

# Good Neighbourliness in Cameroon: A Logistic Analysis of Determinants

Original Research Article

## ABSTRACT

The objective of this paper is to study the determinants of good neighbourliness in Cameroon. Based on survey data from the National Institute of Statistics, covering 9,222 households, estimates made using a logit model show that: corruption (bad governance), level of education, and religion, particularly Christians other than Catholics and Protestants, are obstacles to good neighbourliness, while proximity of living conditions favours good neighbourliness.

*Keywords: Good neighbourliness; corruption; religion; level of education; logit model.*

## ABBREVIATIONS

*NATO: North Atlantic Treaty organization*

## 1. INTRODUCTION

Following the news, especially the war between Ukraine and Russia, according to several observers, it is mainly a war between the great world powers. Russia, for its part, avoids being exposed through its neighbours (Ukraine) to external attacks from NATO countries (United States).

In a world where living together is a necessary condition for prosperity and peace for all, it seems that individual interest, the desire for power and domination prevail over collective well-being. Indeed, according to the Grains of Peace Foundation, living together is defined as the capacity and consent of inhabitants, in an environment of social and cultural diversity, to share their living space harmoniously. Therefore, good neighbourliness is an achieved level of living together. It is a friendly relationship, a mutual assistance between neighbours (Forrest, [1]).

In Cameroon, the Anglophone crisis has given rise to much debate on social cohesion and living together. An analysis of the televised debates reveals two main conclusions between the parties. Firstly, social cohesion is presented as a manifestation of living together. This is

conditioned by the requirements of good governance, while it is a political option according to the authorities (Esse, [2]).

Speaking of political will, Avodo Avodo [3], through an analysis of four types of political discourse, finds that they give each citizen a sense of belonging to the same nation. Beyond political discourse, it is also worth mentioning that school curricula must be such as to promote living together (Patel, [4]). For a country like Cameroon, which has two hundred and forty ethnic groups and more than two hundred dialects, the adoption of two official languages (French and English) is a priori an instrument for the improvement and development of human relations, and thus for living together.

The literature on living together focuses more on couples (Manting, [5]; Rhoades and al., [6]; Haas and Whitton, [7]; Henderson and al., [8]; Guetto and al., [9]) than other relationships such as sympathy between individuals (Hankins, [10]) or good neighbourliness countries (Asare and Siaw, [11]). This paper consists of a logistic analysis of the determinants of good neighbourliness in Cameroon. The rest of the work is divided into three parts: methodology, results and interpretations, and conclusion.

## 2. METHODOLOGY

### 2.1 Method of Analysis

This study uses the logit model introduced by Berkson [12] to analyse the determinants of good neighbourliness in Cameroon. Indeed, multiple logistic regression makes it possible to explain a binary variable Y from qualitative and/or quantitative variables. The variable Y follows a Bernoulli distribution with parameter p and the logistic transformation allows us to write:

$$\text{logit}[P(Y_i = 1|X = x_1, x_2, \dots, x_n)] = \ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_{i1} + \dots + \beta_n x_{in} \quad (1)$$

$$P(Y_i = 1|X = x_1, x_2, \dots, x_n) = \frac{e^{\beta_0 + \beta_1 x_{i1} + \dots + \beta_n x_{in}}}{1 + e^{\beta_0 + \beta_1 x_{i1} + \dots + \beta_n x_{in}}} \quad (2)$$

The coefficients of this model are estimated by the maximum likelihood method. They allow several interpretations to be made:

The sign of the estimated coefficient  $\hat{\beta}_i$  makes it possible to say that the explanatory variable acts positively or negatively on the probability of success (of good neighbourliness) p relative to the reference probability (of failure).

The odds ratio  $e^{\hat{\beta}_i}$  greater than unity means that individuals who exhibit a particular modality of the explanatory variable are more likely to be good neighbours than individuals who exhibit another modality of that variable (reference modality), or as the variable in question increases, so does the likelihood of a good neighbour, and vice versa.

The marginal effect, on the other hand, measures the consequences of the variation of an explanatory variable on the predicted

probability of success (probability calculated from the estimated values  $\hat{\beta}_i$  introduced in equation (2)). In effect, it is an arithmetic average of the individual differences between the probability predicted for one value of the explanatory variable and that predicted by another value of this variable, the other variables remaining fixed. Thus, it allows us to say that individuals who manifest a particular modality of the explanatory variable are good neighbours compared to individuals who manifest another modality of this variable (reference modality). At the same time, an increase in the quantity of the explanatory variable increases or deteriorates the good neighbourliness. This last interpretation is therefore more informative than the others.

## 2.2 Definition of Variables

We added three control variables to the model. Indeed, religion, through its values of love of neighbour, compassion and peace, can favour good neighbourliness. On the other hand, the older we get, the closer we are to death and the more empathy we develop, which is favourable to good neighbourliness. Finally, the living condition of the household in relation to that of the neighbours: individuals who identify with others more easily develop good relations with them (their neighbours). In the table above, the first modality of each variable represents the reference one.

**Table 1. Summary of the different variables and their modalities**

Variables	Modalities
Variables of interest	
Can neighbours help you in difficult times? (good neighbourliness)	No Yes
Can you read or write a simple sentence in French?: (French)	No Yes
Can you read or write a simple sentence in English?: (English)	No Yes
Level of education	No level Primary Post primary General secondary 1 General secondary 2 Technical secondary 1 Technical secondary 2
Corruption is a major problem for the country (bad governance)	Superior No Yes Don't know
Control variables	
Religion	No religion

Age	Catholic
Living conditions in relation to neighbours	Protestant
	Animist
	Other Christians
	Other religions
	The set of natural numbers
	Better
	less
	as
	don't know

## 2.3 Data and Characteristics

The data for this study come from the National Institute of Statistics (NIS) and cover 9 222 households that underwent the last household survey in Cameroon in 2014.

**Table 2. Descriptive statistics**

Good neighbourliness	Corruption (Bad Governance)			French		English	
	Oui	Non	Don't know	Oui	Non	Oui	Non
Oui	3 998	344	332	2178	2495	1624	3050
Non	4 100	243	205	2455	2094	2158	2390
Good neighbourliness	Level of education			General secondary 1		General secondary 2	
	No level	Primary	Post primary				
Yes	1 519	1 637	60	590		399	
No	1 054	1 540	59	650		534	
Good neighbourliness	Level of education			Technical secondary 2		Superior	
	Technical secondary 1						
Yes	185		105		179		
No	208		150		353		

## 3. RESULTS AND DISCUSSION

**Table 3. Summary of results**

Explanatory variables	Coefficient	Odds ratio	Marginal effect
Corruption (Governance):			
Yes	-0,25*** (0,08)	0,77	-0,06*** (0,02)
Don't know	0,01 (0,12)		
Educational level :			
Primary	-0,15** (0,07)	0,86	-0,03** (0,01)
Post primary	-0,12 (0,20)		
General secondary 1	-0,23** (0,10)	0,79	-0,05** (0,02)
General secondary 2	-0,34*** (0,12)	0,71	-0,08*** (0,03)
Technical secondary 1	-0,25* (0,13)	0,77	-0,06* (0,03)
Technical secondary 2	-0,40** (0,16)	0,67	-0,09** (0,04)
Superior	-0,68*** (0,14)	0,50	-0,16*** (0,03)
French :			

Yes	-0,008 (0,06)		
English :			
Yes	-0,28*** (0,06)	0,75	-0,06*** (0,01)
Living conditions in relation to neighbours :			
As			
Less	0,42*** (0,06)	1,52	0,10*** (0,01)
Don't know	0,12* (0,07)	1,12	0,03* (0,01)
Religion :			
Catholic	-0,05 (0,12)		
Protestant	0,04 (0,12)		
Other Christian	-0,26* (0,14)	0,77	-0,06* (0,03)
Muslim	-0,06 (0,12)		
Animist	-0,17 (0,16)		
Other religions	-0,16 (0,24)		
Age	-0,002 (0,001)		
Constant	0,48*** (0,17)		
LR Chi-square	317,10***		

*\* , \*\* , \*\*\* significance at 10%, 5%, 1% and (.) standard deviation*

In the table above, marginal effects and odds ratios are calculated only for those variables with a significant coefficient. The results (marginal effects) show that in Cameroon:

People who think that corruption is a major problem are not good neighbours compared to those who think the opposite. Corruption (bad governance) therefore leads to a withdrawal of identity.

Educated individuals are not good neighbours compared to uneducated ones. This result reflects shortcomings in the conception and implementation of living together in schools.

Individuals who write or read English are not good neighbours compared to those who do not. This result is explained by the fact that individuals who write or read English are also more educated.

Individuals who have a living condition close to that of their neighbours are good neighbours compared to those whose living condition is higher or lower than that of the neighbours. This

is because they identify with their neighbours, which makes the sharing of values more fluid.

Christians other than Catholics and Protestants are not good neighbours compared to people with no religion. These Christians certainly claim an identity of their own.

Finally, the Chi-square statistic allows us to affirm that the explanatory variables of the model are globally significant.

#### **4. CONCLUSION**

The objective of this paper was to study the determinants of good neighbourliness in Cameroon. Using multiple logistic regression, we found that corruption (bad governance), level of education, and religion, especially Christians other than Catholics and Protestants, are disincentives to good neighbourliness, while proximity of living conditions promotes good neighbourliness. As a recommendation for social policies, the government should:

Fight against corruption. One measure is to decentralise power. Indeed, one of the responses to the Anglophone crisis has been to strengthen the decentralisation process with the regional council elections of 6 December 2020. Tchitchoua and Onana [13] find that deepening the decentralisation process reduces corruption in Cameroon. As the country is still ranked among the most corrupt in the world, there is a need to continue to fight corruption at all levels in order to foster good neighbourliness and avoid social uprising groups.

Reformulate the concept of living together in the school curriculum, diluting the individualistic approach and placing more emphasis on teamwork in a multicultural context.

Monitor the functioning of religious organisations to ensure that they do not become separate entities.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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