

An Analysis and Discussion of Rural Planning System and Its Sustainable Development in Ghana Based on 'Capital' Framework Approach

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Abstract. In recent years, with the advancement of globalization and industrialization, sustainable development has become the consensus of the world and the central theme of human society and modern global development. However, vulnerability and instability in rural areas have increased significantly due to urbanization and rapid socioeconomic development. The global problem of rural decline is becoming increasingly prominent, and the sustainable rural development is facing severe challenges, especially in developing countries.

Keywords: rural planning, sustainable development, Ghana, rural-urban interactions

1 Introduction

Rural areas provide crucial resources for life and dominate food production, employment, and income (Pervarah, 2024)^[16]. In contrast, the disparity between urban and rural areas in terms of economy, services and infrastructure has led to a decline in agricultural production efficiency and rural economy, and a widening income gap between urban and rural residents (Binsheng et al., 2023)^[2]. Rural areas also face some problems such as rapid population growth, poor agricultural production conditions, intensified environmental degradation, and weak socio-economic connections (Alina et al., 2024)^[1]. In addition, the process of globalization has exacerbated the level of rural poverty and the process of rural decline (Binsheng et al., 2023)^[2].

In Ghana, agriculture is the main driving force for economic development (As shown in Figure 1). However, rural communities are highly susceptible to the impact of environmental changes due to their dependence on agriculture and lack of financial resources, social facilities and infrastructures, resulting in scarcity of natural resources and land (Alina et al., 2024)^[1]. The government of Ghana has adopted a decentralized development planning system (As shown in Figure 2) and has formulated a sustainable rural policy aimed at promoting high diversity and economic development in rural areas, and ultimately achieving sustainable rural development. This essay will analyze the Ghana's rural planning system and explore the specific aspects emphasized in the

local rural policy. This essay will also evaluate the advantages and disadvantages of the rural policy and the impact under the relevant backgrounds.

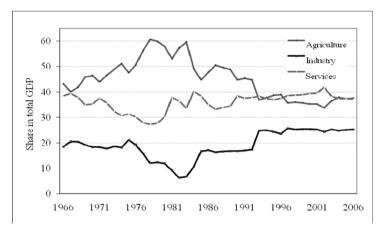


Fig. 1. Structure of economic growth in Ghana, 1966-2006. Source: World Bank 2007b (WDI) and Ghana Statistical Services 2007b.

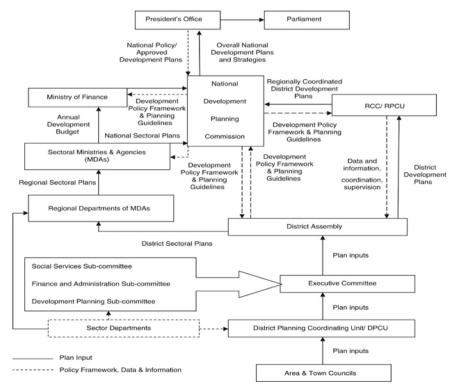


Fig. 2. Framework for decentralized planning in Ghana. Source: Inkoom, 2011^[13].

2 Methodology

Rural areas are the manifestation of the complex of social capital, economic capital, land capital and cultural capital and so on, and the capital is interrelated and interactive (As shown in Figure 3). Rural areas' development requires external resources, but the path to sustainable development always comes from within rural individuals or communities. Harnessing the interrelationship between rural and capital and how they affect economic, social and environmental development is critical to co-creating better rural areas. Under the decentralized development planning system, the government of Ghana adopted a 'capital' framework approach, namely the Asset Based Community Development (ABCD) approach to rural planning (Chen et al., 2024)^[8].

The 'capital' framework approach focuses on the identification and utilization of resources within rural communities, including regional, financial, human and institutional resources, and encourages the active participation of rural people in rural planning (Federica et al., 2023)^[10]. This approach helps to identify opportunities and limitations of rural development projects. It provides a powerful and practical approach to understanding the essence and dynamics of rural development. While identifying the usefulness of local resources, mobilize them and engage citizens in the process to sustainable development and rural planning.

Second, in order to measure the 'capital' framework approach of the study, local resources, asset mobilization and citizen participation were taken as independent variables; The essay takes rural poverty alleviation as the dependent variable and government policy as the moderating variable. In addition, using five (5) projects proposed by Mathie and Cunningham (2003), Kretzmann and McKnight (1993), and Mwakulilah (2016) to measure local resource availability in rural Ghana (Chen et al., 2024)^[8].

Taking into account the rigor of the data and the policy content, this essay analyzes the poverty trend data provided by the Ghana Bureau of Statistics (2018) report and local policies and laws. This study also provides a systematic literature review in the context of urban environmental management and rural planning as preferred reporting items for Systematic Review and Meta-analysis (PRISMA) (Federica et al., 2023)^[10].

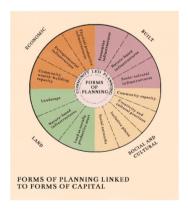


Fig. 3. 'Wheel of Place': forms of capital and forms of planning. Source: Menelaos, Nick&Mark, 2022^[15].

3 Description of the Rural Planning System in Ghana

Since 1994, Ghana has implemented a decentralized rural development planning system, focusing on coordinating urban and rural planning for sustainable development, which involves issues of poverty, unemployment, and inequality (Botchie, 2000)^[3]. This planning system helps to plan and manage environmental changes in rural areas, involving the coordination of natural spaces, human settlements, and improving rural residential settlements. In addition, the rural planning system establishes effective of communication channels between the national government and local communities to achieve the goal of harmonious urban-rural integration and sustainable rural development.

3.1 The Embeddedness of the Rural Planning System Within the Broader Setting

3.1.1 Social System

Rural areas are a complex social system, involving complex interactions between natural resources, environment, population, government institutions and so on (Vivian, Wai-Fung&Jessica, 2023)^[17]. By embedding decentralized development plans into the social system, the government improves the existing rural environment and product market, creates new rural industries and practical activities. Direct rural household market participation, supply chain activities, and market transactions are facilitated by the rural planning system. The embeddedness' of the rural planning system among the social system helps to address the challenges of rural resource utilization, income gap, infrastructure security, so that the social system can be maintained and developed.

3.1.2 Political And Economic Features

The rural decentralized development planning system in Ghana as an ideological principle and rural planning framework, aimed at regulating the relationship between asset mobilization, local resources and rural poverty alleviation, and citizen participation (Botchie, 2000)^[3]. The decentralized development planning system emphasizes the decentralization of the power, functions, measures and authority of rural planning implementation from the central government to the rural regional institutions.

Ghana's economic development is based on agriculture, with agriculture accounting 40% to GDP, three-quarters of total export income, and employing 55% of the labor force (Chen et al., 2024)^[8]. The characteristic of the country's economic development process is to develop agriculture as the backbone of the national economy, promoting balanced growth of the overall economic level. In each rural family in Ghana, an average of five members participates in family farm activities including planting, harvesting, transporting and selling agricultural production to support the household economies (as shown in Figure 4). The decentralized development planning system maintains agricultural production and exports in rural areas, improving the social-economic capacity of the poor in rural areas, alleviating the broader economic situations of poverty.

Characteristics	Total (n = 600)	Percent
Total cultivated farm size (ha)		
Average	4.89	
>5	412	68.7%
≤5	188	31.3%

Fig. 4. Socioeconomic characteristics of households in rural Ghana. Source: Godfred, Jungho&Douglas, 2023^[11].

3.1.3 The Dominant Governance Model

Under this system, the decentralized development planning process distributes governance responsibilities to the local regions, reduces the excessive dependence of rural community institutions on the central government. In order to promote this process, the government of Ghana focuses on policy decision-making and leaving the planning and implementation of development plans and projects to rural areas. Through this model of governance, local communities are able to identify their priority needs and contribute to the development in the governance process (Botchie, 2000)^[4].

3.2 Significant Changes of the Rural Policies Over Time

The decentralized development planning system in rural areas has brought about significant changes in the rural policy over time. First, the Provisional National Defence Council (PNDC) Law 207 of 1988 provided a legal basis for the organizational and administrative framework for decentralized development planning system, promoting the entire process of decentralization and authorized various planning functions in rural communities. However, this was replaced by the Local Government Act 1993 (Act 462), it emphasizes regional coordination committees in rural areas as planning authorities, ensuring the establishment of a standardized decentralization process and effective decentralization system, and providing innovative and practical solutions for rural planning (Botchie, 2000)^[3].

3.3 Particular Aspects Highlighted in the Rural Policy

Firstly, at the social level, the rural policy encourages rural people to engage in productive and developmental activities. The policy envisages the implementation of local micro-credit schemes, establishes a local form of development bank and social investment funds for rural areas (Botchie, 2000)^[3], enables rural people to access basic social services and improve the financial capacity of the poor.

Secondly, the rural policy supports the development of a rural economy centered around agriculture. It provides farmers with fertilizers and tractor services to enhance

agricultural productivity in villages. In addition, supporting organic farming by educating and guiding farmers to follow quality standards to obtain farm certification helps farmers sell their agricultural products at relatively high prices. Additionally, a producer association has also been established, which provides farmers with organic materials, agricultural land, and financial assistance to encourage farmers to increase crop cultivation and livestock production (Godfred et al., 2024)^[12].

Finally, in order to improve the living conditions and environment of rural residents, the policy encourages to initiate rural infrastructure projects through increased transfer of technology and financial resources. For example, repairing and improving rural roads, and developing connecting farms and rural tracks to improve the efficiency of transporting agricultural products from farms to villages and back to markets (Botchie, 2000)^[3].

3.4 Relevant Institutional Structure in Charge of Rural Planning

The rural planning agency responsible for Ghana consists of the National Development Planning Commission (NDPC), Regional co-coordinating councils (RCCs) and District assembles (DAs) (Botchie, 2000)^[3].

Functionally, the NDPC is at the top of the rural planning structure, providing a framework and direction for national development planning and execution, and the guidelines for local rural development plans (As shown in Figure 5). The main components of DAs are the rural councils and their subsidiary structures, which aim to receive support from administrative and technical service departments, and articulate the views and aspirations of rural communities for development. The RCCs are responsible for coordinating rural planning and development initiatives in alignment with national policies and priorities. They provide necessary data and information to DAs to assist in formulating district development plans.

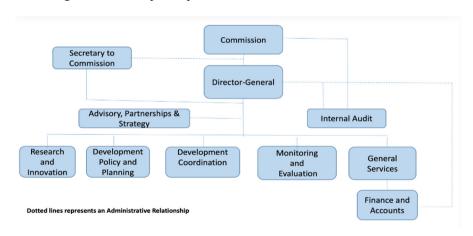


Fig. 5. Organogram for NDPC. Source: NDPC, 2024.

3.5 Important Regulatory Instruments on Rural Planning

The government of Ghana continues to play an important role in regulating local development plans in rural areas through resource allocation, tax policies, and market trade agreements (Erica et al., 2024)^[9]. In order to promote the effectiveness of the rural planning decision-making process, these policies strengthen community supervision to ensure the effective implementation of the planning, execution, and review. Secondly, the government also plans to continuously improve the transparency in rural planning implementation, allow rural communities to participate in supervision and management, and adjust the direction and objectives of planning according to their actual needs (Botchie, 2000)^[5].

3.6 Impact of Global Challenges on the Evolution of the Rural Policy

Global challenges arise not only from globalized economic competition, but also involve conflicts of interest, social change, and environmental sustainability (Martin&Max, 2016)^[14]. Economic globalization has brought about intense competition in the market, which has put forward higher requirements for the rural policy to focus on enhancing the competitiveness of rural industries through technological innovation, personnel training and market development. At the same time, the policy also needs to develop appropriate trade regulations for rural areas to protect rural industries from unfair competition and trade practices (Menelaos, Nick&Mark, 2022)^[15]. With the changes in global social structure and employment pattern, the flow of labor and talent has been accelerated, the rural policy needs to adjust and reform to ensure equitable access to education, healthcare, and social welfare services for rural residents.

3.7 Current Challenges of Implementing the Rural Policy

There are still many challenges in the expectation of implementing the rural policy. Some indicators indicate that Ghana's agricultural growth has relied heavily on land expansion rather than productivity gains (Pervarah, 2024)^[16]. Secondly, Ghana's export structure is still depended on traditional exports such as gold, cocoa and forestry (Breisinger et al., 2008)^[7]. If there is no corresponding increase in agricultural productivity, the growth in agriculture exports increases the demand for food, which often leads to higher food prices and imports on the market. In addition, developing laborintensive manufacturing and service industries in the rural policy may be hindered by high labor and food costs in the market. Climate change may also impede the implementation of the rural policy and slow the agricultural transition in Ghana's rural areas.

4 Discussion

4.1 Positive Aspects and Shortcomings of the Rural Policy

The current implementation of rural policy in Ghana has brought many positive impacts. Under the rural policy, rural communities can better access and manage natural

resources. In addition, rural people can have a more cohesive and supportive rural social environment, access financial resources and high-quality education, and improve information levels. The policy helps to build new agricultural infrastructure to achieve sustainable rural development goals from the social, economic and environmental aspects. However, the rural policy still has some shortcomings. Achieving productivity-oriented agricultural transformation in rural areas must go beyond export agriculture (Godfred et al., 2024)^[12]. Therefore, local policies are unlikely to benefit the majority of small and poor farmers, resulting in economic income gaps and inequalities. Secondly, although the government can effectively use and manage local resources, the rural policy is not efficient enough in coordinating local resources to promote rural poverty alleviation (Chen et al., 2024)^[12].

4.2 The Influence of the Specific Setting on the Rural Policy in Ghana

For a long time, poverty has been a major global issue, and poverty reduction is the primary objective of sustainable development goals. Ghana prioritizes addressing poverty and reducing inequality in rural areas where incidence of poverty exceeds that of urban areas (Chen et al., 2024)^[12]. In addition, there are differences in poverty rates among different ethnic and geographical groups, with the highest poverty rates in the northern regions of Ghana and among ethnic minority groups (Alina et al., 2024)^[12]. Figure 6 and Figure 7 depict the national and regional incidence of poverty, and actual and projected poverty rates and real GDP per capita in Ghana respectively, with the three northern regions consistently having the highest poverty rates, thus the rural policy uses the north of the country as a focal area for rural planning.

Rural areas in Ghana also face rapid population growth, poor agricultural production conditions and increased environmental degradation, and weak socio-economic connections in urban areas. Therefore, under the backgrounds of political, social and economic and so on, the government has implemented a number of rural policies and plans to promote rural economic growth and poverty alleviation in rural areas (Botchie, 2000)^[6].

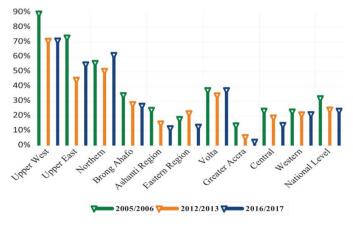


Fig. 6. National and regional incidence of poverty in Ghana. Source: Chen et al., 2024.

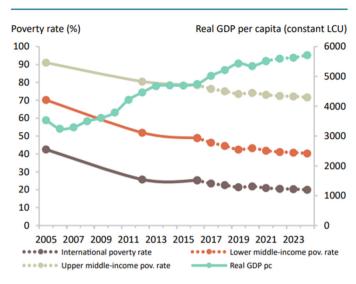


Fig. 7. Actual and projected poverty rates and real GDP per capita. Source: World Bank.

4.3 The Influence of Global Factors on the Rural Policy in Ghana

Global factors significantly impact the rural policy in Ghana. Climate change directly affects agricultural production through extreme weather events such as droughts, floods and heavy rains, prompting the policy adaptation and mitigation efforts. Rising global food prices has forced the rural policy to focus on the importance of poverty reduction and hunger eradication (Pervarah, 2024)^[16]. Global technological innovation and application play an important role in improving agricultural productivity and sustainability, requiring the rural policy to encourage the development and application of these technologies in rural areas. Finally, there is a common global concern and goal for achieving sustainable rural areas, requiring the rural policy to pay attention to the holistic development in education, health, and environmental protection and some poverty problem (As shown in Table 1) in rural areas.

Table 1. Macro poverty outlook indicators in Ghana. Source: World Bank, Poverty & Equity and Macroeconomics, Trade & Investment Global Practices. Emissions data sourced from CAIT and OECD. Notes: e = estimate, f = forecast.

	2019	2020	2021	2022f	2023f	2024f
Real GDP growth, at constant market prices	6.5	0.5	5.4	3.5	2.7	3.5
Private Consumption	13.8	-1	0.8	4.4	5	4.6
Government Consumption	5.4	10.1	82.1	-14.8	-7.5	2.9
Gross Fixed Capital Investment	-10	1.8	5.8	26.1	19.2	24
Exports, Goods and Services	12.7	-50.7	69.1	10.4	11.4	11.1
Imports, Goods and Services	15.9	-545	113.8	20	23.8	25.8
Real GDP growth, at constant factor prices	6.5	0.8	5.3	3.4	2.7	3.6

Agriculture	4.7	73	8.4	2.2	2.2	3.2
Industry	6.4	-2.5	-0.8	3.8	2.4	3.7
Services	7.6	0.7	9.4	3.8	3.2	3.6
Inflation (Consumer Price Index)	7.9	10.4	10	28.6	22.5	14.4
Current Account Balance (% of GDP)	-2.7	·3.2	·3.7	-5.8	-4.5	-5.2
Net Foreign Direct Investment Inflow (% of GDP)	0.7	1.6	2	0.4	2	2.3
Fiscal Balance (% of GDP)	-7.2	·14.7	-11.4	-7.9	-9.2	-9
Debt (% of GDP)	61.2	74.4	76.6	104.6	99.7	101.8
Primary Balance (% of GDP)	-1.6	-8.4	4.1	-0.6	-0.9	-0.2
International poverty rate (\$2.15 in 2017 ppp)	21.4	21.9	21	20.5	20.4	20
Lower middle-income poverty rate (\$3.65 in 2017 ppp)	42.4	43.2	41.8	41.1	40.8	40.3
Upper middle-income poverty rate (\$6.85 in 2017 ppp)	73.5	74.2	73	72.4	72.1	71.7
GHG emissions growth (mtCO2e)	16.5	23.6	-3.8	0.9	2.3	1.4
Energy related GHG emissions (% of total)	150.7	139.7	141.9	134.9	127.9	120.2

5 Conclusion

In conclusion, the decentralized planning system and 'capital' framework approach and the related rural policy in Ghana are fully aligned with the concept of sustainable rural goals. The unified combination of the planning system and policy will help address poverty, large income gap and inequality, promote coordination and development between urban and rural areas. In the background of globalization, Ghana's rural system and policy still need to be adjusted and changed according to the actual development situation and the needs of the people to further achieve the goal of sustainable rural development.

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