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# MODELING THE ALTRUISTIC POLICY FOR LOCAL DEVELOPMENT WITH DATA ENVELOPMENT ANALYSIS

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## **Abstract**

In this article, we analyse the effectiveness of the altruistic policy for local development in Cameroon. We use Data Envelopment Analysis (DEA) method. Datas used are from 61 chiefdoms in the city of Yaoundé. The empirical results obtained show that the philanthropic funds received (inputs) make it possible to finance economic and social infrastructures: outputs (schools, health centers, construction of water supply bridges, electricity, etc.). We recommend that the main actors in local development work together to promote altruism and philanthropic donations for the development of local infrastructure.

**Keywords:** Altruism, Philanthropy, Local development, Urban territory, Infrastructures, DEA method.

JEL Code : C14 ; D61 ; H41 ; I15 ; J24

## **Introduction**

An African proverb says: “Alone we go faster, together we go further” (Observatory of the Fondation de France, 2016). A few centuries earlier, Smith (1759) had already said in Theory of Moral Sentiments whatever degree of self-love one may suppose in man, there is evidently in his nature a principle of interest in what happens. To others, which makes their happiness necessary to him, even though he derives from it only the pleasure of witnessing it. Altruism refers to behavior that benefits another individual at a cost to oneself. Best known in

Wealth of Nations (1776) as the great champion of selfish interest, Smith developed in his early writings a theory of behavior based on the individual's ability to change roles with others (1759). The author then maintained that man derives satisfaction not only from his own pleasure, but also from his sympathetic involvement in the experiences of his fellows. For the father of capitalism, the materialistic and interested behavior necessary to energize the capitalist system would therefore ultimately derive from sympathy. Is man by nature altruistic or selfish? Is he a philanthropist or not? As for altruism, it is a disposition to be interested and devoted to the cause of others. Unlike the egoist, the altruist works not for his own cause, but for the welfare of everyone else. Philanthropy is rooted in family and kinship ties, with the obligation to protect one's own and to offer hospitality to strangers. This particularity is intended to show the interest that human beings have for their fellow human beings. Altruism and especially philanthropy is made of donations, volunteering, charity, etc.

The main motivation for sustainable development, as defined in the Brundtland report, is to caring for other humans the world's poor and the unborn. That of local development is to bring about visible changes in the locality. The traditional economy models use the motivation to increase one's own well-being as the primary motivation for stock. Efficiency improvements, as a primary goal of economy-based models, have widely shown to be ineffective, due to rebound effects, etc. We know that the efficiency or Consistency improvements can only be effective if they are accompanied by a value change. A change including altruistic motivations, because they are part of sufficiency strategies for local development first and then sustainable. Patterns that reduce incentives to the actions of self-centered people cannot explain such a change. The approach through the philanthropic actions of multiple actors as alternative to neo-classical approaches, distinguishes the interests of its own well-being and other interests. Yet it has rarely been applied to resolve the latter. Tested the participatory method which includes, has no scope to analyze the broader societal effects of policies. This article therefore incorporates the altruistic policy in a capacity framework, to be used as a basis for empirical analyzes of local development.

By altruism, a person devotes himself to others in a selfless way. The altruist is a devoted and charitable being who never expects anything in return for his kindness. Altruism is the opposite of selfishness. And philanthropy is a concept that imposes disinterested generosity. From the ancient Greek «philanthropos» (either «philo» for love and «anthrôpos» for humankind), the term philanthropy globally means «for the love of humankind». It is an Aristotelian concept that designates the spontaneous love of man for his fellow man, as opposed to misanthropy. Philanthropy is the philosophy of life that places

people at the forefront of its prerogatives. The philanthropist is indeed the one who, out of love (philo) of humanity (anthrôpos), will work for the good of his neighbour. Already Plato quoted by Chambry (1992) showed the powerlessness of an isolated man to satisfy his needs on his own.

Talking about philanthropic policy in the context of our article means talking about altruism, generosity, benevolence, solidarity and living together. The philanthropic policy has a double dimension. First, it is exercised in various activities, integrates the concept of charity while distinguishing itself from it by its political project, because charity relieves misery. Secondly, it goes further by seeking the well-being of man, it requires voluntary actions for the benefit of others and places human achievement as a priority. The philanthropic policy aims to promote the quality of life of humanity. Here, we will talk about improving the living environment of the populations. A philanthropist is a person who seeks to help other human beings in order to make their lives better. She uses different means to achieve this goal without expecting any reward.

The ambition is, as Becker (1974) indicates, to provide a new explanation of social relations. The social interaction theory aims to introduce the constraining effects of the social environment on individual choices. This theory is of particular interest to Becker for its ability to describe the interactions between different members of a family. This reasoning shows that the philanthropic behavior of one person can arouse in several other people philanthropic behaviors. In order to also benefit from the first reward, other people, even selfish ones, have an interest in maximizing the well-being of the group. A certain form of cooperation can therefore emerge between egoists when at least one person is united and occupies a central place. In our specific case, the theorem is similar to the peri-urban area which ardently desires change and development in its locality. But this change is only possible if people come together to maximize the means to achieve it. Every member of the locality, altruistic or not, selfish or not, must cooperate for the community to develop. This economic approach used by Becker favors the behavior of maximizing utility, the coordination of actions and the hypothesis of stability of preferences. In other words, in the theory of social interactions, philanthropy consists of positively integrating the utility of the other into one's own utility function. He must think of the other in each of his actions: « I am well if you are well » (Mupondé, 2013).

The word altruism and the adjective altruistic today apply to a behavior characterized by showing interest and devotion to others, which does not provide apparent and immediate

advantages to individual who performs them but which are beneficial to other individuals and can favor especially in the long run term living together and mutual recognition within the group where he is present, although gross altruism is never less an act asking for nothing in return. The term altruism is used for the first time by Comte. It goes together with philanthropy which is the act of giving. The gift is defined with Mauss (1924) as a social act, an exchange which supposes that personal happiness depends on the happiness of others. The latter must be an altruistic and disinterested act (Buchanan, 1975). The major donors, without being the richest, are sometimes motivated by the desire to directly influence the course of things, the future of an afflicted population, the development of a given space, of a given locality. The philanthropic policy in general refers to a voluntary act and can cover a donation of money (manual donation, notarized donation and bequest), a donation of one's time and person (volunteering, voluntary work, solidarity leave, agent available, etc.), a donation in kind (loan of expertise, advice, shipment of materials, provision of premises, etc.), or even a blood donation. Therefore, philanthropic generosity can take the form of personal, individual or collective donations, as well as investments of time, money, know-how, relationships and many other types of assets (CCIC, 2008). For example, a computer scientist can help create a website, a high school student can help a college student prepare for the college patent. In the present case, we can speak of individuals who organize a « clean city » day, of an association which participates in the financing of a footbridge in the locality, or even of a non-profit organization which allows several children to go to school by paying their tuition, etc. The important thing is to commit to the other, to an important cause, to show altruism, solidarity and generosity with the world around us. It is a moral act, that of giving, of sharing.

Apart from Smith, Becker, Buchanan, we have recently known new authors in the field of philanthropy such as Tchouassi (2004, 2010), Aina and Moyo (2013), Tchouassi et al. (2021), who bring a new vision to the understanding of this philanthropic policy. , emphasizing the contribution of civil society organizations in its accomplishment. These scholars, mostly African, emphasize philanthropic funds as private wealth for the public good. In this article, philanthropic participation will designate any action or private activity, geared towards the development of the locality, with the aim of improving the living environment of the inhabitants, whether it is carried out at the individual, collective, family or community. Development is defined according to Perroux (1961) as the combination of mental and social changes in a population that make it capable of increasing, cumulatively and sustainably, its overall net product. Subsequently in 1972, the latter further broadened this definition by indicating that development designates the change of mental and social structures that

promote the mutual training of the production apparatus and the population in the service of the latter. The development sought, according to the terminology of Perroux (1972), implies an increase in well-being and a change in the economic and social structure. It engages society in all its aspects. It aims to improve the quality and environment of people's lives and to increase their ability to influence their future. The development highlighted here is local development.

By consulting the existing literature in the context of development, we see that research on the urban and local economy is not new. Evidenced by the contributions of Von Thünen (1826), Hotelling (1929), Lösch (1940) to name a few. But it was only in the 1990s, under the impetus of the work of Krugman (1991, 1995) and, more recently, Essombé Edimo (2007, 2015), among others, that this facet of the economy experienced a considerable analytical renewal. Urban economics, or even the economics of town planning, is a branch of spatial economics which has gradually become more specialized thanks to its object of study, i.e. say about the city and the urbanization models used. This approach is particularly concerned with the behavior of households in terms of choice of residential location and the formation of land prices.

A few decades ago, economists were particularly interested in national and international development, neglecting the spatial side. Laganier et al. (2002) present the territory as the foundation of growth and development. According to them, there can be no growth without territory. Space is the physical foundation on which all development is built. The territory thus reflects a complex and evolving system. Several actors are associated with it. For this reason, populations need to be united in order to be able to move forward together, hence the presence of the philanthropic spirit. Urban areas need more than ever what contemporary philanthropist Playton calls “voluntary action for the public good” (OECD, 2003).

Grefe (1984) and Pecqueur (1989, 2003) took over by specifying their research on local development. Pecqueur establishes a direct link between local development and proximity. For him, relational proximity feeds local development, because it is not only about the development of a place, but about a real social construct. The local economy provides a framework for analyzing the different modes of interaction between actors located in a territory, which indicates social dynamics as a vector of local development. Local development, also called by some development from below (Essombé Edimo, 2007), is a process using local initiatives at the level of small communities as the engine of economic

development. It is advocated in developing countries as a complement to major projects. For others, it is a question of development “from above”, or more exactly in the words of Greffe (1984) of a limited territorial projection of development from above. According to the latter, the adjective “local” only gives a territorial dimension to a development policy initiated at a higher level, most often national. For this author, local development arises from the awareness of the shortcomings of regional planning policies, geographical and socio-economic imbalances that can only find full fulfillment by relying on an organizational structure of local wills.

Moreover, local development is defined as the product of the efforts of its population. It calls into question the existence of a development project integrating its economic, social and cultural components. Thus defined by Greffe (Ibid.), this process requires a philanthropic spirit, the population being called upon to intervene for its success. There are always areas that need support and assistance. With the process of urbanization, Cameroonian cities are almost all under construction. As a result, the city is no longer analyzed only as a “dislocated city” and “without future” as mentioned by Djouda Feudjio (2010). But, it should also be observed as a real “laboratory” of urban and peri-urban dynamics. Interactions and relationships with others have a major influence on altruistic behavior, and socialization can have a significant impact on altruistic actions on local development. Modeling altruistic actions can be an important way to foster prosocial and compassionate actions.

Altruism is the unselfish concern for other people doing things simply out of a desire to help, not because you feel obligated to out of duty, loyalty, or religious reasons. It involves acting out of concern for the well-being of other people. In some cases, these acts of altruism lead people to jeopardize themselves to help others. Such behaviors are often performed unselfishly and without any expectations of reward. Other instances, known as reciprocal altruism, involve taking actions to help others with the expectation that they will offer help in return. Philanthropic actions are therefore an effective weapon for the construction of local facilities that transform the living environment of the inhabitants, as well as their experience. These achievements will certainly be insignificant against expectations, but they can nevertheless effectively influence the predefined area. We therefore understand why the growth model must be re-studied. Camus (2000) mentions that an action is effective if the objectives are achieved. Efficiency corresponds to the degree of achievement of the objectives of a company, an association or an organization. It is therefore the fact of reaching one's goals. The specialized literature and empirical measures of economic efficiency. Coelli (1996), Amara et al. (2000) trace the conceptualization and measurement of economic

efficiency to the pioneering work of Debreu (1951), Banker et al. (1984) and especially Farrell (1957) who proposed an approach for estimating efficiency frontiers. Indeed, this method consists in estimating a production or cost function from empirical data relating to inputs and outputs of a certain number of companies. Recent authors such as Tchouassi et al (2015), Tchouassi and Dzou (2020), have carried out work on the effectiveness of local development, either in relation to the microfinance, or again in relation to decentralization. Our objective is to pursue this field of study in order to measure local development in relation to philanthropy.

According to them, the concept of efficiency is used to describe the relationships between factors (input) and products (output). Input is the set of goods and services entering into the production process. It is the set of factors entering into a given production (raw materials, energy, labour, capital, etc.). Output is a good or service from the production activity. It refers to the quantity of goods or services produced in a given period of time, by an association, a company, a country, whether they are consumed or used for production purposes.

The central idea of this reflection is to measure the effectiveness of the altruism policy on local development. This is to show how altruism can influence the execution of local projects, the construction of local infrastructure. For this, it is a question of evaluating the gaps observed in the management of community affairs, with the participation of actors of goodwill. So, in view of the above, how can we measure the effectiveness of the altruism policy on local development in the city of Yaoundé?

## **Methodological approach**

The realization of this article was done by adopting the descriptive statistical analysis with a descent on the ground and particularly the DEA analysis to capture the effectiveness of philanthropy for local development.

The field trip allowed us to collect primary and secondary data in order to assess the effectiveness of the philanthropic policy for local development. Our study was restricted to the city of Yaoundé. To obtain a satisfactory result, we identified two observation units. Initially, we have as an observation unit, all the district municipalities of the Mfoundi department. So we met with the mayors for orientation. To go deeper into our research, we have a second observation unit. Our second observation unit is all the urban neighborhoods of the Yaoundé metropolis. The statistical unit allowing to better obtain the desired observation



being the head of the district. In Cameroon, we have 1st degree chiefs, 2nd degree chiefs, 3rd degree chiefs, block chiefs. In our study, we went to 3rd degree chiefs, also called district chiefs. The district chief holds regular meetings with the block chiefs. They are therefore aware of all the activities carried out in their community.

As a survey instrument, we opted for observation and the questionnaire. Observation is a prerequisite for any systematic investigation of social reality. Javeau (1990) insists on this when he places observation as the prerequisite for any form of investigation at the same time as a form of investigation itself. In this article, we have used our ability to observe. This helped us in designing our questionnaire. The questionnaire is defined as “a series of proposals, having a certain form and a certain order on which the opinion, judgment or evaluation of a questioned subject is sought”. We chose the questionnaire as a tool for several reasons. It is a tool for producing verbal/written data. It represents a particular interlocutory situation which produces different data. It provokes a response, opinion or attitude and indicates the reaction of the subjects. It implies prior knowledge of the world of reference. Its construction requires a prior choice of discriminating factors. The questionnaire is suitable for studying a large number of people and does not pose the problem of representativeness. It allows to find information in the field for a short time, at the same time it is an easy to handle and inexpensive instrument, without the need for recording devices.

The results collected from the survey lent themselves to the analysis model of the exploratory statistics and to the DEA analysis. Data Envelopment Analysis (abbreviated as DEA) is a nonparametric deterministic envelopment method for estimating boundary functions. It is a non-parametric efficiency benchmarking method. It unites several alternative production decision choices and imposes a single result regardless of the orientation chosen. The DEA analysis determines the set of points (input or input X, output or output Y) such that it is possible, technologically, to produce output Y with input X. The measurement of technical efficiency by the DEA method takes into account two dimensions. The first, geared towards maximizing outputs, is used when one would like to increase the quantities of outputs without changing the quantities of inputs used. On the other hand, the second oriented towards the minimization of inputs is possible when one wants to partially reduce the quantities of inputs without altering the quantities of outputs. In other words, from a basket of real inputs, we can produce the maximum possible output, just as, to produce a real quantity of output, we can use the minimum possible input.

This method is based on linear programming theories to evaluate the production frontier with respect to a sample of observations. This production frontier is placed above the observations and corresponds to the most adequate sample units. The DEA method wraps the set of apprehensions in such a way that the less appropriate units fall below the wrapper. The technical efficiency of a sample unit therefore takes into account the distance that separates this unit from the envelope. We then speak of relative efficiency insofar as it depends on the best performing units in the sample. The figure below illustrates this in the case of a sample of units using a single input to produce a single good with returns to scale assumed to be non-constant.

Figure 1 shows us the production units A, B, C, D and E, which constitute the reference envelope against which the technical efficiency of the other units in the sample is assessed. The units meet the criteria mentioned above, and are the most efficient of the observed sample. Their technical productivity is by definition equal to 1. The point P not being on the border, it represents a technically inefficient company. Indeed, from the quantity of input  $X_P$  it has, it is technically likely to produce the quantity  $Y_{p^*}$  of output greater than that which it achieves  $Y_{p0}$ . Its technical efficiency in this case is worth  $Y_{p0} / Y_{p^*} < 1$  and corresponds to the ratio of the quantity of output that it produces from the quantity of input  $X_P$ , by the maximum quantity that it could produce from this same amount of input with respect to the best units in the sample. This way of measuring technical efficiency corresponds to an output orientation. This company can also produce the quantity  $Y_{p0}$  using fewer inputs, in particular a quantity  $X_{p0} < X_P$ . Its technical efficiency in this case is worth  $X_{p0} / X_P < 1$  and corresponds to an input orientation. According to Farrell (1957) the indices of technical efficiency output orientation and input orientation are equal in the case of constant returns to scale and different in the case of variable returns to scale.

However, we must always be sure that all the production units located on the estimated boundary are the same. The orientation chosen must in no way influence the final result.

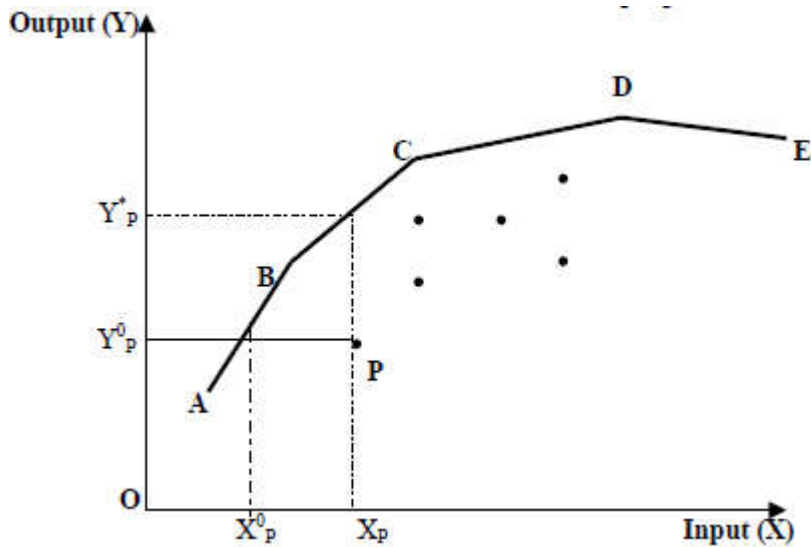


Figure 1: Determination of the technical efficiency frontier according to Farrell.

The linear program allowing the construction of the efficiency frontier depends on the type of efficiency in which the production takes place. A distinction is thus made between the model with constant returns to scale (or Constant Returns to Scale [CRS] model) and that with variable returns to scale (or Variable Returns to Scale [VRS] model) which will be presented below.

### The CRS Model (constant Returns Scale)

In this model, the ratio of any output to any input for a firm is a measure of its technical efficiency. This measure of technical efficiency is obtained by solving the linear program below, obtained by adding orientation output to the CRS model.

The convexity constraint is therefore:

$$\sum_{j=1}^N \lambda_j = 1$$

Max  $\phi_i$  ( $1 \leq i \leq N$ )      Under constraint

$$\left\{ \begin{array}{l} X_{k,i} - \sum_{j=1}^N \lambda_j X_{k,j} \geq 0 \\ -\phi_i Y_{m,i} + \sum_{j=1}^N \lambda_j Y_{m,j} \geq 0 \\ \sum_{j=1}^N \lambda_j = 1 \\ \lambda_j \geq 1 \end{array} \right.$$

### The VRS Model (Variable Returns Scale)

According to Coelli (1998), an increasing return to scale is appropriate only if all production units operate at an optimal level of scale. Imperfect competition, material or financial constraints etc., can help the company to have an optimal level of scale. The hypothesis of variable returns thus seems more likely than that of constant returns. The consideration of non-constant returns in the measurement of technical efficiency (Input orientation) proposed by Banker et al. (1984) is then obtained by adding to the previous dual program, a convexity constraint

$$\sum_{j=1}^N \lambda_j = 1 \text{ We then obtain the program below:}$$

$$\text{Min } \phi_i \quad (1 \leq i \leq N) \quad \text{Under constraint}$$

$$\left\{ \begin{array}{l} Y_{m,i} + \sum_{j=1}^N \lambda_j Y_{m,j} \geq 0 \\ \phi_i X_{k,i} - \sum_{j=1}^N \lambda_j X_{j,k} \geq 0 \\ \sum_{j=1}^N \lambda_j = 1 \\ \lambda_j \geq 1 \end{array} \right.$$

The scale efficiency of the unit studied is therefore obtained by comparing this index with that obtained by the CRS model. The efficiency score of production unit “i” is determined by the magnitude  $1/\phi_i$  between 0 and 1.

### **Advantages of the DEA method**

The DEA method has several advantages including the determination of the technical efficiency without any a priori hypothesis concerning the functional form of the estimated boundary. This method does not require any special assumptions since the frontier is determined by the data. It has the ability to make efficiency estimates in a multi-output framework. It is therefore a particularly suitable method in the event of uncertainty about the functional form of the production technique studied. Moreover, it makes no restriction concerning the distribution of inefficiency and allows the measurement of technical efficiency even in a multi-output/multi-input framework, i.e. in the case of organizations combining several inputs. to produce several different outputs. This makes it more interesting in the field of philanthropy given its multidimensional character. The DEA method is also suitable for small samples.

### **Limits of the DEA method**

The DEA method also has limitations. We can note the fact of equating any deviation from the frontier with inefficiency. The “Data envelopment Analysis” thus makes no distinction between inefficiency resulting from random factors and inefficiency of the production process. This seemingly insignificant omission leads to an overvaluation of technical inefficiency.

Another major limitation attributed to the DEA method is that it is quite sensitive to the choice of outputs and inputs. Indeed, a single extreme value is likely to shift the efficiency frontier. A tiny prior value can turn certain efficiency into technical inefficiency. But the most important limit of the DEA method is that the efficiency index of a production unit obtained from the latter, leads to a relative and not absolute magnitude. Data envelopment analysis depends on the sample in which the unit under consideration is assessed. It measures the efficiency of a unit compared to the best units in the observed sample. One could be technically efficient in one sample (score equal to 1) and no longer be so in another.

## **Empirical results**

### **Presentation of Inputs and Outputs**

The philanthropic actions carried out required the use of three inputs, namely labour, capital and goods in kind. The implementation was done in 61 peri-urban localities of the city of Yaoundé. Overall, a total of one hundred sixty-three million FCFA (163,000,000 FCFA)

was invested in the labor factor for an average of about two million six hundred and seventy-two thousand one hundred and thirty-one FCFA (2,672. CFAF 131). With regard to Capital, the total injected is two hundred fifty-two million five hundred thousand FCFA for an average of about four million one hundred thirty-nine thousand three hundred and forty-four FCFA. The Nature factor meanwhile received a total investment of two hundred and twenty-three million five hundred thousand FCFA, or an average of three million six hundred and sixty-three thousand nine hundred and thirty-four CFA francs. Note that the locality of Minkoameyos received the highest amount in labor and in kind. And for the capital factor, the best provided locality is that of Melen Onana.

	<b>Travail</b>	<b>Capital</b>	<b>Nature</b>
Global	163,00	252,50	223,50
Moyenne	2,67	4,14	3,66
Max	5,00	10,00	7,00
Min	1,00	1,50	1,50

Figure 2: Estimate of inputs such as labour, capital and goods in kind according to neighborhood leaders (in millions of CFA). Source: Field investigation.

Achievements or outputs were made in seven (07) areas including: education, health, sanitation, water, electricity, roads and social. Out of all the 61 localities, the greatest achievement is made on the road network to the tune of approximately one hundred and fifty-six million FCFA, while the smallest achievement is made in the field of electricity, i.e. approximately sixty-eight million CFA francs.

	<b>Éducation</b>	<b>Santé</b>	<b>Assainissement</b>	<b>Eau</b>	<b>Electricité</b>	<b>Voirie</b>	<b>Sociale</b>
Global	85,25	76,50	123,00	68,50	39,00	156,2	79,00
Moyenne	1,42	1,25	2,02	1,12	0,64	2,60	1,30
Max	3,00	2,50	4,00	3,50	1,50	7,00	2,50
Min	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Figure 3: Estimation of the inputs of the areas of achievement according to the district chiefs (in millions of CFA). Source: Field investigation.

### Presentation of technical efficiencies (Scores)

The empirical model used in this study to measure the technical effectiveness of the philanthropic policy on the development of the neighborhoods in our sample is a model with variable returns to scale. The orientation chosen is an orientation oriented towards the maximization of outputs which, in our opinion, seems more appropriate.

The table below shows the levels of technical efficiency (score) obtained by all the different localities over our study period, i.e. in 2015. This table shows that at the Except for the localities of Mimboman 1 Sud, Mvan Sud, Mvog-Betsi, Ngoa-Ekelle Obili1, Nkolmbenda, Nkomo 2 Sud, Nlongkak 1, Obogogo, and Oyom-Abang 2, the technical efficiency scores were 1 in the other localities. This result means that under the assumption of constant returns to scale, these localities produced 100% of the quantity of outputs that they should have produced from their resources. We could therefore say here that the philanthropic actions carried out in these areas have been effective. For the localities of Mimboman 1 Sud, Mvan Sud, Mvog-Betsi, Ngoa-Ekelle Obili1, Nkolmbenda, Nkomo 2 Sud, Nlongkak 1, Obogogo, and Oyom-Abang 2, the technical efficiency scores are order of 0.99. This result means that under the assumption of constant returns to scale, these localities produced 99% of the quantity of outputs that they should have produced from their resources.

Overall, the average technical efficiency score is 99% which is close to 100%. These results confirm our hypothesis that the philanthropic policy conducted in the city of Yaoundé is effective.

Localité	Score	Localité	Score	Localité	Score
Biteng	1,00	Melen 1	1,00	Nkoldongo 2	1,00
Biyem-Assi	1,00	Melen 4	1,00	Nkoldongo 5	1,00
Briqueterie 3	1,00	MelenOnana M	1,00	Nkolmbenda	0,99
Dakar 2	1,00	MessaAngono	1,00	Nkolmesseng	1,00
Djoungolo 3	1,00	MessaEkoazon	1,00	Nkolondom 1	1,00
Eba	1,00	Messamendongo	1,00	Nkolso'o	1,00
Efoulan-Pont	1,00	Mfandena	1,00	Nkomkana 2	1,00
Ekié-Sud	1,00	Mfebe-Village	1,00	Nkomo 2 Sud	0,99

Ekorezok 2	1,00	Mfoudassi 3	1,00	Nlonkak 1	0,99
Ekoudou 2	1,00	Mimboman 1 Sud	0,90	NlonkakValley	1,00
Ekounou 1	1,00	Minkoameyos	1,00	Nsam	1,00
Elig-Effa 3	1,00	Mokolo 3	1,00	Nsimeyong 3	1,00
EmanaBilig	1,00	Mvan-Sud	0,90	Nyom 1	1,00
Essos Centre	1,00	Mvog-Betsi	0,97	Obogogo	0,98
Etetak	1,00	Ngoa-Ekelle 1	1,00	Odza 3	1,00
Etoug-Ebe 1	1,00	Ngoa-Ekelle Obili1	0,97	Olembé 2	1,00
Kondengui 2	1,00	Ngoulemakong	1,00	Oyom-Abang 2	0,98
Madagascar 3	1,00	Ngousso 3	1,00	Tsinga 2	1,00
Mballa 2	1,00	NkolMfon	1,00	Zibi	1,00
Mbankomo	1,00	Nkolbikok 1	1,00	<b>Moyenne</b>	<b>0,99</b>
Mbog- Belingui	1,00	Nkolbisson- Carrière	0,98		

Figure 4: Average technical efficiency score by location. Source: Field investigation.

## The targets reached

The various targets reached according to the opinion of the neighborhood leaders in the localities are: the construction of new classrooms, the repair of dilapidated classrooms, the manufacture of tables and benches in schools, the deworming of children in the locality, free vaccination campaign, free consultation campaign, donations of materials (beds) in health centers, organizations of cultural and sporting activities in the locality, care for street children, free training young people and women in small trades, donations to orphanages, the development of existing water points (springs), the construction of boreholes, the renewal of electric poles, the lighting of public roads (lampposts), the organization of "clean neighborhood" days, drainage of rainwater and waste water, cleaning of water, garbage collection, beautification of the landscape, a construction of footbridges, the development of vehicle tracks, the development of pedestrian paths, the addressing of streets and houses, etc. The impact of these achievements on local development is thus perceived in all areas of action according to the leaders interviewed.



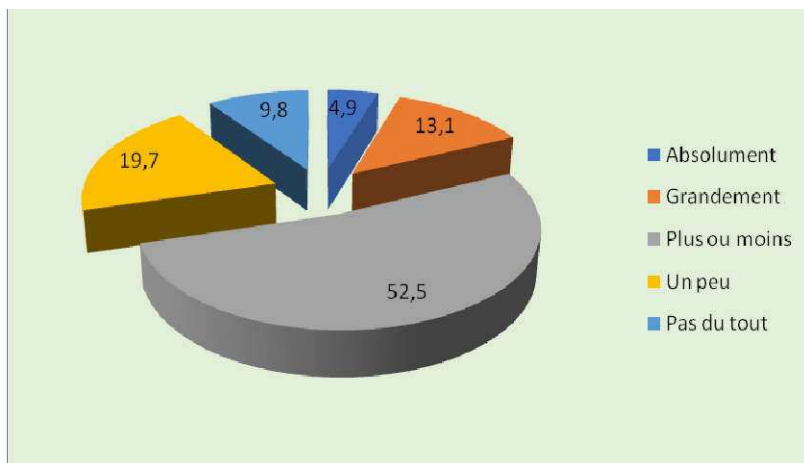


Figure 5: Opinion of chiefs on the impact of achievements in their community (in %). Source: Field investigation.

Overall, 90.2% of the neighborhood leaders met believe that the achievements made in the various areas of activity really influence local development in their community. Conversely, 9.8% of them think on the contrary that no change is perceptible. Nevertheless, several children have the possibility of going to school thanks to the proximity of the infrastructures, there are fewer mosquitoes thanks to the “clean neighborhood” days, etc. Only according to these leaders, much remains to be done before real change is fully visible. Several actions are effective, but they are most often punctual. For them to bring a visible change, they must be sustainable. Philanthropic organizations are already working, but they must redouble their efforts.

## Conclusion

At the end of this article, local development can be compared to a train whose locomotive and wagons are the central government on the one hand and altruism or philanthropic organizations on the other. It must therefore satisfy its passengers who are the populations if and only if the latter are also active in the task, and allow it to move forward. Local development aims to improve the living environment of populations and imposes on them the spirit of participation. The “philanthropy-local development” combination is therefore an intervention strategy in the local environment, intended to compensate for the shortcomings of the central government.

In view of the previous results, the philanthropic policy requires the improvement of the urban environment through philanthropy. The targeted infrastructures can be reached. Only for the performance of this policy to be recognized, donors must double their efforts. Hence our main

recommendation to the main players in local development: a synergy of action promoting philanthropic donations is necessary, even essential, for the development of local infrastructure.

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