International African Review of Multidisciplinary Sciences

Open Access

Equalization in the light of local development in Guinea: an impact analysis on local authorities

Mohamed CISSE[1]

[1] General Lansana County University of Sonfonia-Conakry (UGLC-SC)

Corresponding Author: *Mohamed CISSE, Email:momci2004@gmail.com , Tel:+224 623 80 85 20*

Abstract:

Introduction: This study explores how participatory approaches to identifying and prioritizing local needs influence development outcomes in Guinea. Focusing on 42 municipalities—including 7 urban communes—it analyzes the role of participatory budgeting, as coordinated by the National Agency for Financing Communities (ANAFIC), in guiding the allocation of subnational transfers for socio-economic infrastructure. The central research question is whether such mechanisms promote a more equitable distribution of public resources and foster balanced territorial development. **Method:** A mixed-methods approach was employed, combining a comprehensive literature review, documentary analysis, and fieldwork. Primary data were collected through interviews with local development agents, civil society representatives, and municipal officials. Secondary data from ANAFIC (2019–2021) were analyzed using Stata software. The analytical framework is based on Multivariate Analysis of Variance (MANOVA), used to assess the effects of participatory mechanisms on both demographic evolution and the allocation of financial transfers. Furthermore, a simulation of the current equalization formula—primarily based on population size—was conducted and compared with a revised model incorporating a distance factor. In the proposed version, population accounts for 60% of the weighting and distance for 40%, to better address geographic inequalities. **Results:** Findings show that participatory budgeting is widely implemented, with 98.6% of respondents confirming citizen involvement in identifying local needs. Nevertheless, 57.6% reported satisfaction levels below 50% regarding the prioritization process. Statistically, participatory mechanisms appear to have a significant negative impact on the amount of subnational transfers received, while their effect on population growth is positive but not significant. The revised equalization formula demonstrates improved fairness by allocating additional resources to geographically isolated municipalities.**Conclusion:** The study recommends enhancing the targeting framework and strengthening the equalization function of the national trust budget, to ensure more inclusive and balanced local development outcomes.

Keywords: Participatory approaches, Local development, Needs targeting, Needs prioritization, Equalization, Guinea.

Introduction

The effective realization of citizen participation in development initiatives does not preclude concerns about the quality of participatory approaches or the risk of elite capture (Platteau2003.) Elite capture refers to a situation where local elites appropriate project resources without producing significant benefits for the intended communities. This distortion in the benefits of participation is often linked to a perception that central governments are more accountable than local authorities, partly due to the behavior of certain civil society organizations (CSOs) that, while operating under the banner of community development, may withhold resources from actual beneficiaries.

The understanding of what constitutes "locality" is shaped by the framework of decentralization, which defines the responsibilities and operations of local authorities. In Guinea, decentralization has divided the country into seven (7) administrative regions, thirty-three (33) prefectures—whose capital towns constitute the urban municipalities—and three hundred and twenty-three (323) sub-prefectures—whose capital towns form

the rural municipalities. Participatory budgeting is currently implemented in 336 communes, with mixed results in terms of the construction of infrastructure identified and prioritized through the coordination of the National Agency for Financing Local Authorities (ANAFIC).

In the context of local development, targeting can occur either directly in the field or through pre-defined strategies, regardless of whether they are participatory in nature. Effective participation requires that beneficiary citizens are meaningfully involved in identifying the needs to be addressed by planned development projects. Given the importance attributed to this process by technical and financial partners (TFPs), some programs require a letter from the district or municipal council confirming that the proposing organization is acting on behalf of the local population and in line with their expressed needs. Others accept minutes from a community meeting where local priorities are discussed.[1]

Prioritizing needs involves ranking them according to urgency, typically through a community consultation framework. This process is fundamental in participatory budgeting, during which neighborhood or district representatives gather at the municipal level to arbitrate and collectively decide on priorities. When solidarity prevails, participants may agree, for instance, that a district requiring a health center and located 25 km from the regional capital—which has one—should be prioritized over a closer district without a health center but only 10 km away from the capital. This prioritization process spans from the formulation of the local development plan to the selection of the annual investment program. Consequently, the infrastructure built (particularly through subnational transfers) serves not only practical needs but also plays an essential role in raising citizens' awareness about local tax and non-tax revenue mobilization. Citizens become more willing to contribute financially when they see tangible improvements in their living conditions. This shared sense of responsibility fosters greater fiscal civic-mindedness within local governance.

While some authors argue in favor of the positive impact of participatory approaches on local development outcomes (RaoIbanez2015, PaxsonSchady2002), others emphasize cost concerns, asserting that these approaches can be inefficient or even counterproductive (JalanRavallion2003, Lebovics2007) In the Guinean context, it is particularly relevant to examine whether citizen involvement in the identification and prioritization of needs has a measurable impact on local development. Here, the concept of local development is understood in terms of socio-economic well-being, reflected in improvements to social, health, and economic infrastructure, among other dimensions.

To address this issue, the central research question of this chapter is as follows:

Do participatory approaches in targeting and prioritizing local needs have significant effects on development outcomes in the Republic of Guinea?

The main objective of this study is to assess the effects of participatory mechanisms for targeting and prioritizing needs on local development in Guinea.

More specifically, this research seeks to:

- Describe the mechanisms of need targeting and prioritization;
- Analyze the equalization function of subnational transfers; and
- Evaluate the impact of participatory targeting and prioritization mechanisms on local development outcomes.

Based on a review of literature related to need targeting and prioritization, the following hypotheses are proposed:

H1: Participatory budgeting mechanisms result in development projects that are relevant to local populations in Guinea;

H2: The population factor alone in the equalization formula does not guarantee equitable distribution between urban and rural municipalities;

H3: Participatory approaches in targeting and prioritizing needs have a positive and significant effect on local development in Guinea.

In addition to a general methodology involving literature review, and participation in seminars and conferences, the research includes field engagement with institutions involved in local development, the selection of intervention municipalities, the definition of documentary needs, and the development of data collection tools.

Meetings with institutional stakeholders will facilitate access to essential data and foster collaboration with technical, planning, and monitoring-evaluation personnel. To support cooperation with local government actors, a list of selected municipalities will be shared in advance to help mobilize key local stakeholders. The design of the interview guide will ensure the collection of essential information to address the research questions, while relevant documents will provide complementary data or benchmarks for comparison. A first level of analysis will highlight key features of current targeting and prioritization practices in Guinea, and a second level will assess the equalization function and the determination of resource transfers per local authority.

This study covers, with the exception of the capital city Conakry, the seven (7) administrative regions of Guinea. From each region, five (5) rural communes and one ur-

[1]See for example the Information Note for the selection of implementing partners for activities, World Food Programme, October 2020 to January 2021.

ban commune (the regional capital) are selected for analysis.

Methods

Like any research, this study focuses on a documentary review first before mobilizing the resources needed to verify the hypotheses. Seminars and conferences, as well as interviews, helped to mobilize the necessary primary and secondary data. In the 42 communities covered, local development agents (ADL) and the president of the municipality's civil society were interviewed about the issue.

Data relating to ANAFIC's intervention were also analyzed for the years 2019-2021, including subnational transfers (investments in education; health; other infrastructure, etc.) made in the locality. The data were analyzed using Stata software and the estimation method used was Multivariate Analysis of Variance (MANOVA). Then, simulations made it possible to amend the subnational transfer model in the communities.

Estimation strategy

The ANAFIC equalization formula takes into account a fixed amount of one billion Guinean francs (1,000,000,000 GNF) for each community (337), the deduction of 10% of the Special Allocation Budget for the benefit of ANAFIC for supporting communities, and the share of the population of each community in the total population of communities. The determination of the funding granted to a community is done according to an equalization formula used since 2019.

The expression of the equalization formula

The equalization formula used by ANAFIC is expressed as follows:

$$\textbf{Allocation}\ (t) = \textbf{FB} + \left(\frac{90\% \times \textbf{BAS}(t) - \textbf{SFB}}{\textbf{Total Pop}(t)}\right) \times \textbf{Estimated Pop}_{\text{Municipality}}(t) \quad (1)$$

With :

- Allocation (t) = the amount by a community in the current year;
- DB = the basic allocation per community;
- BAS (t) = the current year's special allocation budget;
- SDB = the sum of basic allocations;
- Pop. Tot (t) = total population of the current year in the communities;
- Estimated Pop Col (t) = population of a community in the current year.

According to this formula, the basic allocation is carried out on an egalitarian basis while the difference between the BAS and the sum of the basic allocations is applied to the population on an equity basis.

The limit of the equalization formula

The formula used by Guinea is a step forward in that equality and equity are taken into account, but the equity of targeting is not sufficient. The "Population" target alone does not prevent the movement of populations from less populated areas (therefore less well-endowed) to even more populated communities (therefore more well-endowed), thus amplifying the development of populated communities to the detriment of less populated ones.

Robustness tests

Test for equality of means of all responses

Ho: The differences between the means are not statistically significant.

Canonical correlation analysis tests yielded results, including Wilk's lambda test, Pillai's test, Lawley's T2 test, and Hotelling's largest root test, with probabilities less than 5%. Indeed, the differences between the means of the variables are statistically significant. Thus, the null hypothesis of equal means is rejected.

Hotelling test

Ho: the vector of means is equal to the vector of zeros.

We reject the null hypothesis of a vector with a mean equal to the zero vector. The vectors of means are significantly different, that is, the terms of the model are significant with a degree of certainty to the extent that the associated probability is less than 5%.

Test of equality of correlations

Ho: the correlations are equal

Since the probability associated with chi2 is lower than the 5% threshold, it is established that the model is valid in the sense of this test.

Matrix covariance test

Ho: the covariances are diagonal, spherical and symmetric.

The matrix covariance and equality of matrix covariances test shows that the covariances are not diagonal, spherical, or symmetric. The probabilities associated with the Chi2 and Chi2 Box are below the 5% significance threshold.

Type I error test

Ho: Error of the first kind

The null hypothesis is rejected because the probability at the significance level is less than 5%. The test shows that the model is not at risk of the primary error to the

point of rejecting the alternative hypothesis. The secondary error that remains, according to this test, is also supported by the previous tests.

Data and description of variables

The data used in the estimation come from both primary and secondary data. Primary data are the result of the author's field research, including the existence of participatory approaches illustrated by participatory budgeting. Secondary data are identified in the ANAFIC database and local development projects, including:

- **Subnational transfer (TRANSFER):**the amount actually paid to communities for the construction of health, education, agricultural, crossing and other socio-economic infrastructure.
- **Population number (Pop):**the population living in a local authority in one year
- **Participatory approaches (PA):**the existence or not of a participatory approach (participatory budgeting for example).
- **Distance (Km):**the number of kilometers between a local authority and its prefectural capital. That of the prefecture being determined in relation to its most distant district or neighborhood
- **Status of the municipality (STACOM):**urban or rural status of the municipality.

Results

Descriptive Statistics

Beyond the secondary data obtained in collaboration with public institutions and CSOs involved in local development, the research focused on the opinions of those responsible for implementing participatory approaches and local development, including Local Development Agents (LDAs), presidents of Civil Society Organizations (CSOs) at the local level, Secretaries General of communities and local elected officials. In the absence of an LDA and a Head of a CSO, the Secretary General of the community and an elected official are contacted.

- **Beneficiary participation in the targeting and prioritization process**

When asked whether beneficiaries of an initiative participate in the process of targeting needs, 98.6% of ADL and CSO leaders or community authorities stated that citizens participate in targeting their project needs. This process is done through Participatory Budgeting where communities are asked to target a maximum of five (5) priority projects at the district and neighborhood level.

As the research focused on community contributions, questions were also asked about the types of projects in which citizens are appropriately involved in identifying their needs.

- **The targeting and prioritization method used**

Several methods are used at the local level to identify needs. According to data collected at the local level, more than 95% of ADLs and CSOs state that PB is the method for identifying the majority of development projects, especially infrastructure projects carried out within the community (Local Council or ANAFIC).

Furthermore, nearly 65.2% indicate that the political projects of elected candidates determine the choice of certain projects. This is all the more reasonable since elected officials take office on the basis of development proposals that have mobilized citizens. From this perspective, the orientation of the PDLs would be quite influenced by electoral commitments, even if stakeholders come up with relevant proposals that could be integrated into the five-year plan.[2]

At the CSO level, nearly 40% of stakeholders maintain that projects implemented by CSOs are chosen based on the agenda of technical and financial partners or CSO proposals. As a result, these projects are less aligned with the principles of participatory approaches to identifying needs, according to the Community Driven Development approach.

As for the prioritization of needs, the trends are the same in terms of assessments depending on whether it is the PB (95.5%), the decision of the executive or the local council (63.6%), prioritization by TFP or CSO (62.1%) and consultation (65.2%). According to the information provided by the ADLs and CSOs, the same methods are used for targeting and prioritization.

- **The level of satisfaction of stakeholders with regard to targeting and prioritization**

The research focused on the level of satisfaction of local development stakeholders with regard to the targeting and prioritization of needs.

When asked about their level of satisfaction, approximately 57.6% of stakeholders (ADLs and CSOs) responded that they had a satisfaction level of less than 50%. Furthermore, 19.7% of stakeholders had a satisfaction level of between 50% and 75% with the conduct of the needs targeting and prioritization process; and 18.2% had a satisfaction level of between 75% and 100%. This means, in other words, that nearly 58% of stakeholders had a satisfaction level of less than 50%.

Empirical Specified Model Estimation and Analysis

This assessment aims to analyze the effects of participatory approaches on local development and the community population. Local development here means the implementation of investments in the socio-economic infrastructure of rural and urban communities.

- **Estimation of the equalization formula**

[2]The Local Development Plan is generally established over five (5) years, i.e., a period corresponding to the mandate of elected officials in accordance with article 561 of the revised CCL of 2017.

$$(\text{POPULATION}_t \ ; \ \text{TRANSFERT}_t) = (\text{AP}_t \ ; \ \text{STACOM}_t \ ; \ \text{KM}_t)$$

A regression by multivariate analysis was carried out in order to judge the effect of participatory approaches on local development in Guinea and on demography.

Table 1: Multivariate Regression Results for POPULATION and TRANSFERT

Equation	**Obs**	**Parms**	**RMSE**	**R-sq**	**F**	**P**
POPULATION	126	4	40287.05	0.5667	53.18	0.0000
TRANSFERT	126	4	4.69e+08	0.2706	15.09	0.0000

Equation	**Coef.**	**Std. Err.**	**t**	**P> |t|**	**[95% CI Low]**	**[95% CI High]**
POPULATION						
KM	152.39	110.21	1.38	0.169	-65.78	370.57
AP	2768.23	7531.79	0.37	0.714	-12141.69	17678.15
STACOM	123174.1	9783.83	12.59	0.000	103806	142542.2
_cons	27868.7	8202.43	3.40	0.001	11631.17	44106.22
TRANSFERT						
KM	603005.7	1282015	0.47	0.639	-1934871	3140882
AP	-3.97e+08	8.76e+07	-4.53	0.000	-5.71e+08	-2.24e+08
STACOM	5.72e+08	1.14e+08	5.03	0.000	3.47e+08	7.98e+08
_cons	7.78e+08	9.54e+07	8.15	0.000	5.89e+08	9.67e+08

Source: Author, based on ANAFIC data, 2021.

The model is well specified and participatory approaches, the status of municipalities and distance explain the variation in population at 56.67% and that of subnational transfers at 27.06%.

MANOVA estimation shows that participatory approaches have a positive and insignificant effect on population increase while they have a negative and significant effect on subnational transfers in local governments.

The distance between a municipality and its capital has no significant effect on the population of that municipality, nor on subnational transfers by the municipality. This result confirms the failure to take this factor of isolation into account in the allocation of resources through the FNDL.

The status of the municipality (urban or rural) significantly and positively impacts demographics and subnational transfers, which are a proxy for development. The elevation of a district to a rural municipality accelerates the development of that locality. Similarly, the elevation of a rural municipality to an urban municipality strengthens the municipality's development process. Government development efforts are greater in urban municipalities than in rural municipalities.

To assess the potential effect of distance, the (KM) data were removed to rerun the regression. The direction of the previous regression is confirmed with a slight decrease in model quality.

Table 2: Multivariate Regression Results for POPULATION and TRANSFERT (Model without KM)

Equation	Obs	Parms	RMSE	R-sq	F	P
POPULATION	126	3	40436.13	0.5599	78.24	0.0000
TRANSFERT	126	3	4.67e+08	0.2693	22.66	0.0000

Equation	Coef.	Std. Err.	t	P> |t|	[95% CI Low]	[95% CI High]
POPULATION						
AP	3025.26	7557.35	0.40	0.690	-11934.06	17984.58
STACOM	120796.2	9667.16	12.50	0.000	101660.7	139931.7
_cons	35191.33	6286.99	5.60	0.000	22746.62	47636.04
TRANSFERT						
AP	-3.96e+08	8.73e+07	-4.54	0.000	-5.69e+08	-2.23e+08
STACOM	5.63e+08	1.12e+08	5.04	0.000	3.42e+08	7.84e+08
_cons	8.07e+08	7.26e+07	11.11	0.000	6.63e+08	9.51e+08

Source: Auteur, à partir des données de ANAFIC, 2021.

The impact of community status remains consolidated on demography and subnational transfers and that of participatory approaches on the same endogenous variables.

For all modalities combined, the status of the municipality has a positive and significant impact on demography and on subnational transfers. The existence of participatory approaches has a negative and significant impact on subnational transfers and a positive and insignificant impact on demography.

Amendment to the existing equalization formula

Several factors can be taken into account in the context of strengthening equity in vertical transfers, including the capacity of the community to cover its own investment needs through its tax and non-tax revenues, the initial allocation of necessary infrastructure, access to the community through the quality of the roads (kilometers of paved or developed roads for example) or the distance of the community from the capital of the prefecture (distance) among others.

Given the constraint of obtaining evidence, this research incorporates the distance factor with a view to improving the harmonious nature of the local development process.

To take into account rural areas far from the urban centres of the prefectures to which they belong, the current equalisation function is amended to take into account the distance factor between urban municipalities and rural municipalities where access to the capital of the prefecture is more difficult and dangerous depending on the quality of the roads.

Since the equalization formula has a limit in terms of equity in the development process, the following proposal is made based on the existing situation.

The equalization formula is thus rewritten as follows:

$$\text{Allocation}(t) = \text{FB} + (90\% \times \text{BAS}(t) - \text{SFB}) \times \left(\frac{\text{Estimated Population of Municipality}(t)}{\text{Total Population}(t)} \right) \tag{2}$$

$$\text{Allocation}(t) = \text{FB} + (90\% \times \text{BAS}(t) - \text{SFB}) \times (p) \tag{3}$$

With $p = \frac{\text{Estimated Population of Municipality}(t)}{\text{Total Population}(t)}$

The new proposal takes into account the distance dimension so as to give weight to the population factor and the distance factor. Should it be noted that the high density of urban or peri-urban areas is explained by the fact that they host significant administrative and business activities? Sticking to the simple population factor to transfer special allocation budgets is doubly advantageous for the development of urban and peri-urban centers, thus reinforcing the development gap and the rural exodus movement.

Factor Weightings

Factor Weightings

Taking into account the dimension of distance from the urban center allows us to consider equity in sharing. What was previously applied solely to the population

will now be distributed between the population and the distance. Hence, the integration into the formula of the parameters α and β, representing the weighting of the population ($\alpha = 60\%$) and the weighting of the distance ($\beta = 40\%$), respectively. The choice of percentages (60% and 40%) is fixed but can be adapted to the context. Depending on the country's context, competent authorities may adjust these parameters accordingly.

A simulation has demonstrated greater fairness in efforts when this factor is considered. For urban municipalities, the distance between the furthest district and the city center of the municipality is taken into account.

The Expression of the New Equalization Formula

The Expression of the New Equalization Formula

The simulation is based on a modification of formula (3), recalled as follows:

$$\text{Allocation}(t) = \text{FB} + (90\%\ \text{BAS}(t) - \text{SFB}) \times (p)$$

Incorporating the distance dimension leads to the following formulation:

$$\text{Allocation}(t) = \text{FB} + (90\%\ \text{BAS}(t) - \text{SFB}) \times (\alpha\ p + \beta\ d)\,(t)$$

(4)

Let $T = 90\%\ \text{BAS}(t) - \text{SFB}$, where T represents the proportional transfer. Formula (4) then becomes:

$$\text{Allocation}(t) = \text{FB} + T \times (\alpha\ p + \beta\ d)\,(t)$$

(5)

Beyond the mathematical validity of this amendment, a key question arises: what is the added value of this amendment for local development? A simulation based on the existing situation showed that this approach allocates more funds to local authorities far from urban centers while still accounting for population size. This formula better addresses equity in meeting development needs after an equal allocation of 337 billion, or one billion per authority.

To illustrate its contribution to greater fairness in transferring Special Allocation Budgets to local authorities, a simulation was conducted on five local authorities, including one urban municipality.

Simulation on the Amended Formula

Simulation on the Amended Formula

For the simulation, five communes were randomly selected: the rural communes of Kamsar, Sinko, Passayah, and Timbo, and the urban commune of Faranah.

Simulation Based on Population

Simulation on the Sample According to the Population

Considering these five municipalities, a simulation was performed using the current equalization formula with a total budget of 10 billion Guinean francs. The aim was to determine the allocation per municipality under the current formula (3):

$$\text{Allocation}(t) = \text{FB} + (90\%\ \text{BAS}(t) - \text{SFB}) \times (p)$$

Table 3: Simulation of Transfers According to the Current Equalization Formula (in thousands GNF)

Commune	**Population**	**% POP**	**Fixed Amount**	**Amount Transferred**
Kamsar	139,270	37.2%	1,000,000	2,488,337
Sinko	98,441	26.3%	1,000,000	2,052,010
Faranah	95,754	25.6%	1,000,000	2,023,294
Passayah	24,409	6.5%	1,000,000	1,260,852
Timbo	16,423	4.4%	1,000,000	1,175,508
Total	**374,297**	**100%**	**5,000,000**	**9,000,000**

Source: Author, from assumed data.

Based on the per capita population of the sampled communities, the current equalization formula distributes amounts as shown in Table 1. From the 10 billion Guinean francs Special Allocation Budget, 10% (1 billion) is deducted for agency management costs, 5 billion is equally distributed among the communities (equal-

ity), and 4 billion is allocated proportionally based on population weight. Thus, Kamsar (139,270 inhabitants) receives a proportional amount of 1.488 billion, surpassing Faranah (95,754 inhabitants) at 1.052 billion. These amounts, combined with the basic allocation (DB), form the total transferred.

The municipalities of Passayah (24,409) and Timbo (16,423), which have smaller demographics in the sample, find themselves proportionally with more than one (01) billion 260 million Guinean francs and more than one (1) billion 175 million Guinean francs as total transfer. In total, the use of the current formula results in the equal sharing of five (5) billion in total and an equitable sharing of four (4) billion, i.e., a total transfer of 9 billion Guinean francs, the 10% being deducted for management.

Simulation Based on Population and Distance

Simulation on the Sample According to the Population and Distance

Using the same sample and budget of 10 billion Guinean francs, the "distance" factor is integrated into the use of the formula. This is formula (5):

$$\text{Dotation}(t) = \text{DB} + T \times (\alpha\ p + \beta\ d)\,(t)$$

The amounts of the Special Allocation Budget are in thousands of Guinean francs.

The proposed weighting for population is 0.6 and that for distance is 0.4. The following table is the simulation of the amendment of the equalization formula with the amounts expressed in thousands of Guinean francs.

Table 4: Simulation of Transfers According to the Amended Equalization Formula (in thousands GNF)

Commune	**Population (%)**	**Distance (%)**	**Fixed Amount**	**Amount Transferred**
Kamsar	139,270 (22.3)	53 (8)	1,000,000	2,208,244
Sinko	98,441 (15.8)	68 (10)	1,000,000	2,035,667
Faranah	95,754 (15.3)	35 (4)	1,000,000	1,814,693
Passayah	24,409 (3.9)	68 (10)	1,000,000	1,546,475
Timbo	16,423 (2.6)	55 (8)	1,000,000	1,420,717
Total	**374,297 (60)**	**269 (40)**	**5,000,000**	**9,000,000**

Source: Author, from assumed data.

With the amendment of the equalization formula, equity is strengthened without affecting the basic allocation which is made equally. In addition to the five (5) billion shared between the five (5) local authorities, the municipalities furthest from the city centers see their allocations strengthened as highlighted in the following point.

Result of the Amendment of the Equalization Formula

The Result of the Amendment of the Equalization Formula

The key question to ask following the amendment is how does it enhance equity? This is particularly important since population per se is not an issue, hence its 60% weighting, but the added value of taking distance into account deserves full attention.

The following table answers the question of added value or contribution of the amendment to improving the living conditions of rural populations living far from city centers.

Table 5: Simulation Results on the Existing and Amended Equalization Formulas (in GNF)

Commune	**Distance**	**Existing Formula**	**Amended Formula**	**Gap**
Kamsar	53	2,488,336,802	2,196,944,734	-291,392,068
Sinko	68	2,052,009,500	2,021,169,858	-30,839,642
Faranah	35	2,023,294,336	1,814,693,447	-208,600,888
Passayah	68	1,260,851,677	1,546,475,164	285,623,487
Timbo	55	1,175,507,685	1,420,716,797	245,209,112
Total	**269**	**9,000,000,000**	**9,000,000,000**	**0**

Source: Author, from assumed data.

It is clear from this table that taking into account distance in the equalization formula strengthens investment in remote communities. The commune of Timbo, which has the lowest population in the sample (16,423 inhabitants) and the lowest amount to be transferred (1,175,507,685 GNF) according to the current formula, sees its investment improved by more than 245 million Guinean francs by taking into account the distance (55 km) which separates the commune from the capital of the Prefecture. This is the case for Passayah, which, 68 km from the city center with a population of 24,409 inhabitants, benefits from more than 285 million Guinean francs with the introduction of distance.

On the other hand, Kamsar (53 km with 139,270 inhabitants), Sinko (68 km with 98,441 inhabitants) and Faranah (35 km with 95,754 inhabitants) respectively experienced a decrease in transfers of more than 291 million, 30 million and 208 million Guinean francs. These municipalities nevertheless maintain their rank in the ranking of the most beneficiaries. This is explained by the weighting given to the population (0.6) and the supplement benefited because of the distance. If the municipalities of Kamsar and Sinko were not relatively distant, they would have lost more with the insertion of the distance factor in the formula. Just as the municipalities of Passayah and Timbo would have benefited more if they had a little more inhabitants.

All combinations accepted, it is proven that the insertion of the distance factor in the equalization formula contributes to substantially improving equity in the redistribution of resources for the financing of local authorities.

Conclusion and policy implications

The local development process in Guinean communities incorporates the Community Driven Development (CDD) model. Stakeholders in the researched areas agree that it is up to the beneficiary to say what they need and that they must be involved in project implementation as well as project monitoring and evaluation.

Participatory budgeting is implemented in all research areas and is practiced to varying degrees from one community to another. Overall, 44% of stakeholders implementing the community participation process have an average satisfaction rate of less than or equal to 50% with regard to targeting and prioritizing needs.

In the local development process, Guinea has moved from documentary targeting to community targeting. The PACVs targeted national plans, national strategies, and policy documents to initiate projects in this direction. With the arrival of ANAFIC, citizens were mobilized through public forums to target needs, prioritize them, and gradually arrive at a shortlist of priorities validated by stakeholders. This process, it is important to point out, deserves to be strengthened in terms of both approaches and interview methodology in order to improve stakeholder satisfaction, especially since participatory approaches negatively impact the implementation of local development investments.

For the financing of local authorities, ANAFIC uses an equalization formula that prioritizes population as a proportionality factor. This formula is amended to include a distance dimension to allow municipalities located far from urban centers or national roads, and therefore less populated and equipped with infrastructure, to benefit from investments so that the local development process is harmonious. A simulation clearly shows the contribution of the amendment to the search for equity.

The results of the analyses imply the following policies:

- amend the equalization formula by integrating the distance dimension to harmonize the development process at regional and national levels;
- improve the methodology of the participatory budgeting process to strengthen the coherence between the projects carried out and the needs of citizens through the monitoring of a detailed guide; and
- ensure the effectiveness of transfers of amounts intended for communities in order to encourage the participatory process at the local level.

While it is established that participatory approaches exist in Guinea, it is regrettable that these approaches do not have a positive impact on the local development process in its phase of targeting and prioritizing needs.

The question that remains is how are projects implemented at the local level in Guinea?

Source of funding

This research is the result of self-financing provided by Mr. Mohamed CISSE.

Conflicts of interest

No conflict of interest.

Authors' contribution

This research work was carried out by me Mohamed CISSE, PhD student at the Cheikh Hamidou KANE Digital University and Lecturer-researcher at the General Lansana Conté University of Sonfonia-Conakry.

Thanks

For the success of this work, several personalities and collaborators made their contributions in the research, processing and writing phases and in the proofreading phase.

After giving thanks to the Merciful, the Most Merciful Allah; let us give thanks deeply:

- My supervisor Professor Seydi Ababacar Dieng, Associate Professor of Economics and Head of the Economic and Monetary Research Laboratory (LAREM);

- My wife Aïssatou Doumbouya and the whole family for the support necessary for the completion of the doctoral research;
- Researchers from the Laboratory of Economic and Monetary Research (LAREM) for contributions during the seminars;
- Mr. Mohamed Sikhé Camara, Dr. Laye Camara and the entire ANAFIC team for their good collaboration;
- All those who have contributed in one way or another to making this research work effective.

Data Availability

The dataset used and analyzed during this study is available from the corresponding author upon reasonable request.

Dates

Received: 10/10/2024, Revised: 25/10/2024, Accepted: 28/01/2025, Published Online: 22/03/2025

How to Cite this Article

To cite this article: CISSE, M. (2025). Equalization in the light of local development in Guinea: An impact analysis on local authorities. *International African Review of Multidisciplinary Sciences (IARMS)*, 1(1), 17–26.

Bibliography

Damien, Mededji (2008), "Dynamics of Urban Poverty in Benin: An Analysis in Terms of Inputs and Outputs", PEP working paper series 2008-06.

World Bank (2021), "Report no: ICR00005322 on the implementation of the results of IDA-58250" of February 9, 2021 for Phase 3 of the PACV.

Damien, Mededji (2008), "Dynamics of Urban Poverty in Benin: An Analysis of Inputs and Outputs", PEP working paper series 2008-06.

Florence Morestin, Patricia Grants, Valérie Ridde (2009), "Criteria and processes for identifying the poor as beneficiaries of programs in developing countries", University of Montreal, Canada.

Ibanez, Ana Maria,Rao, Vijayendra(2015), "*The social impact of social funds in Jamaica: a mixed-methods analysis of participation, targeting and collective action in community driven development*», World Bank, Latin America and the Caribbean, Jamaica, JM-Soc. Invest. Fund

Jalan, J and Ravallion, M (2003), "Estimating the Benefit Incidence of an Antipoverty Program by Propensity-Score Matching", Journal of Business & Economic Statistics, 2(1).

Kramer, R. (1990) "Review of Collaborating: Finding Common Ground for Multiparty Problems, by B. Gray." The Academy of Management Review, 15(3), 545–547.

Laurent Guihéry (2001/2), "Fiscal federalism in Germany. What reform of German financial equalization?", Public economics, open edition journal.

LEJEPAD Guinea (2020/21), "Analysis of the budgets of the Communes of Conakry and those of the capitals of the administrative regions", funded by NED, 2020 and 2021.

LEJEPAD-Guinea (2018) "Report on Collaborative Social Accountability Initiatives", study commissioned by GPSA of the World Bank, Republic of Guinea.

LEJEPAD-Guinea (2021), "To Promote Youth Participation in Local Governance and Peaceful Elections", funded by NED.

Maxime Lebovics (2007), in his article "analysis of the contributions and constraints of participatory development", Afrique Contemporaine, 2007/3-4 (no 223-224).

Pradhan, Menno; Rawlings, Laura B.. (2002), "The Impact and Targeting of Social Infrastructure Investments: Lessons from the Nicaraguan Social", World Bank Economic Review, Washington, DC: World Bank.

Paxson, C., & Schady, NR (2002), "The Allocation and Impact of Social Funds: Spending on School Infrastructure in Peru" The World Bank Economic Review, 16, 297-319.

PROJEG (2018), "Final report on the implementation of Participatory Budgeting (PB) and Participatory Monitoring and Evaluation (PM&E) approaches in the Mamou and Labé regions", Project implemented between August 2017 and August 2018.

Simon Harragin (2004), "Relief and an Understanding of Local Knowledge: The Case of Southern Sudan", in V. Rao & M. Walton (eds), Culture and Public Action. Stanford: Stanford University Press.

The World Bank Policy Reserch Report (2013), "Localizing Development: Does Participation Work" Green Press Initiative, Washington DC, ISBN (electronic): 978-0-8213-8990-4.

License