
Local Economic Development and Growth Strategy for Prestea Huni-Valley Municipal Assembly



*Oil Palm Processing, Bondaye, Prestea Huni-Valley Municipality. Ghana, June 2018
(Photo Credit: WAGES)*

Prepared for World University Service of Canada

April 2018

By Dr. Steve Manteaw and Nicholas Adamtey

Contents

List of Tables.....	iii
List of Plates	iii
Acronyms.....	iv
EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	6
1.1 Background and Purpose of the assignment.....	6
1.2 The Prestea Huni Valley Municipality.....	7
1.2.1 Geographical Features.....	7
1.3 Purpose of the Assignment.....	8
1.4 Scope of the Assignment	9
2.0 THE DEVELOPMENT ASPIRATION AND VISION OF PRESTEA HUNI VALLEY	11
2.1 Anchoring the LED and Growth Strategy on a shared vision.....	11
2.1.1 Alternative Municipal Development Vision.....	11
2.1.2 The Proposed Vision.....	12
2.1.3 Municipal Development Goals.....	13
3.0 THE PREVAILING SOCIO-ECONOMIC CONDITIONS	14
3.1 Structure of the Local Economy	14
3.2 The resource base of the local economy.....	14
3.3 Population size, Structure and Composition.....	15
3.4 Literacy Levels, Availability of the skills set, and Employment.....	15
3.5 The locational advantages and disadvantages of the economy.....	16
4.0 REPORTS OF STUDIES AND ANALYSIS ON THE MUNICIPALITY.....	17
4.1 Reports Commissioned for the Purpose of LED Planning	17
4.2 Agriculture and Agri-business Report.....	17
4.3 Local Procurement Assessment	17
5.0 THE NATIONAL POLICY CONTEXT	18
5.1 One District, One Factory	18
5.2 Planting for Food and Jobs	19
5.3 Infrastructure for Poverty Eradication Programme (IPEP)	20
5.4 Local Content Regulations in the Mining Sector.....	20
6.0 THEORETICAL UNDERPINNING OF THE STRATEGIC FRAMEWORK	25
6.1 The Growth Pole Theory.....	25

6.1.1 The Agriculture and Agri-business Growth Pole	26
6.1.2 The Mining Sector Growth Pole.....	26
7.0 THE STRATEGIC DEVELOPMENT FRAMEWORK.....	27
7.1 Strategies for Enhancing Agricultural Performance	28
7.1.1 Strategic Interventions to enhance Rice productivity	29
7.1.2 Strategies to Expand Rice Value Chain Opportunities.....	30
7.2 Strategies to Enhance the Performance of Oil Palm Production.....	31
7.2.1 The oil palm market.....	31
7.2.2 Viable but unexplored opportunities in the palm oil value chain	33
7.2.3 Palm kernel cake utilization in poultry.....	33
7.2.4 The case for Poultry development.....	33
7.2.5 Palm kernel cake utilisation in piggery feed	34
7.2.6 Use of palm kernel shell for activated carbon	35
8.0 STRATEGIES FOR INTEGRATING MINING INTO THE LOCAL ECONOMY	36
9.0 THE ROLE OF INFRASTRUCTURE IN THE PHVM LOCAL ECONOMIC DEVELOPMENT AND GROWTH STRATEGY	37
9.1 The Atuabo gas transmission line	37
9.2 Railway development.....	37
9.3 Roads	37
10.0 INTEGRATING GENDER AND YOUTH IN THE PHVM LED AND GROWTH STRATEGY...38	
11.0 INTEGRATING ENVIRONMENTAL CONCERNS INTO THE LED AND GROWTH STRATEGY	39
12.0 BUILDING STRATEGIC PARTNERSHIPS FOR THE LED AND GROWTH STRATEGY .40	
13.0 THE IMPORTANCE OF LAND USE PLAN TO THE LED AND GROWTH STRATEGY....41	
14.0 IMPLEMENTATION FRAMEWORK	42
15.0 FINANCING THE LOCAL ECONOMIC DEVELOPMENT AND GROWTH STRATEGY48	
15.1 The Minerals Development Fund and the Opportunities it Provides	48
15.2 Corporate Social Responsibility Contributions.....	49
15.3 Other Financing Opportunities.....	49
16.0 Bibliographical References.....	51

List of Tables

Table 1 Mining Industry Expenditure Pattern 2013 – 2016	21
Table 2 Mining Industry Local Content Procurement List	22
Table 3 Strategic Opportunities for Local Production.....	23
Table 4 Economic uses of rice straw in industrial chain within agricultural and other sectors	30
Table 5 Mining industry import expenditure on activate carbon	35
Table 6 Prioritized Programs and Activities	42

List of Plates

Plate 1. MMDAs in the Western Region	7
Plate 2. Municipal Map of Prestea Huni-Valley	8
Plate 3. Oil Palm - The game changer for Local Economic Development in PHVM	26
Plate 4. Agric and Agribusiness afford opportunity for poultry development	34
Plate 5. Abandoned underground Mining tunnels can be rehabilitated to serve as tourist attraction	36
Plate 6. PHV's poor road infrastructure will require attention in its development strategy ...	37

Acronyms

1D1F	One-District-One Factory
BAC	Business Advisory Centers
BOPP	Benso Oil Palm Plantation
CBO	Community Based Organizations
CECI	Centre for International Studies in Cooperation
CPO	Crude Palm Oil
CSIR	Council for Scientific and Industrial Research
CSR	Corporate Social Responsibility
DAs	District Assemblies
DACF	District Assembly Common Fund
DDF	District Development Fund
DMTDPs	District Medium Term Development Plans
DPCU	District Planning Coordinating Unit
DPF	Decentralization Policy Framework
DPF	Decentralization Policy Framework
FDI	Foreign Direct Investment
FFA	Free Fatty Acid
GCB	Ghana Commercial Bank
GHEITI	Ghana Extractive Industries Transparency Initiative
GSOPP	Golden Star Oil Palm Plantations
GSS	Ghana Statistical Service
IGF	Internally Generated Fund
IPEP	Infrastructure for Poverty Eradication Program
LED	Local Economic Development
LEDA	Local Economic Development Agency
LEDADS	Local Economic Development and Growth Strategy

M&E	Monitoring and Evaluation
MCDS	Mining Community Development Scheme
MDF	Minerals Development Fund
MSDI	Ministry of Special Development Initiative
NGO	Non-Governmental Organization
NPP	New Patriotic Party
OASL	Office of the Administrator of Stool Lands
PFJ	Planting for Food and Jobs
PHVMA	Prestea Huni Valley Municipal Assembly
PHVM	Prestea Huni Valley Municipality
PHVMAR of 2010 GPHC	Prestea Huni Valley Municipal Analytical Report of Ghana's 2010 Population and Housing Census
PPP	Public-Private Partnership
SDGs	Sustainable Development Goals
SMEs	Small and Medium Enterprises
SWOT	Strength Weaknesses Opportunities Threats
TOPP	Twifo Oil Palm Plantation
WAGES	West Africa Governance and Economic Sustainability in Extractive Areas
WUSC	World University Service of Canada

EXECUTIVE SUMMARY

This Local Economic Development and Growth Strategy paper was commissioned by the World University Service of Canada (WUSC), and the Centre for International Studies and Cooperation (CECI) as part of their West Africa Governance and Economic Sustainability in Extractive Areas (WAGES) project, being implemented over the period 2016 - 2022.

At a broad level, the strategy paper is intended to offer a fresh perspective to local economic development planning, taking into account the mineral endowment of the municipality, opportunities for local skills development and labour market utilization, input-output opportunities for integrating mining into the local economy, opportunities for enhancing agricultural output and benefaction in ways that create additional employment, especially for women and youth outside the mine, and how mining could be leveraged to promote local tourism.

The drafting of the paper was informed by stakeholder inputs, gathered during a municipal level consultation towards the 2017 – 2020 medium-term development planning process facilitated by the WAGES project, during the training of the District Planning Coordinating Committees and One District and One Factory Committee of the Prestea Huni-Valley Municipal Assembly, as well as through studies and available socio-economic data on the municipality, including the District Analytical Reports of Ghana's 2010 Population and Housing Census, previous municipal development plans, the agriculture and agribusiness sub-sector analysis, the local procurement capacity assessment, and market research reports commissioned by the WAGES project.

The strategy is hinged on a proposed local development vision of: [An integrated economy, mutually reinforced by agriculture and mining, delivering jobs and contributing to poverty reduction in the Prestea Huni-Valley Municipality \(PHVM\).](#)

The following specific goals would be pursued under the district development vision:

- Improved employment opportunities in the municipality, especially for youth and women
- Enhanced and sustained agricultural incomes through agribusiness and agro-processing
- Built backward and forward linkages between agriculture and mining
- Enhanced contribution of tourism to local economic development
- Enhanced municipal revenue mobilization and Foreign Direct Investment (FDI) inflows into the municipality

Opportunities within the prevailing socio-economic conditions of the PHVM

- A thriving agriculture sector employing almost half of the population (45.2%). A strong and growing mining sector (both large-scale and artisanal), competing with agriculture for economic dominance
- Minimal level of agro processing, gold refining and petty trading, but with potential for expansion if agricultural productivity is enhanced and the government's one-district-one-factory capitalized on
- The literacy level of people living in the PHVM is pretty high, with 78.4 percent of those of 11 years and above being literate and 21.6 percent being illiterate
- In terms of local labour market utilization, the evidence suggest that of the employed population, about 44.0 percent are engaged as skilled agricultural, forestry and fishery workers, 21 percent in Plant and machine operators and assemblers, 15.2 percent in

service and sales, 9.8 percent in craft and related trade with only 4.4 percent engaged as managers, professionals and technicians

- In terms of locational advantages, the municipality is accessible by road, and linked by railway lines to the Port of Takoradi. The railway transport went out of use for several years but has been recently been rehabilitated. This makes the external (regional and national) markets easily accessible to the municipality. With the reactivation of the Prestea – Takoradi rail network, export markets for bulky commodities are also within reasonable reach
- The area has untapped tourism development potential

Constraints facing the local economy

- Land use contestation between agriculture and mining poses food security risk in the municipality
- Unregulated small-scale mining polluting the environment and water bodies
- Absence of appropriate technology for agro-processing
- Limited appropriate training and capacity building opportunities for youth and women for effective participation in the local economy
- Weak collaboration with the biggest mine, Golden Star Resources in local economic development planning, as a result of which the benefits to the local economy has been marginal, providing minimal employment and subsistent livelihoods for the communities

The national policy context and opportunities it affords

Existing government policies and programs that the municipality could strategically position itself to take advantage of in promoting its local economic development agenda were:

- Planting for Food and Jobs
- One-District-One-Factory
- Infrastructure for Poverty Eradication Program
- Local Content Regulations for the mining sector, requiring the procurement of listed mine inputs from the Ghanaian economy.

Theoretical Foundation of the Strategy

The proposed strategy for promoting the local economic development and growth of the PHVM is anchored on the Growth Pole Theory.

In the context of PHVM, the following key sectors of the local economy were identified as having the potential for exponential growth with capacity to cascade into other sectors and create increased job opportunities for the people of the municipality, especially women and youth:

- Agriculture and Agri-business
- Mining
- Tourism

The strategy emphasizes some mutually beneficial relationships that could be fostered among these sectors in ways that create new job opportunities away from the mine. Particularly, the agricultural potential within the local economy could be harnessed to provide food and other input into the mine. Agribusiness, especially in the case of oil palm processing could be leveraged to provide other mine inputs, such as activated carbon from palm kernel shell. The residue (palm kernel cake) from the processing of palm kernel into oil extracts can also support poultry feed processing to bring down the cost of poultry birds, a known barrier to accessing markets within the mining and hospitality industry.

Mining also affords opportunities for refining, jewelry making, and other downstream benefaction activities. Old mining pits, especially the underground ones could be rehabilitated to serve as tourist sites, with ancillary jewelry exhibition and sales centers.

In terms of financing the Local Economic Development and Growth Strategy, the following sources have been identified:

- The District Assembly Common Fund (DACF)
- District Development Fund (DDF)
- Minerals Development Fund (MDF)
- Internally Generated Fund (IGF)

The IGF in particular was identified as having under-performed over the years, and yet having the greatest potential to contribute to the municipal development financing. The underperformance of the Assembly's IGF is attributed to difficulty in identifying all potential rate payers in the municipality. The proposed solution is therefore to construct a database of all businesses and trades in the municipality, with locational addresses and nature of economic activity engaged. As a critical complimentary initiative, the Assembly should ensure that all streets and buildings in the municipality are named and numbered for easy identification.

The Assembly is also advised to move away from the imposed approach to levying to a consensual approach. This is easier to do, when residents are engaged on the strategic plan and their buy-in is procured. Putting in place accountability mechanisms for reporting on revenue performance and usage will build stronger trust between the Assembly and residents and encourage them to keep faith with their payment obligations.

The passage of the Minerals Development Fund (MDF) Act in 2016 also affords new development financing opportunities to mining host communities. In addition to the 10 percent share of mineral royalties accruing to central government, all mining districts are to benefit from 20 percent of another 10 percent of mineral royalties set aside for the purpose of ensuring the sustainability of the mining industry. This fund is to be disbursed to a yet to be established Mining Community Development Scheme (MCDS).

It is strongly suggested that the funds accruing to the MCDS is managed in ways that reinforces the local development efforts. In other words, projects and programs selected to be financed with MCDS resources should be selected from the Medium Term Development Framework which is aligned with the Local Economic Development and Growth Strategy.

Corporate Social Investments made by companies in the municipality can also be re-directed to complement existing funding sources for the LED and Growth Strategy.

In the particular case of Golden Star Resources (Prestea-Bogoso), the company invests a substantial amount in its flagship CSR project, the Golden Star Oil Palm Plantations Limited Project (GSOPP); and in addition, makes a US\$1 per ounce of gold sold contribution to its Golden Star Development Foundation. It is proposed that the Assembly aligns projects funded by the Foundation's resources with the medium-term development priorities, aligned with the development strategy for the municipality.

It is also suggested that the Assembly considers inviting the Foundation to partner it in some of the planned programs and activities under the development and growth strategy, as a way of

leveraging some complimentary financial resources for their implementation.

Other financing sources for the LED and Growth Strategy beyond the identified statutory disbursement of funds, and voluntary CSR contributions are identified as private investment capital. The Municipality is well placed to attract investment inflows. One of the two distribution pipelines from the Atuabo gas processing facility terminates in the PHVM. This affords the opportunity for factories and other energy-intensive business ventures to access power at an affordable cost. For instance, Ghana Gas has indicated that a private energy company, Genser, has expressed interest in taking some of the gas to produce energy for Gold Fields in Tarkwa.

Again, the government's Western Railway Rehabilitation program, currently underway, is scheduled to extend the railway network from Kojokrom to Tarkwa, making it easier and cost efficient to transport goods from Tarkwa, Prestea, Bogoso, and its environs to the Port of Takoradi enroute to export markets, and also to access other markets in the southern part of the country. What the Assembly ought to do to take advantage of these opportunities, is to use its internet portal, social media, and brochures distributed through Ghana's missions abroad, to sell its locational advantages and economic potential to international investors.

1.0 INTRODUCTION

1.1 Background and Purpose of the assignment

A major challenge that confront the Prestea Huni-Valley Municipality (PHVM), like many other natural resource host communities in Ghana, is how to leverage on the opportunities afforded by resource extraction for enhanced local economic development. Planning in most mineral rich districts over the years appears to have overlooked the opportunities that mining brings in its wake, in terms of agricultural, technological, labour and logistical inputs for the mine's operations.

Indeed, no such strategy has ever been crafted to guide how PHVM interfaces its local economy with mining, in ways that provide support for the agricultural sector, which until the onset of commercial scale mining was the mainstay of the local economy.

PHVM and many other mining districts in Ghana have mostly relied on a share of mineral royalty disbursed by the Central Government as additional funds for local economic development, but as the reports of the Ghana Extractive Industries Transparency Initiative (GHEITI)¹ have revealed, there has always been a high tendency for district assemblies to spend their share of mineral royalty on recurrent expenditure items, and which according to the reports partly accounts for the low development outcomes in beneficiary districts.

At the heart of the challenge that faces PHVM is its difficulty in achieving sustainable development in terms of mitigating the negative social and environmental impacts of mining, while optimizing its share of benefits from the mine, including ensuring the optimum use of the Municipality's share of mineral royalty disbursed by the Central Government.

It is an undeniable fact that mining brings a great deal of opportunities to local people, but without a carefully crafted strategy, these opportunities will slip by most communities.

Again, mining brings extra pressures to bear on the budget of local governments. The population dynamics change as many more people flood the district in search of jobs and other economic opportunities in the mining industry. More schools, clinics, housing and other social services would be required for the increasing numbers of residents. More garbage would be generated and associated with that, an increase in the cost of waste management and disposal.

It is equally important to recognize that, the increased population figures are not only a liability, but represents an opportunity for catalyzing local economic activity. Production and consumption within the local economy would invariably be enhanced, and with it,

¹ GHEITI is the Ghana version of the Extractive Industries Transparency Initiative (EITI), a global initiative aimed at ensuring that natural resource exploitation and the revenues accruing from them, translate into lasting benefits for the governments and people of developing countries, who though rich in natural resources, continue to wallow in poverty and squalor. Ghana acceded to the initiative in 2003 and has since produced 13 mining reports, spanning January – June 2004; July – December 2004, and successive years up to 2015.

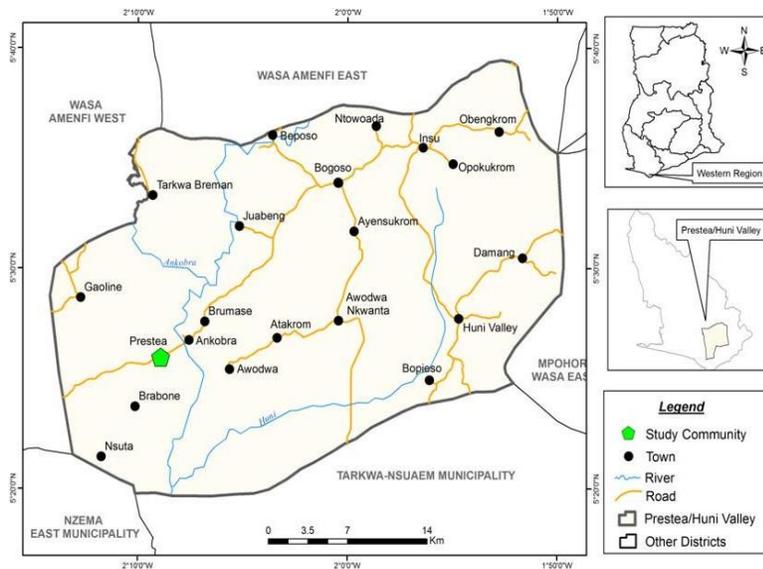


Plate 2. Municipal Map of Prestea Huni-Valley

1.3 Purpose of the Assignment

The need to develop an LED strategy paper follows WAGES' successful implementation of a district level stakeholder consultation towards the 2017 – 2020 medium-term development planning process, and a training of the District Planning Coordinating Committees and One District and One Factory Committees of the two project districts (Prestea Huni-Valley Municipal Assembly, and Wassa East District Assembly).

The overall goal of the assignment as understood from the terms of reference, is to formulate a Local Economic Development Strategy based on newly identified development needs, opportunities and comparative advantages to inform and guide the Municipality to facilitate development, unlocking the latent economic development potential, encourage private sector investment and create economic development and job opportunities for the poor. As such, the economic strategy will inform the budget of the municipality and will provide a baseline against which the performance of the budget and government spending can be measured.

Based on this goal, the following objectives have been identified:

1. Obtain an understanding of the real, but unexplored development opportunities in the key economic sectors in the municipality
2. Identify practical sectoral programs that could be used as basis for pro-active economic development initiatives
3. Identifying micro-level business opportunities
4. Identifying financing sources and investment options that could enhance practical implementation

5. Emphasize local job creation, alleviation of poverty, and redistribution of opportunities and wealth
6. Focus explicitly on opportunities for SME development in all economic sectors
7. Packaging of economic data in an electronic database to be utilized as investment marketing tool
8. Achieve skills transfer as part of the interaction with the client by utilizing known approaches such as counterpart training
9. Ensure that the strategy aligns with and add value to the existing policies and strategies such as the One-District-One-Factory initiative, and the Planting for Food and Jobs program

1.4 Scope of the Assignment

Working with key stakeholders and with the support of WUSC-CECI, the municipal authority has identified the need for a Local Economic Development Strategy Paper to guide the execution of its development facilitation mandate.

In terms of scope, the strategy paper covers the following key issues of LED:

- The socio-economic environment and opportunities for local development
- The resource base of the local economy and opportunities for value-addition, and therefore job creation
- Availability of the skills set/development of local capacity for improved local labour market utilization
- The locational advantages and disadvantages of the economy and investment-marketing actions that need to be developed around these
- Current government policies that could be seized upon
- According to the Prestea-Huni Valley District Analytical Report of Ghana's 2010 Population and Housing Census, the area has specific tourism development potential. The opportunities are however, not fully exploited. They ought to be explored and further developed for the full benefit for local communities
- The role and function of retail and business services are analyzed in terms of district vs. regional or national service provision. Specifically, cross border injections of buying power need to be maximized for full exploitation of the multiplier effect for local benefit
- A number of studies and initiatives have been undertaken in the area, such as agriculture and agri-business sub-sector analysis, local procurement analysis, and market research. These were commissioned by WUSC. The findings and recommendations of these provide much guidance for the further development of the area with specific reference to projects, agreements, and budget priorities. Potential

sources of financing for the local economic development and growth strategy are also identified.

2.0 THE DEVELOPMENT ASPIRATION AND VISION OF PHVM

2.1 Anchoring the LED and Growth Strategy on a shared vision

Every development strategy must be driven by a vision. The vision begins to answer the question: “Where do we want to go?” and is a snapshot of the desired future. It makes clear the core values and principles that are central to what the local area wants to become. The vision is informed by the current situation and looks to the future to alter the current into the desired.

The visioning process should lead to the development of long term strategic goals or framework from which successive medium term plans will take inspiration. One popular approach is the participatory visioning process, which involves stakeholder consultations, and consideration of various documentation, including socio-economic analysis reports and data.

In a workshop setting, the following questions then have to be answered:

- What would you like the local area’s future to become?
- What are the most important economic aspects of the desired future (e.g., jobs, income, poverty reduction, etc.)?
- What is different about your vision of the future from what you see today?

The responses are then collected and grouped around similar ideas. Next is to get an agreement on themes and have someone from the group to pull together one or two vision statements for approval of the consultative plenary.

From key informant interviews conducted by the consultants, it did not appear that PHVM had gone through a municipal visioning process. However, information available on the Western Regional Coordinating Council’s website phrases PHVM’s vision as: aspiring to become a high-income district that provides equal opportunities, wealth and state of the art facilities and services that meet the needs and aspirations of the citizenry. The problem with this vision is that it lacks specific development focus, with no indication of how it intends to become a high-income district.

2.1.1 Alternative Municipal Development Vision

The alternative vision for the municipality is formulated following an analysis of the various district economic assessment reports, some of which have been commissioned recently by the WAGES project, with some of the critical issues regarding LED identified from existing data.

It was discovered during the review that there were some gaps in the district economic profile based on documented information. The task in this regard, therefore was to identify the missing data (information gap) that needs updating to make for a comprehensive desktop review. Particularly, disaggregated information on gender, informal sector, environment, micro and small-scale business were not available. These were gathered from the District Analytical Report of the 2010 Ghana Population and Housing Census, and the Seventh Ghana Living Standard Survey (GLSS 7). After obtaining the necessary information, the following were considered:

- Review of previously prepared SWOT Analysis for the municipality
- What the future of the local area is likely to be if its resources and socio-economic potentials were fully deployed
- What are the most important economic aspects of the desired future (e.g., jobs, income, poverty reduction, etc.)?
- What is different about the vision of the future from what is observed today?

A vision is then formulated based on a scale of probability, considering the Strengths, Weaknesses, Opportunities and Threats to the achievement of the vision.

2.1.2 The Proposed Vision

The proposed vision, and which is to be pursued through successive Municipal Medium Term Development Plans (MMTDPs) is: **An integrated economy, mutually reinforced by agriculture and mining, delivering jobs and contributing to poverty reduction in the Prestea Huni-Valley Municipality.**

This vision is only a proposal, and the municipal authority shall reserve the right to vary it, as it pleases. The key words and their economic notions to note in the proposed vision are provided in Box 1 below.

Box 1 Key Words and their Economic Notions for Consideration

Integrated Economy – this becomes a plausible long term goal because, over the years the mining industry has existed as an enclave unto itself, and not integrated in any way into the local economy. As a result, opportunities that could have come about in the form of local content have eluded the people. The prime consideration here is how agriculture, which until the onset of commercial mining, was the mainstay of the local economy, could serve as a source of food supply to the mining industry, or in other words, how the mining industry could help sustain agricultural incomes by serving as a ready market to food crops. Of course, linked to this goal will be the need to address concerns about standards and quality.

An Integrated Economy also mean exploring opportunities to add value to mineral production at the local level. This may require some agreement to be entered into with the mining company for the supply of gold to organized local jewelers for jewelry making for local consumption, and possibly for export.

Mutually Reinforced – Mutuality here means supporting / benefiting from each other, as against the current contestations around land use between the two economic activities.

Agriculture and Mining – These two economic sectors are identified as the growth poles or in other words, the fulcrum around which growth will be catalyzed and spread to other sectors of the local economy.

Jobs – The reference to jobs in the vision is borne out of a recognition of the need to ensure that growth leads to improvement in the incomes and livelihood situations in the municipality.

Poverty Reduction – The reference to poverty reduction in the vision is because it is a means by which social well-being or human development is assessed.

2.1.3 Municipal Development Goals

From the vision, specific outcomes that the district seeks to achieve are identified. The outcomes are stated in the form of goals. Goals are much more descriptive and concrete than a vision statement, and should be directly related to the findings from the Local Economic Assessment. The following goals are identified from the PHVM development vision:

- Improve employment opportunities in the municipality, especially for youth and women
- Enhance and sustain agricultural incomes through agribusiness and agro-processing
- Build backward and forward linkages between agriculture and mining
- Enhance the contribution of tourism to local economic development
- Enhance municipal revenue mobilization and Foreign Direct Investment (FDI) inflows into the municipality

3.0 THE PREVAILING SOCIO-ECONOMIC CONDITIONS

3.1 Structure of the Local Economy

According to the Prestea Huni-Valley Municipal Analytical Report of Ghana's 2010 Population and Housing Census (PHVMAR of 2010 GPHC), agriculture is the dominant economic activity in the municipality, engaging almost half of the population (45.2%). It is therefore, invariably, the growth pole around which local economic development can be fostered. In recent years, mining (both large-scale and artisanal) has been competing with agriculture for economic dominance. However, due to the absence of a carefully crafted strategy to harness the opportunities the mineral sector affords, the benefits to the local economy has been marginal, providing mainly employment and subsistent livelihoods for the communities. Some of the prominent mining companies in the municipality are Golden Star Resources, Bogoso/Prestea Ltd, Prestea Sankonfa Gold Ltd, New Century Mines (Prestea).

Some level of agro-processing, gold refining, and petty trading also take place in the local economy.

A little over half of the population (52 percent) of households are engaged in agriculture, with crop farming being the main (97.3 percent) agricultural activity. Those in livestock rearing account for 28.1 percent, and tree planting (0.3 percent). Poultry (chicken - 66.4%) is the dominant animal reared in the District.

Financial intermediation within the local economy is provided by several micro-finance institutions, including Amenfiman Rural Bank, Opportunity Savings and Loans Ltd, and Fiaseman Rural Bank Ltd.

The only large universal bank with a branch in the municipality is Ghana Commercial Bank (GCB), with First National Bank, a medium sized bank also providing access to banking and other financial services.

More than 73.2% of the population aged 15 years and above are economically active while 26.8 per cent are economically inactive. Of the economically active population, 96.5 percent are employed while 3.5 percent are unemployed. A greater percentage (44.7 percent) of the economically inactive population are students; 31.5 percent perform household duties and 7.9 percent are disabled or too sick to work.

Of the employed population, about 44 percent are engaged as skilled agricultural, forestry and fisheries workers, 21 percent are engaged in plant and machine operation, and assembly, 15.2 percent in service and sales, 9.8 percent in craft and related trade; with only 4.4 percent engaged as managers, professionals and technicians.

3.2 The resource base of the local economy

Every economy thrives on its resource base. In other words, the prevalence of a resource in a locality gives it a comparative advantage and assigns a relatively competitive

production function for a product or service in the specific economy than in an aggregate economy. The economy therefore produces the product, or renders the service more efficiently.

The PHVM falls within a forest deserted plateau underpinned by precambrian rocks of Birimian type. The Birimian rocks are regarded as the most important formations due to its mineral potentials and thus the existence of minerals like gold in the District (DMTDP 2010-2013).

By virtue of its geophysical location, PHVM enjoys a wet equatorial climate. It has two rainfall patterns usually from March to July (major season) and from September to November (minor season). The municipality experiences high rainfall with a mean annual rainfall of 187.83mm.

Temperatures are high all year round with significant daily and seasonal variations. The annual average temperatures range between 26⁰C and 30⁰C. Humidity varies from 75-80 percent in the wet season and 70-80 percent in the dry season. The soil is deep, open and acidic in many places due to heavy leaching of base from the top soil because of high rainfall, humidity and temperatures. The acidity of the soil reduces the availability of phosphorus, calcium and magnesium (Ibid).

Several rivers and streams flow through the District, notable among them are: Ankobra, Huni, Oppon, Bogo, Peme, Subri, Bonsa and Mansi. Major communities located along these rivers derive their names from them; e.g Bogoso, from the Bogo river, Huniso/Huniano/Huni-Valley from the river Huni, Ankobra at Prestea from Ankobra river. The rivers also serve as a source of water for communities as well as for fishing.

The main resource base of the municipality therefore consists of minerals (gold) and agriculture (oil palm, cassava, and timber). This is supported by the findings of the sectorial analysis commissioned by the WAGES project.

Both mining and agriculture provide great opportunities for value-addition, job creation, incomes and poverty reduction.

3.3 Population size, Structure and Composition

The population of the PHVM, according to the 2010 Population and Housing Census, is 159,304 representing 6.7 percent of the region's total population. Males constitute 50.5 percent and females represent 49.5 percent. Sixty three percent of the population is rural. The District has a sex ratio of 102.1. The population of the District is youthful (15.2%) of the 0-4 age group, depicting a broad base population pyramid which tapers off with a small number of the 70 plus years (1.0%). The total age dependency ratio for the District is 78.8, the age dependency ratio for females is higher (79.2) than that of males (78.4). Like most mining districts, majority of migrants (70.1%) living in the District as at 2010 were born in another region, while 29.9 percent were born elsewhere in the Western Region.

3.4 Literacy Levels, Availability of the skills set, and Employment

The levels of literacy and formal education are key determinants of the general employability of a population, as this indicates the ability of those concerned to read and understand instructions regarding the production process such as equipment operation, chemical handling, health and safety issues etc. Again, local capacity development or skills transfer, which is necessary for improved local labour market utilization, can best be achieved on the basis of a literate or educated population.

The literacy level of people living in the PHVM is pretty high, with 78.4 percent of those of 11 years and above being literate and 21.6 percent being illiterate.

More than seven out of ten (73.2%) of the population aged 15 years and older are economically active while 26.8 per cent are economically not active. Of the economically active population, 96.5 percent are employed while 3.5 percent are unemployed. For those who are economically not active, a larger percentage of them are students (44.7%), 31.5 percent perform household duties and 7.9 percent are disabled or too sick to work. More than six out of ten (62.3%) of the unemployed are seeking work for the first time.

Of the employed population, about 44.0 percent are engaged as skilled agricultural, forestry and fishery workers, 21 percent in plant and machine operators and assemblers, 15.2 percent in service and sales, 9.8 percent in craft and related trade with only 4.4 percent engaged as managers, professionals and technicians.

3.5 The locational advantages and disadvantages of the economy

The location and accessibility of an economy to a very large extent determines its investment attractiveness, market access and for that matter growth opportunities.

The municipality is accessible by road, and linked by railway lines to the Port of Takoradi. The railway transport went out of use for several years, but has been recently rehabilitated. This makes the external (regional and national) markets easily accessible to the municipality. With the reactivation of the Prestea-Takoradi rail network, export markets for bulky commodities are also within reasonable reach.

The area has specific tourism development potential. The opportunities are however, not fully exploited. They ought to be explored and further developed for the full benefit for local communities.

4.0 REPORTS OF STUDIES AND ANALYSIS ON THE MUNICIPALITY

4.1 Reports Commissioned for the Purpose of LED Planning

A number of studies and initiatives have been undertaken in the area, such as the agriculture and agri-business sub-sector analysis, local procurement assessment, and market research. These were commissioned by WUSC, under the WAGES project. The findings and recommendations of these provide much guidance for the further development of the area with specific reference to projects, agreements, and budget

priorities.

4.2 Agriculture and Agri-business Report

The agriculture and agri-business sub-sector feasibility analysis reveals that the most widely cultivated crops in the PHVM are oil palm, cassava and rice. These, according to the researchers, offer the most feasible pathways for women and youth inclusive economic development.

Cassava and the opportunities it affords:

In the liquor and pharmaceutical industries, there is huge demand for ethanol which can be processed locally from cassava. Local suppliers however, need to build the capacity to process to the standards required by industry, establish elaborate supply chains and be able to deliver huge consignments on consistent basis.

Oil Palm and the opportunities it affords:

The sub-sector analysis also revealed that value addition to oil palm production in the municipality is marginal. Many small-scale mills are not able to extract up to 20% of crude palm oil (CPO) from fruit bunches and less than 10% of related products like palm kernel and palm kernel oil. Although the poor technology used by small-scale and artisanal processors is the reason for the low quality of palm oil produced, poor knowledge of processing and product requirements contribute significantly to the inefficiency among artisanal processors. The most important challenge in the downstream processing system is the inability to manage the levels of Free Fatty Acid (FFA) and moisture content in processed oil as well as other microbial contaminants. This sub-sector therefore provides great opportunities, provided the identified challenges associated with technology and quality control mechanisms can be addressed.

4.3 Local Procurement Assessment

The Local Procurement assessment report analyses the capacity gaps and constraints to increased participation of master craft persons, trade associations, and suppliers in local procurement offered by three major companies: Golden Star Resources Wassa Mine, Golden Star Resources Bogoso/Pretea, and Plantations SOCFINAF Ghana Ltd. in Daboase.

The report provides indications as to what key competences need developing, and what curriculum and competency-based entrepreneurship training modules are needed to enable local businesses to take full advantage of local content opportunities in the mining sector.

5.0 THE NATIONAL POLICY CONTEXT

Three key government policies/programs have been identified as potential anchors for the PHVM economic development and growth strategy. These are: One-District-One-Factory (1D1F), Planting for Food and Jobs, and Infrastructure for Poverty Eradication Program (IPEP).

5.1 One District, One Factory

One-District-One-Factory was a manifesto pledge by the New Patriotic Party (NPP), during the 2016 general elections. Having won the elections, the new government launched the program in June 2017. Its prime objective is to address the challenge of slow economic growth at the district level through a deliberate and concerted industrialization program nationwide. It is intended to empower communities to utilize their local resources in manufacturing products that are in high demand both locally and internationally. In other words, 1D1F will serve as both import substitution and export oriented program that will create jobs, sustain agricultural incomes through value addition, and help to improve the country's balance of trade position.

The program is expected to facilitate the creation of between 7,000 to 15,000 jobs per district and between 1.5 million and 3.2 million nationwide by end of 2021.

The program is being delivered through a special purpose coordinating secretariat under the Office of the President. It provides the following support packages:

- Business support services
- Business assessment and assistance with developing a growth strategy
- Capacity building, Mentoring and coaching
- Provision of networking opportunities
- Assistance with financial planning and financial management
- Assistance with regulatory and legal compliance
- Links to strategic partners for market and community access facilitation
- Sector specific technical support including project management, quantity surveying and engineering services etc

Financial support for 1D1F projects ranges from USD 5,000 to USD 5 million. This is based on project size and operational categorization. The program promises to make adjustments where appropriate to accommodate projects outside the stipulated support bracket.

Credit to businesses will come in the form of:

- Investor matching
- Direct credit
- Equity financing
- Long and short term trade financing
- Long and short term asset financing

Application for financial credit support are categorized according to the investment required and number of people to be employed as indicated below:

Category	Investment required
Micro scale Enterprises	≤ US\$50,000
Small scale Enterprises	≤ US\$100,000
Medium scale Enterprises	≤ US\$1,500,000
Large scale Enterprises	≤ US\$5,000,000

Though the program targets almost all sectors of the national economy, it prioritizes the following strategic areas/activities:

- Input/Raw material producer groups
- Agro processing and agri-business
- Textiles and Clothing
- ICT
- Pharmaceutical and cosmetics
- Waste management
- Distribution and trading
- Tourism, Arts and Crafts

It is apparent that PHVM qualifies for support under the agro-processing and agri-business category on account of its comparative advantage in oil palm production and the opportunities it presents for value addition. Even though there is no express mention of value addition in the mining sector, jewelry making, using locally produced gold, could qualify under tourism, arts and crafts.

5.2 Planting for Food and Jobs

'The Planting for Food and Jobs' is a five-year agriculture intensification and modernization program introduced by the current NPP administration. It is intended to help improve the country's food security, reduce the country's food import bill, and create jobs for Ghanaian youth.

The policy is built on the following five main pillars:

- Supply of Improved Seeds to farmers at subsidized prices (50% subsidy)
- Supply of fertilizers to farmers at subsidized prices (50% price cut)
- Free extension services to farmers (1200 extension officers from the five main agric colleges already enrolled onto the program. Additional 4,000 extension assistants to be mobilized)
- Marketing opportunities for produce after harvest, (arrangements have been made to offer ready markets for farmers who will be participating in the campaign)

- E-Agriculture (a technological platform to monitor and track activities and progress of farmers through a database system). The government has selected five crops for the pilot phase (first year).

These are:

- Maize
- Rice
- Soybeans
- Sorghum
- Vegetables - Tomato, Onion, Chili pepper

Other crops are supposed to be added in subsequent years. But even then, an agriculture and agri-business sub-sector study undertaken at the instance of the WAGES project ranked the top three crops produced in the municipality as oil palm, cassava and rice (arranged in order of dominance).

Rice farmers in PHVM therefore could take advantage of the Planting for Food and Jobs to expand their production, while the 1D1F initiative provides opportunities for milling, packaging and marketing.

Even though oil palm is not included in the priority list for now, the sub-sector analysis point to opportunities that can be exploited under the 1D1F program.

5.3 Infrastructure for Poverty Eradication Program (IPEP)

The Infrastructure for Poverty Eradication Program (IPEP) was introduced in 2017 by the NPP government, as a special initiative aimed at expanding and improving infrastructure across all districts of Ghana to provide the launch pad for local economic development.

The program is being implemented by the Ministry of Special Development Initiative (MSDI) under the Office of the President.

The government has pledged an amount of US\$1 million to each of the country's 275 electoral constituencies annually to be invested in infrastructural projects. The expenditures are to be aligned with the medium-term development plans of the metropolitan, municipal and district assemblies with the constituencies.

It is primarily aimed at complimenting government's flagship initiatives such: "One district, one factory;" "One village, one dam;" "Agricultural infrastructure (warehouses and markets);" "Water for all (boreholes);" as well as "Sanitation (toilets)."

The delivery on IPEP's mandate is to be superintended by three development authorities, namely, the Northern Development Authority, the Middle Belt Development Authority and the Coastal Development Authority.

PHVM stands to benefit from this program and should begin the process of identifying key infrastructure within its jurisdictional area that could catalyze economic development and package same for consideration under the IPEP initiative.

5.4 Local Content Regulations in the Mining Sector

Globally countries that have been able to maximize their benefits from their natural resources are those who are themselves active participants in the exploitation of the resources, or actively provide technological and logistical input in to the resource exploitation or have found ways to add value to the resource prior to export.

Local content therefore helps to integrate resource extraction into the national and local economies. Because Ghana has operated its mining industry for decades without a deliberate local content strategy, the industry has become an enclave unto itself, not in any way linked to the national or local economies.

Available evidence however suggests that a great deal of opportunity for value retention is missed by focusing almost exclusively on royalties and taxes to the neglect of local content and value addition.

Table 1 shows the mining industry expenditure pattern for four years (2013 – 2016). The data indicates that the industry expenditure on host communities is the lowest, ranging between 0.3 and one percent; while expenditure on local purchases is the highest, ranging between 21 percent and 31.1 percent during the period.

Unfortunately, due to constraints, most of which are identified in the local procurement assessment study undertaken by Ferdinand Nyantakyi-Dapaah for WAGES, the huge amount spend on local purchases benefit not local businesses but foreign services and logistics companies. The constraints include: Lack of entrepreneurial and business management skills; Poor financial management; Lack of negotiation skills; Lack of knowledge in procurement, costing and contract administration; Poor customer service; Poor financial accounting and records keeping; Non-formalization of businesses, among others.

Table 1 Mining Industry Expenditure Pattern 2013 - 2016

	2013		2014		2015		2016	
	Amount Spent (USD)	% share mineral revenue	Amount Spent (USD)	% share mineral revenue	Amount Spent (USD)	% share mineral revenue	Amount Spent (USD)	% share mineral revenue
Amortization	118,716,470	2.5%	403,912,021	11%	434,773,852	14%	329,786,195	10.1%
Imported Consumables	354,957,628	7.6%	242,584,498	7%	166,385,404	5%	216,854,271	6.7%

	2013		2014		2015		2016	
	Amount Spent (USD)	% share mineral revenue	Amount Spent (USD)	% share mineral revenue	Amount Spent (USD)	% share mineral revenue	Amount Spent (USD)	% share mineral revenue
Local Purchases	1,000,823,339	21.4%	770,944,773	21%	865,596,473	28%	1,013,810,896	31.1%
Energy	805,884,246	17.2%	637,197,195	17%	627,254,181	20%	677,160,836	20.8%
Employees	670,101,951	14.3%	390,665,609	11%	459,942,287	15%	435,644,859	13.4%
State	550,125,717	11.8%	422,631,382	11%	323,740,682	10%	327,218,125	10.0%
Shareholders	49,130,416	1.1%	116,947,660	3%	118,122,522	4%	33,000,000	1.0%
CAPEX	313,198,988	6.7%	473,485,941	13%	418,162,162	13%	452,995,131	13.9%
Host Community	12,124,053	0.3%	20,769,049	1%	17,094,776	1%	12,203,889	0.4%

To give real effect to the local content provisions of the Minerals and Mining Act (2006), Act 703 the parliament of Ghana in 2012 passed the Minerals and Mining General Regulations (2012), LI 2173. The LI contains specific provisions for regulating the procurement of local goods and services in the mining industry. In particular, it requires mineral right holders and support service companies to each present a five (5) year procurement plan to the Minerals Commission for consideration and approval. The procurement plans are to be developed based on Procurement Lists for which the Minerals Commission is to publish regularly.

The Local Content Regulations benefited immensely from a collaborative work among the Minerals Commission, Chamber of Mines and International Finance Corporation on a broad National Supplier Development Program in the mining industry in 2010.

A key objective of the program was to support local enterprises to improve their competitiveness to participate in the mining value chain. The collaboration identified twenty-eight (28) mining inputs which could be sourced locally albeit with varying degrees of quality improvement.

The Procurement Lists issued by the Minerals Commission has so far been selected from the list of twenty eight (28) items identified in the seminal work referred to earlier. The initial Procurement List issued in 2014 had eight (8) items and the second in 2015, eleven (11).

Table 2 Mining Industry Local Content Procurement List

Procurement List 1	Procurement List 2
Grinding Media	Bolts and Nuts
Heavy Duty Electrical Cables	Crucibles
HDPE/PVC Pipes	Plastic Sample Bags
General Lubricants	Calico Bags
Quick/Hydrated Lime	Bullion Boxes
Tyre Retreading	Chain Link Fencing/Wire or Netting/Barbed
Explosives (Emulsion)	Conveyor Rollers
Cement & Cement Products	Metal/PVC Core Trays
	Overalls and Work Clothes
	Haulage Services
	Catering Services

Source: Minerals and Mining General Regulations (2012), LI 2173

The Ghana Chamber of Mines has expressed readiness to collaborate with interested local manufacturers for discussions on its support to harness these opportunities. Regarding non-strategic items, manufacturers and service providers are encouraged to contact producing member companies to be considered on their vendors list.

Additionally, products that are locally available but imported by mining companies have been identified as presenting strategic opportunities to local businesses. These include sodium cyanide, caustic soda, and activated carbon.

Table 3 Strategic Opportunities for Local Production - Locally Available but Imported Input by Value (2009 – 2013)

PRODUCT	Unit	2009	2010	2011	2012	2013	Total	Average Per year
Sodium Cyanide ¹	USD	59,041,227	61,615,701	76,637,330	99,484,100	88,202,711	384,981,069	76,996,214
Caustic Soda ¹	USD	14,141,476	7,614,334	11,371,411	16,171,144	14,007,828	63,306,193	12,661,239
Activated Carbon ²	USD	3,301,152	5,485,961	6,286,867	6,980,077	5,368,296	27,422,353	5,484,471

¹National Imports

²Mining Industry Consumption

6.0 THEORETICAL UNDERPINNING OF THE STRATEGIC FRAMEWORK

6.1 The Growth Pole Theory

The Local Economic Development and Growth strategy paper hinges more on the growth pole theory as its strategic framework. Box 2 below briefly explains the Growth Pole theory.

Box 2 Growth Pole Theory

The Growth Pole theory was first propounded by French economist, François Perroux in 1950, was further sharpened in later works of development economists, and finally evolved into a concept whose meaning is somewhat at variance with what was originally posited by Perroux. While Perroux had conceived a growth pole to be a focus of economic development in an abstract economic space, it was interpreted by his followers, particularly Jacques Boudeville, to be a focus of development in geographic space.

Growth pole theory, as originally formulated, assumes that growth does not appear everywhere at the same time, but manifests itself around 'poles' or fulcrums of growth (Perroux, 1950; 1955). With variable intensities, the growth spreads by different channels and eventually affects the economy as a whole (Vanneste, 1971). In his latter writings, as Vanneste (1971) points out, Perroux refined his concept of growth pole as a dynamic unit in a defined environment. The unit is simple or complex: (a) a firm, or (b) group of firms not institutionalized, or (c) group of firms institutionalized, such as private and semi- public undertakings. Based on these features of the growth pole concept, other authors (Davin, et al,1950) associated a functional attribute to the concept. They argued that a growth pole is formed when an industry, through the flow of goods and incomes which it is able to generate, stimulates the development and growth of other industries related to it (technical polarization); or determines the prosperity of the tertiary sector by means of the incomes it generates (income polarization); or stimulates an increase of the regional economy by causing a progressive concentration of new activities (psychological and geographical polarization). To the extent that the growth pole concept has a functional character, Vanneste (1971) argues that it would be wrong to neglect the spatial aspect and the geographical implications of the concept.

Applied to the PHVM context, effort is made to identify the fulcrum or key sectors of the local economy around which local economic development could be catalyzed. For example, the PHVM economy is characterized by a few strong sectors, due to the concentration of key activities, such as mining and agricultural production, as evident in the economic profile of the municipality. These are significant sources of employment and have strong forward and backward linkages, but these benefits are far from full realization locally. The diversity in economic base thus requires diverse interventions to attract new investment and development.

6.1.1 The Agriculture and Agri-business Growth Pole

In spite its dominance in the local economy, the agricultural potential of PHVM has not been fully explored. As an important economic activity, with a high propensity to serve as a

source of employment especially for youth and women, Agriculture is prioritized as a growth pole. Opportunities for value addition and market accessibility are all evaluated and strategies developed to leverage on them. The particular clusters within the agriculture sector that have been identified for special focus are rice production, oil palm production, poultry and piggery. While rice production is expected to enhance the municipality's food security, it will also create opportunities for allied businesses such as milling, production of breakfast cereals, packaging, branding, and marketing. Oil palm also provides opportunities in the downstream (agro-processing) for cooking oil, margarine, cosmetics, soap making, animal feed and activated carbon processing.



Plate 3. Oil Palm - The game changer for Local Economic Development in PHVM

6.1.2 The Mining Sector Growth Pole

Mining is also a dominant economic activity, whose upsurge through the influx of illegal small scale miners, has led to severe land-use contestation in the municipality, putting at risk its food security. Government has since 2017 place a moratorium on artisanal and small scale mining across the country. Large scale mining however continues to thrive in the municipality, but opportunities for integrating it into the local economy and generating mining induced local economic growth has largely been missed.

Currently the only benefits that accrue to PHVM as host district of the Golden Star Resources mine is realized through local employment; a share of mineral royalty disbursed by central government; and corporate social responsibility programs of mining companies. Attempt is made in this strategy to assess opportunities for integrating the mining industry into the local economy by backward and forward linkages to large scale gold production by the mining conglomerate.

The need to explore downstream benefaction in the mining sector is made even more urgent by the fact that, the mining industry is characterized by continuous process

evaluation, efficiency assessment and operational restructuring, often leading to job cuts.

7.0 THE STRATEGIC DEVELOPMENT FRAMEWORK

This section presents the strategic focus clusters (growth poles) for developing the local economy of PHVM. The focus clusters are packaged as the thrust of the PHVM LED strategy.

From a strategic development perspective, it is important to ensure that appropriate linkages between the strategic economic clusters (growth poles) and other sectors of the local economy are established. For example, between mining and industrialization; mining and tourism; and between agriculture and industrialization.

The main development clusters are derived from a SWOT analysis of the local economic environment, and are directed at utilizing existing strengths and opportunities through strategic programs and interventions that will minimize the threats, and address the weaknesses in the local economy.

The proposed strategic development framework identifies two main clusters around which the holistic development of PHVM can be quickly achieved. These are Agriculture and Mining. Figure below shows the economy-wide benefits to be derived from the establishment of appropriate and strategic relationship between the two selected economic clusters and other economic sectors.

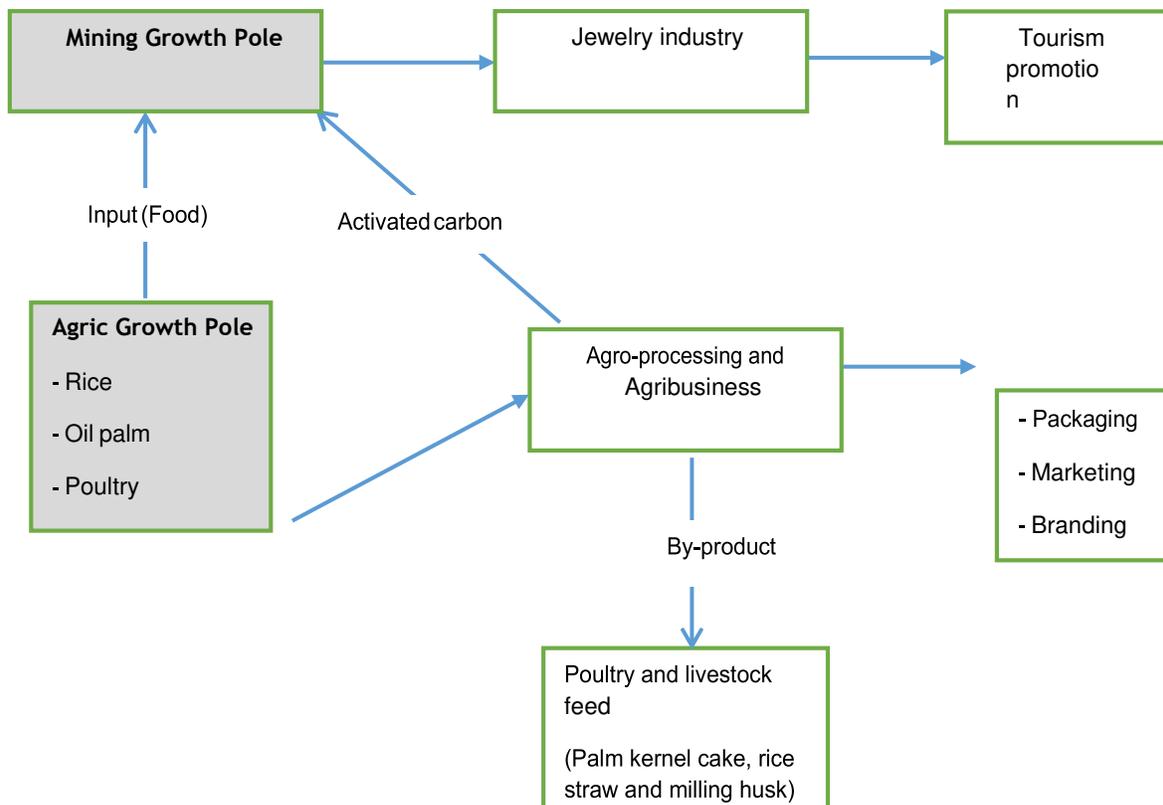


Fig1 PHVM Growth Pole Structure

The strategic framework is designed to deliver the following development outcomes:

- Optimum exploitation of the agricultural potential of PHVM
- Sustainable jobs, especially for women and youth
- Sustainable income levels
- Broadened local revenue base
- Integrated and sustained local economy

7.1 Strategies for Enhancing Agricultural Performance

According to available geophysical data, PHVM is situated in a rain forest belt. It receives a good amount of rainfall, with two rainy seasons, a major season from March to July and a minor from September to November.

Agriculture has for a very long time been the dominant economic activity, albeit with little or no value addition or processing to go with it. The result is that, like many agricultural communities in Ghana, farmers in PHVM suffer a great deal from post-harvest losses, and from severe income volatility, associated with the absence of agro-processing to extend the shelf life of agricultural produce.

The elements of the agriculture growth pole in this strategy document, are intended to improve agriculture production and utilization within PHVM. Agriculture is used in its broad sense to cover food crops, cash crops, livestock and poultry. For the purpose of this strategy paper however, the focus will be on rice, cassava, oil palm, and poultry.

Lavoie F. and Ayamga M. (2017) in their report on Economic Growth Opportunities in Agribusiness in the Wassa East and Prestea Huni-Valley Districts, authored at the instance of the WAGES project, maintained that despite the emergence of a thriving mining-driven economy that served as a catalyst for infrastructural and socio-economic development, agriculture remains the main source of livelihood in many of the communities, employing over 70% of men and women.

The study identifies two distinct forms of agriculture in the two districts—high efficiency large scale commercial plantation farms, and low efficiency subsistence agriculture characterized by use of traditional production technology.

The main cash crops are identified as cocoa, oil palm and rubber, with cocoa mostly cultivated by smallholders and in rare cases, medium-sized plantations established by settler farmers.

Large-scale oil palm plantation is said to be common feature of the oil palm sub-sector dominated by oil palm exporting multinationals like SOCFINAF in WED or Golden Star Mines who have established plantations for local people as part of their corporate social responsibility and community development programs in both Districts. Large-scale Oil palm plantations have also been established by entrepreneurs who either sell nuts directly to processing companies or have their nuts processed for them for fee by medium scale mills within the region.

Gender definition of roles in agriculture, according to the report, are not entrenched even though men tend to dominate cash crop production while women mostly engage in food crop production, small-scale agro processing and distribution mainly to local markets. The authors suggest that the high concentration of women in food crop production and low value agro-processing activities is the reason for relatively higher levels of poverty among women.

The justification for including poultry in the local agriculture priority list emerged during stakeholder consultations towards the inception of the 2017 – 2019 medium term development planning process. It was revealed by officials of Golden Star Resources that, their company spends millions of dollars a year, importing chicken from Portugal. In response to why the company will not procure the chicken locally, the officials explained that quality, ability to meet supply volumes, and reliability of supply were the reasons for sourcing their chicken from outside the country. They expressed willingness to procure their chicken locally if they could be produced to the required standard, and sustainability of the supply could be assured. This revelation presents an opportunity for PHVM to retain additional value from the mine's presence.

The objective of the agricultural growth pole strategy is therefore to expand agricultural productivity, improve the agricultural value chain to create new employment opportunities, including addressing issues of market access, and associated with it, agro-processing. Addressing market access and benefaction challenges in the agricultural sector is a key strategy for reducing income volatility, and associated with it, poverty among farmers and agricultural workers in the municipality. It also seeks to ensure that local agriculture, in this case rice and poultry, is able to feed the mine's workers.

7.1.1 Strategic Interventions to Enhance Rice Productivity

The opportunity is not to be missed to tap into the government's Planting for Food and Jobs program. As already indicated, the government has selected 5 crops for the pilot phase (first year). These are: maize, rice, soybeans, sorghum, vegetables (tomato, onion, chili pepper).

While it is hoped that in subsequent phases oil palm, which is the dominant crop in PHVM would be added to the list of crops to be supported, the municipality can take advantage of the increasing prominence of rice cultivation among food crop farmers to access available support under the Planting for Food and Jobs program.

The emergence of rice in PHVM as a viable economic growth sector has been the result of relatively high earnings of early entrants to the sector, according to Loie F. and Ayamga M. (2017). The authors argue that, access to credit for farmers through the Rural Enterprise Program (REP) and the rural banks has improved largely because of the significant returns farmers in the sector reported.

Though the PFJ support package is targeted at individual farmers, the Municipal Assembly could play a facilitating role by proactively identifying eligible farmers, and assisting them to access the support package, which include: Supply of Improved Seeds to farmers at subsidized prices; supply of fertilizers to farmers at subsidized prices; free extension services to farmers; marketing opportunities for produce after harvest; and E-Agriculture (a technological platform to monitor and track activities and progress of farmers through a database system).

A beneficiary farmer requires a minimum of 2 to 3 acres to be enrolled on the program. To enlist, the farmer is supposed to present his or her particulars to the district director of agriculture, who then forwards same to the Head Office in Accra.

To complete the documentation, a staff of a contracted IT firm will visit applicants to take their biometric data and to measure the sizes of the farm for which support is being sought.

Given the bureaucracy involved in the enrollment process, it is to be expected that without the active involvement and support of the Assembly, fewer farmers may enroll, and this could undermine the otherwise welcome intervention to improve agricultural productivity. The Business Advisory Council (BAC) of the Assembly ought to be oriented to prioritize agriculture and agri-business and to facilitate access to available support under the Planting for Food for Food and Jobs program.

While most of the constraints to increased rice production in PHVM, such as underfunded and understaffed extension services, unreliable supply of agricultural inputs (adapted seeds, fertilizers, pesticides) and bird protection; difficulty in accessing credit are likely to be addressed under the PFJ program, the high cost of land preparation may have to be mitigated locally, through the establishment of a plant pool either by the Assembly or through a PPP arrangement.

7.1.2 Strategies to Expand Rice Value Chain Opportunities

Demand for rice in PHVM is pretty high, but also intense is the competition posed by imports from South- East Asian countries. As the volumes of rice production increases, the economies of scale are expected to bring down production cost and make local rice competitive. Though the government's agriculture support program guarantees market for any surpluses over the local demand for rice through the Buffer Stock Company's purchases, the government's 1D1F industrialization program affords yet another opportunity to develop value-added rice products involving milling, processing into blended cereals, branding and packaging. This will create employment opportunities especially for women and youth, who, according to the agriculture and agribusiness sector analysis undertaken for the WAGES project, are marginal players in rice production.

The mining industry in the PHVM can also serve as a market for locally produced rice. The Assembly may want to initiate discussions with Golden Star Resources, Prestea Sankofa and other medium to large scale enterprises in the municipality and adjoining districts to secure their buy-in, and then facilitate the creation of rice cooperatives or the establishment of depots to aggregate production volumes to ensure supply availability and reliability.

There are several other economic uses of the rice straw that can be explored under the government's 1D1F program at the municipal level. These include uses in the agricultural, manufacturing, construction, and renewable energy sectors.

Table 4 Economic uses of rice straw in industrial chain within agricultural and other sectors

AGRICULTURE	MANUFACTURING	CONSTRUCTION	RENEWABLE ENERGY
Compost	Paper making	Thatch	Biofuel (ethanol)
Mushroom growing medium	Food packaging material	Thermal insulation	Biogas (domestic uses)
Livestock feed	Activated carbon	Land reclamation	

These opportunities have not been seized upon because of the absence of indigenous knowledge in the uses of rice straw and the unavailability of Research and Development (R&D) knowledge in this regard. The Assembly could facilitate the acquisition of existing knowledge from other jurisdictions where such knowledge abounds, such as Malaysia.

7.2 Strategies to Enhance the Performance of Oil Palm Production

Even though oil palm is currently not a priority crop under the PFJ program, its dominance in the local agriculture sector and the enormous potential it presents PHVM in terms of value addition and job creation, makes it imperative to focus attention and resources in developing it. In Ghana, oil palm is the second most significant cash crop after cocoa, and

the most significant in PHVM.

The authors of the agriculture and agri-business sector report, Lavoie F. and Ayamga M. suggest that the oil palm sub-sector is better organized, with some value addition, and marketing arrangements already in place. Production, according to the authors, is characterized by smallholder farms; individually owned medium and large-scale plantations with a network of out-grower farmers, and in recent years, out-grower schemes supported by Golden Star Resources as part of the company's social performance programs. Under the Golden Star Resources model, the company facilitates access to technical services and credit facilities to assist smallholders establish their farms.

The report further establishes the presence of substantial gap between actual and attainable yields. It reveals that productivity is lowest among individually owned small-scale farms, with average yields of about 5 tons/ha. The large estates, according to the report achieve productivity levels between 15 and 20 tons/ha; while smallholders out-growers produce between 7 – 15 tons/ha.

The reason for the higher yield among large estates is that, they are able to keep pace with modern technology, while smallholders use traditional or obsolete practices. Support therefore ought to focus on accessibility to modern technology and knowledge on best practices.

7.2.1 The oil palm market

The market for oil palm and derived products, according to the sector analysis report, is highly segregated and largely dictated by the quality of product. The constraint that keeps small scale processors out of high- end markets, the authors maintain, is the inability to keep FFA and moisture content low, and to eliminate impurities in the oil they produce.

The sector analysis report segregates the market into three main segments:

- a. **Industrial refineries and manufacturing companies** that use Crude Palm Oil (CPO) as raw material. This market is served by large oil palm estates like Benso Oil Palm Plantation (BOPP), Twifo Oil Palm Plantation Limited (TOPP) as well as independent medium and large-scale plantations with medium scale industrial mills. The quality and price of CPO in this market are the highest.
- b. **Domestic consumption market.** The product in this market is of medium to low quality and the buyers are households, traditional caterers, among others who use the product in food preparation. Here the prices are subject to wide variations but are significantly lower than prices paid in tier one. Transportation problems, market and price information as well as poor post-processing capacity in storage and handling

further impact on the ability of artisanal processors to command meaningful prices.

- c. **Secondary processor market:** The buyers in this market are mostly women who use palm oil as raw material to produce the local soap "alata samina" and other derivatives. The market mostly relies on low quality palm oil produced from nuts at the point of rotting. Some poor quality oil from individually owned medium scale mills and rejected by the industrial refineries is sold in this market.

For the local economy to realize the full potential of oil palm sub-sector of agriculture, consideration ought to be given to how much of the value in the crop value chain could be retained within the economy. The practice of selling palm fruits for food has led to a retention of low value by primary producers. Estimates from the factories and buyers gleaned from the sector analysis report suggest that primary producers earn between 8%-10% of the value of CPO. Given the volume of production at the smallholder levels, 8%-10% of the value of CPO is not significant enough income to improve livelihood.

To increase and sustain incomes, there will certainly be the need to expand production and increase the yield per hectare. Value addition however becomes more critical. There are several known industrial uses of palm oil. It can be processed into bio-diesel, cooking oil, margarine and confectionary fats, soaps and detergents, pharmaceutical preparations.

Besides the oils derived from the palm fruits, its kernel is also a great source of oil which is used in cooking and for medicinal purposes.

The kernel of the palm fruit itself can be processed into activated carbon, one of the inputs for gold processing. The pulp of the processed nut is compressed into cake and used either as high protein feed for dairy cattle, piggery and poultry or burned in boilers to generate electricity for palm oil mills and adjoining villages.

Available evidence suggests that not much benefaction takes place in the oil palm value chain, which in itself makes the crop one of the fundamental pillars within the agriculture growth pole. It is estimated that about 68% of palm nuts is processed by small scale village mills, with a collective share of 55% of the total palm oil production. Medium sized mills and the large commercial mills process 12% and 19-20% of total nuts, respectively.

Different processing methods lead to different grades of CPO and the grade determines which end-products the oil can be used for and by extension the value of the oil. The report distinguishes three grades based on the contents of Free Fatty Acid (FFA) and moisture in the CPO:

- *Grade 1* oil is produced by large scale and medium scale mills and refined to meet international standards. The FFA content is lowest (less than 5%) and moisture at 0.4% or below. This product is supplied to domestic manufacturing for the production of soap, cooking oil and margarine.

- *Grade 2* palm oil contains FFA levels between 5% –12% and moisture content around 10%. This is mostly produced by village small scale mills and other improvised equipment. This grade of oil is mostly used in food preparation.
- *Grade 3* oil has FFA content exceeding 12% and moisture above 10%. It is mostly produced by small-scale farmers and artisanal women processors and used as raw material to produce the local soap "alata samina".

7.2.2 Viable but unexplored opportunities in the palm oil value chain

Opportunities for using palm kernel cake in animal feed has so far not been explored. M Boateng, D B Okai, J Baah and A Donkoh (2008) suggest that the inability to utilise palm kernel cake for animal feed in Ghana can be attributed to the lack of information on its chemical composition, nutritive values, improvement methods and feeding responses of animals fed with palm kernel cake-based diets.

The “Traditional” and Expeller processes were identified as the two methods of palm kernel oil extraction in Ghana and these produce the “Cottage-type” and “Factory-type” palm kernel cakes respectively. The literature surveyed showed that in one study, a 30% palm kernel cake-diet with high level of residual fat led to a higher average daily gain and better feed conversion efficiency compared to a low-fat palm kernel cake-based diet; but increased carcass fat with a consequent reduction in leanness in pigs. A 20% palm kernel cake-diet also yielded positive responses in broilers and layers but beyond that, reduced egg numbers and quality were recorded.

7.2.3 Palm kernel cake utilization in poultry

Due to its high fibre content, the use of palm kernel cake in poultry rations is very limited. Osei and Amo (1987) evaluated palm kernel cake as a broiler feed ingredient. Palm kernel cake partially replaced maize at levels of 0, 5, 7.5, 10, 12.5 and 15%. The addition of palm kernel cake to the diet had no significant effect on feed consumption and body weight up to 8 weeks of age. However, feed conversion efficiency significantly declined as palm kernel cake levels reached 12.5% and above. This makes palm kernel cake a suitable poultry feed blend which can contribute substantially to the reduction of the cost of locally produced poultry feed.

7.2.4 The case for poultry development

As mentioned earlier, Golden Star Resources spends huge amount of foreign currency importing chicken from Portugal. The company could not procure local chicken mainly due to challenges associated with obtaining the required supply volumes sustainably and reliably, as well as meeting required standards are the main reason for sourcing the chicken from abroad. Of course, it is also common knowledge that cost competitiveness also contributes to pricing out the Ghanaian poultry farmer from what is now a very competitive market.

Golden Star Resources however indicated its readiness to not only procure locally produced poultry if all the identified supply constraints can be addressed, to even facilitate access to technical support to meet the quality requirements.

This commitment constitutes a strong case for supporting local poultry development. In terms of strategy, the high cost of poultry feed could be ameliorated through the introduction of palm kernel cake which is currently treated as industrial waste, into the poultry feed mix. Again, the supply sustainability concern can be addressed by organizing local poultry farmers into cooperatives and facilitating their access to credit and technical services to enable them expand their farm sizes. The reliability concern can be addressed by introducing into the local supply a depot that receives and aggregates the supply from all the cooperative members in municipality. The company then can be supplied from the depot directly, instead of it having to comb the municipality buying small quantities from the various farms in the municipality.

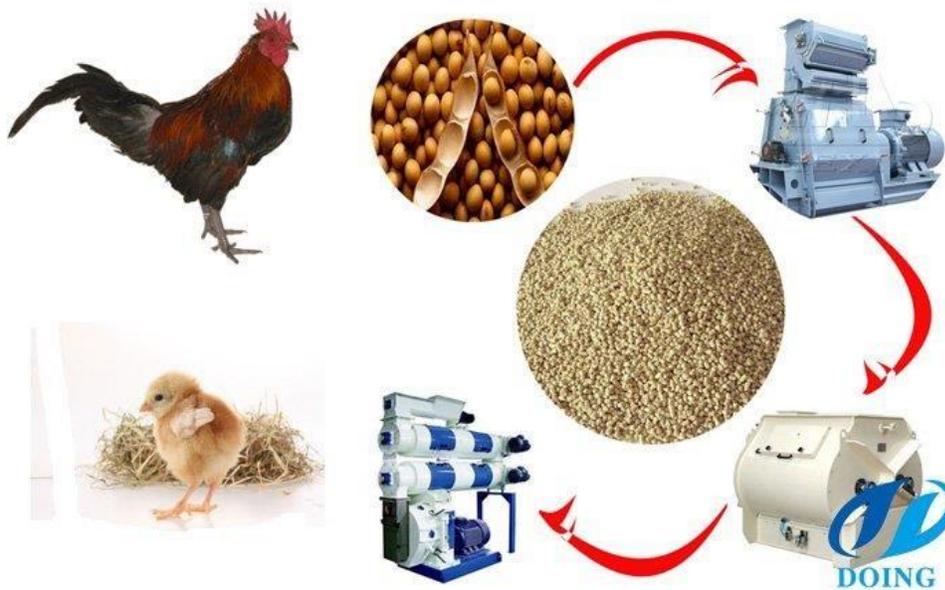


Plate 4. Agric and Agribusiness afford opportunity for poultry development

7.2.5 Palm kernel cake utilization in piggery feed

Again, palm kernel cake has been found to reduce the cost of swine diets. In a study on growing pigs, Okai and Opoku-Mensah (1988) assessed the performance of the pigs on palm kernel cake at 0, 10 and 20% inclusion levels. At the end of the 28-day trial period, all the growth performance criteria were found to be higher for the palm kernel cake diets except for feed intake which was similar for all the three treatments. Back fat thickness was however higher ($P < 0.05$) for the palm kernel cake-based diets. There was a decrease in the cost per kilogram of feed with increasing levels of dietary palm kernel cake.

In another study, Rhule 1998 evaluated the effect of two diets containing palm kernel cake from two oil mills (A and B), incorporated into the diets at 300 g/kg level. The average daily gains of the pigs were 0.57, 0.46, and 0.49 kg/day for those on control, palm kernel cake A and palm kernel cake B diets respectively, during the grower period. The corresponding values were 0.60, 0.63, and 0.65 kg/day during the finisher period, and 0.60, 0.54, and 0.55 kg/day during the entire grower-finisher period. It was also reported that the palm kernel cake with high level of residual fat led to a higher average daily gain and better feed conversion efficiency but there was increased carcass fatness and reduced leanness in pigs.

Scholarly literature on poultry and piggery feed widely confirm palm kernel cake as a viable feed ingredient. According to Boateng M. et al, the only setback to its application has been the high level of non- starch polysaccharide which poses a limitation to the rate of utilization. The authors suggest that, the current trend in modern animal nutrition is to find means of making the non-starch polysaccharides more available to farm animals, especially monogastrics. One approach that has proved useful in recent years is the addition of enzymes to the feed.

Exploring opportunities for using palm kernel cake, an agro-industrial by-product, in animal feed does not only make economic sense but could also help to curb the problem of environmental pollution associated with the disposal of this industrial waste.

7.2.6 Use of palm kernel shell for activated carbon

The opportunity also exists to process the shell of the palm kernel into activated carbon, but this has so far not been utilized. The spend trend of the mining industry, according to data supplied by the Ghana Chamber of Mines, reveal that mining companies spend between US\$3million and US\$6million every year on imported activated carbon. This means, if PHVM could leverage its palm kernel shell to process activated carbon for the local mine as a starter, and subsequently to the entire industry, with support from the 1D1F initiative, substantial mining related income benefits would be retained in the local economy and will help reduce youth unemployment.

Table 5 Mining industry import expenditure on activate carbon

	2009 (USD)	2010 (USD)	2011 (USD)	2012 (USD)	2013 (USD)	Total (USD)	Average (USD)
Activated Carbon ²	3,301,152	5,485,961	6,286,867	6,980,077	5,368,296	27,422,353	5,484,471

8.0 STRATEGIES FOR INTEGRATING MINING INTO THE LOCAL ECONOMY

Currently, there is no downstream beneficiation in Ghana's mining industry. Gold is produced into smelted bars and exported to refineries and further value addition abroad. Ghanaian jewelers have often complained that they have had to rely on scrap gold and production from the artisanal and small-scale sector for raw material supply.

Local level beneficiation can help integrate the gold industry into the local economy. It can create jobs, create new tax opportunities for national government and generate revenues from Business Operating Licenses, property rates etc. for the local administration.

Again, downstream beneficiation such as jewelry making provides opportunities for promoting tourism. This could be through the periodic organization of gold jewelry fairs and exhibition to showcase and sell locally produced gold jewelry and souvenirs; construction of a museum of mining, to showcase the history of mining in the municipality. The museum could host an auditorium where videos documentaries on mining could be shown as part of the tour package. The jewelry fairs could be organized to coincide with local cultural festivals or prominent national events such Independence Day celebration.



Plate 5. Abandoned underground Mining tunnels can be rehabilitated to serve as tourist attraction

In terms of strategy, it is proposed that the PHVM authorities initiate discussions with Golden Star Resources for the latter to cede a small amount of its gold production to local jewelers for use as raw material for their jewelry businesses. Whatever is ceded will be for sale, and so it becomes important for the Assembly to organize the local jewelers into a

cooperative or an association and facilitate their access to credit to enable them buy the gold that will be ceded by the mining company.

9.0 THE ROLE OF INFRASTRUCTURE IN THE PHVM LOCAL ECONOMIC DEVELOPMENT AND GROWTH STRATEGY

To achieve the development vision for PHVM will require massive investments especially in the local infrastructure. Such investments will ease the current barrier to accessing markets within and outside the municipality and which invariably will enhance the attractiveness of the municipality to local and foreign investors.

There are some infrastructures in the municipality that can form the basis for attracting some private sector investments into the local economy, but a lot more will have to be done to improve some of the deplorable infrastructure, such as roads.

9.1 The Atuabo gas transmission line

Another infrastructure that is key in attracting investors to a location is power. Incidentally, the Western Corridor Gas Infrastructure Project, which includes a gas processing plant has been designed to deliver gas to the western power enclave at Aboadze to generate power for the national grid, and to Tarkwa, and PHVM to boost power generation by mining companies. The fact that the gas pipeline terminates in the PHVM means investors can have access to cheaper sources of power for manufacturing and agro-processing activities.

9.2 Railway development

Again, the government has embarked on an aggressive rehabilitation of the country's railway transportation system and is poised to restore the Kojokrom Tarkwa route by 2020. This means, investors will be able to convey their produce to market centers and to export destinations, through the Takoradi port, with ease and at a cheaper cost.

9.3 Roads

While the extension of the Atuabo gas pipeline to the municipality, and the reconstruction of the Kojokrom-Tarkwa railway is likely to encourage investments into the municipality, the rather poor state of roads connecting major towns within the municipality, and the municipal capital's town roads could be a major setback in that regard. In 2016, over 80 percent of the municipal roads were feeder roads, requiring regular reshaping. The only trunk roads were Tarkwa-Bogoso–Ayamfuri and Bogoso-Prestea roads. It is recommended that the Assembly considers PPP arrangements to improve its roads. For instance, some of the major economic routes can be fixed with public-private capital and the investment recouped over reasonable time frame through road tolling.



Plate 6. PHV's poor road infrastructure will require attention in its development strategy

10.0 INTEGRATING GENDER AND YOUTH IN THE PHVM LED AND GROWTH STRATEGY

Evidence from the Agriculture and Agribusiness sector analysis report suggests that women and the youth tend to be engaged more at the mid to downstream end of the agriculture value chain. They are usually involved in harvesting, processing, and marketing of agricultural produce. There is also a high concentration of youth in the mining sector, especially in the artisanal and small-scale sub-sector. However, following the moratorium on these activities, many of the youth have become economically displaced. Creating downstream opportunities through agro-processing, gold refining and jewelry has the high potential of absorbing most of these youth and women who are affected by the moratorium.

Facilitating the development of the refining and jewelry making industry at the local level, has the added benefit of increasing tourism in the municipality, especially when jewelry fairs are organized and conjoined with traditional festivals. This is expected to lead to investments in the hospitality industry and will create further job opportunities for women and youth.

Again, the opportunities created by the use of palm kernel cake in poultry and livestock rearing is expected to absorb large numbers of youth and women in the local livestock and poultry feed preparation industry, and also encourage many of this target group to venture into poultry and livestock rearing.

11.0 INTEGRATING ENVIRONMENTAL CONCERNS INTO THE LED AND GROWTH STRATEGY

Most development activities almost inevitably occur at a cost to the environment. The pursuit of sustainability in development therefore requires that pragmatic steps are always taken to

mitigate or minimize the toll of development activities on the environment. Environmental sustainability is about meeting human needs without undermining the capacity of the planet's ability to support life. This has become an imperative in development planning.

From the analysis of the growth pole strategy for PHVM it is apparent that growth within the municipal economy would be generated from value addition activities such as agro-processing, gold refining and jewelry making. It therefore become important to find ways of ensuring that these value added activities do not further undermine the environmental integrity of the municipality, especially the management and disposal of industrial waste.

Already, environmental management in the municipality is under enormous strain. Solid waste disposal is largely done in old fashion and often in unhygienic ways. According to the District Analytical Report of the 2010 Population and Housing Census, two in every three households (62.4%) dump solid waste in public or open spaces. The strategy proposed to grow the economy and improve the well-being of the people of the PHVM, is design not to compound an already bad situation but to ensure that industrial waste, especially from agro-processing, find economic uses. For instance, palm kernel cake, a by-product of oil extraction from palm nuts, which currently is disposed of in open public spaces, will now be deployed into further processing into poultry and livestock feed. The husk of the nuts will also be channeled into the production of activated carbon for use in the mining industry.

12.0 BUILDING STRATEGIC PARTNERSHIPS FOR THE LED AND GROWTH STRATEGY

To effectively deliver on the goals of this development strategy for PHVM the building of strategic partnerships to address the knowledge, technology transfer, and investment gaps would be required.

At the national level partnerships will need to be developed with the organs implementing the government's flagship programs such as the Planting for Food and Jobs (PFJ), the zonal development authority responsible for the management of the \$1 million per district pledge; and the One-District-One Factory secretariat. These partnerships will aim at leveraging whatever support packages have been designed for beneficiaries of these programs.

In the particular case of the PFJ the Municipal Assembly will need to leverage its partnership with the Directorate for Agriculture and the Crop Research Institute of the Council for Scientific and Industrial Research (CSIR) to facilitate the selection of farmers in the municipality for the program, and beyond that provide complimentary support through training on modern methods of rice production, access to improved seedlings etc. Similar partnerships are required in the area of agro-processing. The Food Research Institute of the CSIR has developed various techniques for food processing and preservation but have not quite managed to get these commercialized. Same with the Industrial Research Institute, which is

also desirous of commercializing their technological innovations. Therefore, an MoU with the Crop Research Institute, Food Research Institute, Industrial Research, and Oil Palm Research Institutes to work together to commercialize their research findings and technological innovations, will serve the mutual interests of these institutes and the Assembly.

At district level, partnership can be developed by bringing together stakeholders in the local economy (including representatives of national, regional and decentralized departments), employers' and workers' organizations, Business Advisory Centers (BACs), representatives of financial institutions, Chambers of Commerce, cooperatives, producers' associations, women organizations, youth groups, Non-Governmental Organizations (NGOs), and Community Based Organizations (CBOs) for collective action on the proposed strategy. The partnership can be developed in a forum or institutionalized in a Local Economic Development Agency (LEDA) for the purpose coordinating implementation of the Strategy.

13.0 THE IMPORTANCE OF LAND USE PLAN TO THE LED AND GROWTH STRATEGY

To the extent that development takes place in a physical space, it becomes necessary that land use, in the context of development planning, is given a primary consideration. Coordinated spatial development provides guidance for the orderly development of a country or in this case, the municipality. It prescribes indication of the desired spatial distribution for various land uses and activities across the municipality, and how these spaces and their uses complement each other.

The absence of land use plans in most mining host districts in Ghana account for the indiscriminate mining across the entire land space of the districts, to the extent that agricultural lands are often encroached by artisanal and illegal small scale miners.

Spatial planning is also important for environmental preservation. The protection and management of PHVM's natural environment is important for the following reasons:

- Maintenance of natural ecological systems and processes
- The preservation of the history and cultural heritage of the municipality
- Enhancement of the social, mental and physical well-being of residents
- Promotion of the eco-tourism attractiveness and long-term sustainability of the local tourism industry, which this development strategy paper seeks to promote

The 1992 Constitution; the National Development Planning Commission Act, 1994, Act 479; the National Development Planning Systems ACT, 1994, Act 480; and the Local Government Act, 1993, Act 462 grant MMDAs the power and authority for the economic, social and physical development planning at the Metropolitan, Municipal, and District Assembly level. In respect of land use planning, each District planning authority, together with the District

Planning Coordinating Unit (DPCU) shall plan the use of all lands within their jurisdictions, including urban renewal (re-planning) of developed and built up spaces.

The reality however is that, most MMDAs do not have functional land use plans; and even where they exist, they are mostly not duly enforced.

One effect of the disorderly citing of businesses and residences is that, in the event of power rationing, as happened between 2014 and 2016, it becomes difficult to prioritize power supply to business for economic production. This indeed, became part of the reasons for the decline in economic output and the mass lay-off of workers across the country, during the period.

It is therefore recommended that PHVM take urgent steps to ensure that its spatial plan is not only developed, but perhaps more importantly, published; and the public educated on it, to inform developers. The Town and Country Planning Department of the Assembly should also put in place mechanisms to enforce the land use plan, as approved.

14.0 IMPLEMENTATION FRAMEWORK

The preparation of this Local Economic Development and Growth Strategic is not an end in itself, but the beginning of an important process, which is implementation. The implementation framework therefore serves as a compass that will direct the journey towards the achievement of the set goals. At the implementation stage, the institutional arrangements and capacity, information, financial, and the strategy itself is put to test practically. Implementation is about carrying out the programs and activities in the strategic document. Stakeholder engagements are still necessary at this point, as this will bring about ownership and help sustain the gains of the projects.

Table 6 Prioritized Programs and Activities

Proposed Development Vision	An integrated economy, mutually reinforced by agriculture and mining, delivering jobs and contributing to poverty reduction in the Wassa East District				
Theoretical Assumptions	Value addition in agriculture and mining will propel exponential local economic growth and create jobs for all, especially women and youth				
Development Goal	Strategic Objectives	Proposed Activities	Indicators	Indicative Budget (GHS)	Funding sources
Enhance and sustain agricultural incomes through agribusiness and agro-processing;	Double agricultural productivity, and agro-processing activities in the district over the next two medium terms	<ol style="list-style-type: none"> 1. Stakeholder consultation to secure buy-in into strategy; 2. Facilitate selection of local rice farmers for PFJ program; 3. Organize in collaboration with PFJ and CSIR, training on modern methods of rice production, access to improved seedlings, and available technological innovation in rice milling 4. Organize in collaboration with Food Research Institute, BAC, and 1D1F, training on value addition opportunities in rice production 5. Organize training in poultry and livestock feed preparation using palm kernel cake as base; 6. Organize local poultry farmers into cooperative and support them to access credit to expand the businesses; 7. Organize a 5-day study visit to Malaysia or Indonesia for 8 local entrepreneurs, and 2 reps from the Industrial Research Institute to 	<ol style="list-style-type: none"> 1. Broad support for growth agenda 2. At least 80% of rice farmers enlisted for PFJ 3. Rice farmers use new improved methods in rice cultivation, and milling 4. Business proposals developed for funding under 1D1F 5. Proposals done for feed preparation under 1D1F 6. Number of cooperatives created, and credit procured 7. Improved knowledge of available rice and oil palm processing and value addition technology 		

Proposed Development Vision	An integrated economy, mutually reinforced by agriculture and mining, delivering jobs and contributing to poverty reduction in the Wassa East District				
Theoretical Assumptions	Value addition in agriculture and mining will propel exponential local economic growth and create jobs for all, especially women and youth				
Development Goal	Strategic Objectives	Proposed Activities	Indicators	Indicative Budget (GHS)	Funding sources
		<p>acquaint them with the technology and industrial uses of rice and oil palm</p> <p>8. Sensitized local poultry farmers on the introduction of palm kernel cake-based feed and its cost effectiveness.</p>	<p>8. Palm kernel cake-based feed utilized in local poultry.</p>		
Build backward and forward linkages between agriculture and mining;	Create interdependency relationship between the two sectors to reduce the current land use contestations between them.	<ol style="list-style-type: none"> 1. Team up with Chamber of Mines and Minerals Commission to sensitized local entrepreneurs on local content opportunities in mining 2. Negotiate an MoU with GSR and other mining companies in WEDA for the supply of local rice, chicken, and activated carbon for their use 3. Organize, in collaboration with Industrial Research Institute and BAC, training in food packaging and supply chain management 4. Organize in collaboration with Minerals Commission, Chamber of Mines, and BAC training on technology and processing of palm kernel shell into activated carbon 5. Negotiate and sign MoU with GSR for the sale of limited amount of gold to local jewelers through their association or cooperative 	<ol style="list-style-type: none"> 1. Knowledge of local content opportunities among local entrepreneurs enhanced 2. Local rice, poultry, and activated carbon patronized by mining companies in the district 3. Businesses in the district improve the quality of packaging of their products 4. Palm kernel shell used in the production of activated carbon in WEDA; 5. GSR cedes an agreed ounce of gold for local jewelry making. 		

Proposed Development Vision	An integrated economy, mutually reinforced by agriculture and mining, delivering jobs and contributing to poverty reduction in the Wassa East District				
Theoretical Assumptions	Value addition in agriculture and mining will propel exponential local economic growth and create jobs for all, especially women and youth				
Development Goal	Strategic Objectives	Proposed Activities	Indicators	Indicative Budget (GHS)	Funding sources
Improve employment opportunities in the district, especially for youth and women.	Achieve 80 percent reduction in local unemployment over two medium terms	<ol style="list-style-type: none"> 1. Organize in collaboration with BAC, training on cooperative formation, governance, and benefits for farmers and agro-processors 2. Organize training on procurement and supply chain management for local entrepreneurs 	<ol style="list-style-type: none"> 1. Number of cooperatives formed and functional 2. Number of local businesses and trade associations able to access procurement opportunities in the mining sector 		
Enhance the contribution of tourism to local economic development	Develop and promote local tourism around jewelry making and mining.	<ol style="list-style-type: none"> 1. Identify potential eco-tourism sites in the district 2. Construct reception centres at identified tourist reception centres 3. Construct or improve road access to identified potential tourism facilities 4. Negotiate with GSR and other private sector entities for the design, construction, and management of a mining museum and jewelry mall in the district 5. Create a segment in the planned local investment fair to showcase tourism potential and investment opportunities in the hospitality industry 	<ol style="list-style-type: none"> 1. Historical, mining related, and cultural heritage sites identified 2. Number of tourist reception centres constructed 3. Kilometers of new roads constructed / rehabilitated 4. Mining museum with exhibition and shopping mall constructed; 5. Number of new investments in hospitality industry; 		

Proposed Development Vision	An integrated economy, mutually reinforced by agriculture and mining, delivering jobs and contributing to poverty reduction in the Wassa East District				
Theoretical Assumptions	Value addition in agriculture and mining will propel exponential local economic growth and create jobs for all, especially women and youth				
Development Goal	Strategic Objectives	Proposed Activities	Indicators	Indicative Budget (GHS)	Funding sources
		6. Organize annual jewelry fair to coincide with major festivals of the district	6. Number of annual jewelry fair organized		
Enhance district revenue mobilization and FDI inflows into the district	Increase local revenue mobilization by 50% within the current medium term, 70% within the succeeding medium term.	<ol style="list-style-type: none"> 1. Build stakeholder consensus around rate fixing 2. Complete street naming and property address program 3. Create database on key economic actors in the district 4. Computerize revenue collection and accounting through the introduction electronic hand-held devices 5. Involve professional and trade associations in the collection of fees and levies 6. Improve road network through PPP arrangements to increase market access and boost economic activity 7. Hold district investment fair in collaboration with private sector and Ghana Investment Promotion Centre 	<ol style="list-style-type: none"> 1. Number of stakeholder consultations organized 2. All street named, and houses numbered 3. Database on economic actors established 4. Electronic POS devices procured and deployed 5. Meetings held / MoUs signed with major professional and trade associations 6. Number of PPP contracts signed for construction / rehabilitation of major link roads 7. First ever district investment fair organized 		

15.0 FINANCING THE LOCAL ECONOMIC DEVELOPMENT AND GROWTH STRATEGY

Funding has always been critical to the successful implementation of Local Economic Development strategy. Relying on traditional sources of funding at the current levels won't suffice. It therefore becomes an imperative to attempt to increase traditional sources, while at the same time innovating to raise additional funds to finance the strategy.

Current sources of funding for the municipality's development activities are categorized into four. These are the District Assembly Common Fund (DACF), District Development Fund (DDF), Minerals Development Fund (MDF), and Internally Generated Fund (IGF).

Available evidence suggests that though the DACF is assured and reliable its releases has been quite erratic in recent years. The IGF has on the other hand under-performed over the years, largely due to difficulties in identifying eligible rate payers. There is no reliable database of properties and businesses in the municipality, which makes it difficult to make well-informed revenue projections and to map out the rate payers for collection.

The proposed strategy for improving the performance of IGF is therefore to identify all potential rate payers in the municipality and build a database of these into a database system with locational addresses, property type, and nature of economic activity engaged in. As critical complimentary initiative the Assembly should ensure that all streets and buildings in the municipality are named and numbered for easy identification.

Furthermore, the Assembly is encouraged to move away from imposed approach to levying to consensual approach. This is easier to do, when residents are engaged on the strategic plan and their buy-in is procured. Putting in place accountability mechanisms for reporting on revenue performance and usage will build stronger trust between the Assembly and residents, and encourage them to keep faith with their payment obligations.

15.0 The Minerals Development Fund and the Opportunities it Provides

With the passage of the Minerals Development Fund (MDF) Act in 2016, have come new opportunities for financing local economic development.

The Act spells out its objects to include:

- Redress of harmful effects of mining on communities
- Promote local economic development
- Provide an endowment for the sustenance of the mining industry through support to R&D in mining sector, and support for the sector's institutional capacity-building

The Act sets aside 20 percent of royalties paid to the state to pursue the objects above. This is held in the MDF account, and distributed by the Office of the Administrator of Stool

Lands (OASL) in accordance with established formulae. Half of the allocated monies to the fund (10 percent) is distributed to impacted District Assemblies, the Stool of the mining area, and the traditional council.

In addition, mining districts are to establish Mining Community Development Scheme (MCDS) to receive 20 percent of the other portion (10 percent) set aside to support sustainable mining. The MCDS is to be managed by a Local Management Committee comprising:

- The DCE or his/her rep;
- Traditional rulers;
- Rep of the local office of Minerals Commission;
- Rep of each company in the district;
- Rep of a women's groups,
- Rep of youth group.

It is strongly suggested that the funds accruing to the MCDS is managed in ways that reinforces the local development efforts. In other words projects and programs selected to be financed with MCDS resources should be selected from the Medium Term Development Framework which is aligned with the Local Economic Development and Growth Strategy, even though the MDF Act is silent on this need.

15.1 Corporate Social Responsibility Contributions

Mining companies in general shy from making direct financial payments to local governments as part of their corporate social responsibility (CSR). From key informant interviews conducted for the purpose of this paper, it appears this is as a result of mistrust of local authorities' capacity to financial resources to effective use. Where companies have agreed to make financial contributions to the development of their host communities, they have done so as a stand-alone, multi-stakeholder-managed initiative.

In the particular case of GSRPBL, the company invest substantial amount in its flagship CSR project. The Golden Star Oil Palm Plantations Limited Project (GSOPP), and in addition makes a US\$1 per ounce of gold sold contribution to its Golden Star Development Foundation. Here again, it will have advanced the municipality's development agenda to align projects founded with the Foundation's resources with the medium term development priorities, aligned with the development strategy for the municipality.

It is also suggested that the Assembly considers inviting the Foundation to partner it in some of the planned programs and activities under the development and growth strategy, as a way of leveraging some complimentary financial resources for their implementation.

15.2 Other Financing Opportunities

Beyond the identified statutory disbursement of funds, and voluntary CSR contributions

to support local economic development, PHVM will need to attract private investment capital, both internally and externally in order to achieve its goal of promoting industrialization and job creation through agro-processing and value addition to gold production. A number of factors indeed works in the municipality's favour in terms of pitching for investment inflows. First, is the fact that, one of the two distribution pipelines from the Atuabo gas processing facility terminates in the PHVM. This affords the opportunity for factories and other energy-intensive business ventures to access power at affordable cost. Ghana Gas has indicated that an energy company, Genser has expressed interest in taking some of the gas to produce energy for Gold Fields in Tarkwa.

The government's Western Railway Rehabilitation program, currently underway, is scheduled to extend the the railway network from Kojokrom to Tarkwa, making it easier and cost efficient to transport goods from Tarkwa, Prestea, Bogoso and its environs to the Port of Takoradi enroute to export markets, and also to access other markets in the southern part of the country.

Using the Assembly's internet portal, social media, brochures distributed through Ghana's missions abroad, PHVM Assembly should be able to sell its locational advantages and economic potential to international investors.

Furthermore, organizing an investment fair in collaboration with the Ghana Investment Promotion Centre and with funding support from companies operating in the district and development partners, to herald the implementation of its development strategy will be a novel way of attracting the private sector into the municipality.

16.0 Bibliographical References

- Bateman M., (2013). Financing Local Economic Development: In Search of the Optimal Local Financial System, Juraj Dobrila University of Pula (UNIPU);
- Beauregard, Robert A. (1993). "Constituting Economic Development: A Theoretical Perspective." in Theories of Local Economic Development. Bingham and Mier (eds.);
- Blakely E.J. and Leigh N.G. (2005). Planning Local Economic Development: Theory and Practice (4th edn). Thousand Oaks: Sage Publications;
- Boateng M., Okai D. B., Baah J, and Donkoh A., (2008). Palm kernel cake extraction and utilisation in pig and poultry diets in Ghana, [Livestock Research for Rural Development](#);
- Browne P., (2009). "[Defining 'Sustainable' Palm Oil Production](#)". *The New York Times*;
- Cunningham, S. and Meyer-Stamer, J. (2005). Planning or doing local economic development? Problems with the orthodox approach to LED. *Africa Insight*, 35 (4): 4-14;
- Empel V. C., (2007). Local Economic Development in Ghana: Rooting public-private dialogue, ILO;
- Ghana Statistical Service (2014) 2010 Population and Housing Census District Analytical Report Prestea Huni Valley District
- Gitta C. and South D., (2012). [Southern Innovator Magazine Issue 3: Agribusiness and Food Security](#): United Nations Office for South-South Cooperation. ISSN 2222-9280;
- Kanyane M. H., (2008). Conceptualizing Local Economic Development as Community Engagement Strategy for Poverty Alleviation. *Journal of Public Administration*, 43(4.1): 698-707;
- Macrae R, Robinson R.K., and Sadler M.J. (eds.), (1993). *Encyclopaedia of Food Science, Food Technology, and Nutrition*, 8 vol.;
- Mensah, J. K., Bawole J.N., Ahenkan, A, (2013). Local Economic Development Initiatives in Ghana: The Challenges and the Way Forward;
- Parr, J.B., (1999). Growth-pole Strategies in Regional Economic Planning: A Retrospective View Part 1. Origins and Advocacy. *Urban Studies*, Vol. 36 no. 7;
- PLATFORMA and CLGF (2015) Local Economic Development in Africa: Implementation, Constraints and Prospects
- Prokurat, Sergiusz, (2013). "[Palm oil - strategic source of renewable energy in Indonesia and Malaysia](#)", *Journal of Modern Science*: 425–443;
- Poku K., (2002). "[Origin of oil palm](#)". *Small-Scale Palm Oil Processing in Africa*. FAO Agricultural Services Bulletin 148;
- Sagalyn, Lynne B. (2007). Public/Private Development, *Journal of the American Planning Association*, Vol. 73, No. 1, Winter;

Woolsey L, (2008) Application of Industry Cluster-based and Sector-focused Strategies to Rural Economies, the Corporation for a Skilled Workforce,;

Yin, Jordan S. "A Review of Alternative Economic Base Study Methods for Community Economic Development".