reinert, S 2005, p. 6). Using Spain and the Dutch Republic and accounts from mercantilists and scholars of mercantilism, Reinert, E and Reinert, S (2005) showed that the Spanish economic failure and the success of the Dutch served as important benchmarks for England and other nations in Europe. Appropriate policy initiatives and actions from the Spanish and Dutch experiences were carefully studied for their adoption in England and elsewhere. Josiah Child, a former Governor of the British East India Company and a staunch advocate for mercantilism argued

that the economic progress of the Dutch, presented a great opportunity for England. Child (1668[1959]) noted that;

The prodigious increase of the Netherlanders in their domestick and forreign trade, riches, and multitude of shipping, is the envy of the present, and may be the wonder of all future generations: and yet the means whereby they have thus advanced themselves, are sufficiently obvious, and in a great measure imitable by most other Nations, but more easily by us of this Kingdom of England (p. 41).

If we intend to have trade of the world, we must imitate the Dutch, who make the worst as well as the best of all manufactures that we may be in a capacity of serving all markets, and all humors (Child 1693, p. 90 in Jomo KS and Reinert, E 2006, p.7)

Mercantilist scholars all realized that benchmarking successful nations with similar characteristics was an important piece to development. The thoughts of these scholars point to need for national development planning based on successful experiences of similar countries.

#### *Activity-Specific Development and Backward and Forward Linkages*

Mercantilist scholars recognized that some activities were more beneficial for capital accumulation and development than others. “It was clear to most astute observers that the wealth of Holland rested on the synergic interdependence of manufacturing, long-distance trade and fisheries, where ‘one factor gave strength to the other and vice versa’” (Serra [1613], in Jomo KS and Reinert, E 2005, p. 8). Furthermore, “starting in the 1700s, great emphasis was put on the beneficial synergies between manufacturing and agriculture: only where there was manufacturing, was there successful agriculture” (Reinert, E and Reinert, S 2005, p. 9).

#### *Industrial Protection*

Industrial protection in the mercantile system was context specific. “Protecting manufacturing industry could be the right thing to do in one context, while promoting free

trade could be the right thing in another” (Reinert, E and Reinert, S 2005, p. 10). Once government-granted monopolies were deemed necessary for development, they were aggressively pursued with the goal of creating comparative advantages. Once comparative advantages were gained, protectionist tendencies were abandoned and firms were allowed to participate in international trade. Protection and support particularly for the manufacturing sector were justified on the grounds of wealth and employment creation. The overriding goal of mercantilism was to align public and private vested interests by encouraging “nations into increasing return industries that create virtuous circles of development” (Reinert, E and Reinert, S 2005, p. 9).

According to Reinert, E and Reinert, S (2005), the three principles discussed above are an absolute must for any country wishing to progress from poor to rich. The context in which these principles can be applied will be different thus the recognition of changing international conditions is important. Reinert, E and Reinert, S (2005) argued additionally that mercantilist thought on development in the right context has been proven right time after time whether in Holland and England in the 15<sup>th</sup>-17<sup>th</sup> centuries or in Japan, Korea and Taiwan in the 20<sup>th</sup> centuries<sup>12</sup>.

#### 4.4 Classical Political Economy and Development Economics

##### *Adam Smith, Mercantilism and Economic Development*

Adam Smith is credited for his fierce attack on mercantilism (especially in his *Wealth of Nations*). However, a careful look at all of Smith’s work in regard to mercantilist thought and development presents a confused Adam Smith who is arguable at best “a misunderstood

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<sup>12</sup> Reinert, E & Reinert, S (2005) summarized the insights as follows: (i) national wealth cannot be created or based on raw material production in the absence of a manufacturing/increasing returns sector; (ii) an inefficient manufacturing/increasing returns sector provides a much higher standard of living than no manufacturing sector. Large-scale deindustrialization is therefore a crime to prosperity. They further argued that the services sector is also complimentary to primary sectors and can be wealth enhancing.

mercantilist” (Reinert and Reinert 2005, p. 15). Smith was a supporter of the Navigations Acts which were designed to protect English manufactures from the Dutch. He argued for the wisdom embedded in these Acts in spite of them being protectionist. Such support was inconsistent with his push for free markets domestically and internationally.

When *The Theory of Moral Sentiments* (1759) and the *Wealth of Nations* (1776) are taken together, Smith’s view on development is riddled with contradictory positions. Smith wished for the United Kingdom to be as prosperous as Holland and thus pushed for different policies at different times to reflect that desire. In spite of his contradictory positions, Smith’s message on the division of labor, capital accumulation and the role of the state in the economy have had tremendous implications for the conduct and practice of development<sup>13</sup> (Reinert, E and Reinert, S 2005, p. 15 and Peet and Hartwick 2009, p. 30-33).

*David Ricardo, Comparative Advantage and Development Economics*

Ricardo’s theory of comparative advantage underlay his push for free trade and reflected his thought on development. Using the example of two countries (England and Portugal) and two goods (cloth and wine), he demonstrated the advantages that would accrue to each country if they specialized in the production of those goods in which they have the lowest opportunity cost or comparative advantage.

Growth and economic development come from Ricardo’s system because any inefficiency particularly in the area of wasted time and effort in the production of goods in which a country does not have the lowest opportunity cost will be simply eliminated. Ricardo recognized that manufactures yielded more wealth than agriculture especially when marginal

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<sup>13</sup> In the *Theory of Moral Sentiments*, Smith is an ardent supporter of the government particularly with regards to its role in adding and promoting new manufactures but in his critique of the mercantile system, he takes the position suggesting his rejection of the economic system being supported by that same government. See Reinert, E & Reinert, S (2005, p. 17-18).

land was being brought under cultivation. In his chapter “On Machinery” in the last edition of his *Principles of Political Economy and Taxation*, that the incidence of machinery had the potential to increase the incidence of poverty while worsening the plight of the working classes since the source of income for the capitalist and workers differed<sup>14</sup> (Ricardo [1821]1973, Patnaik 2005, Peet and Hartwick 2009).

*John S. Mill, Ethics and Development Economics*

John Stuart Mill’s view on development can be seen from his writings *On Liberty* (1859), *Utilitarianism* (1863) and in his *Principles of Political Economy* (1909). Mill accepted Bentham’s utility theory and agreed that the encroachment of the government on individual’s rights to pursue their own happiness was never justified unless in the pursuit of an individuals’ happiness, they harm others and pose a danger to civil society. The government was to be a minimalist government which guaranteed that individual rights will be protected at all cost (Mill 1859 and 1863).

In his *Principles of Political Economy*, Mill made one of his most important contributions to classical political economy. He argued that state intervention was necessary especially in the area of distribution. He recognized that such redistributive efforts had to be society-specific if they were to be effective. Furthermore, Mill’s recognized the antagonism between workers and capitalists. He argued for an increased participation of workers in the accumulation process, improved child labor laws, increased education, worker ownership of factories and worker-capitalist partnerships. “Mill was a radical liberal who believed that

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<sup>14</sup> If workers and capitalists are rewarded from different sources and income inequality is likely, then there is room for the state to attempt to resolve some of these income discrepancies. One could take it further and argue that the state will be needed to protect society from the accumulation process that has improved its situation but yet threatens its very existence as Karl Polanyi did in his “A Great Transformation”. It is important to note that serious critiques of Ricardo’s comparative advantage and variants of it (like the Hecksher-Ohlin model) have rendered it a contentious theory. The model ‘contains a logical fallacy when used to argue that mutual benefit necessarily results from trade’, because it ‘assumes that both goods can be produced in both countries’ (Patnaik 2005, p. 31-41).

capitalism would eventually give way to cooperativism” (Peet and Hartwick 2009, p. 40). His contribution brought questions of ethics, general well-being and distribution of wealth more to the fore. Mill’s would be more interested in the social indicators of development.

### *Karl Marx and Development Economics*

According to Patnaik (2005), Karl Marx was perhaps the first development economist because he not only studied development under capitalism but also the development of capitalism. Marx’s thought on development emerges from the articles he wrote on British rule in India for the *New York Daily Tribune* in 1853 and later in his chapter on *The Modern Theory of Colonization* (Capital, Volume 1).

In these writings, Marx pointed out that colonization was an extension of the arm of capitalist whose quest for surplus value had no boundaries. The draining of surplus from India was immense with little obligations on the part of England. As Marx noted;

India alone has to pay £5 million in tribute for good government, interest and dividends on British capital, etc., not counting the sums sent home annually by officials as savings of their salaries or by English merchants as part of their profits in order to be invested in England (Marx [1887]1974 in Patnaik 2005, p. 71).

Furthermore Marx in a letter to N. F. Danielson (on February 19<sup>th</sup>, 1881) described surplus drain from India as “a bleeding process with a vengeance” (Habib, 1963 in Patnaik 2005, p. 71).

In spite of these harsh observations of Marx regarding the drainage of surplus, he noticed that the process of development in India necessitated the provision of basic infrastructure such as roads, railways. He also noticed that in the process of transforming India into a viable raw material production center for English manufacturing firms, tremendous destruction and exploitation of people occurred. Traditional social systems such as the self-sufficient village community where agriculture and industry were intertwined

were destroyed (Patnaik 2005, p. 68). Marx's perspective on development brings to the fore the negative aspects of the penetration of social formations distinct from capitalism by capitalist interests.

#### 4.5 Italian Origins of Development Economics

Development thought in Italy emerged in the 13<sup>th</sup> century with the realization that manufactures and industry enhanced national wealth at a much faster pace than agriculture. "Of the four largest European cities in 1500, only Paris was not in Italy" (Vries 1984, p. 35). Also, "other countries of Europe adopted the economic practices of the Italian city-states" (Wallerstein 1974 and 1980 and Reinert, S 2005, p.24). The decline<sup>15</sup> of Italy as an economic power and the movement of the country into the semi-periphery necessitated a search for new approaches to development (Cipolla 1970, p. 196-214 and Wallerstein 1980).

Key features of the scholarly works directed at developing Italy are similar to the views of mercantilist scholars discussed earlier. Italian scholars knew that industry and manufacturing needed institutional support particularly from the government if they were to grow and become an important part of the economy. For example, the Duke served as the 'entrepreneur of last resort' in the silk industry of northern Italy since it was difficult for individuals to enter that industry (Reinert, S 2005, p. 28). This is similar to the demiurge role advocated by Evans (1995).

Italian scholars contended that the engine of growth and development laid in the synergic relationships between industry, services and agriculture. Thus protecting industry

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<sup>15</sup> The decline was so severe and represented more than a 50% decline in the industrial activity in cities like Venice, Como, Milan, Genoa, Cremona, Florence and many others. For example in "Milan at the beginning of the seventeenth century there were between sixty and seventy firms making wollen cloths, with an overall output averaging 15,000 cloths a year. By 1709 there was but a single firm with an average annual production of around 100 cloths (Cipolla 1970, p.197). The decline in industrial activity in Italy coincided with the rise of Dutch, English and French economies and a movement of the core from Italy farther west. See Cipolla 1970 and Reinert, S 2005.

and identifying these synergic relationships dominated the work and views of these scholars. Serra (1613) noted that the growth of industry helped cities and urban areas by virtue of agglomeration economies.

He said;

The number of manufactures also benefits the city, in which diverse causes produce a great gathering of people, not only because of the manufactures (which would then be the cause of it all), but insofar as the two causes reinforce one another: that is to say that the number of manufactures increases the desirability of the place, as well as the volume of urban traffic, while on the other hand the number of manufactures in turn is a product of the said traffic and gathering of people (Serra 1613, p. 18 in Reinert, S 2005, p. 31).

Pietro Verri's axioms<sup>16</sup> of development emphasized the need for industrial protection. He argued that the judicious use of tariffs was necessary if industrial capacity and comparative advantages were to be built up across Italy.

#### 4.6 German Origins of Development Economics

“German economics was that of a backward nation attempting to catch up with its wealthier neighbours” (Reinert, E 2005, p. 48). German thought on development holds important insights for many countries around the world who find themselves in the situation Germany was in three to four centuries ago and again after WWII.

The German economic tradition was born out of the occupations of its scholars (many of whom were involved in public service in various small states across Germany). This tradition shared the belief of the mercantilists and Italians that the state was an important facilitator of growth and development and occasionally needed to serve as an entrepreneur of

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<sup>16</sup> On manufactured goods, Verri argued that tariffs on exported manufactured goods were bad for commerce and tariffs on imported manufactured goods were good for commerce. On raw materials he argued that tariffs on imported raw materials needed for domestic industry were bad for commerce while tariffs on exported raw materials needed for domestic industry were good (Verri [1764]1998 in Reinert, S 2005, p.38-39)

last resort<sup>17</sup> (Reinert, E 1999, p. 282). The main characteristics of the German tradition in economics as it relates to development thought can be summarized from the work of Dreschler (2004) and Reinert, E (2005). They are;

1. *Erfahrungswissenschaft and Praxisnahe*: actions and policies must be based on experience and must be close to reality. There is little to no room for metaphysical speculation and high abstraction<sup>18</sup>. History matters and the realization and understanding of the role of cumulative causation and context specific policies are important. Qualitative ‘*verstehen*’ approaches to policy making are favored and a non-mechanical understanding to the world is preferred (Dreschler 2004).
2. *Strukturzusammenhänge*: structural coherence and interdependencies characterize the economic system and understanding such interdependencies is a key step in the development process.
3. *Gottesähnlichkeit*: there is embedded in man, entrepreneurship and creativity. Man is always thinking and finding new ways to match experiences with existing knowledge to create new things<sup>19</sup>. From this conception, economic progress and harmony is man-made through hard work and commitment. “Passivity” is more likely to create ‘spontaneous disorder’ than ‘spontaneous order’” (Reinert, E 2005, p. 52).
4. Technology, new knowledge and a focus on production are keys to economic growth and development. A focus on the production of high value manufactures was important.

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<sup>17</sup> “The state is something through which, rather than against which, individual liberty and progress are gained” (Reinert, E 2005, p. 51).

<sup>18</sup> Ricardo’s work was criticized as being highly abstract and full of metaphysical speculation (Reinert, E 2005)

<sup>19</sup> This notion is similar to Veblen’s idle curiosity.

The discussion of development thinking from the mercantilist to the Germans reveals three important facts. First, industry adds more to national output than agriculture and structural change is an important indicator of growth and development. Second, national benchmarking, industrial protection and the identification of important synergic relationships in an economy are fundamental to that economy's ability to grow and develop. Third, the state has a far more important role to play than is espoused in neoclassical theory. The state must act as an entrepreneur of last resort as in Italy and must facilitate the building up of comparative advantages as in England. Further, the state must be committed to and justify its legitimacy by its commitment to the development of its people as in the case of Germany.

#### 4.7 Connecting the Recent with the Historical

Table 9 lists the similarities between the developmental state theory and development thought prior to WWII. A discussion of the similarities follows the table.

Table 9: Similarities between the developmental state and development thought prior WWII

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1. The state is a catalyst for development and an entrepreneur of last resort
  2. Strong state-society relationships and embedded autonomy are crucial for development
  3. Effective bureaucracies are necessary for development
  4. Agricultural development and industrial transformation must go hand in hand
  5. "Fixing and building new ladders?" (circumvention of international barriers to national development policies are necessary)
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State involvement in the economic development of East Asian economies has been similar to the period prior to WWII. Amsden (1989 and 2001) showed that through the creation of and assistance to *chaebols*, the South Korean state engineered the creation of "Asia's Next Giant". Careful, creation and protection of specific industries like the steel industry (with the creation of Pohang Steel Company), formed a necessary foundation for

other sectors to grow. National benchmarking is also evident in East Asia's development experience. Malaysia's *Looking East Policy*, promulgated by Dr. Mahathir Mohammed is an example. Wade (1995), Brautigam (1996) and Chang (2006), have showed that states in East Asia, governed their markets (promoting and yet protecting market participants) in a manner far broader than the minimalist neoclassical state.

National benchmarking was an important part of state development policy. As Child (1693) noted, imitating Dutch policies on commerce and industry was necessary for England's development prospects. Cipolla (1970), presented convincing evidence to show that Dukes and other state officials served as entrepreneurs of last resort in northern Italy to build up certain industrial capacities. Chang (2002) showed that industrial protection via the tactful use of tariffs played an important role in the industrial transformation and economic development of England and the United States. He noted further that contrary to popular belief, these countries have not been as free market as has been portrayed. Finally, state development policy was sector and activity specific in many instances prior to WWII. Sectors that maximized backward and forward linkages and created the most value were aggressively promoted, protected and developed (for example shipping in Holland and steel manufacturing in South Korea).

State-society relationships have also been very similar. As Reinert (2005) showed, German development had as a basis a strong state-society relationship<sup>20</sup>. This relationship ensured the necessary commitment towards national development objectives from the state and society. Polanyi (1944[2001]) points to such relationships with his discussion of the role of the Tudor government in England. In Japan, Korea, Taiwan, Singapore and Malaysia these

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<sup>20</sup> Migdal (1988) has an interesting discussion on the dynamics of state-society relationships including an argument that state strength is only acquired after "series of wrenching social dislocations" (p. 271). Castells (1990) shares this opinion (p. 58)

relationships have been extremely strong. As Johnson (1982) pointed out, policies of the Meiji period were crucial to establishing such relationships in Japan. The presidency of Park Chung Hee (South Korea), the activities of Kuomintang regime of Chang Kai-Shek, the governance of Singapore by Lee Kuan Yew and the governance of Dr. Mahathir Mohammed (and his relationship between Malays and Bumiputeras [mostly Malays] and the Malaysian state) have all been very strong. In varying degrees, these states have had the requisite embedded autonomy needed for them to execute their roles.

Some state-society relationships have been characterized by repression, oppression and racism towards some social groups however, they have been embedded enough to allow them to pursue developmental goals (see Jomo KS, 2001 in Stiglitz and Yusuf "Rethinking the East Asian Miracle" for more details particularly on Southeast Asia).

Reinert, E (2005) showed that the German bureaucracy was made up of well educated civil servants who were well trained to execute state functions. Johnson (1982), Amsden (1989), Wade (1990) and many others have shown that bureaucracies in East Asian countries particularly in Japan, South Korea and Taiwan were efficient because they recruited the best and brightest students from the top universities to staff agencies responsible for the conduct of development policy. The discussion of effective bureaucracies has often been attacked with the argument of corruption in the civil service, however as Castells (1990) pointed out that;

Corruption was widespread in South Korea, significant in Taiwan, much more limited (but present) in Hong Kong and Singapore. And yet the South Korean state or the KMT (Kuomintang) state were able to operate with a high level of efficiency, served by well-trained civil servants, and organized flexible lines that changed according to the needs of each stage of development (p. 63-64).

His observation is true in the case of Malaysia where corruption at the top levels of government appear to not permeate the lower levels of the civil service. Petty corruption is rare and basic state functions run smoothly and for the most part effectively.

Chang (2003) argued that Friedrich List's *Kicking Away the Ladder* is what characterized the development experience of now industrialized countries. That is violation of laws of free trade were used at various stages in the development of the UK, US and many other European countries however, in the aftermath of their development, a push for free trade and free markets is pursued to maintain and continue their existence as dominant economic powers in the world. Thus after climbing the ladder towards growth and development, these countries kicked away the ladder to prevent others from climbing it. The point of relevance here is that international conditions of trade and labor etc were violated by many countries and the experience of East Asia was no different. In fact Alice Amsden noted that, 'getting prices wrong' and in general getting the precepts of conventional economic theory wrong was what led to the rapid industrialization of South Korea.

Grabel and Chang (2004, pp. 202-205) and Ikpe (2008, p. 17) showed that although current international conditions imposed by the World Trade Organization (WTO) and others made it difficult for countries to pursue certain initiatives, these initiatives were not impossible. For example, Kearney (1990) and Meisenhelder (1997) showed that in the case of Mauritius, bilateral agreements with European countries for the export of sugar and sugar products, aided in the structural transformation of the island nation. They showed that Mauritius secured preferred status for its sugar and through time increased capacity for sugar processing, thereby replacing the export of crude sugar with processed sugar and a reliance on raw material production with manufacturing.

The discussion in preceding sections of this chapter has looked at the developmental state theory and development thought from a historical perspective. It has also highlighted advancements in the developmental state paradigm since Johnson (1982). The discussion so far has shown that development thought and practice since WWII is akin to that of East Asian developmental states.

Two important facts emerge from the discussion so far. First the developmental state offers the best description of the development experience since mercantilism. Second, for nations looking to develop their economies like Ghana, the principles of the developmental state and the adherence to heterodox approaches to development offer the best opportunity.

#### 4.8 Rediscovering the Role of the State in Development: Lessons from East Asia

If the developmental state best characterizes the development experience of now and late industrializing countries as has been argued so far, then a reclamation of the state and its roles must be the way forward especially for countries toiling in the trenches of poverty (UNCTAD 2007).

Wade (1990) offered ten important lessons from the East Asian experience. Even though not all of these lessons are applicable given regional differences between SSA and East Asia, they offer important insights and are thus worthy of discussion. They are;

1. *Use national policies to promote industrial investment within the national boundaries, and to channel more of this investment into industries whose growth is important for the economy's future growth.*

In SSA (Ghana), industries such as agro-processing present a great opportunity since significant portions of the population remain employed in the agricultural sector and the sector accounts for more than a third of the value added to GDP.

2. *Use protection to help create an internationally competitive set of industries.*

3. *If the wider strategy calls for heavy reliance on trade, give high priority to export promotion policies.*
4. *Welcome multinational companies, but direct their sales toward exports and inputs purchases towards local suppliers*
5. *Promote a bank-based financial system under close government control.*
6. *Carry out trade and financial liberalization gradually, in line with a certain sequence of steps.*

Many countries in SSA (including Ghana), have already experienced various levels of liberalization during the period of structural adjustment, however, these liberalizations have not yielded the anticipated results (Stein 1996, Akyuz and Gore 2001 and SAPRIN 2004)

7. *Establish a “pilot agency” or “economic general staff” within the central bureaucracy whose policy heartland is the industrial and trade profile of the economy and its future growth path.*

Such an agency must be well staffed with the best and brightest, adequately remunerated, and independent enough as to carry out its duties regardless of the change of government (especially in the era of pro-democracy initiatives in SSA). Japan’s MITI described by Johnson (1982) is an excellent example of such an agency.

8. *Develop effective institutions of political authority before the system is democratized.*

Of course, this lesson is historically specific to East Asia and is very difficult to replicate in SSA. As Mkandawire (2001) argued, developmental states that have democratic foundations are going to be the norm. Thus the creation of developmental states in SSA especially in Ghana must integrate multi-party politics and streamline the politics of development to ensure the continuity of development plans and policies.

9. *Develop corporatist institutions as or before the system is democratized.*

10. *Make piecemeal reforms even in soft states so as create an institutional configuration better able to support a modest industrial policy.*

The successful replication of these depends entirely on the commitment of the replicating nations. Ghana, has a unique opportunity to become the next (democratic) developmental state, however embedded autonomy must be achieved, statecraft must be reorganized, and far more importantly, a tangible and serious national agenda of development must be the driving force of current and future governments. Chapter 5 discusses the role of the developmental state in agricultural development using Ghana and Malaysia as case studies. The role of the Malaysian developmental state and lessons for Ghanaian agriculture will be highlighted.

## CHAPTER 5

### AGRICULTURAL TRANSFORMATION, RURAL DEVELOPMENT AND THE DEVELOPMENTAL STATE: A COMPARATIVE ANALYSIS OF THE CENTRAL REGION OF GHANA AND SARAWAK, MALAYSIA

*“It is in the agricultural sector that the battle for long-term economic development will be won or lost”-(Myrdal 1968)*

#### 5.1 Introduction

Agriculture’s importance to economic development has long been recognized by scholars and policymakers. In SSA, the relevance and potential of agriculture is well documented<sup>1</sup>. Many of the countries are agriculture based and have more than half of their labor force and about a third of their valued added to GDP generated by the agricultural sector.

Population growth coupled with rising food insecurities has made the need for agricultural transformation pertinent in SSA. In recognition of this, research and efforts by international organizations such as the World Bank, FAO and Gates Foundation have increased over the years. Mirroring agricultural transformation in East Asia has been an important part of such efforts. Understanding the interplay of private and public initiatives that deepened the relationship between agriculture and other sectors of East Asian economies while contributing to their economic development has served as a point of reference for many countries in SSA because of the similar initial conditions that existed between the two regions in the early 1960s (Karshenas 2001, p. 317).

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<sup>1</sup> In 2000, the FAO with the assistance of the Japanese government commissioned the Role of Agriculture Project to study agriculture’s role in poverty alleviation, food security, population dynamics and economic development in agriculture based economies. Also an important part of the Gates Foundation’s Global Development Program is agricultural development. Furthermore in 2009 budget of the Government of Ghana, there was a re-focus and commitment (at least on paper) to agricultural issues. Scholarly works by Kajisa et al. (1997), Boratav (2001), Karshenas (2001) and Sauber (2009) have all added to the discussion on agricultural development in Africa. Finally, the World Development Report (2008), focused solely on agricultures’ impact on development especially in agricultural based economies.

The case of Ghana and Malaysia is an archetypal example of agricultural transformation and stagnation. Similarities and differences of their initial and current conditions are presented in table 10. The table shows that rural agricultural populations were similar in the 1960s but dramatically different in 2008 and agricultural productivity per worker which is the ratio of agricultural value added to the number of workers in agriculture has risen fastest in Malaysia. The difference in 1990-92 was \$93 but in 2003-2005, that margin rose to \$205.

Table 10: Selected Agricultural Indicators for Ghana and Malaysia

	I		II		III	
	<b>Rural Pop (%)</b>		<b>Employment (%)</b>		<b>Ag. Productivity per worker (in 2000 \$)</b>	
	<u>1960</u>	<u>2008</u>	<u>1960</u>	<u>2008</u>	<u>1990-92</u>	<u>2003-2005</u>
Ghana	76.7	49.9	64	56	293	320
Malaysia	73.4	29.4	63	14	386	525

Source: World Development Indicators 2009

The remainder of this chapter provides a comparative analysis of agricultural transformation and rural development using Ghana and Malaysia as examples. The role of the developmental state in agricultural transformation is discussed and lessons from the Malaysian experience are highlighted so that they can be adopted where applicable in Ghana. All comparative analysis is based on field research and observations in the two countries from October to December 2009 and July through August 2010.

## 5.2 Methodology

To add a human perspective and to address issues of data deficiency especially in Ghana, a focused ethnographic study of stakeholders in agriculture was undertaken<sup>2</sup>. Focused

<sup>2</sup> Focused ethnographic studies are common in medical research and community based studies. It is my believe that if the goal is to learn from a small group of people the causal mechanisms of an activity or an event in their

ethnography differs from traditional ethnography because the topic of interest is specific and the focus is on the common behaviors and experiences that result from the shared features and interests of the participants. This method fits this dissertation given the specificity of the topic (agricultural transformation) and its focus on the common features of participants (farmers, fishermen, livestock keepers, scholars and policymakers in agriculture). This type of ethnography shines the spotlight on small elements in a society to help understand the unique experiences of individuals in that society (Mack et al. 2005, Richards et al. 2007). Table 11 highlights the differences between conventional and focused ethnography.

Table 11: Differences between Conventional and Focused Ethnography

Conventional Ethnography	Focused Ethnography
Long-term Field Visits	Short-term Field Visits
Experientially Intensive	Data/Analysis Intensity
Time Extensivity	Time Intensity
Writing	Recording
Solitary Data Collection and Analysis	Data Session Groups
Open	Focused
Social Fields	Communicative Activities
Participant Role	Field-Observer
Insider Knowledge	Background Knowledge
Subjective Understanding	Conservation
Notes	Notes and Transcripts
Coding	Coding and Sequential Analysis

Source: Knoblauch, Hubert (2005, September). Focused Ethnography [30 paragraphs]. *Forum: Qualitative Social Research [On-line Journal]*, 6 (3), Art. 44. Available at: <http://www.qualitative-research.net/fqs-texte/3-05/05-3-44.htm> [Date of Access: 11/17/2010]

Critics of focused ethnography argue that conclusions reached by such studies are superficial given the short time period involved but as Knoblauch (2005) contends, the duration of such studies is compensated for by another type of intensity: data and time.

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community, then this type of ethnography holds the best answers. See Gove et al. 1994. The first part of field work was based in the Central Region of Ghana and the second was based in Sarawak, Malaysia.

Questionnaires, focus groups and field-observations based on short field visits were extensively used. Field visits involved day trips to oil palm plantations and processing plants, cocoa, citrus, cassava and plantain farms, pineapple plantations and sorting facilities, pepper and rubber gardens, small scale copra processing, wet and dry paddy fields, marine and inland fisheries sites, poultry farms, piggeries and cattle ranches, aquaculture workshops, national farmers day celebrations and village and community markets.

Data collected was analyzed using simple statistical methods. Data was cross-checked where permissible with published data for consistency. A thematic analysis was used to identify the main issues faced by participants. Verbal consent was sought from all interviewees and data was stored and kept in line with institutional review board standards. Appendix A and B are the questionnaires and other interview questions used during field research.

### 5.3 Agriculture in the Ghanaian Economy

Ghana's agricultural sector employs 56% of the working population and contributes 36% of the value added to GDP. Cocoa is the most important crop and occupies a strategic position in the political economy of Ghanaian agriculture. The crop has been the symbol of Ghanaian agriculture since colonial times and in the 1960s, Ghana accounted for 33% of world cocoa production. Up to the 1980s, cocoa accounted for 45% of foreign exchange earnings and 65% of total exports. Since the 1980s, Ghana's dominance in cocoa has declined dramatically as countries like Cote D'Ivoire, Malaysia, Indonesia and Brazil have increased their production of the crop (Appiah 2004, Oduro 2000 and Essegbey 2009).

Crop farming accounts for an estimated 77% of all agricultural activities with fisheries and livestock and non-crop sectors accounting for 13% and 10% respectively.

Agricultural activities occur in six agro-ecological zones: coastal, guinea and sudan savannahs, tropical rainforest, semi-deciduous rainforests and a transition zone of semi-deciduous forests and grasslands. Variegated climatic conditions allow for the cultivation of many crops. Industrial crops such as cocoa and oil palm are cultivated in the forest regions. Roots, tubers, legumes and cereals are grown in the transitory zone, guinea and Sudan savannahs and the semi-deciduous forests. Fruit, vegetables and horticultural crops do well in the coastal plains. Table 12, shows the main crops cultivated in Ghana.

Table 12: Main Crops Cultivated in Ghana

<b>Group</b>	<b>Crops</b>
Cereals	Maize, Millet, Sorghum, Rice
Industrial Crops	Cocoa, Oil Palm, Coffee, Cotton, Tobacco, Shea Nut, Cola nut
Legumes	Cowpea, Bambara nut, Groundnut, Soybean
Fruits	Papaya, Avocado, Mango, Cashew, Watermelon, Banana (Plantain)
Vegetables	Tomato, Eggplant, Onion, Pepper, Okra, Cabbage, Lettuce, Carrot
Roots and Tubers	Yam, Cassava, Cocoyam, Sweet Potato

Source: FAO, Fertilizer Use by Crop in Ghana, 2004, p. 5

Climatic conditions provide varied rainfall patterns across the country. Growing periods are longest in the rainforests and shortest in the coastal plains and northern savannahs. Figure 13 shows growing periods across Ghana. The Western region has the longest growing period and largest rainfall totals. Rainfall totals are lowest in the Greater Accra Region, along the coast line and in the upper east and west regions. The Central Region has varied growing periods. In the interior, growing period is as high as 330 days and along the coast they are as low as 180 days. This variety allows for most crop groups to be cultivated in different parts of the region.

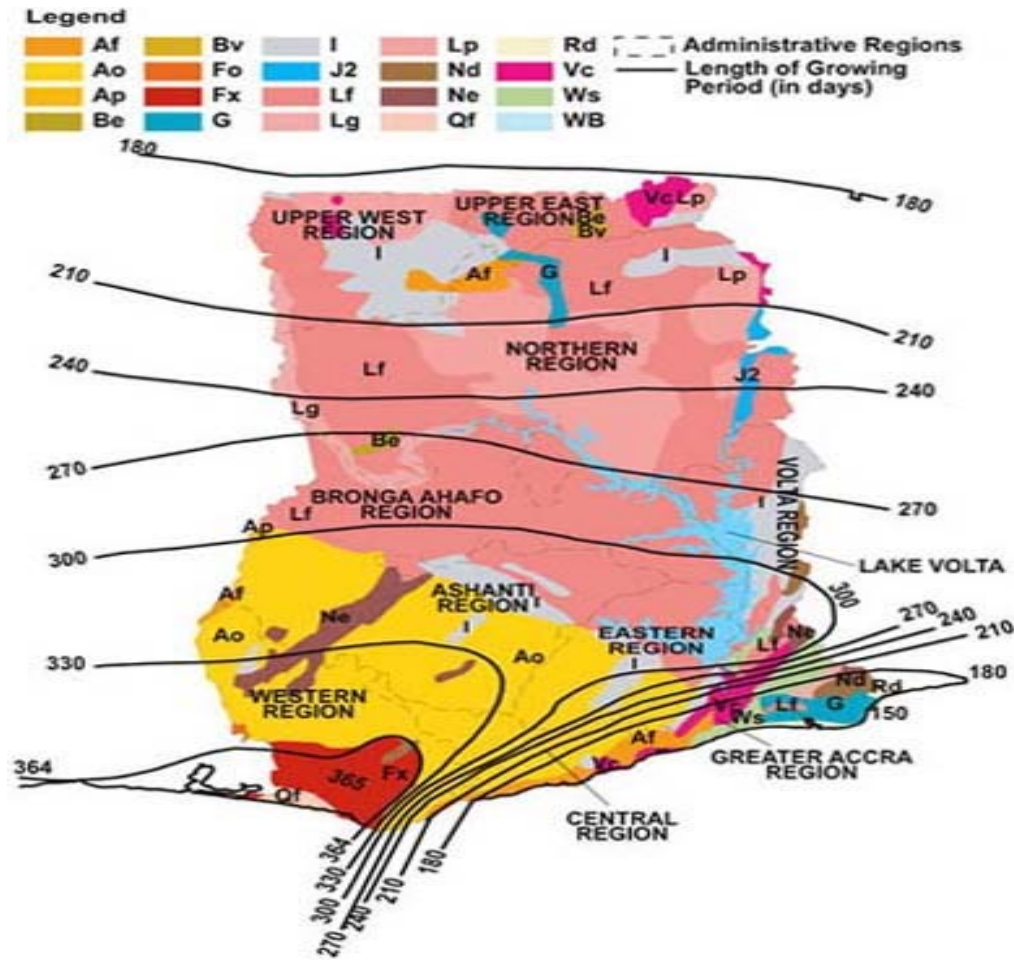


Figure 13: Agro-ecological zones of Ghana. Source: FAO, Fertilizer Use by Crop in Ghana, 2005, p. 3

Agricultural activity occurs on 7.1 of the available 13.5 million hectares of cultivable agricultural land. Smallholder agriculture dominates and most cultivation is rain-fed. About 90% of farm sizes are between 2-5 hectares and the potential for irrigation is tremendous as only an estimated 11,000 hectares of grassland are irrigated. Soil conditions in the country are favorable as Acrisols and Luvisols are the major soil types. For example ferric and orthic Acrisols make up more than 95% of the soils in the Central Region. Acrisols, Luvisols, Gleysols, Oxisols and Podzols are generally good to moderate in the cultivation of various crops including industrial tree crops such as cocoa and oil palm. These soils occur in a variety of vegetations but one constant is large quantities of rainfall (FAO 2004).

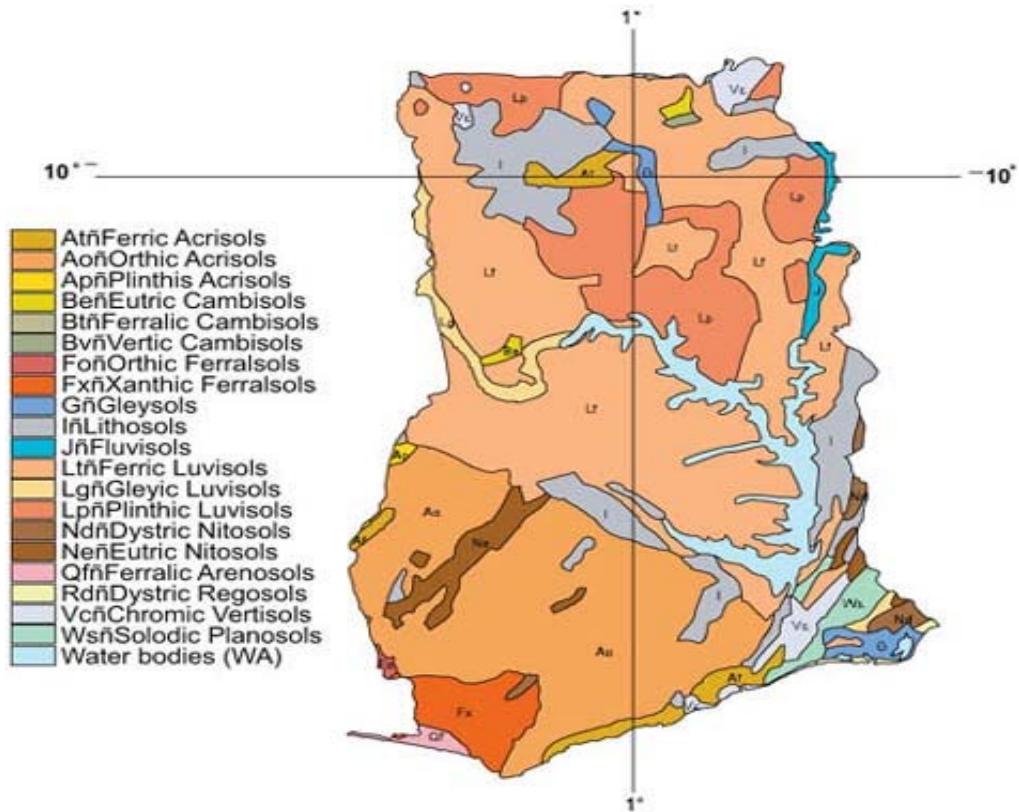


Figure 14: Soil Map of Ghana. Source: FAO, Fertilizer Use by Crop, 2005, p. 4

In spite of the tremendous potential for agriculture, productivity levels have generally been low. Figure 15 and 16 look at the area harvested and production data for some of the main crops. Area under cultivation has grown very slowly. For example area cultivated of cocoa peaked at 2 million hectares in 2004 and current levels are similar to those of the early 1960s. Oil palm has grown six fold to 352,800 hectares and cassava has grown eight fold to about 885,800 hectares. Paddy has also grown significantly. In absolute terms, production levels have increased the fastest for cassava and oil palm. In recent years, government action via the President's Special Initiative on cassava starch has transformed the crop into an industrial crop and boosted production levels (Essegbey 2009, p. 63).

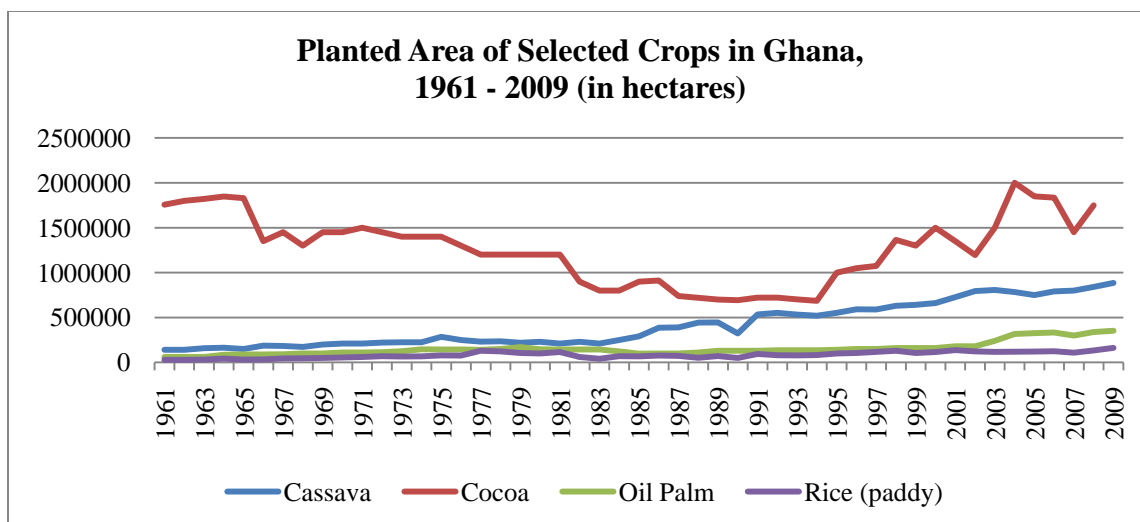


Figure 15: Planted Area of Selected Crops in Ghana, 1961-2009 (Data on cocoa for 2009 is missing). Source: FAOSTAT and Ministry of Food and Agriculture, Ghana

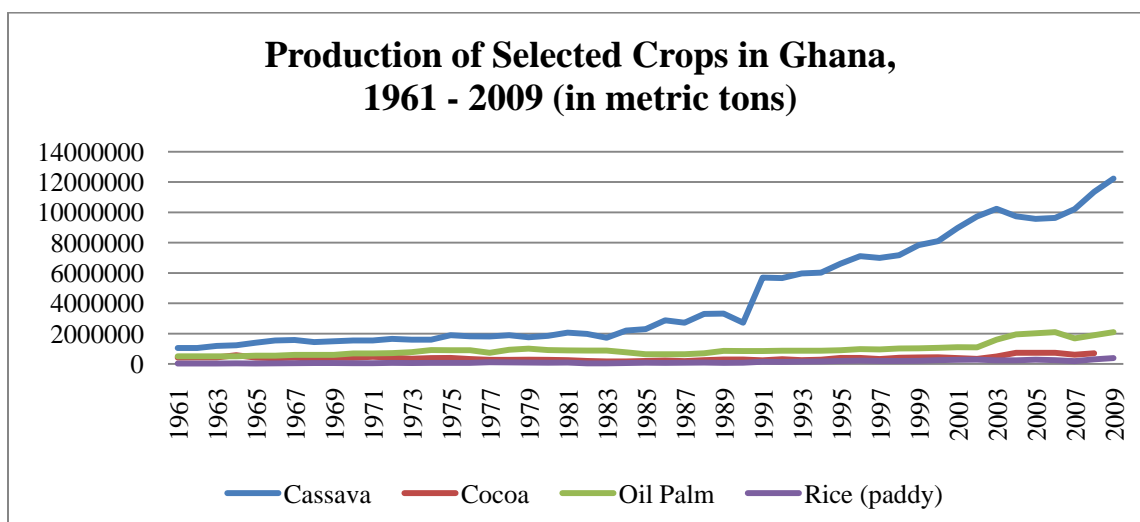


Figure 16: Production of Selected Crops in Ghana, 1961-2009 (data on cocoa for 2009 is missing). Source: FAOSTAT and Ministry of Food and Agriculture, Ghana

Tables 13 and 14 are simulated data based on average yield and achievable yield data for selected crops. Table 13 shows that even though yields have increased for nearly all crops since the 1970s, less than 50% of potential yields were realized. Cocoyam and plantains were the only crops to reach more than 75% of achievable yields.

Cassava has enjoyed increased production in recent years but was at only 50% of potential<sup>3</sup>.

Table 13: Average and Achievable Yields (in metric tons per hectare)

Crop	Average Yield				Achievable Yields	% of Yields Achieved in 2000s
	1970-79	1980-89	1990-99	2000s		
Maize	1	1.1	1.4	1.5	5	30
Rice	1	0.9	1.8	2.1	6.5	32
Millet	0.6	0.6	0.8	0.8	2	40
Sorghum	0.8	0.7	1	1	2	50
Cassava	7.9	7.2	11.2	11.8	28	42
Yam	5.3	5.2	11.7	12.5	20	62
Cocoyam	4.7	4.5	6.8	6.5	8	81
Plantain	5.8	5.5	7.6	8.7	10	87

Sources: Statistics, Research and Information Directorate (SRID), Ministry of Food and Agriculture, Accra. National Development Planning Commission, *Seven Year Development Plan (2008-2015)*, Chapter 5 and Asuming-Brempong and Nyanteng 2003, p. 21.

Table 14: Estimated Production if Yields reached Achievable Levels (in thousands of metric tons)

Crop	Average Production from 2005-2007	Production if Potential Achieved
Maize	1246	4153
Rice (Paddy)	269	833
Millet	168	420
Sorghum	295	590
Cassava	9978	23676
Yam	4125	6600
Cocoyam	1679	2066
Plantain	2682	3083

Source: Calculations based on data retrieved from Statistics, Research and Information Directorate (SRID) at the Ministry of Food and Agriculture, Accra, The Ghana Statistical Service, Accra. National Development Planning Commission, *Seven Year Development Plan (2008-2015)*, Chapter 5, Asuming-Brempong and Nyanteng 2003 and FAOSTAT

Fisheries resources in Ghana can be found along the country's 342 mile coastline and the 1.1 million hectares of inland waters (most of which is the Volta Lake) plus aquaculture. Aquaculture is a relatively new, but this source of fish is growing fast. There are ponds in

<sup>3</sup> Achieving potential yields are heavily dependent on near perfect conditions; however, action towards achieving at least 75% of the potential will make a tremendous difference in production levels. Irrigation, fertilizer use, demand conditions and purposeful government action towards particular crops can all influence yields. Estimated figures in table 14 are speculative, however, the point remains that achieving levels higher than current levels are possible.

eight of the ten regions (Fisheries Commission, Accra 2008). Like crop farming, the exploitation of fisheries resources is mostly done by small scale fishermen along coastal towns in four coastal regions. The port city of Tema in the Greater Accra Region remains the commercial fishing capital of the nation<sup>4</sup>. Landings for marine fisheries in Axim and Sekondi-Takoradi in the Western region and Moree, Elmina and Winneba in the Central region form an important part of marine fishing.

As global fish stocks have declined, so have marine fish landings in Ghana. Landings of the Atlantic Tuna and other pelagic species have declined tremendously (Ghana Marine Fisheries Research Department, 2007 and firsthand accounts of 31 small scale fishermen interviewed between 11/03/2009 and 11/28/2009). Fisheries statistics are reported in table 15-17. Periodic averages in table 15 show an increase in total landings by marine and inland fisheries. However, as figure 17 shows, landings from 2000-2006 have been declining for both sources in line with global trends. Table 16 shows that less than 500 hectares is currently being used for aquaculture. Fish farming employs an estimated 2,869 people across eight regions. Data on other fish culture is presented in table 17. In 2008, fish cages could be found in the Eastern and Greater Accra regions. Fish pens were only in the Volta region. Reservoirs covered about 9,184 hectares and could be found in six regions.

Table 15: Annual Fish Production by Source, 1970-2006 (5-Year Averages in Metric Tons)

	<u>1970-74</u>	<u>75-79</u>	<u>1980-84</u>	<u>85-89</u>	<u>1990-94</u>	<u>95-99</u>	<u>2000-2006</u>
Marine	184000	213000	225000	302000	317000	312000	332422
Inland	38000	40000	42000	57000	56000	73000	81363
Total	222000	253000	267000	359000	373000	385000	413785

Source: Fisheries Commission, Accra-Ghana

<sup>4</sup> Korean and Chinese fishing companies dominate commercial fishing in Ghana. Even though most commercial vessels are operated by Koreans and Chinese these vessels have what one fisherman referred to as “puppet Ghanaian managers” who secure licenses et cetera for Korean and Chinese firms. The fisherman also commented on the quality of the fish that reaches landing sites: “big fish are stored by the Chinese and Koreans, and juvenile fish not discarded in open sea are sold to local fish mongers”, Interview conducted on 11/3/2009.

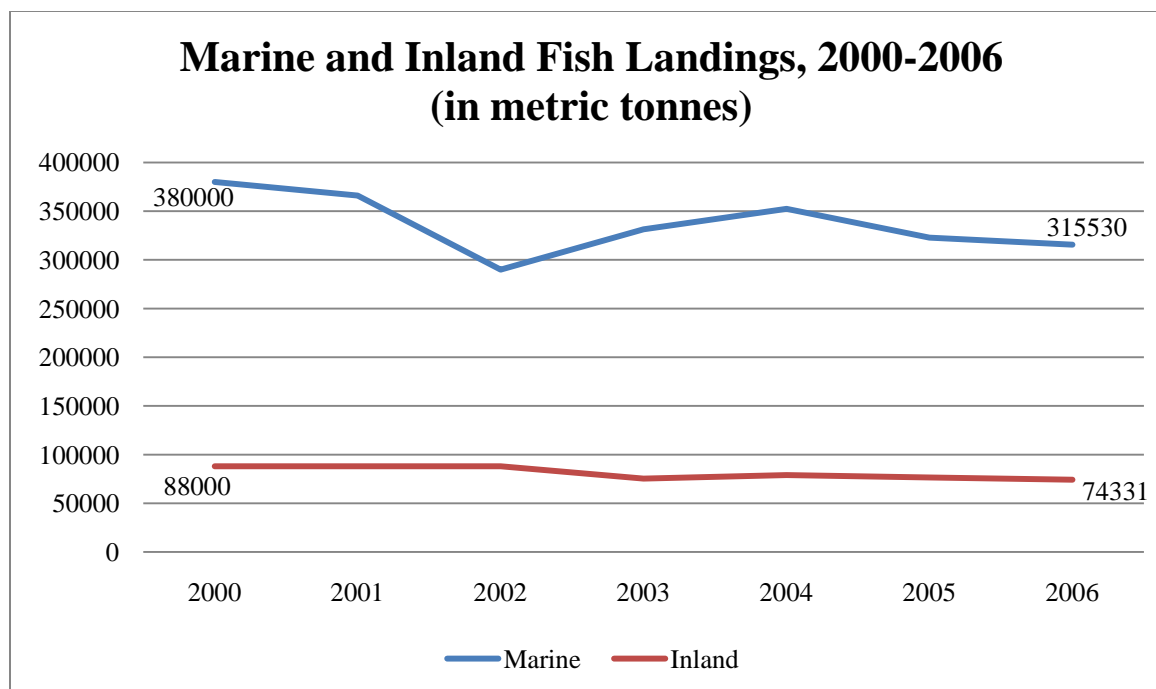


Figure 17: *Fish Landing by Source in Ghana, 2000-2006*. Source: Statistics, Research and Information Directorate, Ministry of Food and Agriculture, Accra.

Table 16: Aquaculture by Region (2008)

Region	Number of Fish Farmers	Number of Ponds	Number of Functional Ponds	Number of non-functional ponds	Total Surface Area in Hectares
Ashanti	304	746	746	0	118.71
Brong Ahafo	333	761	761	0	138.63
Central	253	633	610	23	39.91
Eastern	107	311	311	0	20.35
Greater Accra	64	233	207	26	39.5
Volta	143	308	54	54	67.35
Western	1650	2550	2550	0	59.1
Upper East	15	25	25	0	7.52
<b>Total</b>	<b>2869</b>	<b>5567</b>	<b>5264</b>	<b>103</b>	<b>491.07</b>

Source: Fisheries Commission, Accra, Ghana

Table 17: Cages, Pens and Reservoirs

<b>Region</b>	<b>Number of Cages</b>	<b>Surface Area in Cubic Meters</b>
Eastern Region	161	4003
Greater Accra	19	1263
<b>Region</b>	<b>Number of Pens</b>	<b>Surface Area in Hectares</b>
Volta	76	6.73
<b>Region</b>	<b>Number of Reservoirs</b>	<b>Surface Area in Hectares</b>
Greater Accra	18	18.62
Eastern	9	2.27
Northern	836	2135.6
Upper East	550	6542.65
Volta	10	29.6
Upper West	91	455.9

Source: Fisheries Commission, Accra, Ghana

Livestock production has increased in line with the population. Rearing cattle is limited to savannah regions and coastal plains due to the risk of tsetse fly infection in the forest regions. Poultry farming is common in all regions and piggeries are very limited in the Muslim communities of the north. Goats, sheep and other small ruminants are also reared in all regions. Table 18 shows estimated average periodic livestock population. The general trend has been increasing, however, pig and sheep populations have declined in recent period. In spite of increasing livestock population, Ghana remains a net importer of livestock products.

Table 18: Estimated Livestock Populations, 1970-2006 (5-year averages in 000s)

	<u>1970-74</u>	<u>75-79</u>	<u>1980-84</u>	<u>85-89</u>	<u>1990-94</u>	<u>95-99</u>	<u>2000-2006</u>
Cattle	700	902	1031	1167	1192	1238	1345
Sheep	800	1458	1821	2067	2194	2444	2354
Goats	700	1234	1583	2100	2150	2544	3559
Pigs	100	218	360	500	424	348	330
Poultry	3760	6155	6690	8300	11250	15934	26327

Source: Statistics, Research and Information Directorate (SRID), Ministry of Food and Agriculture, Accra, Ghana Statistical Service and Asuming - Brempong and Nyanteng 2003, p. 20

#### 5.4 Agriculture in the Malaysian Economy

The relative importance of agriculture to the Malaysian economy has decreased since independence. Value added to GDP by agriculture has declined to 4% in the 2000s. Employment in agriculture has declined to an estimated 14% of the working population (Department of Statistics-Malaysia, 2009). Declines in value added to GDP and share of employment has not meant that the sector has become unproductive. Rather, it has become more entwined with industry and services and continues to be an important part of the overall economy. Natural rubber once the face of Malaysian agriculture has given way to oil palm which is by far the most important crop in Malaysia today. Cocoa was important in the 1980s but its significance has declined tremendously<sup>5</sup>. Crop farming is undertaken by smallholders, commercial plantations, estates and government land development schemes such as the Federal Land Development Authority (FELDA). Plantation agriculture accounts for the majority of crop farming.

Industrial crop cultivation is complemented by other crop farming in pepper, paddy, fruit crops and vegetables. Livestock keeping, fisheries and other non-crop sectors particularly logging are very important to Malaysia. The main agro-ecological zone in Malaysia is the tropical rainforest. The major regions characteristically have similar rainfall patterns, lengths of growing period and thermal patterns during the growing seasons. The highest rainfall totals are in Sarawak and Sabah (Malaysia Meteorological Service Department, 2009, and FAO 2004, p. 1).

The terrain of peninsular and East Malaysia is characterized by coastal lowlands which slowly transition into mountainous inland territories. Unlike Ghana, fewer portions of

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<sup>5</sup> Area harvested of cocoa peaked in 1989 at an estimated 414,236 hectares. In 2009, the estimated area was only 20,561 hectares (Department of Statistics-Malaysia, 2009 and FAOSTAT).

the Malaysian landscape are isotropic. The interior of East Malaysia is very mountainous especially as the country meets Kalimantan (Indonesia). Crop groups cultivated in Malaysia are similar to those in Ghana but superior rainfall totals give Malaysia an edge in the cultivation of certain crops.

Figure 18 and 19 show agro-ecological zones for peninsular and East Malaysia (only Sarawak<sup>6</sup>). Figure 18 shows areas of histosols in the peninsular. Histosols are typically found in swampy forests and mangroves and thus it is no surprise that they are found close to the South China Sea and straits of Melaka (Malacca). Histosols are very poor soils for cultivation (FAO 2004). Regions in the south of the peninsular in the state of Johor for example are characterized as being without a regular dry season, an indication of the regularity of rainfall. In figure 19, undulating hills and other anisotropic terrain are common.

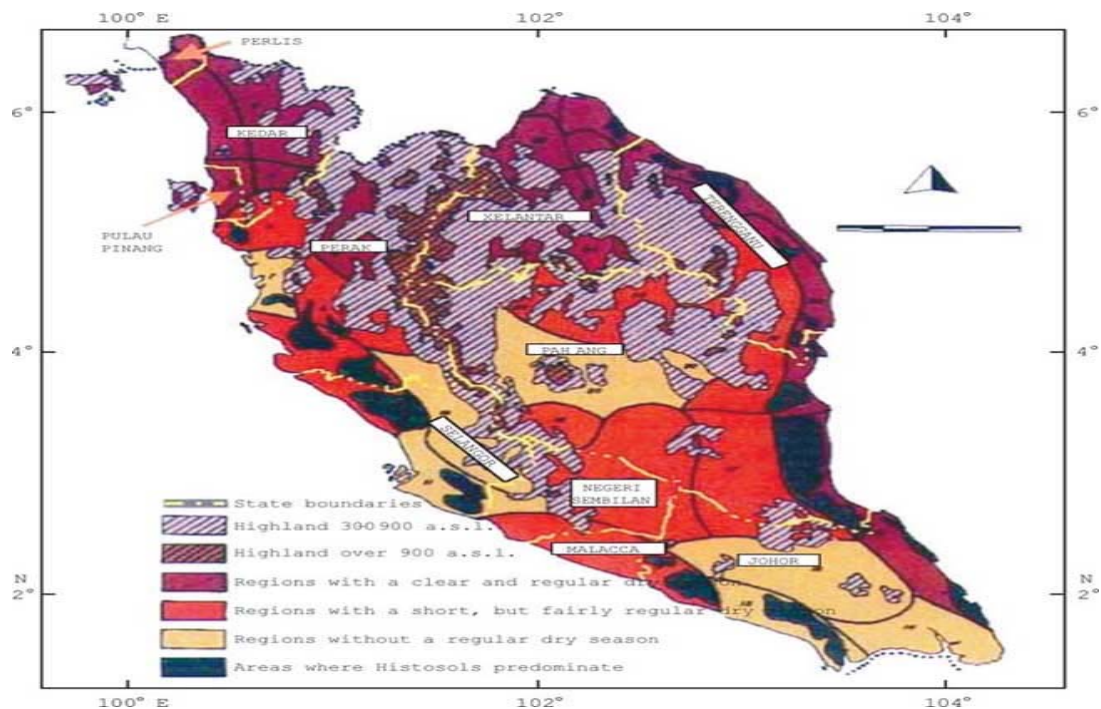


Figure 18: Agro-ecological zones of peninsular Malaysia. Source: FAO, Fertilizer Use by Crop in Malaysia, 2004, p. 7

<sup>6</sup> Conditions in Sabah are similar with respect to the agro-ecology (FAOSTAT 2004).

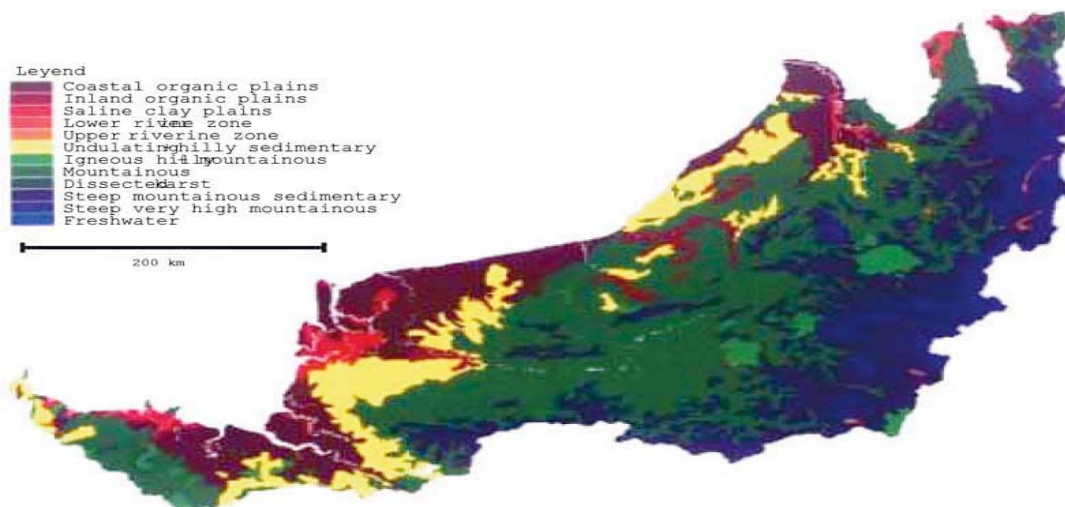


Figure 19: Agro-ecological zones of East Malaysia. Source: Department of Agriculture-Sarawak in FAO, Fertilizer Use by Crop in Malaysia, 2004, p. 10

Cultivable agricultural land in Malaysia is estimated to be about 14 million hectares; slightly larger than agricultural land in Ghana. Soil conditions in Malaysia are not the best. Heavy rainfall leads to tremendous leaching and the continued exposure of forest lands particularly in Sarawak and Sabah due to logging have worsened matters. Figure 20 shows the dominant soils of Malaysia. Coastal regions are characterized by histosols (including peat soils) which are cultivable in very limited circumstances. Acrisols characterize most country and are generally suitable for cultivating a variety of crops but more importantly tree crops.

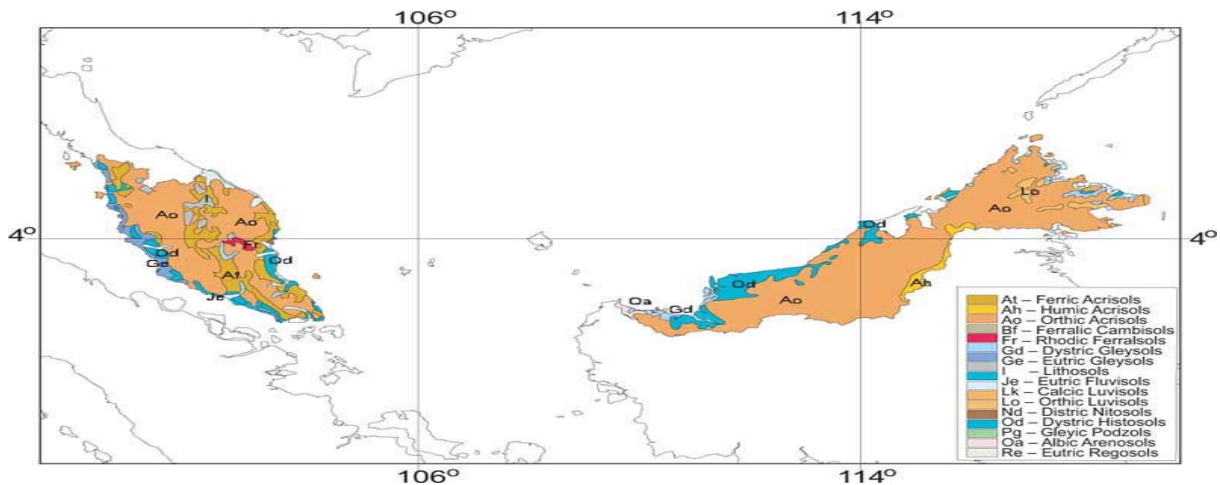


Figure 20: Map of Dominant Soils in Malaysia. Source: FAO, Fertilizer Use by Crop in Malaysia, 2004, p. 8

Climatic and soil conditions have contributed to extraordinary agricultural productivity in Malaysia. The country is largely self-sufficient in most food commodities. Table 19 shows estimated self sufficiency levels in a variety of food commodities. Of the ten commodities listed, self sufficiency is achieved in six with near sufficiency in rice.

Table 19: Malaysia's Self Sufficiency Levels in Food Commodities (in percentages)

Commodity	2010
Rice	90
Fruits	138
Vegetables	108
Fisheries	104
Beef	24
Mutton	10
Poultry	122
Eggs	115
Pork	132
Milk	5

Source: Murad, W., Mustapha, N., and Siwar, C 2008, p. 612 and Ninth Malaysia Plan (2006-2010)

Figure 21 shows the area harvested of selected crops in Malaysia. The decline of rubber and the increase in the cropped area of oil palm is amazing. Planted area of oil palm surpassed natural rubber in 1989 and has grown seven times since 1975. Area harvested of natural rubber has declined by 747,000 hectares since 1975. Area planted of paddy, coconuts and cocoa have all declined. A drive towards monoculture is evident in the data as more land is being brought under oil palm cultivation particularly in Sarawak and Sabah<sup>7</sup>. Figure 22 shows production data for the selected crops in figure 20. Oil palm has grown the fastest with an estimated 2009 production of 83 million metric tons. Paddy was estimated at 2,353,000 metric tons, natural rubber at 1,072,400 and cocoa at 27,955 metric tons. Paddy and oil palm

<sup>7</sup> In 2009, Sarawak had the largest number of immature oil palm in Malaysia at an estimated 193,746 hectares (MPOB, 2009)

outputs have been on the rise while natural rubber and cocoa have been declining (FAOSTAT, Malaysia Palm Oil Board, Malaysia Cocoa Board and Malaysia-Yearbook of Statistics 2008).

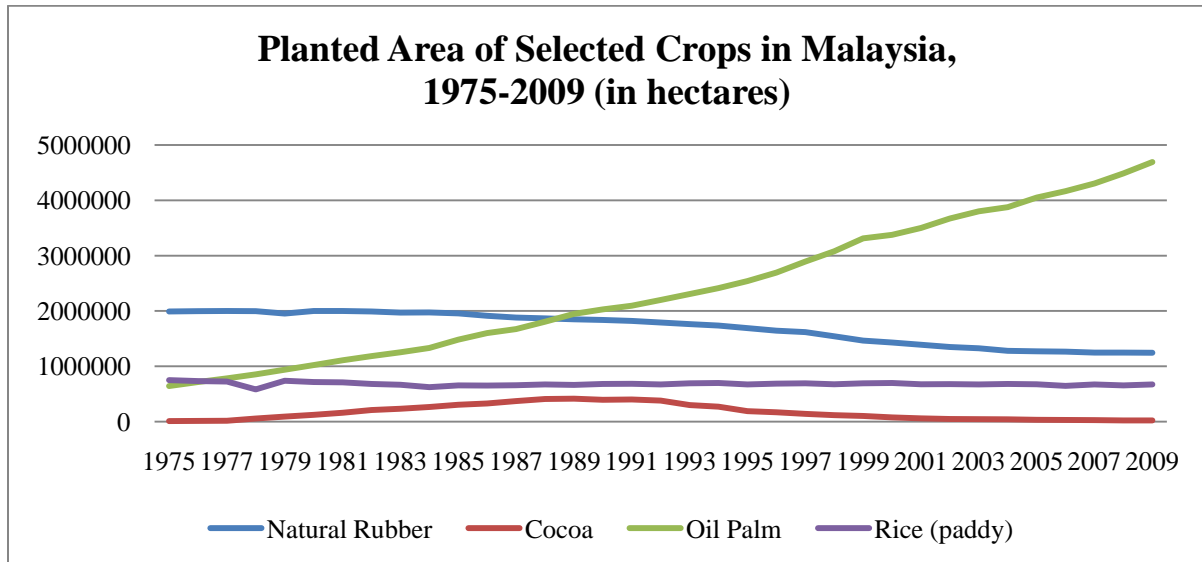


Figure 21: Planted Area of Selected Crops in Malaysia, 1975-2009. Sources: Malaysia Palm Oil Board, Malaysian Cocoa Board, Malaysia-Yearbook of Statistics 2008 and FAOSTAT

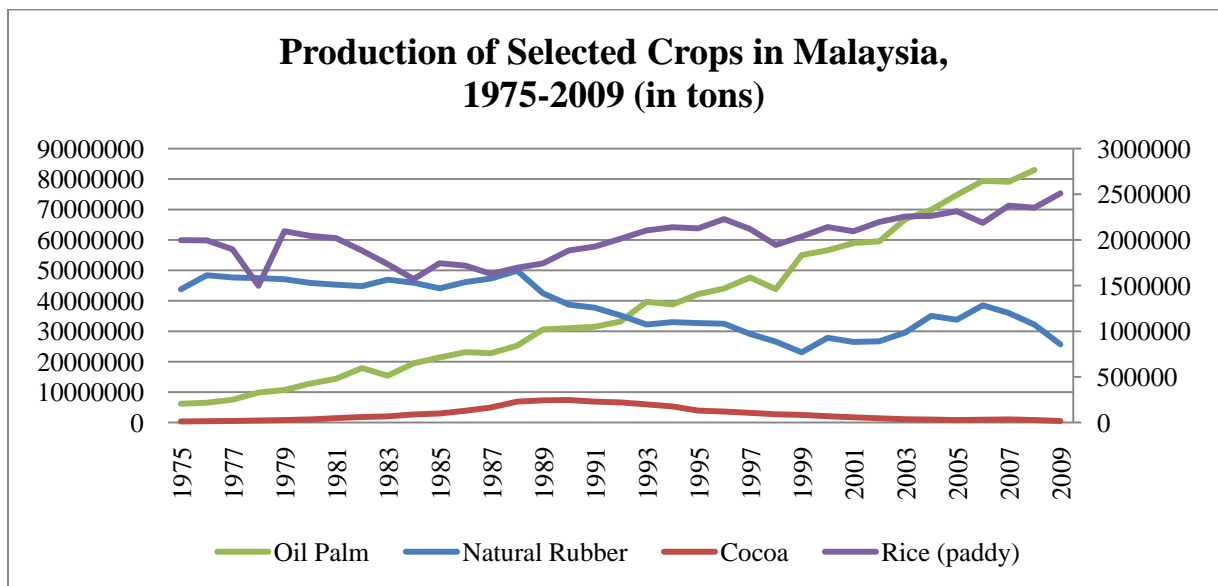


Figure 22: Production Estimates for Selected Crops in Malaysia, 1975-2009. Sources: Malaysia Palm Oil Board, Malaysian Cocoa Board, Malaysia-Yearbook of Statistics 2008 and FAOSTAT. Oil palm output can be referenced with the primary axis (on the left) and the output of other crops can be referenced using the secondary axis (on right).

The South China Sea and the many rivers of Malaysia provide fisheries resources for the country. The continental shelf is particularly wide in Malaysia. Marine landings have been increasing since the 1970s although growth rates have been declining as global fish populations have been dwindling. In 2008, the estimated tonnage was 1,394,531 metric tons. Aquaculture and inland fisheries have also grown tremendously since the 1970's. East Malaysia leads the country in aquaculture. Sarawak has the largest number of ponds and total surface area under fish culture and fish farmers. In 2008, the estimated production by aquaculture alone was 354,428 metric tons which is almost as much as total fish production in Ghana.

Figure 23 and table 20 present data on marine fish landings and aquaculture. Marine landings have been increasing at a decreasing rate over the last decade which is consistent with global trends. The significant production levels by aquaculture have helped Malaysia deal with declining fish stocks. Government policy initiatives such as the fishpond subsidy scheme have contributed to the increase in aquaculture in Malaysia.

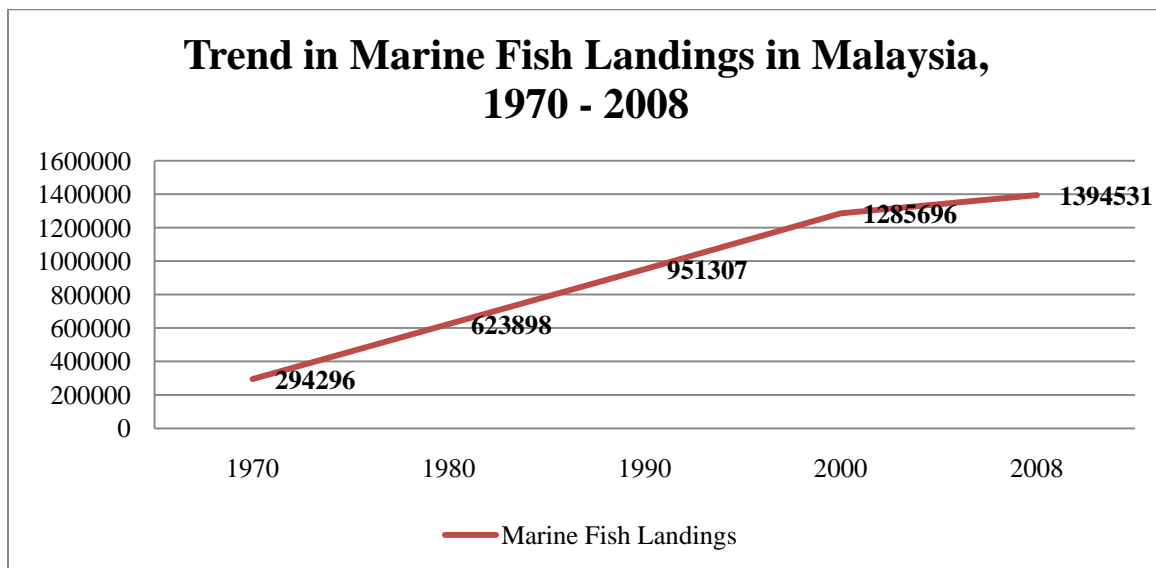


Figure 23: Trend in Marine Fish Landings in Malaysia, 1970-2008. Source: Calculations based on various editions of Annual Fishery Statistics, Department of Fisheries-Malaysia.

Table 20: Aquaculture by state (2008)

State	Number of Fish Farmers	Number of Freshwater Ponds	Total Surface Area (in hectares)
Perlis	117	345	26.14
Kedah	599	2032	169.86
Pulau Pinang/Penang	53	468	61.12
Perak	1226	3099	944.61
Selangor	329	1331	308.58
Negeri Sembilan	897	1864	309.5
Melaka	184	466	71.52
Johor	228	1862	208.54
Pahang	765	1636	272.31
Terengganu	531	1290	181.05
Kelantan	645	1757	151.55
<b>Total Peninsular Malaysia</b>	<b>5574</b>	<b>16150</b>	<b>2704.78</b>
Sarawak	9374	15754	1479
Sabah	5743	14178	732
<b>Total East Malaysia</b>	<b>15117</b>	<b>29932</b>	<b>2211</b>
<b>Total Malaysia</b>	<b>20691</b>	<b>46082</b>	<b>4915.78</b>

Source: Annual Fisheries Statistics 2008, Department of Fisheries, Malaysia.

Like Ghana, Malaysia's livestock population has grown in line with growing demand for livestock products. Poultry is the largest livestock group because of cultural and religious reasons<sup>8</sup>. The largest stocks of animals are on the peninsular. For instance, in 2008 it was estimated that Sarawak and Sabah had only 6.25% of the national cattle population (Malaysia-Yearbook of Statistics 2008, p. 65). Table 21 presents data on the estimated livestock population of Malaysia. Pigs mostly consumed by the Chinese and native groups of Sarawak and Sabah have increased over the years. Sheep and buffaloes have decreased while goat populations have seen resurgence in recent period. Chicken and other poultry have grown extremely fast over the last two decades.

<sup>8</sup> Halal (no pork) food operators in many parts of Malaysia ensure that chicken (ayam in Malay) and other poultry form the most important meat requirement. In most Chinese communities pork is served and in the rural communities of Sarawak, pork and wild boar (babi hutan) continue to be an important part of the dietary needs of the community.

Table 21: Estimated Livestock Population, 1970-2008

	1970	1980	1990	2000	2008
Cattle	325522	549522	667720	733892	796550
Goats	368776	342119	331278	237634	335952
Pigs	1086236	1837004	2678083	1807590	2027561
Sheep	39213	61283	205409	157070	110415
Buffaloes	310402	285339	205163	142042	127646
Chicken (1000 head)	37000	50800	57000	123650	190000

Source: FAO STAT, *Malaysia Yearbook of Statistics 2008*, p. 65-66

### 5.5 The Case for Central Region, Ghana and Sarawak, Malaysia

Country-wide analysis of agriculture is a big task for any individual researcher. In this dissertation, the analysis is focused on the Central Region of Ghana and Sarawak, Malaysia<sup>9</sup>. The choice of these two locations is based on their unique roles in the agricultural sectors of their respective countries, the climatic and soil conditions (largely Acrisols), the progress and potential of agriculture and the relative ease of research (I had contacts with institutions in both regions which assisted with fieldwork).

Central Region, Ghana and Sarawak, Malaysia are not the bread baskets of their respective nations but they are strong contributors to agricultural output. In one sense they are average to better than average agricultural locations. Each of the two areas has all three constitutive sub-sectors of agriculture (crops, fisheries and livestock) and this played an important role in them being chosen for this comparative analysis. Similar crops are also cultivated in both areas.

<sup>9</sup> Although the research focuses on these two areas, I travelled to other regions and states of the respective countries. In Ghana, I traveled to the Greater Accra, Eastern, Ashanti and Western regions. In Malaysia, I traveled to the Peninsular and visited Kuala Lumpur, Putrajaya and parts of Selangor. I also visited several parts of Sabah including its main city of Kota Kinabalu.

### 5.5.1 Central Region, Ghana

Ghana's Central Region is divided into seventeen districts for administrative purposes. The seat of regional government is Cape Coast. Figure 24 shows a map of the region with districts identified. The Agona, Gomoa and Upper Denkyira districts were recently realigned to bring the total districts in the region to seventeen. Komenda-Edina-Eguafo-Abirem, Cape Coast Municipal, Abura-Asebu-Kwamankese, Mfantseman, Gomoa and Awutu-Effutu-Senya districts make up the 104 mile coastline of the region.

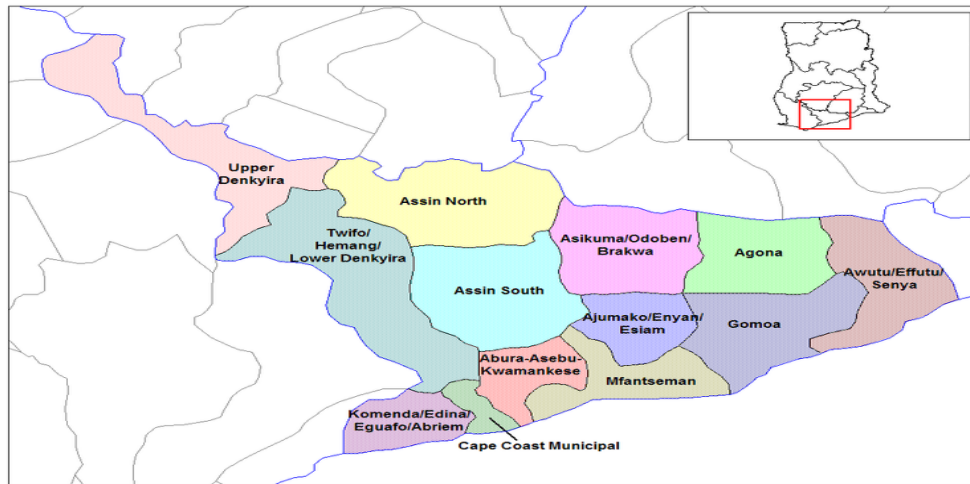


Figure 24: Map of Central Region of Ghana. Source: retrieved from [http://ghana-net.com/Documents/776px-Central\\_Ghana\\_districts.png](http://ghana-net.com/Documents/776px-Central_Ghana_districts.png) on November 10<sup>th</sup>, 2010.

The land capability and technical potential for agriculture in the region is immense. Total agricultural land is estimated at 1,454,569 hectares of which only 454,569 is currently under cultivation mostly by smallholders. Grasslands in the coastal plains allow for livestock keeping and rivers Offin and Pra, several lagoons, and the Atlantic Ocean provide fisheries resources. Marine fish landings in the region account for 25% of Ghana's total fish output. Fish farming and non-traditional agricultural activities like bee-keeping and snail farming are also on the rise.

In 2008, there were estimated 253 fish farmers, 610 functional ponds with a surface area of over 40 hectares, and 300 snail farmers in the region. The terrain of the region is isotropic with isolated hills and the highest point is 300 ft above sea level. The agro-ecological zones of the region are coastal savannah which quickly transition into moist semi-deciduous and tropical rainforests (*Population and Housing Census-Central Region*, Ghana Statistical Service, 2000 and CEDECOM 2009).

The main crops cultivated in the region include cocoa, oil palm, cassava, plantains, maize, coconuts, citrus, pineapples and other fruit crops such as papaya. Agro-processing facilities for oil palm and fruits are available in the region. The region is the leading producer of citrus in the nation and among the leaders in cassava and oil palm production. In spite of the potential for progress, economic and social conditions in the region are very poor and the region ranks among the top four by national poverty standards. Many rural communities lack potable water, hospital facilities and other basic social amenities. Rural development and structural change has been minimal. Agriculture is the main occupation of most individuals and the sector employs over two-thirds of working population and accounts for an estimated 52.3% of the economic output of the region. Agricultural development holds the key for long term economic development in the Central Region.

#### 5.5.2 Sarawak, Malaysia

Malaysia's Sarawak was carved out by the dynastic Brooke family starting in the mid 19<sup>th</sup> century (Rawlins 1965, Reece 2004). Administratively, it is divided into eleven divisions with the city of Kuching in the Kuching Division as the capital. Figure 25 shows Sarawak and its constitutive divisions. The state shares the island of Borneo with the state of Sabah to

the northeast and Kalimantan (Indonesia) to the south. Brunei Darussalam is nestled in the northeastern corner of Sarawak between the Miri and Limbang divisions.



Figure 25: Map of Sarawak, Malaysia. Retrieved from <http://dayakbaru.com/weblog08/2008/04>

The land capability and technical potential for agriculture in Sarawak is heavily hampered by the terrain of the state. Of the 12.3 million hectare land area, only 3.5 million can be considered as having any potential for agricultural activity. As Schatz (2007) notes, “there is a scarcity of good agricultural land” in Sarawak. Mass et al. (1986) noted that;

Of the land suitable for agriculture, about 1.64 million hectares are classed as marginal and consists mainly of hilly land suitable only for small-holders using hand tools for rubber or subsistence crops, leaving 1.84 million hectares as moderately suitable to suitable for commercial agriculture. Of the latter, only 207,000 hectares are free of some serious limitations to agriculture and are level enough for the employment of modern farm tillage and harvesting machinery (in Schatz 2007, p. 15).

In spite of the dearth of good land, acrisols suitable for agriculture can be found in most of Sarawak. Coastal regions are characterized by marginal peat soils and other histosols. Terrain and soil conditions make Sarawak’s agricultural capabilities with regards to soil conditions similar to the Central Region of Ghana.

The South China Sea and the many large rivers (like the Rajang and Sarawak rivers) provide immense fisheries resources. Aquaculture is a significant provider of employment

and fish for the state. In 2008 there were some 9,734 fish farmers operating 15,754 ponds that covered 1,479 hectares. Although not the premier marine fishing state, landings in Sarawak were estimated to be over 150,000 metric tons.

Similar to the rest of the nation, the main crop cultivated in Sarawak is oil palm. In 2009, the cropped area for oil palm was estimated at 839,748 hectares<sup>10</sup>. Cocoa, paddy (dry and wet), natural rubber, cassava (tapioca), coconuts, plantains, pineapples, melons, and fruit crops like papaya are all cultivated in Sarawak. Durian a fruit native to Sarawak is of significant importance to the state. Sarawak is also famous for its peppers (Agricultural Statistics of Sarawak, 2008).

Figure 26 shows the estimated crop area of Sarawak's in 2008. As noted oil palm accounts for the majority of the planted area and more land area is being brought under oil palm cultivation.

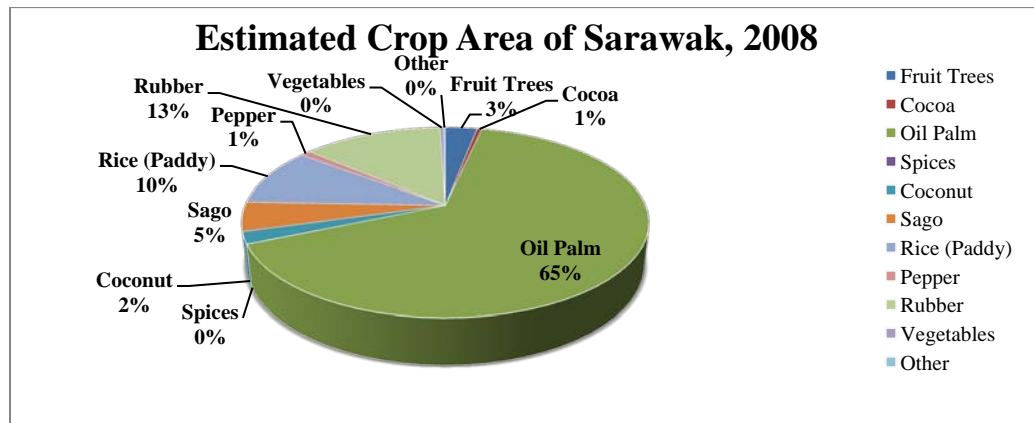


Figure 26: Estimated Crop Area of Sarawak in 2008. Source: Agricultural Statistics of Sarawak, 2008

Crops grown in Sarawak are similar to those cultivated in Ghana's Central Region. Fishponds grow tilapia and catfish as in the Central Region and besides buffaloes, animals raised in both regions are similar. Even though agricultural transformation and rural

<sup>10</sup> The rate of growth of oil palm in Sarawak is fascinating. In 1963, there were no oil palm plantations or significant area under cultivation. In 2005 about 543,398 hectares was estimated to be under cultivation and in a matter of four years in 2009, that estimate grew by an amazing 300,000 plus hectares (Schatz 2007 and MPOB, 2009).

development have been achieved in Sarawak, the state is considered backward by many Malaysians especially from the peninsular. Many consider it to be a primitive sparsely populated place full of jungles and rivers. Structural change and rural development has been achieved in Sarawak and agriculture's role in this cannot be overstated. Currently, agriculture contributes less than 11% to the GDP of Sarawak and employs less than 30% of its work force. Social amenities are by and large available in all areas including most villages (kampongs). Potable water, accessible roads (except in the interior mountainous regions) and health facilities<sup>11</sup> are available in most kampongs (Schatz 2007).

Given the similarities and agricultural capabilities of the two regions, Sarawak's experience with agricultural transformation and rural development can yield important lessons for Ghana's Central Region and perhaps Ghana as a whole. Adoption of lessons highlighted must be undertaken after careful scrutiny of structural and socio-cultural differences that exist between the two regions. A cookie-cutter approach will simply not work and is not being advocated here.

#### 5.6 Transformation versus Stagnation in Agriculture: A Case Study of Sarawak, Malaysia and Central Region, Ghana

Agricultural transformation is the process by which the structure of production shifts from subsistence-based smallholder production towards a more specialized commercial-based production. It is characterized by a movement away from the cultivation of small plots (less than 10 hectares) to industrial size plots supported by processing and storage facilities that allow for value addition to crude products. Agricultural transformation is an important part of the process of structural transformation because of the backward and forward linkages

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<sup>11</sup> In the 1960s agriculture employed about 82% of the workforce and contributed about 40% to Sarawak's GDP (Schatz 2007).

that it exposes and enhances between agriculture, industry and services that ultimately culminate in increased economic output (Timmer 1997, Argwings-Kodhek et al. 2002).

Agriculture has been of great importance to Sarawak, Malaysia and Central Region, Ghana for many years. Agricultural transformation has contributed significantly to rural development and poverty eradication in Sarawak, Malaysia. Stagnation in the sector has deepened poverty in the Central Region of Ghana. In comparing and contrasting the two regions, important institutional, technological and environmental factors that have helped or hindered agricultural transformation will be highlighted with the goal of bringing to the fore important lessons for agricultural development in Ghana's Central Region.

The analysis in this section draws on evidence gathered from field research and the notion that agricultural transformation depends on improvements in three key areas: (1) Technology, (2) Institutional Capacity and (3) Coordination<sup>12</sup>. Technology refers to production processes, storage capacities, research and development and distribution. Institutional capacity for change refers to the ability of governmental institutions to encourage progress through purposeful and timely action, infrastructure development and support services that encourage entrepreneurship and creativity. Coordination refers to the guiding hand of facilitators of change such as the government and donor agencies. Coordination is necessary to ensure that uncertainty in the sector is reduced and the focus is on increasing productivity, incomes and standards of living through agricultural transformation.

Drawing on field research and the three key areas discussed, Table 22 highlights the major characteristics of agriculture in the Central Region and Sarawak followed by comparative discussion based on evidence from field research.

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<sup>12</sup> These areas are adapted from the methodology of Kajisa et al. 1997.

<b>Table 22: Characteristics of Agriculture in the Central Region and Sarawak</b>		
<i>Characteristics</i>	<i>Central Region, Ghana</i>	<i>Sarawak, Malaysia</i>
<b>TECHNOLOGY</b>		
<b>Farm technology</b>	Smallholders (simple tools).	Plantations.
<b>Processing capacity</b>	Limited for most agric output.	Capital-intensive.
<b>Storage capacity</b>	Very Limited.	High.
<b>Research and development</b>	Very Limited.	Very high.
<b>INSTITUTIONAL CAPACITY</b>		
<b>Agricultural policy</b>	FASDEP 2007.	NAP 1-3.
<b>Supporting infrastructure</b>	Very poor access roads to rural farming communities.	Roads excellent unless disrupted by mountains.
<b>Land Tenure</b>	Customary land tenure where chiefs control the majority of the land.	Land divided into government, private and native customary lands.
<b>COORDINATION</b>		
<b>Access to Credit</b>	Very poor. Interest rates between 20-50%.	Very good. Interest rates around 6%. Credit schemes available to farmers.
<b>Inputs</b>	Low fertilizer use, limited use of modern inputs and poor extension services.	High fertilizer use, use of highest yield varieties are been used and high use of modern technologies.
<b>Marketing</b>	Poor access to domestic, regional and external markets. Out-growing opportunities limited to selected crops.	Contract based marketing of industrial crops thereby guaranteeing demand for output. Easy access to markets.
<b>PERFORMANCE</b>		
<b>Productivity</b>	Low.	High for most crops.
<b>Rural development and poverty</b>	Low, region ranks among the highest in national poverty standards.	Rural development achieved in most areas.

At their birth as bona fide domains, smallholder agriculture accounted for nearly all agricultural activity in Sarawak and the Central Region. Smallholders cultivating 2-5 hectares with simple agricultural tools accounted for nearly all production. Fisheries were exploited with traditional canoes and watercraft and livestock were kept using traditional methods. The use of high yield varieties, fertilizer, and terrain preparing machinery were negligible. Four

decades plus into their future reveal divergence in agricultural and rural development. Success in Sarawak, Malaysia has occurred through purposeful government action at various points. Such action has been directed towards agriculture and at times into other areas that have supported agricultural development. Carefully placed and implemented agricultural policies have transformed the state from smallholder agriculture to a largely plantation based agricultural state. This transformation has contributed to social transformation. Sarawak has become more urban and structurally transformed with rising incomes in nearly all employments (Schatz 2007).

### 5.7 Factors behind Agricultural Stagnation in Central Region, Ghana

After its creation just before the 1970 population census, growth in agriculture in the Central Region has been poor. Output growth has lagged behind population growth, and structural change and rural development have been missing. Rural incomes largely dependent on agriculture have remained low<sup>13</sup> (CEDECOM 2009). While agricultural stagnation can be explained by the methods of agricultural activity, the absence of government policy initiatives and the neglect of the sector have contributed to the lack of progress in the sector.

#### 5.7.1 Technology

As the way of doing things, technology in the Central Region has seen little change. From a Veblenian perspective, agents of change have struggled to triumph over past binding methods of agriculture rooted in history, myths and legends. Most farm sizes are between 2-5 hectares and continue to be cultivated with simple tools. Table 23, shows the farm sizes of twenty-eight crop farmers interviewed across the region. Of the 6 who could be considered commercial farmers, only 3 cultivated their entire land holdings.

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<sup>13</sup> It is estimated that about 67% of the regions' 1.6 million people live in rural areas and agriculture employs an estimated 58% of the regional workforce (Ghana Statistical Service 2005).

Table 23: Farm Sizes

Size	Number of Farms
Farm $\leq$ 5 Hectares	20
5 Hectares < Farm < 20 Hectares	2
Farm $\geq$ 20 Hectares	6

Source: Field Study October-December 2010

Of the 31 fishermen interviewed in four coastal fish landings sites, none owned modern commercial fishing vessels. Small dug-out canoes powered by outboard engines formed the majority of sea-faring watercraft. Of the 22 livestock keepers interviewed only four could be considered as commercial. The average poultry farmer kept less than 1000 birds. Most owners of small ruminants such as goats and sheep kept less than 20 animals and cattle herders on average kept a herd of about 40 animals.

Processing capacity for the regions' output of oil palm, citrus, pineapples and other crops are very limited. The Twifo-Oil Palm Plantation (TOPP)<sup>14</sup> and processing plant remains the only modern facility in the region. Traditional processing techniques are still common among smallholders although some serve as out-growers for processing plants like TOPP. Limited processing and sorting facilities for pineapples can be found in the town of Bodwiase in the Awutu-Effutu-Senya district. Facilities for cassava, one of the region's most important crops is limited to the Ayensu Starch factory also in the Awutu-Effutu-Senya district. Processing facilities for animal products are very limited and there are no fisheries processing facilities in the region. Traditional methods of smoking and salting fish remain the main fish preservation and processing technique.

Post harvest management via storage facilities are extremely limited and remain an important reason for food insufficiency in the region especially in the rainy season when

<sup>14</sup> Twifo Oil Palm Plantation is located in the Twifo-Hemang Lower Denkyira district of the region. The plantation owns an estimated 4,234 hectares. Outgrowing smallholders are a source of fresh fruit bunches for this plantation. Smaller processing plants are located in Agona Duakwa.

many roads are impassable. Field observations in the citrus capital of the region (Abura-Asebu-Kwamankese district) showed that a significant amount of the region's citrus never leaves. Oranges in particular were observed on roadsides in hot and humid conditions (Field Study October-December 2009).

Research and development is very limited. Research is centralized at the Ministry of Food and Agriculture in Accra. Farmers, fishermen and livestock keepers in the region continue to use primitive methods because of their lack of knowledge of new techniques. Information transfer is poor for most agricultural processes. For example, fishermen in the region continued to combine various mesh sizes in hopes of increasing their catch<sup>15</sup>. The poor transmission of knowledge from research centers in Accra to the farthest corners of the region has contributed to the continued use of less productive technology. Localized research and new and efficient partnerships between public and private entities need to be encouraged and established. For example, knowledge at the University of Cape Coast barely makes it out of Cape Coast to rural farming communities.

#### 5.7.2 Institutional Capacity

Commitment to agricultural policy has been very poor as different governments implement different policies. The Food and Agriculture Sector Development Policy II (FASDEP), published in 2007 is the guiding authority for agriculture in the country and region. FASDEP acknowledges that the biggest challenge to the achievement of outlined policies is budgetary. The FAO noted that;

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<sup>15</sup> Combined mesh sizes often lead to the capture of juvenile fish, thereby affecting fish stocks in subsequent periods.

Most agricultural projects depend on donor sources for funding. For example, in the 2002 budget of MOFA, the Government of Ghana's contribution was 33 percent and the remaining 67 percent was expected to come from donor sources. Donor funding is used largely to implement projects, while government's contribution is used to mostly pay staff salaries, wages, travel allowances and other emoluments (2004a, p. 37).

Agriculture supporting infrastructure such as access roads to rural farms is very poor. Pot holes and unpaved roads prolong otherwise short trips from producing areas to market centers. Rural electrification remains poor as less than 50% of the region has access to often interrupted electricity service. The absence of regular power supply is a big hindrance to increasing the processing capacity in the region. Social amenities are also poor as many in the region do not have toilet facilities, good potable drinking water and health facilities. The ratio of doctor to patient is estimated at 1:36,233 (Ghana Statistical Service 2005).

Land tenure is described by many scholars of African and Ghanaian agriculture as one of the most debilitating factors of agricultural transformation. In the region as in many areas of the country, tenure is defined along customary lines and local chieftains control the majority of the land. Before field research, I was convinced that the literature was correct, however field research revealed otherwise. Although the majority of crop farmers worked on inherited land, those who purchased land did not find the tenure system to be a hindrance. In fact many found that once their ideas were presented to local chieftains', extra land was offered to them at discounted rates on condition that the majority of workers will be hired from the local community and that the farmer will engage the local community in mutually advantageous ways. Table 24, shows the distribution of land ownership and rights among the 28 crop farmers interviewed. If tenure was a strong debilitating factor, one would expect the number of purchased land to be much lower.

Table 24: Land Ownership and Rights

Mode	Number of Farmers
Inheritance	14
Communal/Family Land	3
Purchased	10
Leased or Rented	1

Source: Field Study October-December 2010

### 5.7.3 Coordination

Access to credit was described by all 81 interviewees as the biggest hindrance to agricultural development in the region. When asked if it was easy to obtain funds, the answer was a resounding no. Fishermen and livestock keepers contended that credit was not available to them. Individuals who managed to get loans faced interest rates between 25 and 50% with no grace periods. Credit to agriculture from the banking sector is very limited. For example in 2002, it was estimated that 2% of all loans made by commercial banks went to agriculture related activities. Evidence from field work suggested that that trend continues. High rates of lending to the agricultural sector inhibit progress (FAO 2004, Essegbey 2009 and Field Visits 2009). Farmer's schemes that include finance are extremely limited and many government support programs for the agriculture have been scrapped in the era of market liberalization. Essegbey (2009), noted;

With laissez-faire market ideas prevailing in Ghana, government economic policies have generally been liberal. While such policies enhance competition and stimulate innovation, they sometimes inhibit innovation (p. 84).

The use of farm inputs such as fertilizer and modern farm machinery is limited. District offices rent out limited equipment at steep prices and the average farmers' tool set is limited to simple tools like the cutlass (machete). Agricultural requisites like day-old chicks for poultry farmers are difficult to come by. Farmers have to travel to Accra or Kumasi to

acquire such inputs<sup>16</sup>. Quality feed for poultry is also difficult to come by. Many farmers preferred to produce their own feed using local materials which may not offer the best nutrition for animals. In aquaculture, the availability of fingerlings and quality fish feed was sharply criticized at a fish farmers workshop held in the Twifo-Hemang Lower Denkyira district (Field Study, November 2009). In addition to poor coordination of inputs and other agricultural requisites, the effectiveness of extension services can be greatly improved. Crop farmers and livestock keepers had the highest satisfaction rates for the extension services they had received. Marine fishermen were highly dissatisfied. Table 25 shows the ratings of the effectiveness of extension officers. 49% (40/81) approved of extension services, 13% (11/81) were neutral and 37% (30/81) were dissatisfied<sup>17</sup>.

Table 25: Effectiveness of Agricultural Extension Officers

<b>Crop Farming</b>	
Satisfied	17
Neutral	8
Dissatisfied	3
<b>Fisheries</b>	
Satisfied	4
Neutral	3
Dissatisfied	24
<b>Livestock</b>	
Satisfied	19
Neutral	0
Dissatisfied	3

Source: Field Study October-December 2010

<sup>16</sup> Accra is 88 miles from Cape Coast and Kumasi is 140 miles. From interior towns like Diaso in the Upper Denkyira district, Accra is over 190 miles most of which is on primitive roads that are impassable with heavy rainfall.

<sup>17</sup> Before field work I anticipated that extension services would be one of the most important factors explaining agricultural stagnation in the Central Region. I expected dissatisfaction to be very high, however, field work revealed otherwise. Improvements can be made to extension services by properly equipping officers and monitoring their performance. One disgruntled cocoa farmer intimated that their farm was often not sprayed with the necessary chemicals needed to protect the crop because of officers' failure to appear at the farm. The sale of pesticides etc is highly regulated mostly because of fear of these chemicals being indiscriminately used. Workshops by extension services could help alleviate such issues and increase farmers' access to these inputs.

Access to domestic and international markets is poor and outgrowing opportunities are limited to industrial tree crops particularly oil palm. Cooperatives and contractual agreements between commercial and smallholder farmers could guarantee markets for smallholder output and increase production and processing capabilities. Poor access to markets put smallholder farmers at the mercy of middlemen from urban centers. Further, the desire to produce beyond subsistence levels is hampered since farmers often end up selling excess produce at extremely low prices because failure to do so means watching most of their yields rot. As one farmer noted;

Last year [referring to 2008], a lot of my plantain and cassava had to be sold very cheap in the local market just to get rid of them. If I had waited another week to send them to Cape Coast, they would have all gone bad (Field Study 2009, Interview conducted, 10/30/2009).

Poultry farmers and other livestock keepers also struggle to sell their output. This is particularly disturbing because the number of outlets that could use the products of these farmers is immense. Many hotels, resorts and recreational sites are located in the region because of its unique abundance of historical and tourist sites but the influx of foreign animal products has disrupted the market for local farmers<sup>18</sup>. Table 26, summarizes the facilitators and inhibitors of agricultural transformation observed during field visits.

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<sup>18</sup> Many poultry farmers argued strongly against the overwhelming influx of foreign frozen chicken, eggs and other animal products into restaurants and hotels within the region. They accepted that they do not possess the capacity to meet the demand of these establishments but struggled to understand why many of them could not even sell their output to local firms. Many relied on demand from establishments outside the region particularly Accra. Owners of piggeries had their largest demand from firms in Accra (Field Study 2009).

**Table 26: Facilitators and Inhibitors of Agricultural Transformation in the Central Region, Ghana**

Facilitators	Inhibitors
<ul style="list-style-type: none"> <li>• Public policy (especially Ministry of Food and Agriculture, Central Region Development Commission)</li> <li>• Extension Services</li> <li>• Donor initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Poor and very limited access to credit</li> <li>• Poor infrastructure</li> <li>• Poor market demand</li> <li>• Poor technology and transmission of agricultural knowledge and processes</li> <li>• Limited inter-sector linkages</li> <li>• Excessive influx of foreign agricultural products</li> <li>• Public policy<sup>19</sup></li> </ul>

### 5.8 Factors behind Agricultural Transformation in Sarawak, Malaysia

When Sarawak joined Malaysia in 1963, it was well renowned for its agriculture. An estimated 81.6% of its labor force was employed in agriculture and the sector contributed about 40% to the state’s GDP. Agricultural and structural transformation has brought agriculture to less than a third of Sarawak’s labor force while contributing less than 10% to its GDP. Highly diversified subsistence production has given way to specialized commercial plantation style cultivation of major industrial crops (most importantly, oil palm). The population dynamics of the state has also changed as previously needed rural agricultural labor have moved to prosperous cities like Kuching, Sibul, Miri, Bintulu and others.

While agricultural transformation can be explained by the purposeful action of entrepreneurs across the state, credit must be given to the tactful albeit often controversial government action and policies at the federal and state levels. These policies have influenced Sarawak’s agriculture since it became a part of Malaysia (Jomo KS 2001, Schatz 2007, Morrison et al. 2006 and McCarthy et al. 2009).

<sup>19</sup> Public policy is a significant inhibitor because of the lack of an actionable agricultural policy.

### 5.8.1 Technology

Timmer (1997) argued that in the process of agricultural transformation, farm level diversification decreases, commercialization increases and so does international trade in agricultural products and food consumption. His discussion fits Sarawak well. The way of doing things in Sarawak's agriculture has changed drastically. Highly diversified smallholder agriculture has declined and specialized commercial production has increased with the use of heavy equipment, fertilizer and other modern agricultural inputs. Most farms observed were commercial in nature and were in the 1,000 plus hectare range. Smallholder farms typically cultivated crops like peppers on hillsides. Livestock and fisheries production is also on a commercial basis<sup>20</sup>.

Processing capacity has increased as oil palm mills are strategically located throughout the state. For example Tradewinds Plantation Berhad Group owns four mills in Kuching, Mukah, Miri and Limbang divisions. These mills are furnished with fresh fruit bunches from about twenty-five plantations that cultivate nearly 50,000 hectares of oil palm. Sarawak Plantation Berhad operates two mills in the Mukah and Miri divisions and currently controls an estimated 52,071 hectares of oil palm.

Storage capacity and research and development by federal and state governments, and private entities are at a very high level. For example about 13% of Sarawak's soils are peat soils (a type of histosol) largely considered as marginal to unsuitable. Research and

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<sup>20</sup> Field visits to fishing towns in the Kuching and Limbang divisions yielded no significant results. I expected to observe many small scale fisheries activities however to my surprise many fishermen were operating fish ponds and other fish culture. Marine landings showed little activity although some commercial type fishing vessels were observed in the Kuching division. Discussions with residents from Bintulu and other coastal areas reaffirmed the fact that traditional marine fishing the type of which was observed in Ghana was on the decline. Field visits to the Kuching, Samarahan and Sri Aman divisions showed that livestock facilities often operated their own feed mills and were clearly commercial with respect to the livestock populations. Smallholder livestock facilities were observed near the Indonesian border in the town of Tebedu and surrounding areas (Field Visits 2010).

development by the state government through the Tropical Peat Laboratory in Kuching is geared towards identifying ways to improve the cultivation of sago in these soils<sup>21</sup>.

### 5.8.2 Institutional Capacity

Support for agriculture in Sarawak has been provided for by the actions of the federal and state governments'. Five year development plans involving the marriage of the state (local and federal) and private actors since independence has been instrumental in agricultural development. State policies have provided generous opportunities and incentives for the private sector to lead the development process (Morrison 1997).

At the federal level, 3 National Agricultural Policies (NAP) were introduced in 1984, 1992 and 1998 respectively. The first NAP was concerned with increasing the planted area of export crops such as oil palm and cocoa. Increasing yields through modernization and infrastructure development were also important hallmarks of this initial policy.

The second NAP was similar to the first because of its desire to increase cropped area and yields. This policy focused on identifying, deepening and maximizing the benefits from inter-sector linkages. Agro-industry was aggressively pursued to add value to crude products. Finance and various credit instruments to engender private sector interest were introduced and international policy was geared towards protecting Malaysian output within the bounds of international law.

The third NAP was similar to its predecessors and was introduced after the Asian Financial Crisis of 1997. The goal was to bring agricultural policy in line with new developments in the Malaysian economy. New strategic approaches and policy thrust to

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<sup>21</sup> Sago is a starch extracted from the sago palm which grows on Sarawak's coastline. In "Government will continue peat soil research", Sarawak Tribune, October 12, 2010, the state government reaffirmed its commitment towards better understanding the dynamics of the soil and how best to use it to the advantage of the state. See Sulaiman et al. 2005 for more details on peat soil research in Sarawak.

enhance the economic contribution and growth of the sector were highlighted. Enhancing food security, creating new sources of growth within the sector and further deepening of inter-sector linkages were key features of this policy (Kajisa et al. 1997, Harron et al. 2001 and Ismail 2007).

Sarawak Land Development Board (SLDB), established in 1972, and the Sarawak Land Consolidation and Rehabilitation Authority (SALCRA), established in 1976 have been influential in the process of agricultural transformation in *Negeri Sarawak* (State of Sarawak). The actions of SLDB and SALCRA have contributed to the rapid expansion of oil palm in Sarawak. These institutions are deeply entwined with the very fragile issue of land tenure in Sarawak<sup>22</sup>. SLDB sought to achieve improved multi-racial relations (between the main ethnic groups: Ibans, Malays and Chinese) through land development schemes that would grant titles to participant citizens once development costs were recouped. The institution failed as a freeze on title issuance was put in place and Chinese and Malay communities targeted for participation declined (Awang, Z 1986 and McCarthy et al. 2009).

Unlike SLDB, SALCRA had no ambitions of achieving racial harmony. SALCRA's main objective is developing native customary land for the benefit of the owners who have native customary rights to the land. These owners upon successful repayment of development costs would be granted legal title to the land. It is important to note that in West Malaysia,

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<sup>22</sup> Before field visits in Sarawak, I did not anticipate land tenure issues to be as critical and fragile as they turned out to be. Several individuals that discussed land issues spoke of it with so much passion especially those with rural roots and ties to native communities across the state. McCarthy et al. 2009, "Oil Palm Expansion on the Malaysian and Indonesian Frontiers", *Geographical Journal*, 175 (2):112-123 offers an excellent and succinct description of the situation in their description of the history and evolution of the Land Code of 1958 and more importantly how the provisions under that policy are being tested under the neoliberal era where the push for land for oil palm cultivation has been simply mind-blowing. The Land Code is discriminatory as Chinese Sarawakians many generations removed from mainland China can still not acquire certain lands. Native customary rights to land are the most contentious of all forms of tenure because they are based on the shifting cultivation and community based definitions of use rights etc. As many scholars of Sarawak land issues have shown, in practice native lands have been viewed as an encumbrance on state land and therefore have been exploited without much consideration for native culture and rights.

the Federal Land Development Authority (FELDA) served a similar function as SALCRA. Government schemes in Sarawak have contributed to a focused direction in agriculture. In addition to SLDB and SALCRA, the Sarawak Land Custody and Development Authority (SLCDA) have worked as a matchmaker for land-based initiatives by the private sector (Morrison et al. 2006). The dominance of private interests in Sarawak's commercial agriculture has been facilitated at various stages by federal and/or state policies. For example the growth of oil palm processing in Malaysia was greatly influenced by the governments' imposition of higher duties on the export of crude palm oil in the mid 1970s (Goppal 1999, Jomo KS et al. 1999).

### 5.8.3 Coordination

Access to credit in Sarawak is relatively easy when compared to Ghana's Central Region. Various government run schemes help guarantee finance to many farmers. Demand for farm output is often guaranteed through public and private schemes governed by legally enforceable contracts. For example the Sarawak Economic Development Corporation (SEDC) and its agencies established a poultry farmer's scheme that combines stable market demand with hands-on experience and the necessary credit and subsidies needed for the scheme to be successful (Morrison et al. 1997, p. 195).

Small-scale contract farming in Sarawak's poultry sector provides an excellent example of the coordination activities that have contributed to agricultural transformation in the state. Figure 27 shows Sarawak's poultry complex. The big six firms are all based in Kuching. Poultry production in the state has grown as a result of government supported private sector activities and active government action through import controls on day-old chicks (Ching 1999).

Typical contracts in the private and public sectors involve the supply of day-old chicks and the purchase of full grown birds from scheme participants 45-58 days. Birds are processed and used in public services such as schools, hospitals and the police service. Private sector schemes provide the final product to supermarkets. A major difference between the public and private sector schemes is that the public scheme is directed at bringing the rural poor typically *bumiputeras* out of poverty. Affirmative action like the poultry scheme is available in fisheries and crop farming as well. In spite of the critique against such programs, they have generally succeeded in increasing productivity and have been an instrument for addressing the uneven opportunities that rural Sarawakians face (Morrison et al. 2006, p. 203).

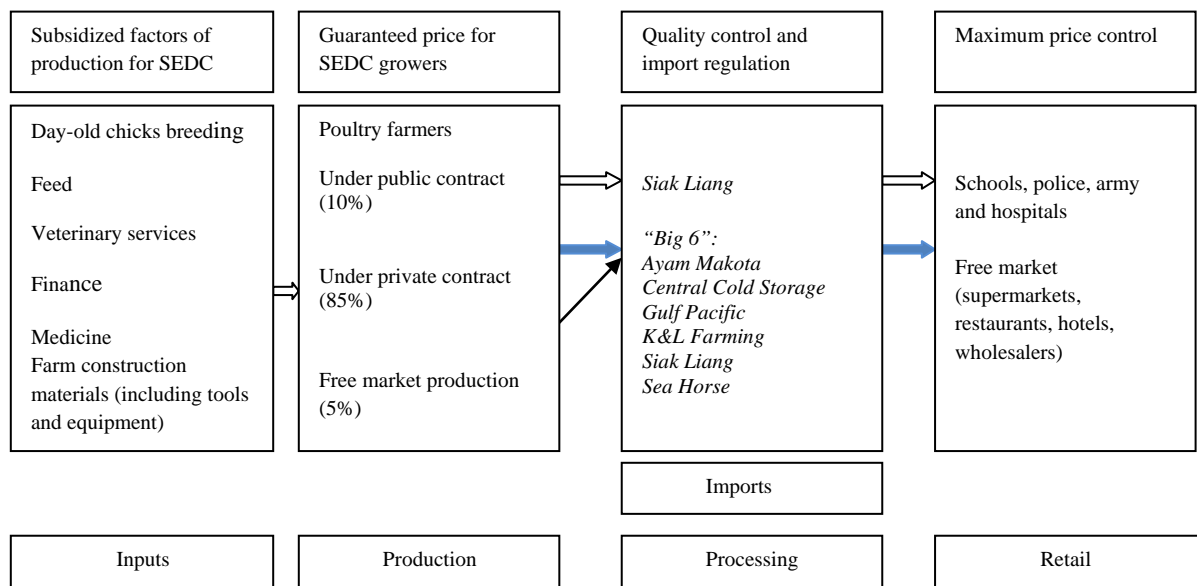


Figure 27: The Sarawak Poultry Complex. Source: Morrison et al. 2006, p. 197

Coordination of productive capacities in Sarawak's agriculture is very high as agricultural requisites necessary for boosting production are readily available for use by farmers either through local production or imports. As an example, over the period 1999-2008, the state imported an estimated 595,045 metric tons of manufactured fertilizers and

604,026 metric tons of crude fertilizers. Total imports had an estimated value of 2.2 billion ringgit (\$600 million). The state also exported an estimated 610,546 metric tons of manufactured and crude fertilizers with an estimated value of nearly 1 billion ringgit (\$303 million). Potassium based fertilizers are the most common because of their use on oil palm plantations. Land preparation, harvesting and other agricultural machinery are regularly imported into Sarawak to support the sectors' development (Department of Agriculture Sarawak, 2008).

Table 27 summarizes the facilitators and inhibitors of agricultural transformation observed during field work. Facilitators have had a strong impact on Sarawak's agriculture but issues of land tenure pose a great threat to Sarawak especially with the expansion of oil palm and logging activities. Land conflicts between private developers (often with government backing) and *Dayaks* (native rural communities) over what constitutes native customary land have being a source of controversy in the post-independence Sarawak. These conflicts and the drive towards monoculture in oil palm pose different sets of challenges for Sarawak's agriculture. The intersection of the drive towards monoculture and the political economy of land tenure need further analysis (Jomo KS et al. 2004, Ngidang 1997 and 2005, Schatz 2007, McCarthy et al. 2009).

<b>Table 27: Facilitators and Inhibitors of Agricultural Transformation in Sarawak</b>	
<p><b>Facilitators</b></p> <ul style="list-style-type: none"> <li>• Federal and state governments               <ul style="list-style-type: none"> <li>○ Infrastructure</li> <li>○ Agricultural and land schemes like poultry farmers and fishpond schemes, SALCRA etc</li> </ul> </li> <li>• Research and development</li> </ul>	<p><b>Inhibitors</b></p> <ul style="list-style-type: none"> <li>• Land tenure (conflation of government, private and native customary lands)</li> </ul>

## 5.9 Lessons from Comparative Analysis and Fieldwork

Agricultural transformation and rural development requires purposeful government action that creates the necessary environment for successful private engagement in the sector. In Malaysia, the developmental state has been able to achieve such transformation by executing its custodial, demiurge, midwife and husbandry roles. Embedded autonomy has allowed for policy initiatives to be carried out effectively. Field research revealed that government policy allows for the ease of private sector involvement in agriculture.

An actionable national development policy must be established prior to any sector policies in Ghana's Central Region. A continuous drive towards the achievement of embedded autonomy is essential for agricultural transformation. Table 28 summarizes the characteristics of Sarawak's agricultural transformation and lays out a desired future path for the agricultural transformation of Ghana's Central Region. Lessons identified and all assertions made in Table 28 are based on field visits.

**Table 28: Lessons from Sarawak, Malaysia and the Desired Future Path for the Central Region of Ghana**

	<b>EXPERIENCE OF SARAWAK</b>	<b>DESIRED PATH FOR CENTRAL REGION, GHANA</b>
<b>TECHNOLOGY</b>		
<b>Farm-Level</b>	Highly mechanized cultivation of high yield varieties. Monoculture of oil palm. Modern fish landings and advanced aquaculture. Advanced poultry farming.	Highly mechanized cultivation of high yield varieties. Polyculture (region wide) in oil palm, cassava, cocoa and fruit crops. Modernized fisheries and livestock sub-sectors.
<b>Processing</b>	Capital intensive. Highly mechanized especially for industrial crops like oil palm.	Capital intensive. Out-grower supply of agro-industries.
<b>Management Structure</b>	Private companies and government controlled estates under schemes like SALCRA.	Cooperatives and private companies. Government support via the President's Special Initiative.
<b>INSTITUTIONAL CAPACITY</b>		
<b>Research</b>	Public research with spillovers from private sector.	Public research. Support for private research.
<b>Institutions</b>	Consistent development and agricultural planning. Land tenure very cumbersome.	Actionable development plans and commitment to agriculture. Land reform and increased partnership between chieftains, government and private sector.
<b>Supporting Infrastructure</b>	Accessible road networks. High quality nurseries. Excellent storage facilities.	Accessible road networks. Improved nurseries. Improved storage facilities.
<b>COORDINATION</b>		
<b>Inputs</b>	High fertilizer use. Modernized livestock and fisheries.	Increased fertilizer use. Improved irrigation in coastal plains. Use of modern inputs in livestock and fisheries.
<b>Demand Conditions</b>	Contract farming. Stable incomes.	Increased contract farming. Increased out-grower opportunities that guarantee stable prices. Public demand for certain output
<b>PERFORMANCE</b>		
<b>Productivity</b>	Moderate to High.	Increasing until high.
<b>Environmental Impacts</b>	Very high as the drive towards monoculture in oil palm has led to increased deforestation.	Sustainable environmental practices that include the use of organic fertilizers and the preservation of national forests.
<b>Extension Services</b>	Moderate to high.	Improved extension services.

The drive towards monoculture in Sarawak is strongly discouraged for Ghana's Central Region. Polyculture at the regional level is desired given the varied agricultural capabilities of the region. The region can improve its cultivation of oil palm, cocoa, pineapples, oranges, farmed fish and animal products by drawing on the experience of Sarawak, however it is encouraged that it strives to achieve some parity in its agricultural land use. For example oil palm cultivation could be improved and centered in the Upper and Lower Denkyira districts. Cassava production could be improved and centered in the Agona and Awutu-Effutu-Senya districts and pineapples and citrus cultivation could be centered in other parts of the region and so on.

Achieving the desired path for Ghana's Central Region will require public research for increased productivity, public initiatives for market creation and improvement and public commitment towards the enhancement of smallholder livelihoods. The need for public involvement is a not a call for dirigisme but rather for the developmental state. Public initiatives should have mechanisms that allow for the role of the state to change as agricultural transformation progresses (Kajisa et al. 1997, p.16).

In addition to the experience of Sarawak, scholars of Southeast and East Asian agriculture have shown that public initiatives that combined the roles of the developmental state played an instrumental role in the agricultural transformation of many countries in the region.

Government initiatives to build public institutions and infrastructure were particularly important. The establishment of strong agricultural research, extension, and other support institutions, along with a steady commitment to strengthening the rural infrastructure, provided the essential foundation for the productivity growth in agriculture and the commercialization of the rural economy [in Taiwan] (Gabre-Madhin and Johnston. 2002, p. 60)

Private sector involvement is crucial to agricultural transformation however the guiding and creating hand of government is an important condition that must be present for continued progress. Public action engenders the necessary private participation needed for transformation, stability and progress in agriculture. Sarawak, Malaysia and East Asia in general present excellent examples of desirable government action in agriculture.

Chapter 6 concludes this dissertation by discussing three important issues; first, is with regards to whether the developmental state is replicable; second, considers whether we can we build a Ghanaian developmental state and what challenges face such a notion and third, considers the characteristics of a developmental state that has as its theoretical basis the modern money approach.

## CHAPTER 6

### CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

*“Economic development is a structural process[...]markets are a major locus of this process, but the state has a strategic role in providing the appropriate institutional framework to support this structural process[...]in the context of globalization, economic development requires a national development strategy which seizes global opportunities[...]economic development should be financed essentially with domestic savings[...]although the Schumpeterian side of the development process and strategic industrial policy are relevant, the demand side is where the major bottlenecks unfold[...] to achieve long term development economic policies should pursue full employment as its primary goal, while assuring price and financial stability”-(Ten Theses on New Developmentalism, 2010)*

#### 6.1 Introduction

The ability of the developmental state to promote agricultural transformation and economic development has been discussed in chapters 4 and 5. It has been shown that competent bureaucracies and strong state-society relationships allow for the necessary embedded autonomy needed to execute the developmental roles of the state. Building the developmental state requires a social engineering process based on a shared commitment from the government, private sector and all other agents in the economic system. Governments must establish credibility if the private sector is to believe that their actions will be developmental and beneficial to them. Actions needed to establish such credibility go beyond the governments' role of custodian advocated by mainstream economists. Huff, Dewit and Oughton (2001) illustrated using a game-theoretic approach that cooperation between private actors and the state does not occur until state credibility towards developmental objectives have been established.

If entrepreneurs and the private sector need such assurances of credibility, then it follows that other agents (for example workers) need such credibility in order for them to

fully engage in developmental activities within the country. In East Asia, credibility allowed states to promote and execute successive national development plans with the general backing of the majority of public. Given the historical record of East Asia since the early 1960s the concept of the developmental state must become an important analytical tool through which economists and policymakers interested in issues of development in SSA conduct their own research and formulate policy prescriptions (Fritz and Menocal 2007).

Developmental state theory has faced a multitude of critiques since its inception in the early 1980s. Critiques leveled against it have ranged from the inadequacy of supporting data to its historical specificity to East Asia. This concluding chapter addresses some of these critiques and outlines directions for future research. The remainder of the chapter is organized as follows. The next section addresses the issue of replicability of East Asian development strategies. This is followed by a discussion on the promises and challenges to building a Ghanaian developmental state. Financing the developmental state is discussed by critiquing some of the tenets of the Washington Consensus and the orthodox view of economics and money. Heterodox perspectives such as the modern money approach are discussed and summarizing remarks and directions for future research are highlighted.

## 6.2 Replicability and Institutional Adjustment: Insights from Ha-Joon Chang and John Fagg Foster

Chang (2003 and 2006) noted that the replicability of East Asian development success has been a controversial issue in the debate over the economic transformation of that region. In the neoclassical framework where free trade and free markets dominate, adopting policies wholesale and implementing them elsewhere faces little theoretical challenges since ‘getting prices right’ et cetera will undoubtedly lead to economic growth and development. Experiences with structural adjustment and the contributions of non-mainstream economists

(like Alice Amsden, etc.) have shown that the neoclassical policy prescriptions cannot yield sustained economic growth and development. Scholars in the heterodox tradition have also shown that ‘getting prices wrong’ (Amsden 1989 and 2001), ‘governing the market’ (Wade 1990) and ‘embedded autonomy’ (Evans 1995) are the best descriptors of East Asian development.

If getting prices wrong, governing the market and embedded autonomy best explain development success in modern history, can these tenets be replicated in SSA and in particular in Ghana? On the surface, replication may appear intractable, however, a careful redefinition of what replication means coupled with a flexible theory that allows for the integration of replicable themes make the replication of East Asia’s development strategies a possibility in Ghana and elsewhere in SSA.

#### 6.2.1 Arguments against the Replicability of the East Asian Model

Arguments against the replicability of the East Asian model have centered around three main issues. First, is that most developing countries around the world do not have the requisite bureaucracies needed to achieve developmental state status; second, is that current global conditions are so entrenched in free trade policies that they do not permit developing countries to employ strategies used by now industrialized and late industrializing countries; third, is the perspective that the Confucian work ethic is so deeply woven into the history of East Asia and this simply cannot be replicated elsewhere (Chang 2003, p.119-120, 2006, p. 47-52; Chang and Grabel 2004, p. 66-70).

#### 6.2.2 Replication: A Redefinition

Arguments by critics of replicability are unconvincing when matched against the historical record. Ha-Joon Chang and many others have shown that competent bureaucracies

are socially engineered through tireless commitment and government investment in education and training of civil servants to increase their capacities to properly execute developmental goals<sup>1</sup>. Further, while current conditions may be restrictive to developing nations, loopholes exist and countries like Mauritius and Botswana have used them over the years. Confucianism which is credited for economic development in the region was once criticized “for holding East Asia back” (Chang 2003, p. 119). Prior to 1950, several aspects of Confucianism impeded growth but after that period certain aspects of it have been re-channeled to enhance growth and development.

Replication means to copy and reproduce. In the context of SSA (Ghana) and East Asia (Malaysia), copying and reproduction must recognize the uniqueness in geopolitics, culture, history and current as well as anticipated future conditions. “In fact, if there is one lesson to be drawn from the East Asian economies that is transferrable everywhere, it is that the growth of a late-developing country depends critically on how successfully it can engage in the importation, adaptation, assimilation and innovation of institutions, not just technologies” (Chang 2003, p.120).

### 6.2.3 Implementing Replicable Policies and Lessons

The ability to effectively engage in the importation, adaptation and assimilation of institutions depends on the success of institutional adjustment. In his discussion of land use planning, Foster (1981) put forth a theory of institutional adjustment that holds great promise for the replication of East Asian development strategies. His theory is made up of the principles of technological determinism or instrumental primacy, recognized interdependence and minimal dislocation. All principles must be taken as a whole when institutional

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<sup>1</sup> Chang 2006 argued that competent bureaucracies were not part and parcel of the initial conditions of East Asia. He further argued that Korea sent its bureaucrats to the Philippines and Pakistan for training until the late 1960s (Mkandawire 2001, Chang 2003 & 2006, and Chang & Grabel 2004)

adjustment is being considered since all principles must be at work for effective adjustment to occur.

The principle of technological determinism is concerned with the question of whether the proposed action will yield the greatest summation of economic values. It is also concerned with the technical aspects of effecting that change and asserts that members of society must have some basic capability of effecting that change. In other words the capacity to effect change must be present. Instrumental primacy asserts that social problems can be resolved only by adjusting the institutional structures in such a way as to minimize the negative obstructions posed to the adjustment by past binding actions deeply rooted in history and culture.

Recognized interdependence in Foster's theory refers to the fact that social problems affect everyone and so does the solution to these problems thus an adjustment to an institution may have far reaching consequences beyond the scope of that institution alone. Foster noted further that this principle implies that the immediate pattern of any institutional adjustment must be specified by the pattern of interdependencies recognized by members of the institution. Effective institutional adjustment will be achieved if the recognition of interdependencies is high. Cooperation between all members of the institution being adjusted and members of other institutions will be highest if there is proper recognition of inter-institution linkages.

Foster's principle of minimal dislocation argues that members of society will be affected in different ways by institutional adjustment. More importantly, people benefitting from the status quo will be averse to change and those suffering from it will be in favor of it. Recognizing the differing impacts of the change and working towards minimizing its

negative effects is the underlining message of this principle. He adds that “this principle does not require an absence of dislocation, but rather a *minimum*” (p. 1002). Foster added that informing society of why adjustment is necessary is crucial to minimizing the dislocation that is bound to occur.

In sum, Foster’s theory of institutional adjustment stresses three important facts. First, societies effecting change must have the potential or capability to effect that change; second, they must recognize that there are important inter-institutional and sector interdependencies that may influence the implementation as well as the impact of the change; and third, implementing a change will affect different members of society in different ways, thus care must be taken to minimize the dislocation.

In the context of this dissertation, replicating East Asian development strategy in Ghana is possible if it is informed by Foster’s insights. Technological determinism in Ghana will imply that commitment from all agents in the economy must be of the highest level if the greatest economic values can be achieved. Can Ghana actually replicate Malaysia’s development success? Does the nation have the capabilities to effect such a change? Historical evidence and the promise of the future will suggest an affirmative answer to these questions.

Ghana has shown characteristics of developmentalism in its history and during periods of adherence to development plans, economic progress occurred. Since independence, 10 national development plans (on paper at least) have spanned 52 years of which only 30 years have been implemented at the lowest level. In the years soon after independence when development plans were implemented to the letter, the nation boasted of

rapid economic growth and development<sup>2</sup>. Agencies like the National Development Planning Commission, Ministry of Food and Agriculture and the Central Region Development Commission must be given the necessary institutional support to allow for the execution of their duties. Building and/or fully utilizing the capacity that exists within these institutions will allow Ghana to satisfy the requirements of Foster's principle of instrumental primacy.

Future oil revenues and the proper management thereof coupled with continued political stability in a continent marred with political disarray makes Ghana's capacity to actually effect change very promising. The Malaysian and East Asian experience shows that development planning and a committed adherence to such plans is an important part of the development process. This is an important lesson that should and can be replicated in Ghana<sup>3</sup>.

Recognizing interdependencies will include the identification of backward and forward linkages between the agriculture, industrial and service sectors. Recognizing that changes made to anyone one of these sectors will affect all other sectors is important. Agricultural development has been shown to be crucial to poverty reduction and economic development and methods of achieving it in Sarawak, Malaysia provide important lessons that must be learned (see Chapter 5 for more details). Decision making that solicits input from all sectors is necessary. The success of any adopted sector specific policies will depend on how much recognized interdependencies were acknowledged. Malaysia has been successful in linking agriculture with industry through various agro-industry initiatives,

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<sup>2</sup> Data in chapter 3 show that in the first decade after independence, development indicators for Ghana and Malaysia were on par and in certain instances, better in Ghana.

<sup>3</sup> Since 1992, multi-party elections have been held and opposition parties have taken turns to govern. The next step will be to ensure that developmental goals are not shattered every time there is a change in government. These goals will only be achieved if the relationship between the state and important elites leads to developmental outcomes. "A democracy that heavily invests in the improvement of people's health, education, and capacity so that they can participate effectively" regardless of what government is in power is absolutely necessary (Ake 1996, p. 132).

provision of finance for private entrepreneurs and the availability of a public option. Examples of such linkages were discussed in chapter 5 when the Sarawak poultry complex and the activities of SALCRA in oil palm were mentioned.

Minimizing the dislocation that will occur with the adoption of any strategies requires broad national level knowledge about the country's development agenda and why that agenda is necessary. At the sector level, communication about sector plans is crucial. Simply put Ghanaians must have a general knowledge of the direction the country is heading if replication efforts are to succeed. Individuals in power positions such as chiefs must be educated on the benefits of change.

Replication and institutional adjustment as defined by Ha-Joon Chang and John Fagg Foster respectively make East Asian style developmental states a possibility in places like Ghana. Adapting strategies to fit specific needs and integrating those strategies with Foster's principles in mind will yield favorable results towards development since they factor into development planning, implementation and evaluation the social aspects of policy change.

### 6.3 Building the Ghanaian Developmental State: Promises and Challenges

As discussed in other chapters, building the developmental state requires commitment from everyone in the various sectors of the economy but more importantly from those in state institutions. The state must carry out what it advertises if the goodwill necessary for development is to be established. In East Asia, once the government said it was going to do something, it did it (Huff, Dewit and Oughton 2001). In Ghana and other nations in the developing world, building the developmental state will require the government doing what it says plus the execution of various strategies to attract and retain high quality staff for public

service. Such strategies will help repair the negative image typically associated with the civil service and increase their capacity to effect change<sup>4</sup> (Kauzya 2008).

Prospects for building a developmental state in Ghana are bright but several challenges exist. Factors favoring developmental state creation include a stable culture of democracy and peaceful political transitions, future income stream through oil revenues, relatively good system of education in comparison to other nations in SSA and relatively low international indebtedness especially since the completion of the Heavily Indebted Poor Countries initiative. Challenges include an inept public service which has bred a culture of mediocrity, regional instabilities and past-binding customs that hinder progress.

There are no specific guidelines for the creation of developmental states however certain key features must be pursued with various strategies. Competent bureaucracies can be achieved through the recruitment of a highly skilled and professional staff. Recruiting and retention will be possible only if wages and perks in the public sector are higher than or comparable to the private sector. At the sector level, progress can be achieved through public-private initiatives that reward entrepreneurship while ensuring that risk taking is in line with general developmental goals. This can be achieved through the midwifery and husbandry roles of the state. The case of Korea, Taiwan, Malaysia and elsewhere are excellent examples.

The President's Special Initiative started under the John Agyekum Kuffour presidency was a step in the right direction and similar projects must be enacted with the

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<sup>4</sup> The image of the public service in Ghana and many other SSA countries is very negative. The public service is associated with low wages, corruption, nepotism and poor job security. In the period 1986-1990, an estimated 41,000 civil service jobs were lost largely due to structural adjustment policies. Reductions in personnel size were not accompanied by pay reform, thus remaining staff were not properly incentivized to carry out additional functions. Building the developmental state will require substantial efforts in transforming the image of these institutions (Kauzya 2008).

necessary oversight and commitment to ensure their success. All in all building the developmental state in Ghana will require recognition of the fact that ‘the state will be as developmental as the people that serve within its institutions’ (Kauzya 2008, p. 18).

#### 6.4 Financing the Developmental State

One of the most recent debates on developmental states has surrounded how they are financed. Sindzingre (2007) correctly noted that the structure and organization of taxation are crucial aspects of state formation. Tax policy delineates the relationship between a state and its citizens. Tax policy helps define redistributive programs, the size and power of social groups, and the basis of state action and legitimacy.

Deeply embedded in the understanding of how developmental states are financed is an appreciation of the origins of money and the role of the government in the process of taxation. If money is neutral in its effects and taxes represent a simple exercise to increase funds for government expenditure, then development finance should be straightforward, however, taxes represent complex social relationships whose roots can be traced to what drives the existence of money in the modern capitalist economy. Orthodox and heterodox views on the origins of money differ greatly and so are their conclusions on development finance. Evidence from East Asian developmental states is consistent with the heterodox view since broad and mass tax collection was forgone in favor of targeted taxation, the use of subsidies and the collusion of government and private entities to raise developmental funds.

##### 6.4.1 Origins of Money in Orthodox Economics

In orthodox economics, modern fiat money emerges from the evolution of barter because of the double coincidence of wants which create high transactions costs. Fiat money is the natural progression from barter because it reduces these transactions costs and allows

for the seamless operation of the market system through which all of society's problems are efficiently resolved. The market system is deemed impartial and unprejudiced in its allocation of scarce resources. Money is neutral and the more complex capitalist economies become, the more abstract and intangible money becomes. Money is asocial; it is not historically contingent and does not represent a deeper social contract between the state and society. Simply put, money does not matter. What matters is the exchange that it facilitates (Wray 1998 and 2010).

Given the neutral role of money, the most important responsibility of Central Banks is to control the money supply through various means including altering of required reserve ratios and printing money. Money supply is exogenously determined and agents in the economic system like banks respond to actions of the Central Bank by making loans available and vice versa. The neutrality of money is absolute especially when agents are informed of upcoming actions of the Central Bank. In other words money is neutral in the short and long run and changes occur to the economic system only when the Central Bank reneges on what it said it will do.

Inflation is simply a monetary phenomena and controlling it involves the control of the money supply. Drawing on the quantity theory of money, monetarists argued that if real GDP at its natural rate and the velocity of money are stable (constant), then the only variable that can influence the general rise in the price level is the exogenous increase in the money supply. If inflation is targeted and targets are well communicated to agents in the economy, then for the most part, inflation can be kept under wraps.

Such views on money as discussed are deeply embedded in the ten reforming guidelines of the Washington Consensus (see Appendix C). Orthodox views of money,

international trade and the supremacy of free markets were the building blocks of this consensus. As a hard complier to the policy prescriptions of the Washington Consensus, Ghana reformed its taxation, liberalized its markets, deregulated its economy and removed many subsidies. Building a tax reform to increase the tax base informed the introduction of the Value Added Tax (VAT) in Ghana and elsewhere (Brautigam, Fjelstad and Moore 2008).

In spite of their adoption in many parts of the developing world, “the evidence of the past 15 years has demonstrated that attempting to implement the 10 reforms of the Washington Consensus has ultimately proven to be a disaster for developing nations” (SAPRIN, 2004, Davidson 2004, p. 207). The orthodox view drawing on the insights of monetarists and orthodox development economists can be summarized as follows:

1. Money emerges out of barter to reduce transactions costs.
2. Money supply is exogenous and inflation is always and everywhere a monetary phenomenon.
3. No historically contingent relationship between taxes and money. Taxes are asocial.
4. Free markets and free trade hold the key to economic growth and development.

#### 6.4.2 Origins of Money in Heterodox Economics

In heterodox economics, the origin of money is situated in the historical and socially contingent relationships between states and societies. Money’s role in the economy is much more sophisticated. Money is much more than a facilitator of exchange and a reducer of transactions costs. Money is what makes the world go round. Money is associated with the nation-state (e.g. the Ghanaian Cedi, Malaysian Ringgit and US Dollar) and is intimately

related to the history of the people. Many heterodox scholars have rejected outright the orthodox description of the origins and role of money in the economic system<sup>5</sup>.

“The heterodox alternative locates money’s origin in credit and debt relations, with the money account emphasized as the numeraire in which liabilities are measured” (Wray 2010, p. 40-41). Taxes drive money in the sense that authorities (the state, Kingdom etc) levy obligations and declare that which they will accept to satisfy those obligations. In order for citizens to satisfy these obligations, they must accomplish tasks that will place them in a situation that allows for the accumulation of that which is necessary for the payment of debts. At the individual level, debt obligations between private parties are satisfied through various forms of money however, the ultimate form of money that has the final authority is that of the state (Bell 2001). In colonial SSA, poll and hut taxes were an important way in which the colonial state was entwined with the process of accumulation as well as with the society over which it exerted its authority (Forstater 2005).

Money in heterodoxy is thus a creature of the state (Lerner, 1947). It is not a spontaneous ‘thing’ that emerges to allow peoples’ lives to be easy. It is the single most important entity in the capitalist economy. It is not neutral and this non-neutrality is central to the capitalist accumulation process and thus to the process of growth and development. Unlike orthodoxy, inflation in the economic system arises because of factors more complex than the simple increasing of the money supply by the exogenous Central Bank<sup>6</sup>. First and foremost, money supply is endogenous because Central Banks simply respond to individuals’ demands for money needed for the pursuance of their various economic activities.

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<sup>5</sup> Innes (1913 & 1914), Knapp (1924), Lerner (1943 & 1947), Ingham (2000), Bell (2000 and 2001), and Wray (1998 & 2010) are a few examples of scholarly work dedicated to providing a better understanding of the origins and functions of money in the modern capitalist economy.

<sup>6</sup> Inflation may arise because of struggles between capital and labor. If labor is stronger (i.e. via unions etc, then wages may rise faster which will in turn increase costs for producers and ultimately for the price of their output.

The heterodox view of money leads to different conclusions about the role of money, the state, and the political economy of taxation. It also presents a more realistic explanation as to why tax reform under the Washington Consensus simply failed in the attempt to increase overwhelmingly the tax base and tax revenues. The heterodox view of money asserts that the state's ability to tax is one of the foremost reasons for the existence of money. Modern money has thus emerged from the evolution of state-society relationships of which taxes are an integral part.

Brautigam, Fjeldstad and Moore (2008) presented various discussions on the role of taxation in state-building. They showed at various instances that the efficacy of tax policies is affected by state-society relationships especially between powerful interest groups and the state. As an example, Joshi and Aye (2008) in Brautigam et al. (2008) discussed associational taxation in the context of the informal sector which represents significant portions of the economies of many developing nations. Using examples from Ghana's VAT and the powerful role of the Ghana Private Road Transport Union (GPRTU), they showed that political connections between the union and the political party in power eventually allowed for the institution of VAT after its initial failure. Money matters and so does taxes. The heterodox view drawing on insights from Post Keynesians particularly L. Randall Wray and others can be summarized as follows:

1. Money emerges out of debt and credit relations.
2. Money is not neutral in any way. It is in fact the most important entity of the entire capitalist economic system.

3. Taxes drive money and they represent important social relationships between the authorities and everyone else. Taxes are social acts and for them to be important in the development process they must be treated as such.
4. Money supply is endogenous. Central Banks simply respond to the needs of individuals and entities in the economic system.
5. There is no such thing as free markets and free trade. Governed markets and unfair trade are closer to reality.

### 6.5 Evidence from East Asian Developmental States

Evidence from East Asian developmental states run counter to the orthodox view of money and the Washington Consensus. East Asian developmental states have shown that policy reforms result from “complex, lengthy and endogenous processes [...] they have used heterodox economic policies, for example state intervention in the economy and even political rent-seeking, but these policies were tuned to growth and market sanctions, i.e. export performance” (Sindzingre 2007, p. 616).

Gomez and Jomo KS (1999) made a strong argument for the incidence of patronage in the Malaysian economy. While highlighting the biased nature of contracting, business opportunities etc for the rising Malay bourgeoisie, they noted how significant Malaysia’s New Economic Policy of 1971 had transformed the country’s economic system to one characterized by political patronage. In spite of this patronage, a rising tide appears to have lifted all boats in Malaysia. Many have realized their incomes rise over time and their standards of living improve significantly.

Sindzingre (2007) makes several important observations about the nature of development finance in East Asia. Her observations run counter to the Washington

Consensus prescriptions and reaffirm the theme in this dissertation that tactful government intervention and policy initiatives are desperately needed and required for economic transformation in SSA. Using the example of land reform in South Korea, she noted that East Asian states reduced inequality using various sets of targeted policies and incentives<sup>7</sup>. For example taxation was designed with delicate social issues in mind. She also stressed that developmental states did not have large governments but rather focused their attention on the provision of incentives to spur private sector initiatives. For example in 2004, subsidies accounted for 31% of government expense in Malaysia and in 2007 it accounted for 58% of government expense in South Korea (World Development Indicators 2009). These figures run counter to the second principle of the Washington Consensus which stressed the removal of subsidies.

In addition to Sindzingre's observations, tariff policies in East Asia continue to be consistent with policies advocated by mercantile, German and Italian economists as discussed in chapter 4. Tariffs remain a judicious way of enhancing local industrial activity as outlined in chapter 4. Simple mean tariffs<sup>8</sup> in South Korea were estimated at 20.8% for primary products (possibly needed for local industry). Tariffs were at 6.6% for manufactured products that could be used to bolster local industry. Trade liberalization per Washington Consensus would require these tariffs rates to be much closer to 0 in both directions for all products, however nations that have successfully achieved higher growth rates and economic development have failed to do so even as of the last decade.

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<sup>7</sup> Sindzingre also noted that the reduction of inequality allows for the developmental state to be legitimized. Figure 6 on the distribution of income in chapter 2 thus shows the legitimization of Malaysia by way of their Gini Index.

<sup>8</sup> These are un-weighted averages of effectively applied rates or most favored nation rates for all products subject to tariffs calculated for all traded goods (World Development Indicators 2009)

## 6.6 Implications for Financing the Developmental State

As the East Asian development experience has and continues to show, heterodox principles of economics and development best explain how countries in catch-up situations can quickly transform their economies. The overwhelming evidence from their experience shows that principles of sound finance should be replaced by alternatives that draw on functional finance and modern money. Functional finance will allow sovereign nations with sovereign currencies the flexibility to enact policies that fund development projects. By adopting functional finance, government intervention will be judged solely on the basis of its impact on greater society. In short, intervention will be judged based on its developmental outcomes.

For example, if investment in building up agricultural capacity leads to increased productivity and output, then the spending that allowed for such improvements to occur should be viewed as beneficial and vice versa. If productivity gains are not attained by that spending, then it should be taken as part of the social engineering (trial and error) process that yields developmental states, and the state should withdraw support for such activities within a given time frame (Lerner 1943 and 1947, and Mkandawire 2001). The ability of the state to withdraw that spending is what will make it developmental.

In sum, the following perspectives hold tremendous weight for development finance in places like Ghana and SSA.

1. Taxes drive money; taxes are an intricate part of the social relations between states and societies and tax policy must be crafted with that in mind.
2. Targeted taxation and redistribution are important for developmental states.

3. Functional finance should drive government development expenditure decisions and failure of government policy should not imply an abandonment of functional finance.
4. Neoclassical prescriptions under the Washington Consensus do not yield favorable results and were not adopted by nations that have recently transformed their economies (East Asia countries).
5. Domestic savings, financial stability and human resource improvements must be pursued aggressively for sustained economic growth.

#### 6.7 Summarizing Remarks and Directions for Future Research

Divergence in economic growth and development has characterized the development experiences of SSA and East Asia. In countries like Ghana and Malaysia where initial conditions have been similar, divergence has still persisted. This dissertation has argued using historical, analytical and qualitative methodologies that one of the most important facilitators of growth and development was the committed and focused attempts by the state to achieve economic transformation. It has been shown that replication of East Asian strategies are possible if there is a serious commitment to develop.

The dissertation has reiterated the message of several heterodox development economists and has added to their scholarly work by providing a country and sector-specific analysis of development and agricultural transformation. It is hoped that this dissertation will become an important example for others interested in studying comparative development between East Asia and SSA. The hope is that similar research will bring forth further lessons for economic development in Ghana and SSA.

Future research should delve deeper into the issue of land tenure and agricultural transformation. A comparative discussion will prove useful as it will highlight similarities

and differences in African and Asian land tenure and show their implications for economic development. Comparative analysis of fisheries, crop farming and livestock will also be useful as will the analysis of contract farming. Youth employment and gender issues as they relate to agricultural transformation should also be explored. In addition to these issues, the implications of John Fagg Foster's theory of institutional adjustment, financing the developmental state and modern money for the developmental state should be explored further since they can provide important insights for scholars interested in the prospects of building developmental states in Africa.

The hope is that this dissertation has at the very least reiterated and shown that East Asia's development experience holds the key for SSA. It is hoped that the broad discussion plus the method of research used will be an important insight for scholars. Lastly, the hope is that more of such comparative studies of economic development will be conducted.

Appendix A: Questionnaire

**PART I (General Information about Participant's Occupation)**

1. What type of agricultural activity is the participant engaged in?  
[1 = Crop Farming; 2 = Fishing (river, sea or fish farm); 3 = Livestock; 4 = Crop Farming and Livestock; 5 = Crop Farming and Fishing; 6 = All the Above]

/ \_\_\_\_\_ /

2. What is the nature of the participants' business enterprise?  
[1 = Small – Holder; 2 = Mid – Sized; 3 = Large]

/ \_\_\_\_\_ /

3. Does the participant employ others to work in the enterprise?  
[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

- a. If YES how many people are employed?

/ \_\_\_\_\_ /

- b. Is it difficult to recruit workers?

[1 = Yes; 2 = No; 3 = Sometimes (Please Explain)]

/ \_\_\_\_\_ /

4. How are workers in the enterprise compensated?  
[1 = Wages; 2 = Share of the Output; 3 = Wages and Share of the Output]

/ \_\_\_\_\_ /

- a. If wages are paid, what is the typical wage for a worker per day?

GH Cedis/day / \_\_\_\_\_ /

**PART II (Occupation – Specific Information)**

**Crop Farming**

1. What crops do you cultivate each year on this farm?

2. Is your farm mechanized?

[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

- a. If YES, what type of equipment do you have?

3. What is the size of your farm?  
[1 = < 5 Hectares; 2 = 5 – 10 Hectares; 3 = 11 – 20 Hectares; 4 = > 20 Hectares]

/ \_\_\_\_\_ /

Do you use fertilizer on your farm?

[1 = Yes; 2 = No; 3 = Sometime ago but not now; 4 = Never but would like to]

/ \_\_\_\_\_ /

- a. If YES, where do you get your fertilizer from?  
[1 = Ministry of Agriculture; 2 = Elsewhere (Explain if Possible)]

/ \_\_\_\_\_ /

- b. If YES, are you trained on the proper application of fertilizer?  
[1 = By Extension Officer; 2 = By Other Farmers; 3 = By Trial and Error]

/ \_\_\_\_\_ /

4. What is the source of seeds for your farm?  
[1 = Ministry of Agriculture; 2 = Previous Output from Your Farm; 3 = Other Farmers]

/ \_\_\_\_\_ /

- a. If seeds are from the Ministry of Agriculture, are they free?  
[1 = Yes; 2 = No (Explain if Possible)]

/ \_\_\_\_\_ /

5. Have you seen an improvement in the yields of the seeds over the years?  
[1 = If Yes for Which Crops; 2 = If No for Which Crops; 3 = Not Sure]

/ \_\_\_\_\_ /

6. Is your farm irrigated?  
[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

- a. If NO, has your farm suffered over the years because of irregular rainfall?  
[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

7. Who buys your produce?  
[1 = Ministry of Agriculture; 2 = Marketing Board; 3 = General Public; 4 = Other]  
/ \_\_\_\_\_ /
8. How do you get your produce to the buyers?  
[1 = I Deliver; 2 = Buyer Comes to Farm; 3 = Some Combination of 1 and 2; 4 = Sell in Local Market; 5 = Sell to Middlemen (including State agency)]  
/ \_\_\_\_\_ /
- a. Do the conditions of the roads interfere with your ability to sell your output?  
[1 = Yes; 2 = No; 3 = Sometimes]  
/ \_\_\_\_\_ /
- b. Over the years have the conditions of the roads to your farm improved?  
[1 = Yes; 2 = No; 3 = Conditions have worsened]  
/ \_\_\_\_\_ /
9. How did you start your farm?  
[1 = Inherited; 2 = Took Loan; 3 = Family Business; 4 = Bought Land with Savings]  
/ \_\_\_\_\_ /
10. Have you considered expanding your farm recent years?  
[1 = Yes; 2 = No]  
/ \_\_\_\_\_ /
- a. If YES, can you easily get the funds to expand your farm?  
[1 = Yes (Please Explain Source); 2 = No]  
/ \_\_\_\_\_ /
11. What is your overall perspective on the crop farming business?  
[Please explain trends, weaknesses and opportunities that you see]

## Fisheries

1. Identify type of fishing activity

[1 = Sea Fishing; 2 = River Fishing; 3 = Fish Farm]

/ \_\_\_\_\_ /

- a. If fish farm, where do you receive your stock?

[1 = Ministry of Agriculture; 2 = Private Hatchery]

/ \_\_\_\_\_ /

2. What is the size of the fishing enterprise?

[1 = 1 Canoe; 2 = 1 < Canoes ≤ 10; 3 = Commercial Fishing]

/ \_\_\_\_\_ /

- a. If using canoes or other small boats, do they have outboard motors?

[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

- b. If commercial fishing, how many trawlers and fishing boats are there?

[1 = More than 1 but less than 5; 2 = More than 5]

/ \_\_\_\_\_ /

3. What type of fish do you usually catch?

[1 = Herring; 2 = Tilapia; 3 = Salmon; 4 = Tuna; 5 = Mackerel; 6 = Other]

/ \_\_\_\_\_ /

- a. Do you prefer a particular catch over the other?

[1 = If Yes Which Type; 2 = No]

/ \_\_\_\_\_ /

4. Who buys your fish?

[1 = Fish Mongers and Private Individuals; 2 = Processing Plant; 3 = Both]

/ \_\_\_\_\_ /

- a. How do your buyers receive the fish?

[1 = I deliver; 2 = Buyers come to me; 3 = Both]

/ \_\_\_\_\_ /

5. Are there refrigeration facilities in your town to ensure proper storage of fish?  
[1 = Yes; 2 = No; 3 = Some but Inadequate]

/ \_\_\_\_\_ /

6. Do you receive or have you in the past received training on better fishing techniques?  
[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

- a. If YES, who performed training?  
[1 = Ministry of Agriculture; 2 = Other Agency (explain)]

/ \_\_\_\_\_ /

- b. If NO, would you prefer training?  
[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

7. How did you start your fishing business?  
[1 = Inherited; 2 = Took Loan; 3 = Family Business; 4 = With Own Savings]

/ \_\_\_\_\_ /

8. Have you considered expanding your fishing business?  
[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

- a. If YES, can you easily get the funds to expand?  
[1 = Yes (Please Explain); 2 = No]

/ \_\_\_\_\_ /

9. What is your overall perspective on the fishing business?  
[Please explain trends, weaknesses and opportunities that you see]

## **Livestock**

1. Identify what animals are being raised

[1= Poultry; 2 = Cattle; 3 = Pigs; 4 = Small Ruminants (Goats, Sheep); 5 = Other]

/ \_\_\_\_\_ /

2. How many animals do you have?

[1= < 100; 2 = 100 < Animals < 500; 3 = 500 < Animals < 1000; 4 = > 1000  
Animals]

/ \_\_\_\_\_ /

3. Where do you get feed for your animals?

[1 = Ministry of Agriculture; 2 = Private Company; 3 = Prepare Own Feed]

/ \_\_\_\_\_ /

a. If cattle, do you provide feed for them?

[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

b. If NO how do they eat? (Please explain)

5. Who buys your animals?

[1 = Individuals; 2 = Abattoirs; 3 = Both]

/ \_\_\_\_\_ /

a. How do your buyers receive the animals?

[1 = I Deliver; 2 = Buyers Come to Me; 3 = Both]

/ \_\_\_\_\_ /

6. Do you have training on handling disease outbreaks in your livestock?

[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

a. If YES how did you receive this training?

[1 = Ministry of Agriculture; 2 = other livestock owners; 3 = through experience]

/ \_\_\_\_\_ /

b. Are disease outbreaks frequent in your livestock?

[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

7. Have you considered expanding your business?

[1 = Yes; 2 = No]

/ \_\_\_\_\_ /

- a. If YES, can you easily get the funds to expand?  
[1 = Yes (Please Explain); 2 = No]

/ \_\_\_\_\_ /

8. What is your overall perspective on the livestock business?

[Please explain trends, weaknesses and opportunities that you see]

### **PART III (Investigator Observation)**

1. Is there a thriving local economy close to the agricultural activity? (Describe in detail what that local economy is?)

2. Are there any visible environmental impacts that could be a result of the agricultural activity?

3. What was the composition of labor for each agricultural activity?

## Appendix B: Other Interview Questions

1. In your experience as an expert on Ghana's economy (or Agricultural Sector), what would you identify as the major changes that have occurred in the economy or sector since independence?
2. What sectors of the Ghanaian economy do you think have lacked in growth and development and what sectors do you think hold the key to development and the achievement of the Millennium Development Goals?
3. What is your opinion of the agricultural sector? What do you think are the keys to developing this sector? What challenges would you say affect the productivity of the sector? What ways do you think these challenges can be circumvented?
4. What future do you see for agriculture in Ghana? In the broader context of development, what prospects do you see for Ghana?
5. What steps do you think need to be taken for the overall development of Ghana? Who does this responsibility fall on? Can you identify a specific role for the state in development?
6. In the 1960's, Ghana was compared to several East Asian countries like Malaysia, South Korea and Taiwan. However, in the present period Ghana's development is nowhere near these countries. In your opinion, what do you think is the most important factor that can explain Ghana's poor development record? Do you think learning from these countries (Malaysia, Taiwan etc) and adopting practical lessons can help? (If so, what is the best way to do this?)
7. Any other thoughts?

## Appendix C: Highlights of Washington Consensus

1. Fiscal Discipline
2. Restructuring of public expenditures from indiscriminate subsidies to basic health and education
3. Tax reform to broadens the tax base
4. Liberalizing interest rates
5. A competitive exchange rate
6. Trade liberalization
7. Liberalization of inward foreign direct investment
8. Privatization of state enterprises
9. Abolition of regulations that impede entry and exit of firms and market competition
10. Securing property rights

## BIBLIOGRAPHY

- Abor, J., Adjasi, C. K. D., and Hayford, M-C. 2008. How Does Foreign Direct Investment Affect the Export Decisions of Firms in Ghana, *African Development Review*, 20(3): 446-465.
- Ake, Claude. 1984. *A Political Economy of Africa*. New York: Longman Inc.
- Ake, Claude. 1996. *Democracy and Development in Africa*. Washington DC: The Brookings Institution.
- Akyuz, Y ., Chang, Ha-Joon and Kozul-Wright, R. 1998. New Perspectives on East Asian Development. *Journal of Development Studies*, 34(6)
- Akyuz, Y and Gore, C. 2001. African Economic Development in a Comparative Perspective. *Cambridge Journal of Economics* , 25(3): 265-288.
- Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.3, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, August 2009.
- Amsden, A. 1989. *Asia's Next Giant: South Korea and Late Industrialization*. Oxford University Press.
- Amsden, A. 2001. *The Rise of the Rest: Challenges to the West from Late-Industrializing Economies*. Oxford University Press.
- Amsden, A. 2007. *Escape from Empire: The Developing World's Journey through Heaven and Hell*. Cambridge, Mass: The MIT Press.
- Appiah, M. R. 2004. *Impact of Cocoa Research Innovations on Poverty Alleviation in Ghana*. Accra: Ghana Academy of Arts and Sciences.
- Arden-Clarke, Charles. 1958. Eight Years of Transition in Ghana. *African Affairs*, 57(226): 29-37.
- Arden-Clarke, Charles. 1958. Gold Coast into Ghana: Some Problems of Transition. *International Affairs* , 49-56.
- Asare, Benjamin. and Wong, Alan. 2004. An Economic Development of Two Countries: Ghana and Malaysia. *West Africa Review* , 5.
- Associated Press. July 2009. President Obama's Speech to Ghanaian Parliament. Available from [http://www.huffingtonpost.com/2009/07/11/obama-ghana-speech-full-t\\_n\\_230009.html](http://www.huffingtonpost.com/2009/07/11/obama-ghana-speech-full-t_n_230009.html).

- Athukorala, P., and Menon, J. 1995. Development with Foreign Investment: Malaysia, *Australian Economic Review*, 109: 9-22
- BBC. 2005. *Two Countries Contrasting Tales*. Available from <http://news.bbc.co.uk/2/hi/africa/4398537.stm>.
- Beason, R. and Weinstein D. 1995. The MITI Myth. *American Enterprise* , 6(4):84.
- Bell, S. 2000. Do Taxes and Bonds Finance Government Spending?. *Journal of Economic Issues*, 34 (September 2000): 603-620
- Bell, S. 2001. The Role of the State and the Hierarchy of Money. *Cambridge Journal of Economics*, 25 (May 2001): 149-163
- Bodomo, A. 1996. On Language and Development in Africa: The Case of Ghana. *Nordic Journal of African Studies* , 5(2): 31-53.
- Boratav, K. 2001. Movements of Relative Agricultural Prices in Sub-Saharan Africa. *Cambridge Journal of Economics* , 25(3): 395-416.
- Brautigam, D. 1996. The State as Agent: Industrial Development in Taiwan, 1952-72. In *Asian Industrialization and Africa: Studies in Policy Alternatives to Structural Adjustment*, ed. Howard Stein, 145-182. New York: St. Martin's Press.
- Brautigam, D., Fjeldstad, O-H, and Moore, M. 2008. *Taxation and State-Building in Developing Countries: Capacity and Consent*. New York: Cambridge University Press
- Byres, Terence. 2002. Agriculture and Development: The Dominant Orthodoxy and an Alternative View. In *Rethinking Development Economics*, ed. Ha-Joon Chang (pp. 235-254). New York: Anthem Press.
- Cassen, Robert. 1994. *Population and Development: Old Debates, New Conclusions*. New Jersey: Transaction Publishers.
- Castells, Manuel. 1992. Four Asian Tigers with a Dragon Head. In *States and Development in the Asian Pacific Rim*, eds. Richard P. Appelbaum and Jeffrey Henderson, 33-70. Newbury Park, CA: Sage Publications.
- CEDECOM. 2009. *Central Region Profile*. Cape Coast
- Chang, Ha-Joon. 2003. *Kicking Away the Ladder: Development Strategy in Historical Perspective*. New York: Anthem Press.
- Chang, Ha-Joon .ed. 2003. *Rethinking Development Economics*. New York: Anthem Press.

- Chang, Ha-Joon. 2006. *The East Asian Development Experience: The Miracle, the Crisis and the Future*. New York: Zed Books.
- Chang, Ha-Joon. 2007. *Institutional Change and Economic Development*. Tokyo: United Nations University Press.
- Chang, Ha-Joon. and Grabel, Ilene. 2004. *Reclaiming Development: An Alternative Economic Policy Manual*. New York: Zed Books.
- Chenery, H. and Taylor, L. 1968. Development Patterns Among Countries and Over Time. *Review of Economics and Statistics*, 50(4):391-416.
- Child, Josiah. 1693 [2010]. *A New Discourse on Trade*. Gale ECCO.
- Child, Josiah. 1668 [1959]. Brief Observations Concerning Trade, and Interest of Money. In *Sir Josiah Child: Merchant Economist*, ed. W. Letwin (pp. 40-58). Cambridge, Mass: Harvard University Printing Office.
- Ching, C. 1999. New Trend(s) in Poultry Production and Processing. *Senior Officers Conference - Santubong*. Kuching: Department of Agriculture, Sarawak.
- Ching, P. W. 2006. *The Development of Malaysian Economy*. Selangor: Prentice Hall.
- Cipolla, C. M. 1970. *The Economic Decline of Empires*. London: The Camelot Press Ltd.
- Clark, David. 1996. *Urban World/Global City*. New York: Routledge.
- Clark, David. 1998. Interdependent Urbanization in an Urban World: An Historical Overview. *The Geographical Journal*, 164(1):85-95.
- Clute, R. 1982. The Role of Agriculture in African Development. *African Studies Review*, 25(4)
- Davidson, Paul. 2004-2005. A Post Keynesian View of the Washington Consensus and How to Improve It. *Journal of Post Keynesian Economics*, 27(2): 207-230
- Department of Agriculture Sarawak. 2008. *Agricultural Statistics of Sarawak*. Kuching, Malaysia: Department of Agriculture Sarawak.
- Department of Statistics. 2005. *Agriculture Census*. Putrajaya: Department of Statistics Malaysia.
- Department of Statistics. 2006. *Economic Census: Agriculture*. Putrajaya, Malaysia: Department of Statistics Malaysia.

- Department of Statistics. 2006. *Economic Census: Manufacturing*. Putrajaya, Malaysia: Department of Statistics Malaysia.
- Department of Statistics. 2008. *Annual Rubber Statistics*. Putrajaya, Malaysia: Department of Statistics Malaysia.
- Department of Statistics. 2008. *Yearbook of Statistics*. Putrajaya, Malaysia: Department of Statistics Malaysia.
- Department of Statistics. 2009. *Annual National Accounts: Gross Domestic Product*. Putrajaya, Malaysia: Department of Statistics, Malaysia.
- Deyo, Frederic. ed. 1987. *The Political Economy of the New Industrialism*. Ithaca: Cornell University Press.
- Dreschler, W. 2004. Natural versus Social Sciences: On Understanding in Economics. In *Globalization, Economic Development and Inequality: An Alternative Perspective*, ed. Erik Reinert, 71-87. Northampton, Mass: Edward Elgar.
- Easterly, W and Levine, R. 1997. Africa's Growth Tragedy: Policies and Ethnic Divisions. *Quarterly Journal of Economics* , CXII, 1203-50.
- Essegbey, G. 2009. Ghana: Cassava, Cocoa, and Poultry. In *Agribusiness and Innovation Systems in Africa*, eds. Kurt Larsen, Kim Ronald and Theus Florian, 63-86. Washington DC: World Bank.
- Evans, P., Rueschemeyer, D., and Skocpol, T. eds. 1985. *Bringing the State Back In*. New York: Cambridge University Press.
- Evans, P. 1995. *Embedded Autonomy: States & Industrial Transformation*. Princeton, NJ: Princeton University Press.
- Fine, B. and KS, Jomo. eds. 2006. *The New Development Economics after the Washington Consensus*. New York: Zed Books.
- Food and Agriculture Organization. 2004a. *Fertilizer Use by Crop in Ghana*. Rome: FAO.
- Food and Agriculture Organization. 2004b. *Fertilizer Use by Crop in Malaysia*. Rome: FAO.
- Forstater, Mathew. 2005. Taxation and Primitive Accumulation: The Case of Colonial Africa. *Research in Political Economy*, 22: 51-65.
- Foster, John Fagg. 1981. An Approach to Land Use Planning in Changing Technology. *Journal of Economic Issues*, 15(4):985-1007.

- Francks, P., Boestel, J., and Kim H. C. 1999. *Agriculture and Economic Development in East Asia: From Growth to Protectionism in Japan, Korea and Taiwan*. London: Routledge.
- Fritz, V. and Menocal, A. R. 2007. Developmental States in the New Millenium: Concepts and Challenges for a New Aid Agenda, *Development Policy Review*, 25(5):531-552.
- Gabre-Madhin, Z, E., & Johnston, B. F. 2002. Accelerating Africa's Structural Transformation: Lessons from East Asia. In *Perspectives on Agricultural Transformation: A View from Africa*, eds. Thomas S. Jayne, Isaac J. Minde, & Gem Argwings-Kodhek, 49-82. Hauppauge, NY: Nova Science Publishers.
- Ghana National Development Planning Commission. 2008. *Long Term National Development Plan (Seven Year Development Plan 2008-2015), Volume 1: Towards a Development Policy Framework*. Cantoments-Accra: National Development Planning Commission.
- Ghana Statistical Service. 2002. *2000 Population & Housing Census*. Accra: Statistical Service.
- Ghana Statistical Service. 2003. *Ghana Directory of Industrial Establishments*. Accra: Statistical Service.
- Ghana Statistical Service. 2005. *Population Data Analysis Report: Vol I, Socio-Economic and Demographic Trends*. Accra: Statistical Service.
- Ghana Statistical Service. 2006. *Health, Nutrition and Environment Statistics: 2005 Report*. Accra: Statistical.
- Gomez, Edmund. T., and KS, Jomo 1999. *Malaysia's Political Economy: Politics, Patronage and Profits*. New York: Cambridge University Press
- Goodacre, Hugh. 2005. William Petty and Early Colonial Roots of Development Economics. In *The Pioneers of Development Economics: Great Economists on Development*, ed. Jomo KS, 10-30. New York: Zed Books.
- Gopal, J. 1999. Malaysia's Oil Palm Refining Industry: Policy, Growth, Technical Change, and Competitiveness. In *Industrial Technology Development in Malaysia*, eds. Jomo KS, G. Felker, Rasiah & Rajah, 360-395). New York: Routledge.
- Gove, S., and Peltó, G.H.1994. Focused Ethnographic Studies in WHO Programme for the Acute Respiratory Infections, *Medical Anthropology*, 15 (4): 409-424
- Harron, H. M., Shamsudin, M. N., and Latif, I. A. 2001. *Challenges for Agribusiness: A Case for Malaysia*. Chang Mai, Thailand: Multicropping Center, Chang Mai University.
- Hodder, Rupert. 2000. *Development Geography*. New York: Routledge.

- Hollerman, L. 1983. Review of MITI and the Japanese Miracle by Chalmers Johnson. *Journal of Asian Studies* , 42(2):414-415.
- Huff, W. G., Dewit, G., and Oughton C. 2001. Building the Developmental State: Achieving Economic Growth through Co-operative Solutions: A Comment on Bringing Politics Back In
- Ikpe, Eka. 2008. The Relevance of the Developmental State Paradigm in an Era of Globalisation. *International Initiative for Promoting Political Economy Workshop*. Procida, Italy.
- Innes, A. Mitchell., 1913. What is Money?. *Banking Law Journal*, 30 (5)
- Innes, A. Mitchell. 1914. The Credit Theory of Money. *Banking Law Journal*, 31(2)
- Jayne, T. S., Minde, I. J., and Argwings-Kodhek, G. eds. 2002. *Perspectives on Agricultural Transformation: A View from Africa*. Hauppauge, NY: Nova Science Publishers.
- Johnson, Chalmers. 1982. *MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975*. Stanford, CA: Stanford University Press.
- Johnson, Chalmers. 1994. *Japan Who Governs?- The Rise of the Developmental State*. New York : W. W. Norton and Company .
- Johnson, Chalmers. 1999. The Developmental State: An Odyssey of a Concept. In *Developmental State*. ed. Meredith Woo-Cummings, 32-60. Ithaca: Cornell University Press.
- Johnston, B. F., and Kilby, P. 1975. *Agriculture and Structural Transformation: Economic Strategies in Late-Developing Countries*. New York: Oxford University Press.
- Joshi, A and Aye, J. 2008. Associational Taxation: A Pathway into the Informal Sector?. In *Taxation and State-Building in Developing Countries: Capacity and Consent*. eds. Deborah Brautigam, Odd-Helge Fjelstad and Mick Moore, 183-211. New York: Cambridge University Press.
- Ju-K'ang, T. 1997. *The Chinese of Sarawak*. Kuching: The Sarawak Press Sdn. Bhd.
- Kajisa, K., Maredia, M and Boughton, D. 1997. *Transformation Versus Stagnation in the Oil Palm Industry: A Comparison between Malaysia and Nigeria*. East Lansing: Department of Agricultural Economics-Michigan State University.
- Karshenas, M. 2001. Agriculture and Economic Development in Sub-Saharan Africa and Asia. *Cambridge Journal of Economics* , 25(3): 315-342.

- Kauzya, John-Mary 2008. Building a Developmental State: Strategies for Attracting and Retaining High Quality Staff in the Public Service in Africa, *30<sup>th</sup> Africa Association for Public Administration and Management (AAPAM) Annual Roundtable Conference*. Accra, Ghana
- Kearney, R. 1990. Mauritius and the NIC Model Redux, or, How Many Cases Make a Model? *Journal of Developing Areas* , 24:195-216.
- Khan, J. 2009. *A Tale of Two Countries: Ghana and Malaysia's Divergent Development Paths*. Available from allacademic:  
[http://www.allacademic.com/meta/p282005\\_index.html](http://www.allacademic.com/meta/p282005_index.html)
- Knoblauch, Hubert. 2005. Focused Ethnography [30 paragraphs]. *Forum: Qualitative Social Research [On-line Journal]*, 6 (3), Art. 44. Available at: <http://www.qualitative-research.net/fqs-texte/3-05/05-3-44.htm> [Date of Access: 11/17/2010]
- Knapp, George Friedrich. 1924. *The State Theory of Money*. Abridged edition, translated by H. M. Lucas and J. Bonar. New York: Macmillan and Co.
- KS, Jomo. 2001. Rethinking the Role of Government Policy in Southeast Asia. In *Rethinking the East Asian Miracle*, eds. Joseph E Stiglitz, and S. Yusuf , 461-508. New York: Oxford University Press.
- KS, Jomo. 2005. *The Pioneers of Development Economics: Great Economists on Development*. New York: Zed Books.
- KS, Jomo and Reinert, E. eds. 2005. *The Origins of Development Economics: How Schools of Thought Have Addressed Development*. New York: Zed Books.
- KS, Jomo., Chang, Y., and Khoo, K. 2004. *Deforesting Malaysia: The Political Economy and Social Ecology of Agricultural Expansion and Commercial Logging*. New York: Zed Books.
- Kuznets, Simon. 1971. *Economic Growth of Nations: Total Output and Production Structure*. Cambridge, MA: Harvard University Press.
- Kwan, K. S. 1995. The Korean Miracle (1962-80) Revisited: Myths and Realities in Strategies and Development. In *Asian Industrialization and Africa: Studies in Policy Alternatives to Structural Adjustment*, ed. Howard Stein, 87-144. New York: St. Martins Press.
- Lerner, Abba. P., 1943. Money as a Creature of the State. *American Economic Review*, 37(2)
- Lerner, Abba. P., 1947. Functional Finance and the Federal Debt. *Social Research*

- Lewis, Arthur. 1954. Economic Development with Unlimited Supplies of Labour. *Manchester School* , 22:139-91.
- Mack, N., Woodsong, C., MacQueen, K., Guest, G., and Namey, E. 2005. Qualitative Research Methods: A Data Collector's Field Guide, Research Triangle Park, NC: Family Health International
- Makoto, K. 1988. Myths about MITI . *Tokyo Business Today* , p. 64.
- McCarthy, J., and Cramb, R. A. 2009. Policy Narratives, Landholder Engagement, and Oil Palm Expansion on the Malaysian and Indonesian Frontiers. *The Geographical Journal* , 175: 112-123.
- Meisenhelder, T. 1997. The Developmental State in Mauritius. *Journal of Modern African Studies* , 35:279-297.
- Migdal, J. S. 1988. *Strong Societies and Weak States*. Princeton, NJ: Princeton University Press.
- Ministry of Food and Agriculture, Ghana. (2007). *Food and Agriculture Sector Development Policy*. Accra: Ministry of Food and Agriculture.
- Mkandawire, T. 2001. Thinking about Developmental States in Africa. *Cambridge Journal of Economics* , 25(3):289-313.
- Morrison, P. S. 1997. Transforming the Periphery: The Case of Sarawak, Malaysia. In *Asia-Pacific: New Geographies of the Pacific Rim*, eds. R. Watters and T. McGee, 302-317. London: Hurst and Company.
- Morrison, P. S., Murray, W. E., and Ngidang, D. 2006. Promoting Indigenous Entrepreneurship through Small-Scale Contract Farming: The Poultry Sector in Sarawak, Malaysia. *Singapore Journal of Tropical Geography* , 27: 191-206.
- Murad, W. M., Mustapha, N.H.N and Siwar, C. 2008. Review of Malaysian Agricultural Policies with Regards to Sustainability, *American Journal of Environmental Sciences*, 4(6): 608-614
- Myrdal, G. 1968. *Asian Drama: An Inquiry into the Poverty of Nations, Vol. II*. New York: Pantheon.
- Ngidang, D. 1997. Native Customary Land Rights, Public Policy, Land Reforms and Plantation Development. *Borneo Review*, VIII, 63-80.
- Ngidang, D. 2005. Deconstruction and Reconstruction of Native Customary Land Tenure in Sarawak. *Southeast Asian Studies*, 43(1): 41-75.

- Nyanteng, V. K., and Asuming-Brempong, S. 2003. The Role of Agriculture in Food Security in Ghana. *Role of Agriculture Project International Conference*. Rome: FAO.
- Ocampo, Jose A., and KS, Jomo and Vos, R. 2007. *Growth Divergences: Explaining Differences in Economic Performance*. New York: Zed Books.
- Oduro, A. D. 2000. Performance of the External Trade Sector Since 1970. In E. Aryeetey, J. Harrigan, and M. Nissanke, *Economic Reforms in Ghana: The Miracle and the Mirage*. Oxford, UK: James Currey.
- Onis, Ziya. 1991. The Logic of the Developmental State. *Comparative Politics* , 24(1):109-126.
- Patnaik, P. 2005. Karl Marx as a Development Economist. In *The Pioneers of Development Economics: Great Economists on Development*, ed. Jomo KS, 31-41. New York: Zed Books.
- Peet, R. and Hartwick, E. 2009. *Theories of Development: Contentions, Arguments and Alternatives*. New York: The Guildford Press.
- Polanyi, Karl. 1944 [2001]. *A Great Transformation*. Boston: Beacon Press.
- Porter, M. 1990. *The Competitive Advantage of Nations*. New York: McMillan.
- Rawlins, J. 1965. *Sarawak 1839-1966*. New York: St. Martins Press.
- Reece, B. 2004. *The White Rajahs of Sarawak: A Borneo Dynasty*. Singapore: Archipelago Press.
- Reinert, E. and Reinert, S. 2005. Mercantilism and Economic Development: Schumpeterian Dynamics, Institution-Building and International Benchmarking. In *The Origins of Development Economics: How Schools of Thought Have Addressed Development*, eds. Jomo KS and Erik Reinert, 1-23, New York: Zed Books.
- Reinert, Erik. 1999. The Role of the State in Economic Growth. *Journal of Economic Studies*, 26:4-5.
- Reinert, Erik. 2004. *Globalization, Economic Development and Inequality: An Alternative Perspective*. Northampton, Mass: Edward Elgar.
- Reinert, Erik. 2005. German Economics as Development Economics: From the Thirty Years' War to World War II. In *The Origins of Development Economics: How Schools of Thought Have Addressed Development*, eds. Jomo KS, and Erik Reinert, 48-68. New York: Zed Books.

- Reinert, S. 2005. The Italian Tradition in Political Economy: Theories and Policies of Development in the Semi-Periphery of the Enlightenment. In *The Origins of Development Economics: How Schools of Thought Have Addressed Development*, eds. Jomo KS and Erik Reinert, 24-47. New York : Zed Books.
- Ricardo, D. 1821[1973]. *On the Principles of Political Economy and Taxation*. eds. Piero Sraffa and Maurice Dobb, New York: Cambridge University Press.
- Richards, L., and Morse, J. 2007. *Read Me First for a User's Guide to Qualitative Methods*. Thousand Oaks, CA: Sage Publications.
- Rucipero, Rubens. 2001. African Economic Development in a Comparative Perspective. *Cambridge Journal of Economics* , 25(3):263.
- Sachs, J and Warner, A. 1997. Sources of Slow Growth in African Economies. *Journal of African Economies* , 6: 335-376.
- Sarawak Star Tribune. October 12, 2010. *Government Will Continue Peat Soil Research*. Available from <http://tribune.my/prime/3227-ss--government-will-continue-peat-soil-research.html>
- Sao Paulo School of Economics of Getulio Vargas Foundation. 2010. *Ten Theses on New Developmentalism*. Sao Paulo, Brazil: Structuralist Development Macroeconomics Center
- SAPRIN. 2004. *Structural Adjustment: The Policy Roots of Economic Crisis, Poverty and Inequality*. New York: Zed Books.
- Sauber, M. 2009. Africa's Lost Comparative Advantage in Agriculture: Economic Development and Stagnation in a Monetary Production Economy with Low Agricultural Productivity. *INFER Annual Conference*. Stirling, UK.
- Schatz, Richard. 2007. Structural Transformation and Rural Development in Sarawak, Malaysia, 1963-2006. *The Sarawak Museum Journal* , LXIII, No. 84.
- Scott, A. and Garofoli, G. 2007. *Development on the Ground: Clusters, Networks and Regions in Emerging Economies*. New York: Routledge.
- Sindzingre, A 2007. Financing the Developmental State: Tax and Revenue Issues, *Development Policy Review*, 25(5): 615-632
- Stein, Howard. ed. 1996. *Asian Industrialization and Africa: Studies in Policy Alternatives for Structural Adjustment*. New York: St Martins Press.
- Stein, Howard. 2003. Rethinking African Development. In *Rethinking Development Economics*, ed. Ha-Joon. Chang, 153-178. New York: Anthem Press.

- Stiglitz, Joseph. E., and Yusuf, S. eds. 2001. *Rethinking the East Asian Miracle*. New York: Oxford University Press.
- Sulaiman, W. et al 2005. *Sago Performance on Deep and Shallow Peats and Its Implications on Agronomic Sustainability*. Kuching, Malaysia: CRAUN Research Sdn Bhd.
- Szentes, T. 2005. Development in the History of Economics. In *The Origins of Development Economics: How Schools of Thought Have Addressed Development*, eds. Jomo KS and Erik Reinert, 146-158. New York: Zed Books.
- The Encyclopedia of Malaysia. Volumes 9-13. Singapore: Archipelago Press.
- Timmer, C. P. 1997. Farmers and Markets: The Political Economy of New Paradigms. *American Journal of Agricultural Economics* , 79: 621-627.
- Todaro, M. and Smith, S. 2002. *Economic Development*. New York: Addison-Wesley.
- Todaro, M. and Smith, S. 2009. *Economic Development*. London: Pearson.
- Toye, John. 2003. Changing Perspective in Development Economics. In *Rethinking Development Economics*, ed. Ha-Joon Chang, 21-40. New York: Anthem Press.
- Tradewinds Plantation Berhad. 2010. *Rising to the Challenge*. Kuala Lumpur, Malaysia: Tradewinds Plantation Berhad.
- Trezzini, Bruno. 2001. Embedded State Autonomy and Legitimacy: Piecing together the Malaysian Development Puzzle. *Economy and Society* , 30(3): 324-353.
- Tsen, W. H. 2005. The Determinants of Foreign Direct Investment in the Manufacturing Industry of Malaysia. *Journal of Economic Cooperation*, 26 (2): 91-110
- UNCTAD. 1999. *African Development in a Comparative Perspective*. Trenton, New Jersey: First Africa World Press.
- UNCTAD. 2007. *Reclaiming Policy Space: Domestic Resource Mobilization and Developmental States*. New York: United Nations.
- Vries, Jan de. 1984. *European Urbanization 1500-1800*. Cambridge, Mass: Harvard University Press.
- Wade, Robert 1990. *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*. Princeton, NJ: Princeton University Press.
- Wallerstein, Immanuel. 1974. *The Modern World System I: Capitalist Agriculture and the Origins of European World Economy in the Sixteenth Century*. San Diego: Academic Press.

- Wallerstein, Immanuel. 1980. *The Modern World System II: Mercantilism and the Consolidation of the European World Economy, 1600-1750*. Boston: Academic Press.
- Wray, L. Randall., 1998. *Understanding Modern Money: The Key to Full Employment and Price Stability*. Northampton, Mass: Edward Elgar Publishers.
- Wray, L. Randall. 2010. Alternative Approaches to Money. *Theoretical Enquiries in Law*, 11(1)
- World Bank. 1981. *Accelerated Development in Sub-Saharan Africa: An Agenda for Action*. Washington DC: World Bank.
- World Bank. 1982. *Agriculture and Economic Development*. Washington DC: Oxford University Press.
- World Bank. 1993. *East Asian Miracle: Economic Growth and Public Policy*. Washington DC: Oxford University Press.
- World Bank. 1994. *Adjustment in Africa: Reforms, Results and the Road Ahead*. Washington DC: Oxford University Press.
- World Bank. 1998. *World Bank Indicators*. Washington DC: World Bank.
- World Bank. 2006. *World Development Indicators*. Washington DC: The World Bank.
- World Bank. 2008. *Agriculture for Development*. Washington DC: Oxford University Press.
- World Bank. 2009. *World Development Indicators*. Washington DC: World Bank.
- Yamamura, K. 1983. Review of MITI and the Japanese Miracle by Chalmers Johnson. *Journal of Japanese Studies* , 9(2):211.

## VITA

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