

# The Nexus Between Internally Generated Revenue and Physical Development Projects: A case of the Wassa Amenfi West Municipality, Ghana

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## ABSTRACT

This study examines the relationship between internally generated revenue (IGR) and physical infrastructure development in a Ghanaian local government district, the Wassa Amenfi West Municipality. Using a mixed method research design, the study combined quantitative and qualitative data to assess how local revenue mobilization supports development at the district level. A total of 96 respondents, comprising taxpayers, revenue collectors, and municipal official, were selected using the Yamane (1973) formula, ensuring representation of key stakeholder groups. Descriptive statistics, correlation analysis, and binary logistic regression were applied to determine the relationship between IGR and physical development, and to identify factors influencing taxpayers' willingness to pay. The results revealed a positive and statistically significant relationship ( $r = 0.488$ ,  $p < 0.05$ ) between IGR and physical infrastructure, indicating that increases in internally generated funds contribute to improvements in local development projects. However, a large portion of IGR was expended on recurrent costs, limiting funds available for capital investment. The binary logistic regression showed that gender significantly influenced willingness to pay taxes ( $p = 0.001$ ), with female taxpayers more likely to comply than males. Other factors—education, income, and marital status—were positive but statistically insignificant. The study concludes that while IGF remains an essential tool for local development financing, its effectiveness is undermined by structural inefficiencies in expenditure management and limited taxpayer engagement. It recommends diversifying revenue sources, enhancing fiscal management efficiency, and implementing gender sensitive and participatory tax education programs to strengthen local fiscal autonomy and improve sustainable infrastructure delivery.

**Keywords:** Internally Generated Funds, Physical Infrastructural Development, Ghana Local Government, Fiscal Management, Tax Compliance

## Background To Study

Ghana's unitary multiparty parliamentary democratic system of governance has a 3-tier structure. The first is the national government, made up of the Executive Presidency, Parliament, and Judiciary with some level of separation of powers. Ghana's parliamentary democracy is a hybrid of the English Westminster and the US Presidential systems, with about 50% of the Ministers being drawn from Parliament. The second tier is the regional level made up of 16 regions with their Regional Coordinating Councils (RCCs), coordinating the activities of the districts under their jurisdiction. The third tier is the district level made up of 260 local governments – Metropolitan, Municipal and District Assemblies (MMDAs) – overseeing the development of local communities within their jurisdiction. Key government services are decentralized across these three levels.

Therefore, local governments, including this present study district—the Wassa Amenfi West Municipal Assembly—are the focal point for grassroots mobilizations and participatory democracy and local development in Ghana (Ahwoi, 2017). Local governments in Ghana gives meaning to Ghana's decentralized governance and development structures and aspirations. It is a means of devolving power, resources and decision-making

to community participants to scaffold grassroots socio-economic development. Local governments have been the main pillars through which the central government promotes sustainable local development.

Local development is an essential component of national socioeconomic development. It is a grassroots process that engages all community stakeholders in a conscious effort to address that matters to all and promotes sustainable development at the local level (Kadoyama, 2018). Local development is inextricably linked to a multifaceted process that integrates economic, social, cultural, and environmental elements, as well as innovation to enhance the quality of life, while empowering the most socially marginalized to participation in the governance and development process (Ledwith, 2020). Hence, local development is a joint effort by the government and community stakeholders to enhance inclusion in participatory democracy and community development (Amoako-Mensah et al., 2019; Anlimachie & Avoada, 2020). It creates new and improves existing utilitarian values to foster a thriving local economy, and ensures spatial and ecological order (Sekula, 2017).

A key element in local governance and local development is the mobilization of local resources to complement national resources allocation for grassroots development. Most of the funds used to support local development initiatives are raised internally via taxes, as well as outside through commerce and assistance from international organizations. In Ghana, there are two primary revenue streams for District Assemblies (or local governments). These are the central government sources and internally generated funds. Central government funds include the District Assembly Common Fund (DACF), DDF, central government transfers, as well as donor support. Income from the internal source includes land and concessions, fees, property rates, tolls, levies, licenses, fines and miscellaneous. These internal revenue streams are known as internally generated funds, which are controlled by the District Assemblies and used to fund ongoing development initiatives, and project completion. The IGFs come from local taxes. Local tax is one that meets the criteria of being assessed by a local government, having rates set by that government, being collected by that government, and giving that government the proceeds (Mohammed, 2016). The local governments in Ghana are solely responsible for the collection, management, and administration of local taxes. However, it is crucial to stress that the ability of local governments to choose the tax rate is the most significant aspect of local taxation. They may become more responsible to their citizens as a result (Mohammed, 2016). Local governments do have some taxing authority, but it is restricted. In Ghana, the central government oversees lucrative tax sectors like income tax, sales tax, export charges, and import tariffs (Brown, Ofosuhenne & Akenten, 2019).

The Wassa Amenfi West Municipality faces a complex and pressing issue concerning the optimal mobilization, management and utilization of internally generated funds for advancing crucial physical development projects. Despite the municipality's effort to foster growth and development, the efficient mobilization, management and utilization of IGF is weakened by some structural challenges worth exposing and dealing with. The findings from this study offer valuable insights for local administrators, and stakeholders, guiding potential reforms and strategies for fostering sustainable and impactful development in the municipality.

## Empirical Review

Nkechi & Onuora (2018) examined the impact of internal revenue generation on the development of infrastructure in Southeast States of Nigeria. Descriptive and inferential statistics were applied during the analysis. Simple percentages were utilized in the descriptive analysis, whereas spearman's rank was applied in the inferential analysis to determine the direction of the relationship between the variables. Results of the study show a strong correlation between internal revenue production and infrastructure development. The research also listed a number of methods for obtaining internal revenue, such as public awareness campaigns and tax enforcement. The report also states that in order to increase revenue, revenue administration agencies need to be evaluated.

According to Danquah et al. (2016), the local government service made up of various MMDAs and the national government in Ghana have routinely spent more money than they are able to bring in. This awful performance was attributed to the citizens' ignorance of the necessity to pay taxes to the assembly, inadequate logistics, and the revenue collectors' lack of motivation. Salisu (2017) revealed that local governments are not able to afford to fund the necessary infrastructure, as a result of the lack of income was primarily caused by

corruption among revenue collectors, police, and assemblymen in various. The assembly, like many local governments in Ghana, relied excessively on the DACF to cover its capital expenses while spending a large portion of its IGF on administrative costs.

Nwanne (2015) looked how Nigeria's tax laws affected local governments' capacity to raise and spend money in order to carry out their legal obligations. The research was required because sub-national governments appear to be so enamored with the annual statutory allocations from the Federation Account that they overlook using their own internal resources to pay for both ongoing and capital expenses. The Ordinary Least Squares regression was utilized, and a descriptive method was applied. The Chow Test of Structural Stability was used to determine if Imo State's tax policy on internally generated revenue has a considerable beneficial impact on public spending at sub-national levels.

When it is possible to identify direct recipients, it is standard practice in public finance to charge for services. Particularly in local governments, user fees and charges play a relevant role in supporting infrastructure (OseiKyei & Chan, 2017). Similar to this, Osei-Kyei & Chan (2017) asserts that in order to minimize potential distortions in the flow of factors and goods within a nation, high degrees of national uniformity are preferable for taxes like the corporate income tax and the value-added tax. They admit that local governments are less well suited for using company taxes. That is why the national government must always provide financial support to the local governments. In a similar vein to Williams (2017), the central government has the option to equalize resource allocation from the centre to enhance funding to local governments because resources and investments are not fairly distributed throughout the geographical boundaries of local governments. These problems with natural and investment inequalities present difficulties for local and sub national governments in raising income to fulfill their delivery obligations.

## Theoretical Framework

The study adopted the theory of federation. Kenneth Arrow, Richard Musgrave, and Paul Sadweh Samuelson contributed significant papers on the theory of public goods in 1954 and 1955. These papers, along with Arrow's speech on the functions of the public and private sectors in 1970 and Musgrave's book on public finance in 1959, laid the groundwork for the initial theory of fiscal federalism. Three roles for the government sector were determined within this framework. These were the duties that the government played in addressing different types of market failure, maintaining a fair income distribution, and attempting to maintain macroeconomic stability at full employment and stable prices. The theoretical foundation in question was essentially Keynesian and advocated for the state to take an active role in economic affairs. Therefore, where the market mechanism failed because of different public goods characteristics, the government was expected to step in. Economics teaches us that if public goods are left to private market mechanisms, they will not be adequately delivered since the private provider will not invest in their provision because the advantages accruable to him or her will be far smaller than the overall benefit to society. Governments and their representatives were viewed as the guardians of the public interest who would work to improve social welfare to the greatest extent possible out of altruism or the necessity to win elections in democracies.

The function of the state in maximizing social welfare then offers the fundamental components for the theory of fiscal federalism once we allow for a multi-level government arrangement. The social welfare of the people living under each level of governance is then considered as being maximized. If there are public goods that are used on a local level instead of on a national level, then a multi-layered effort is needed. In this situation, it's clear that local goods that are made to meet local needs by the right local authorities do much better for society than core requirement.

Fair income distribution, maintaining macroeconomic stability, and delivering public goods on a national scale are all tasks that fall under the purview of the central government. Decentralized levels of government, on the other hand, are projected to concentrate on providing local public goods, with the central government providing targeted funds in circumstances when local public goods have jurisdictional spillovers. Reference from this theory, it is emphasized that the Wassa Amenfi West Municipal assembly would, through the little internally generated fund mobilized, be able to provide some essential public goods such as road reshaping, schools, markets, health centers, among others in the Municipality.

The conceptual framework of this study explains the nature of the internally generated fund and its effects on local development with much emphasis on physical infrastructure. The conceptual framework of this study gives the indication that internally generated fund has the ability to cause an effect on Wassa Amenfi West Municipality. In light of this, the relationship between the internally generated fund and local development is depicted in the diagram below.

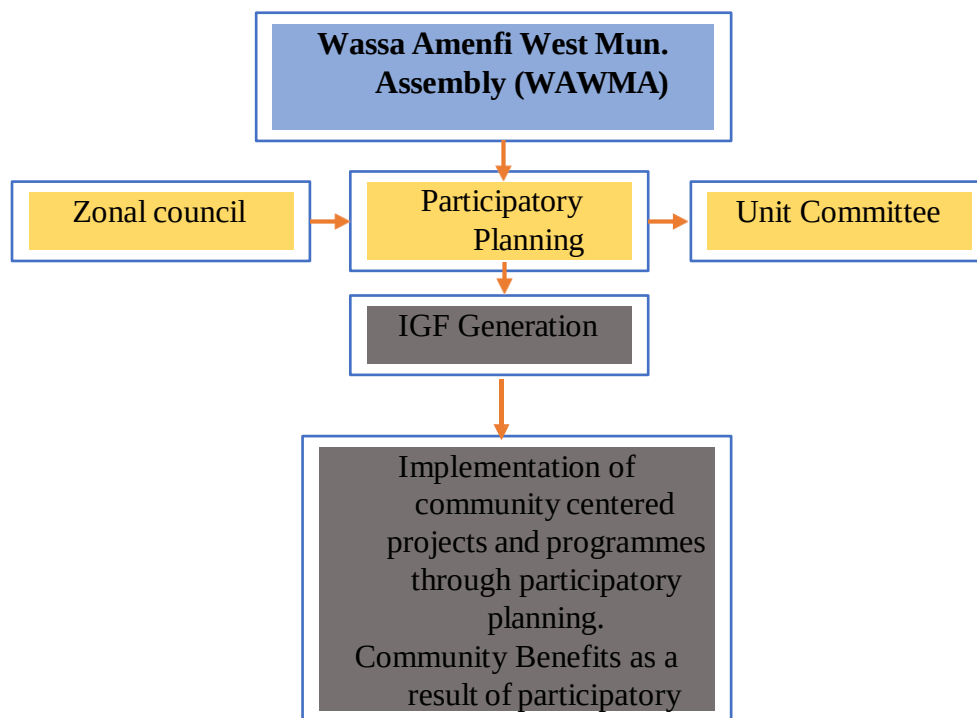


Figure 1: Conceptual Framework

Source: Author's own construct (2022)

## METHODS

This study adopted a mixed-method design to comprehensively examine the contribution of internally generated funds (IGF) to physical development within the Wassa Amenfi West Municipality. The mixed approach was necessary to combine quantitative precision with qualitative depth in understanding how IGF mobilization influences local infrastructure delivery (Anlimachie, 2019; Creswell, 2014). Quantitative data were collected through structured questionnaires, while qualitative data were obtained via key informant interviews with selected municipal officials and community representatives. The mixed-method approach allowed triangulation of findings and helped validate the results of the binary logistic regression with contextual insights from the field.

The target population comprised taxpayers, revenue collectors, assembly members, and key administrative staff of the municipality. A total of 2,686 taxpayers were identified in the municipal database, and the Yamane (1973) formula was applied to determine a representative sample size of 96 respondents at a 10% margin of error. Thus:

$$N$$

$$n = \frac{N}{1 + N(e)^2}$$

$$\left(1 + N(e)^2\right)$$

Where, n=the sample size, N=total population, e=margin of error (10%), and 1=constant

$$n = \frac{2686}{1 + 2686(0.10)^2} = 96$$

This sample size, though modest, aligns with similar district-level studies in Ghana (Akudugu & Oppong-Peprah, 2013; Brown et al., 2019) where administrative and logistical constraints make smaller, representative samples more practical. Participants were selected through purposive and simple random sampling to ensure inclusion of diverse socio-economic groups and stakeholder categories. While the sample size limits broad generalization, it provides valuable insights into local government fiscal dynamics in small municipal contexts typical of Ghana's decentralized governance system.

## Data Analysis Procedures

Data were analyzed using descriptive statistics, correlation analysis, and binary logistic regression to assess relationships between internally generated funds and physical infrastructure development, as well as determinants of taxpayers' willingness to pay. The statistical analyses were performed using STATA version 14, which facilitated both descriptive and inferential modeling. Prior to regression, data were screened for missing values and multicollinearity among independent variables. The dependent variable was taxpayers' willingness to pay (coded as 1 = willing, 0 = not willing), while independent variables included gender, marital status, educational level, and annual income. The logistic regression model estimated the probability of willingness to pay as a function of these predictors, specified as:

$$\text{logit}(P) = \beta_0 + \beta_1(\text{Gender}) + \beta_2(\text{Marital Status}) + \beta_3(\text{Education}) + \beta_4(\text{Income}) + \varepsilon$$

Consider that the dependent variable in binary logistic regression is a dichotomous (binary) variable with a coding of 0 or 1. So, rather than using Y, it expresses the regression model using the logit:

$$\text{logit} = L_i = B_0 + B_1X_1 + \dots + B_KX_K$$

The model's robustness was tested using the Likelihood Ratio (LR) chi-square, pseudo R<sup>2</sup>, and Hosmer Lemeshow goodness-of-fit statistics. Odds ratios were computed to interpret the magnitude of influence of each predictor variable.

In addition, qualitative interview data were analyzed using thematic content analysis, which complemented the quantitative results by providing deeper explanations for observed trends, such as gender differences in tax compliance and perceptions of fiscal transparency. The integration of qualitative and quantitative results strengthened the validity and interpretive depth of the study's findings.

## RESULTS

The results from the data analysis are presented as follows.

### IGF Performances (2016-2021)

The objective one sought to determine and investigate how internally generated revenues are utilized in the study area. In finding out how internally Generated Revenues are mobilized by the Assembly; the researcher collated the various revenue sources available to the Assembly in running its administrative and development projects. Table 4 shows the yearly analysis of IGF generation from various sources from 2016 to 2021. It can be observed from the table that licenses form the highest proportion of IGF in Wassa Amenfi West Municipality with rents being the least performing source within the same period. The Assembly did not do well in terms of Fees and Miscellaneous. It was noted from the study that the Assembly mostly depended on the collection of tolls and other financial duties rendered to it by the people in raising IGF rather than the provision of charged services or engaging in productive business. The Assembly generated high revenues from the licenses, rates, and Lands and concessions within the period, and it is attributed to the emergence of commercial activities, especially within the two largest communities, Asankrangwa and Samreboi. The two communities are commercial hub and with two big markets. Also, small and medium enterprises, hawkers and traders engaging in various trading activities are mandated to pay register with the Assembly and pay their Business Operating Permits. Commercial drivers as well as Tricycle Operators are to obtain city driver's



licenses and pay daily tolls to the Assembly. The assembly has also contracted the collection of property rates to a special task force and as indicated by the table, the revenue generated from the rates has increased since 2016

Table 1: IGF Performances (2016-2021)

| Source of IGF               | 2016              | 2017              | 2018              | 2019              | 2020              | 2021              | Total               |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| <b>Rates</b>                | 39,018.10         | 34,008.05         | 235,805.61        | 373,347.13        | 33,210.52         | 98,154.80         | <b>813,544.21</b>   |
| <b>Land and Concessions</b> | 71,825.00         | 50,588.00         | 150,831.00        | 106,221.74        | 142,884.05        | 85,507.00         | <b>607,856.79</b>   |
| <b>Fees</b>                 | 69,088.00         | 71,964.30         | 67,732.00         | 79,309.80         | 140,024.00        | 106,402.80        | <b>534,520.90</b>   |
| <b>Fines</b>                | -                 | -                 | 1,420.00          | -                 | -                 | 2,080.00          | <b>3,500.00</b>     |
| <b>Licenses</b>             | 93,486.00         | 136,786.65        | 207,675.13        | 231,267.69        | 123,892.76        | 303,854.02        | <b>1,096,962.25</b> |
| <b>Rents</b>                | 17,179.57         | 30,787.34         | 30,061.80         | 66,769.09         | 15,500.57         | 19,498.04         | <b>179,796.41</b>   |
| <b>Miscellaneous</b>        | 44,234.95         | 11,422.95         | 6,485.74          | -                 | 1,860.00          | 2,080.04          | <b>66,083.68</b>    |
| <b>Total</b>                | <b>334,831.62</b> | <b>335,557.29</b> | <b>700,011.28</b> | <b>856,915.45</b> | <b>457,371.90</b> | <b>617,576.70</b> | <b>3,302,264.24</b> |

Source: Wassa Amenfi West Municipal Assembly, 2022

### The Trend of Internally Generated Revenue Mobilization

The trend of Internally Generated Revenue in the Wassa Amenfi West Municipality has seen an increase since 2016, although it is still insufficient to support municipal infrastructure development. As indicated in Table 1 in 2016, the total internally generated revenues mobilized by the Municipality was 334,831.62 Ghana Cedis. This figure increased to 335,557.29, 700,011.28, and 856,915.45 in 2017, 2018, and 2019 respectively. It declined massively in the year 2020 to 457,371.90 which the research revealed was due to the Covid-19 pandemic but jumped to 617,576.70 Ghana Cedis in 2021.

Moreover, Table 2 further shows that the Assembly uses almost all the Internally Generated Revenues on recurrent expenditures every year. The gap between internally generated revenues and recurrent expenditures will continue to widen if essential expenditures like stationery, fuel for official vehicles, labor costs, protocol services, and allowances on the Assembly's payroll continue to experience huge percentage increases in comparison to slow and economically unfeasible increases in revenue rates and collections. The results show

that the Assembly will not have enough resources from IGF to fund physical infrastructure as almost all the amount realized are geared towards recurrent expenditure. According to Danquah et al. (2016), the local government service and the national government in Ghana have routinely spent more money than they are able to bring in. This appalling performance was attributed to the citizens' ignorance of the requirement to pay taxes to the assembly, insufficient logistics, and the revenue collectors' lack of desire.

Table 2: IGF Performance and Expenditure (2016-2021)

| Year         | Budgeted            | Actual IGR          | Performance (%) | Recurrent Expenditure |
|--------------|---------------------|---------------------|-----------------|-----------------------|
| 2016         | 340,450.00          | 334,831.62          | 98.3            | 334,831.53            |
| 2017         | 323,800.00          | 335,557.29          | 103.6           | 335,556.96            |
| 2018         | 659,870.00          | 700,011.28          | 106.1           | 697,961.73            |
| 2019         | 692,863.50          | 856,915.82          | 123.7           | 650,953.18            |
| 2020         | 879,208.98          | 457,371.90          | 52              | 414,160.45            |
| 2021         | 991,423.89          | 617,576.70          | 62.3            | 612,856.43            |
| <b>Total</b> | <b>3,887,616.37</b> | <b>3,302,264.61</b> | <b>84.9</b>     | <b>3,046,320.28</b>   |

Source: WAWMA Treasury, 2021

### IGF and Physical Infrastructure

The research objective two sought to determine the relationship between Internally Generated Revenue and Physical Infrastructure between 2016 and 2021 using the Pearson Correlation coefficient the data is presented in Table 3. As can be deduced from the table, there is a positive relationship between Internally Generated Revenue and Physical Infrastructure. The data in the correlation coefficient gives the indication that Internally Generated Revenue can impact Physical Infrastructure in Wassa Amenfi West Municipal Assembly by up to (0.488 or 48.8 percent) when the “R” is considered. A marginal change in Internally Generated Revenue will result in a marginal change in Physical Infrastructure up to 0.048 or 4.8 percent. In order words, as Internally Generated Revenue increases, Physical Infrastructure is expected to increase. In the case of Wassa Amenfi West, as the study revealed, the funding of these physical infrastructures is not necessarily from IGF. An increment in IGF reduces the burden on other statutory funds such as DACF on recurrent expenditure. Instead of being used for recurrent expenditures when IGF is low, the fund is directly channeled to the provision of physical infrastructure.

This study is in line with Nkechi & Onuora (2018) who examined the impact of internal revenue generation on the development of infrastructure in Southeast States of Nigeria. Descriptive and inferential statistics were applied during the analysis. Simple percentages were utilized in the descriptive analysis, whereas spearman's rank was applied in the inferential analysis to determine the direction of the relationship between the variables. Results of the study show a strong correlation between internal revenue production and infrastructure development. The research also listed a number of methods for obtaining internal revenue, such as public awareness campaigns and tax enforcement The report also states that to increase revenue, revenue administration agencies need to be evaluated.

Table 3: Correlation between IGR and Physical Infrastructure

|                              | Internally Generated Revenue |   | Physical Infrastructure |
|------------------------------|------------------------------|---|-------------------------|
| Internally Generated Revenue | Pearson Correlation          | 1 | .488                    |
|                              | Sig. (2-Tailed)              |   | .0326                   |

|                         |                     |       |   |
|-------------------------|---------------------|-------|---|
|                         | N                   | 6     | 6 |
| Physical Infrastructure | Pearson Correlation | .488  | 1 |
|                         | Sig. (2-Tailed)     | .0326 |   |
|                         | N                   | 6     | 6 |

Source: Author's Field Survey, 2022

### Public Participation in Policy formulation

Because people understand their problems better and can offer better answers, they must participate in decisions that will have an impact on them. However, the results were the opposite, where several proportions of the taxpayers claimed they weren't involved in the decision-making process regarding policy formulation in the community, which accounted for 69%. Nonetheless, 28.1% of them have been involved. Those involved perhaps be the opinion leaders, chiefs, or close relatives of the district assembly workers.

**Table 4: General public involvement in policy formulation**

| General public involvement in policy formulation | Frequency | Percentage |
|--------------------------------------------------|-----------|------------|
| Yes                                              | 27        | 28.1       |
| No                                               | 69        | 71.9       |

Source: Author's Field Survey, 2022

### Investment into community Development

People want value for the tax they pay in their community, and this could increase their willingness to pay the tax. When one could set his or her eyes on the money he or she has paid as a tax used for a developmental project, it gives them the edge to comply with the payment of the tax. However, the story could be otherwise if their tax is seen as not utilized well or for the development of their community. From Table 4 more than half of the taxpayers indicated that there are not enough provisions towards their community development after they paid tax and this constitutes 64.6% of the total sample. At the same time, 35.4% asserted that there is a provision for the development of their community. These individuals could be those who have had scholarship opportunities, provision of toilet facilities, or probably market women and men benefiting from some sort of renovation in their marketplace. However, there seems to be a valid reason declared by Salisu (2017) associated with the failure of the local government to provide for community development. Salisu (2017) revealed that local governments are not able to afford to fund the necessary infrastructure, because of the lack of income was primarily caused by corruption among revenue collectors, police, and assemblymen in various. The assembly, like many local governments in Ghana, relied excessively on the DACF to cover its capital expenses while spending a large portion of its IGF on administrative costs.

**Table 4: Adequate provision towards the community**

| Adequate provision towards the community | Frequency | Percentage |
|------------------------------------------|-----------|------------|
| Yes                                      | 34        | 35.4       |
| No                                       | 62        | 64.6       |

Source: Author's Field Survey, 2022



## Assessment of People Willingness to Pay Tax

Tax collection depends on the willingness of the taxpayers to pay their taxes. Because of this, a lack of willingness to pay taxes will lead to indirect taxes that the taxpayers would experience. It's because the general population is unaware of the current, tangible benefit of money spent on tax payments. It's revealed in Table 5 that most (67.7%) of the taxpayers are willing to pay tax whilst a few (32.3%) still insist on not being compliant with tax.

**Table 5: Willingness to pay tax**

| Willingness to pay tax | Frequency | Percentage |
|------------------------|-----------|------------|
| Yes                    | 65        | 67.7       |
| No                     | 31        | 32.3       |

Source: Author's Field Survey, 2022

Taxes are one of the nation's main sources of income and they also represent a type of national self-reliance in terms of funding. Tax collection depends on how willing taxpayers are to pay their taxes. In rating taxpayers' willingness to pay tax, three variables were introduced. Thus, high, medium and low. It was revealed that most of the taxpayers have a relatively medium 41.7% probability to pay tax, followed by low willingness 37.5% and lastly, high willingness 20.8% as indicated by Table 6.

**Table 6: Rating taxpayers' willingness to pay tax**

| Rating taxpayers' willingness to pay tax | Frequency | Percentage |
|------------------------------------------|-----------|------------|
| High                                     | 20        | 20.8       |
| Medium                                   | 40        | 41.7       |
| Low                                      | 36        | 37.5       |

Source: Author's Field Survey, 2022

## Binary Logistics Model for Willingness to Pay Tax

The authority, privilege, and opportunities that certain individuals have, and others do not in a particular culture are strongly influenced by gender. Policymakers can act to address gender disparities in taxation, which matter. To find out the taxpayers' willingness to pay taxes, a binary logistic model was performed by the researcher. The results are presented in the Table 7. However, the model presented that the probability for a taxpayer to pay tax is (1) thus, willingness to pay tax, and (0) denotes not willingness to pay tax. A total of four independent variables was estimated.

As presented in the table, it is evident that out of the four variables estimated, one variable was statistically significant. The estimation revealed that gender is statistically significant with a positive influence on the taxpayer's willingness to pay tax. This implies that gender has an influence on willingness to pay tax at a p-value of 0.001. It is evident that from the odd ratio that a female taxpayer will be willing to pay tax at a rate of 0.1618 times. An increase in a female taxpayers will influence the probability of paying tax at 0.1618.

This study is in line with numerous studies (Kastlunger et al., 2010; Lohse and Qari, 2014) on tax compliance which revealed that women are more compliant than men in terms of conduct. Additionally, it seems that men and women behave and think differently when it comes to taxes. Studies have revealed that compared to males, women tend to believe that the tax code is reasonable, that getting caught for evasion is more likely, and that the consequences of evasion are overestimated.

**Table 7: Binary logistics model for willingness to pay tax**

| Willingness to pay tax | Odds Ratio   | Std. Err. | Z     | P>z   | [95% Conf. | Interval] |
|------------------------|--------------|-----------|-------|-------|------------|-----------|
| Gender                 | 0.1618078*** | .0900265  | -3.27 | 0.001 | .0543761   | .4814934  |
| Marital status         | 1.246804     | .4098712  | 0.67  | 0.502 | .6546002   | 2.374761  |
| Educational level      | .9389955     | .1602342  | -0.37 | 0.712 | .6720644   | 1.311947  |
| Annual income          | .9999607     | .0000216  | -1.82 | 0.069 | .9999183   | 1.000003  |
| Constant               | 57.03886     | 73.7453   | 3.13  | 0.002 | 4.525388   | 718.9286  |
| Log likelihood =       | 53.490636    |           |       |       |            |           |
| Number of obs =        | 96           |           |       |       |            |           |
| LR chi2(4) =           | 13.80        |           |       |       |            |           |
| Prob > chi2 =          | 0.0080       |           |       |       |            |           |
| Pseudo R2 =            | 0.1142       |           |       |       |            |           |

p-value=1\*\*\*, 5\*\*, and 10\*

Source: Author's Field Survey, 2022

## SUMMARY OF THE FINDINGS

### Utilization and Performance of Internally Generated Funds (IGF)

The results indicate that the total internally generated revenue (IGR) for the Wassa Amenfi West Municipality increased steadily between 2016 and 2021, except for a decline in 2020 attributed to the COVID-19 pandemic. The main revenue sources included licenses, rates, lands and concessions, with licenses accounting for the largest share, while rents were the least-performing category. This upward trend, though modest, reflects improved local revenue collection efforts, driven by commercial growth in Asankrangwa and Samreboi. However, the analysis also revealed that a large proportion of IGF was consistently used for recurrent expenditure—such as administrative costs, fuel, and allowances, leaving limited funds for capital or physical development projects.

This pattern supports earlier observations by Danquah et al. (2016) and Salisu (2017) that local governments in Ghana often overspend on administrative costs, undermining their ability to invest in infrastructure. Similarly, Brown, Ofosuhene, and Akenten (2019) noted that weak fiscal discipline and lack of logistical capacity at the district level constrain the effective use of internally generated funds. The findings from this study thus confirm that while IGF performance is improving, structural inefficiencies in expenditure management continue to hinder physical development outcomes.

### Relationship Between IGF and Physical Infrastructure

Correlation analysis revealed a positive and statistically significant relationship ( $r = 0.488$ ,  $p < 0.05$ ) between IGF and physical infrastructure. This implies that increases in internally generated revenues are associated with improvements in infrastructure projects such as markets, schools, and roads. The findings reinforce the

theoretical argument of fiscal federalism, which posits that local resource mobilization enhances accountability and the efficient provision of local public goods.

These results are consistent with Nkechi and Onuora (2018), who found that internal revenue generation significantly affects infrastructure development in Nigerian municipalities, and with Omodero et al. (2018), who emphasized that improved local revenue autonomy fosters sustainable community development. The present study therefore contributes to the broader discourse that strengthening IGF systems can help reduce dependence on central government transfers like the DACF, creating more fiscal space for local infrastructure financing.

### **Taxpayers' Willingness to Pay and Determinants**

The descriptive results showed that 67.7% of taxpayers expressed willingness to pay taxes, while 32.3% remained unwilling. When rated by degree, 41.7% of respondents showed medium willingness, followed by 37.5% low and 20.8% high. Binary logistic regression analysis further revealed that gender was the only statistically significant factor influencing willingness to pay ( $p = 0.001$ ), with female taxpayers more likely to comply than males. Although marital status, education, and income showed positive but insignificant effects, their directions aligned with prior expectations.

These findings are consistent with the conclusions of Kastlunger et al. (2010) and Lohse and Qari (2014), who observed higher compliance among women due to stronger perceptions of fairness and civic responsibility. The results suggest that gender-sensitive fiscal education and empowerment programs could enhance tax compliance in the Wassa Amenfi West Municipality. Furthermore, qualitative evidence indicated that many taxpayers' willingness to pay is affected by perceived misuse of funds and limited visibility of development outcomes—echoing Touchton et al. (2019), who argue that participatory fiscal governance improves tax morale and compliance.

The overall findings demonstrate that IGF has a meaningful but constrained role in promoting physical infrastructure development. While revenues are growing, high recurrent spending limits their developmental impact. The positive correlation between IGF and infrastructure suggests that strengthening internal revenue administration, transparency, and participatory decision-making could significantly enhance fiscal performance and developmental outcomes. These results align with the broader literature on decentralization and fiscal federalism, which underscores the importance of local financial autonomy for sustainable development (Mogues & Benin, 2012; Hackman et al., 2021).

While the study showed consistent growth in the study district's IGF, but it only matched recurrent expenditures, resulting in deficits. To boost internally generated revenue, the Assembly should consider new revenue sources like tolls on mobile money services, fees for night markets, refuse dumping, revenue checkpoints, tourism, and parking, as well as fines for road safety violations. Most respondents, especially women, were willing to pay taxes, indicating that economically empowering women could boost local revenue. The willingness to pay taxes is crucial, as a lack thereof leads to indirect taxes due to ignorance of tax benefits. Improving IGFs could enhance physical infrastructure development, reducing reliance on the DACF for funding. However, structural challenges in revenue collection and management hindered the IGF's ability to support the Assembly's development, making the DACF the main funding source for construction projects.

### **CONCLUSIONS**

This study examined the relationship between internally generated revenue (IGR) and physical infrastructure development in the Wassa Amenfi West Municipality, using a mixed-method approach that integrated quantitative and qualitative data. The analysis revealed that although IGF increased steadily from 2016 to 2021, a significant proportion of the funds was absorbed by recurrent expenditures such as administration and logistics, leaving limited fiscal space for capital investment. Nonetheless, the correlation results demonstrated a positive and statistically significant relationship between IGF and physical infrastructure, implying that improvements in internal revenue mobilization can directly enhance development outcomes.

The binary logistic regression analysis identified gender as a key determinant of taxpayers' willingness to pay, with women showing higher compliance levels than men. Other socio-economic variables such as education, income, and marital status—exhibited positive but statistically insignificant relationships. These results

highlight that strengthening gender-inclusive fiscal education and transparent governance practices can foster greater tax compliance and revenue performance.

Overall, the study concludes that while Wassa Amenfi West Municipality has made progress in mobilizing internal revenue, structural inefficiencies in expenditure management and limited public participation continue to undermine the developmental impact of IGF. Addressing these institutional and behavioral challenges is essential for achieving sustainable local development and reducing dependence on central government transfers such as the District Assembly Common Fund (DACF)

## RECOMMENDATION

In light of the study's findings, the subsequent strategies are recommended to augment the mobilization and utilization of Internally Generated Funds (IGF) within the Wassa Amenfi West Municipality Assembly. The first is diversification of revenue sources. There is the need for the study Assembly to broaden its revenue generation framework beyond conventional sources and approaches. The Assembly needs to institute charges and levies on mobile money transactions, night market activities, waste management services, on-street parking, and sand extraction operations. This initiative will strengthen fiscal resilience and mitigate the dependency on licenses and rates.

Second, enhancement of Fiscal Management Efficiency is also needed. The Assembly is advised to implement transparent expenditure tracking mechanisms to ensure a higher allocation of IGF towards capital and physical infrastructure investments as opposed to recurrent expenditures. The integration of digital payment solutions and periodic performance evaluations will enhance accountability and reduce potential revenue leakages.

Also, promotion of taxpayer education and engagement is also suggested. Systematic community engagement and awareness campaigns should be established to elevate tax literacy and fortify the rapport between the Assembly and its taxpayers. Additionally, participatory budgeting forums could facilitate the alignment of local development objectives with taxpayer expectations, thereby promoting increased compliance.

Furthermore, there is the need for the Assembly to embrace gender-savvy revenue tactics by harnessing the power of gender dynamics to promote tax compliance. The Assembly should tap into the resourcefulness of women's associations and market groups, turning their civic engagement into a tax compliance powerhouse.

Also, the Assemble need to empower its revenue collection teams by making them then innovative and engaging, keeping them at the top of their game. Ongoing training and logistical support need to be augmented to boost their efficiency, sharpen their ethics, and arm them with cutting-edge digital tools for streamlined revenue collection and crystal-clear reporting.

The study suggests further research to dive deeper into revenue trends by expanding research with diverse, widespread samples. Unlock new insights through comparative or longitudinal studies to illuminate IGF trends and their lasting developmental impacts.

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