

The factors responsible for the failure of agricultural policies implemented in Cameroon.

SANDRINE NGUIAKAM

Directorate General of Economy,

Ministry of Economy, Planning and Regional Development (MINEPAT)

3299, YAOUNDE, Cameroon

Sandrine.nguiakam@gmail.com

+33 6 37 43 28 96

CONTEXT:

In Cameroon, the rural sector goes from agriculture to forestry and logging through farming, fisheries, aquaculture and animal industries. Beyond the agricultural development which is essentially increasing crop and livestock production, rural development goes further and has always aimed at improving overall living conditions of people at the grassroots. Since independence, improving the environment and conditions of living at the base has always received special attention from the government, so it has remained over time, one of the major axes of the various policies and development strategies considered. This attention took the form of substantial budget allocations to finance various interventions in the field of integrated rural development: organization, supervision, support, development of infrastructure.

PROBLEM:

However, several factors raise serious questions about the true scope of all initiatives of the Government. First, the results of the latest Cameroon Household Survey (ECAM 3) revealed an aggravation of rural poverty. There is an impressive number of interventions and actions to which the government and its partners devote significant human and financial resources, without the counterpart (in terms of productivity and better living conditions for the rural populations) not being always perceptible. So, what are the factors responsible for the failure of all measures taken by the government to improve living conditions of rural populations in recent years? What are the reasons for poor agricultural performance recorded? What share of responsibility for agricultural policy of the government? What are the arrangements to put in place to optimize the operations of the government with rural producers?

OBJECTIVES:

The main objective of this study is to identify the factors responsible for the failure of agricultural policies implemented in Cameroon for the past 6 years, and to quantify the share of responsibility for each identified factor. Specifically, it will be about:

✚ Explore the various links in the chain of results of government intervention in rural areas (discussing how human resources, financial and material resources are mobilized and allocated to different activities, how activities are structured and cover the whole territory and among the many actors).

✚ Analyze the structure of beneficiaries, their ways of working and interacting with government, as well as their knowledge of the facilities offered by it.

✚ Rate from government responsibility and the importance of external factors (so-called

counterfactuals phenomena) which seem to be a significant liability in the mixed performance of the agricultural policy in Cameroon.

METHODOLOGY:

To achieve the objectives of this study, the following tools were used:

✚ **An important operation of statistical survey** conducted in 55 administrative departments (58 departments of the country). The choice of samples obeyed completeness criteria for project managers and agricultural officials of decentralized services, spatial coverage, diversification and prioritizing of beneficiaries provided direct support to producer organizations. Thus, 116 project managers, 1346 leaders of associations or organizations of producers and 1263 members of associations or organizations of producers were interviewed.

✚ **A multiple correspondence analysis (MCA)** followed by an **ascending hierarchical classification** for categorizing the factors responsible for the failure of agricultural policies, and to analyze the relationships between them. The factorial coordinate's deductions are taken as numerical variables for a discriminant analysis.

✚ **Discriminant analysis:** To search for linear combinations of quantitative indicators to find the classification found in the multiple correspondence analysis. The criterion of discrimination is:

Inertia between groups

Inertia into the groups

Recall that the inertia of a cloud of n points x_i (p_i weighted weight, the sum is 1) compared to a reference point y and a distance d is defined as the distance mean square from x_i to y .

$$Inertia_y(x_i, p_i)_{i=1 \text{ to } n} = \sum_{i=1}^n p_i d^2(x_i, y).$$

✚ **Scoring**, to quantify the share of responsibility for each identified factor. Score is the variable in discriminant Sense of Fisher. We Calculate the Fisher's function, which is expressed ultimately as a linear combination indicator, which gives the score function. If F is the

Fisher's function $F = \begin{bmatrix} f_1 \\ \vdots \\ f_k \end{bmatrix}$, $f_j = \frac{(\bar{z}_j^1 - \bar{z}_j^2)}{\sqrt{\varepsilon_j}}$ where \bar{z}_j^i is the average of the coordinates of group i on the factorial axis number j , of variance ε_j . The score S of a factor is obtained by:

$$S = \sum_{j=1}^k d_j z^j$$

RESULTS

Descriptive analysis

This study considered as beneficiaries, agricultural producer organizations that have received between 2002 and 2008 from the Government a financial grant or support equipment and inputs or who have received credit. This survey shows that 55.5% of agricultural organizations are in this category.

But despite the fairly good percentage of beneficiaries, there is still 3 of 4 recipients (75.2%) who feel that amount of subsidies granted by the government is inadequate. 7.5% are indifferent, while only 17.2% (less than one recipient of 5) consider the amount sufficient. major field of activity of agricultural organizations have some influences on the perception of the amount of the grant received from the Government. In commercial agriculture only 9.5% of beneficiaries believe the amount sufficient.

All agricultural producer organizations and beneficiaries have not effectively realized why this support has been granted (only 7 farmers' organizations in 10 did), certainly for reasons of risk or

internal operation. This poses a problem of operational capacity of these agricultural producer organizations. A quarter of organizations of farmers beneficiaries, were satisfied with the support.

With regard to access and use of inputs, more than half of beneficiaries believe that government interventions do have a positive impact, although a fraction of 20% believe the opposite. Regarding the impact of government interventions on activities and living conditions in terms of knowledge of innovative practices and techniques of production, profit at this level has responded to nearly 70% as the impact was positive while 11% believe this impact totally negative.

The perception of the impact of government interventions on activities and living conditions in terms of safety has been assessed largely null or negative for recipients. They estimated 7 out of 10 times that this impact is null or negative.

Beneficiaries' poultry farmers estimate that more than two thirds of the impact of government interventions on activities and living conditions in terms of safety is null.

Table1: appreciation of the impact of the interventions of the Government

	Safety Conditions			Improvement of agricultural management (harvest, storage...) Improving farm management (harvest, storage, ...)			Diversification of production		
	Positive	Null	Negative	Positive	Null	Négative	Positive	Null	Negative
All beneficiaries	30,5	45,6	23,9	42,1	39,1	18,8	50,4	33,8	15,8

	Social Progress (housing, education, health for themselves and their relatives)			Unfolding sociocultural			In general, how do you assess the impact of government interventions		
	Positive	Null	Negative	Positive	Null	Négative	Positive	Null	Négative
All beneficiaries	30,5	45,6	23,9	42,1	39,1	18,8	50,4	33,8	15,8

Supports to the different organizations of producers do not have a real impact on them in terms of information on prices and market access. In fact, half of their leaders said that the effect is null on this plane, and only the fourth said that the effect is positive. This situation is virtually identical in all regions.

Regarding the influence of government intervention in structuring the organization and its contacts with other structures, two-thirds of leaders find the impact positive. Three quarters of the leaders believe that the conditions of life in terms of social progress have been positively influenced by government intervention.

The model results

Following interviews with local officials and the public, the main constraints have been identified and classified on the basis of scores indicating the magnitude of each constraint. These factors are grouped into three types:

✚ *Constraints incorporating all exogenous factors and local economic policies* that directly affect the activities of the sector. They include natural phenomena (climate), the international economic environment (price), geography (distance from centers of consumption) or the regional

contagion (cross-border insecurity). In any event, we cannot blame the stress related to these factors to the government or to Cameroonians. According to local officials (project managers, administrators), *the exogenous constraints represented a 28% share in the responsibility of crop failures;*

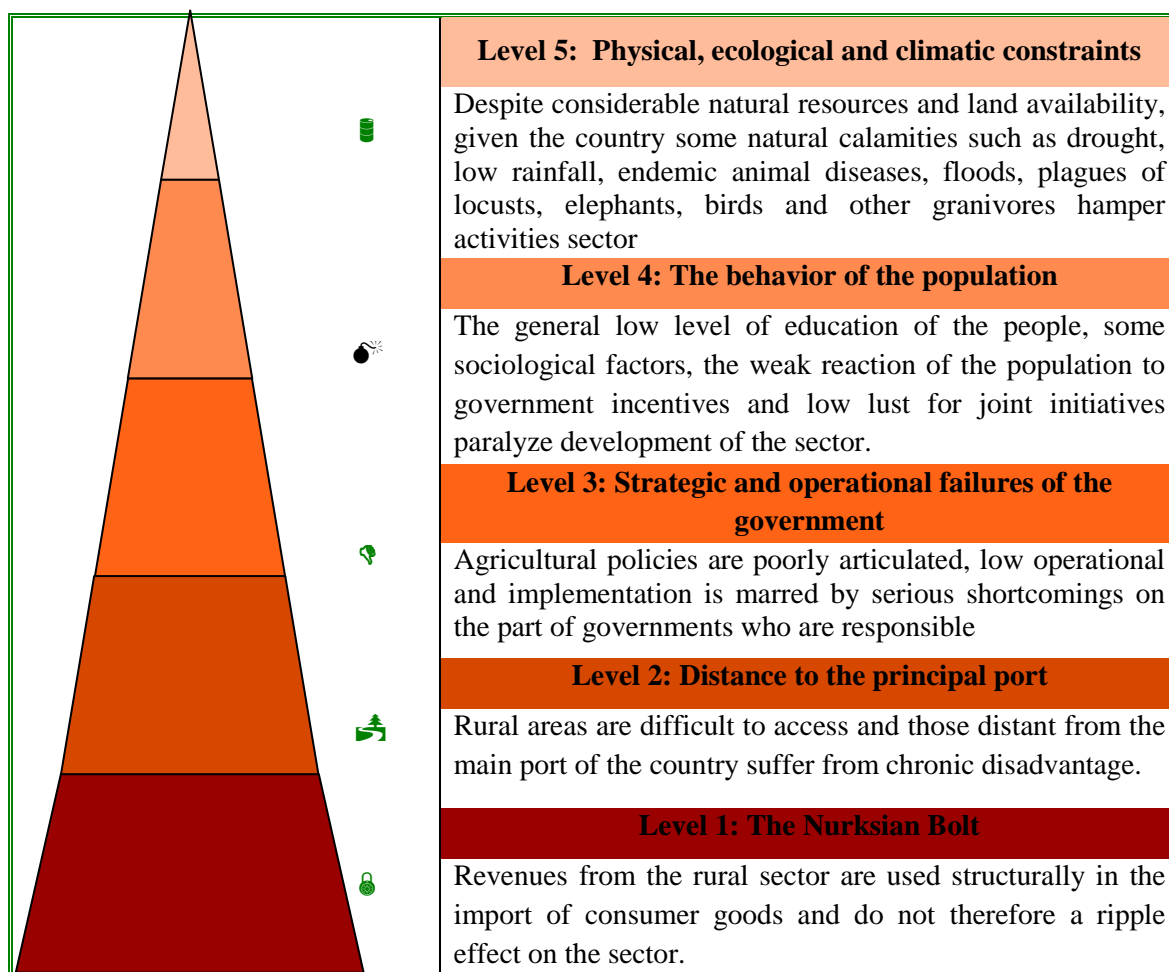
✚ *Agricultural Policy:* it includes all phenomena that good farm policy reduced or eliminated and we can clearly blame the responsibility of the Government. They emerge from the problems of governance, weak anticipation, poor strategic choices. *These factors are 48% responsible for the failure of agricultural policies.*

✚ *The behavior of the population:* the population is the major player in agricultural policy since it is producing, behavior plays a decisive role in the success or failure. It includes all behaviors that may relate to sociology and which are unfavorable for development. *The behavior of the population accounts for 24% to the failure of agricultural policies.*

Table 2: factors responsible for the failure of agricultural policies and their respective weight

Factors	Weight
I Natural phenomena and other uncontrollable	27,50%
1.1- Distance from consumption center	8,56%
1.2- Epidemics and sharp	4,76%
1.3- Price Volatility	4,43%
1.4- invasion of locusts, and other pachyderms	3,59%
1.5-insecurity	3,22%
1.6-epizootics	1,57%
1.7-Low rainfall drought	1,38%
II Agricultural policy of the Government	47,89%
2.1- Input Prices	9,22%
2.2- Slowdown of related activities	9,11%
2.3- Enclosing	8,88%
2.4- Input Supply / Seed	8,56%
2.5- Bad management of funds	6,25%
2.6- financing difficulty	5,86%
III Population Problems	24,22%
3.1- Sociological factors	6,45%
3.2- Rural Exodus	4,29%
3.3- Agropastorals conflicts	3,89%
3.4- Low response to incentives from the government	3,81%
3.5- Land problems	2,09%

Figure 1: Ranking of constraints to rural development in Cameroon



CONCLUSION / DISCUSSION

The main conclusion that emerges is that the government is sharing in the same proportions as other factors responsible for the failure of agricultural policies. This conclusion, relatively unexpected, shows the one hand, if the government was blamed his lack of dynamism, it can not be regarded as solely responsible. The heads of decentralized departments and project leaders are also aware that the problems are complex, some are not within reach of the government and the population itself is not totally unrelated to the situation . This conclusion is so beyond the agricultural sector: it involves all the country's policies and the development model itself must be examined. But an immediate shift of the action in the sector seems essential. It should first be:

1. develop a real policy of access to agricultural inputs, based on local production of low cost thereof and extension to their intensive use;
2. Review its procedures for granting credit and the relative importance given to financial grants in the government's actions;
3. Establish a sustainable funding mechanism bimodal and adapted to agro pastoral and fisheries;
4. improve the operational capacity of public institutions, their interrelationships;
5. Strengthening the structure of rural producers, including the promotion of the sector approach;

The implementation of these new guidelines should evolve with the necessary revision of the framework strategy for government intervention in rural areas. A strategic planning based on two basic pillars around which gravitate four major cross-cutting programs. The first pillar is the promotion of medium and large farms with the main areas of land reform, development of mechanization, irrigation and promotion of the sector approach. The second pillar is projected in the pursuit of initiatives and would support the provision of small locally managed, agricultural extension and education of producers to get them to organize themselves.

Around these two pillars, four major cross-cutting programs are necessary: (1) the development program of agricultural inputs, (2) the program of community infrastructure development, (3) the development program of vocational training and agricultural, (4) the development program of operational capacities of the administrations

REFERENCES

T.HASTIE, R.TIBSHIRANI, J.FRIEDMAN; The Elements of Statistical Learning Theory, Springer-Verlag, 2001

PNUD ; Rapport sur la pauvreté rurale au Cameroun ; May 2006

Ragnar NURKSE ; Les Problèmes de la formation de capital dans les pays sous-développés Editions Cujas, Paris, 1959

Samuel FAMBON ; Croissance économique, pauvreté et inégalité des revenus au Cameroun ; june 2003

Stephane TUFFERY ; Data Mining et Scoring, Dunod, 2002

Keyword 1: agricultural policy Keyword 2: factors Keyword 3: scores Keyword 4: agriculture.

Abstract: The purpose of this study is to identify with their respective weights, factors related to failure of agricultural policy implemented in Cameroon between 2002 and 2008. The methodology used is a model that combines factor analysis (Multiple correspondence analysis) and scoring. The analysis shows that agricultural performance results from a large number of factors acting jointly, but with different intensities. Three main groups of factors responsible for the failure of agricultural policies have been identified: physical, ecological and climatic conditions (sudden epidemics, price instability, drought) which represent 28% of this failure; strategic and operational failures of government (problems of governance, poor strategic choices) whose share is 48%; the behaviours of the population (general low level of education of the population, sociological factors) which account for 24%. The main conclusion that emerges from the results is that the Government shares in the same proportions as other factors responsible for the failure of agricultural policies, therefore Government should redefine agricultural policy, improve the capacity operational public institutions, and strengthen the structure of rural producers.

Key words and phrases: agriculture, agricultural policy, scores, factors