

## **Multiple Dimensional Pattern of Crop Farming in the North West front of Douala**

**Nkumbesone Makoley E. (PhD)**

*Société Savante Cheikh Anta Diop (SS-CAD), Faculty of Letters and Social Sciences,  
Department of geography, University of Douala-Cameroon  
nkumbesonemako@gmail.com(+237) 696 363 221*

&

**Tende Renz Ticha fogwe (PhD)**

*Geography Department university of Yaounde 1- Cameroon*

&

**Fogwe Z NJI (PhD)**

*Geography Department university of Bamenda – Cameroon*

&

**Ejaunde Emmanuel W.(PhD)**

*Geography Department university of Douala- Cameroon*

### **Abstract**

Contemporary trends show that the city of Douala has grown in space, population and functional dynamics necessitating inputs in the form of food that is farmed on the urban peripheries and some available inner space. This paper brings out the characteristics of the various crop farming and it demonstrates the suburbanization identity of institutional and non-institutional stakeholders, based on the hypothesis that changes witnessed in the sizes of the farming systems, is an indication of one of the characteristics of the suburban North West Douala. The cropping refers to the types, systems and intensity of cultivation of crops within the suburban area. The stakeholders involved in the crop farming system are an indicator of the suburbanization characteristic of this region. The paper describes the crop types in terms of the sizes and how changes in the sizes of the farms are the direct result of suburbanization.

**Key words:** Crop farming, dimensional pattern, stakeholders, suburbanization, system

### **Introduction**

Crop farming systems activities have multiple dimensional effects on the landscape and population between Bikoko to Souza. The changes that have occurred on the landscape either through the decrease in farm sizes in favor of other urban activities or the mixing of the two types of functions characterizes the suburban nature of the study area (Fogwe Z.N, M.L. Ba'ana and Bonglam C. Z. 2017). These changes brought by the mixing of

functions are what have been referred to in this paper as its impact on suburbanization (Mainet G. 1984). Suburbanization simply refers to the decentralization of people, employment and services from the inner and centralized areas of cities and their relocation towards the margins of the built up area (Carr, 1997). The increase in population with a corresponding increase in the number of industries and other urban functions has made agricultural (cropping) land systems to be reduced. The social, economic, environment, political and cultural mixings of the various perceptions strategies and practices of the crop farming population would be some of the effects which characterize the suburbanization of North West Douala (Fogwe, Z.N. 2005). The aim is to establish a descriptive analysis of crop farming system as it design the suburban nature of localities situated at the peripheries of the Douala metropolis. The farming systems within this study area are divided into two major headings which are: Intensive and Extensive. Intensive crop farming systems are practiced on a subsistent basis while extensive on both commercial and subsistent principles.

## **Methodology**

### **Choice of the study area**

Located between latitudes 4°25' N to 3° 99' N and longitudes 9 ° 50' E to 9 ° 76' E, the study area is found in the North West of Douala metropolis between Bonaberi to Souza. These areas anchor between two major Divisions; the Wouri which stretches to the North West engulfing Bonaberi and its neighbouring quarters, and Mungo, extending to the South enclosing Souza and Dibombari and her neighbouring ethnic groups. The area of study is at the interface of an urban and a rural milieu called the suburban area. It is shared into three geographic units: urban, suburban and rural, within which are found three subdivisions Douala IV, Dibombari, and Bonaléa subdivisions. This study area shares boundaries to West with the Atlantic Ocean, to the East by the Wouri and some part of the South West region of Cameroon and to the North by Mbanga and Yabassi Sub Divisions. See figure 1.

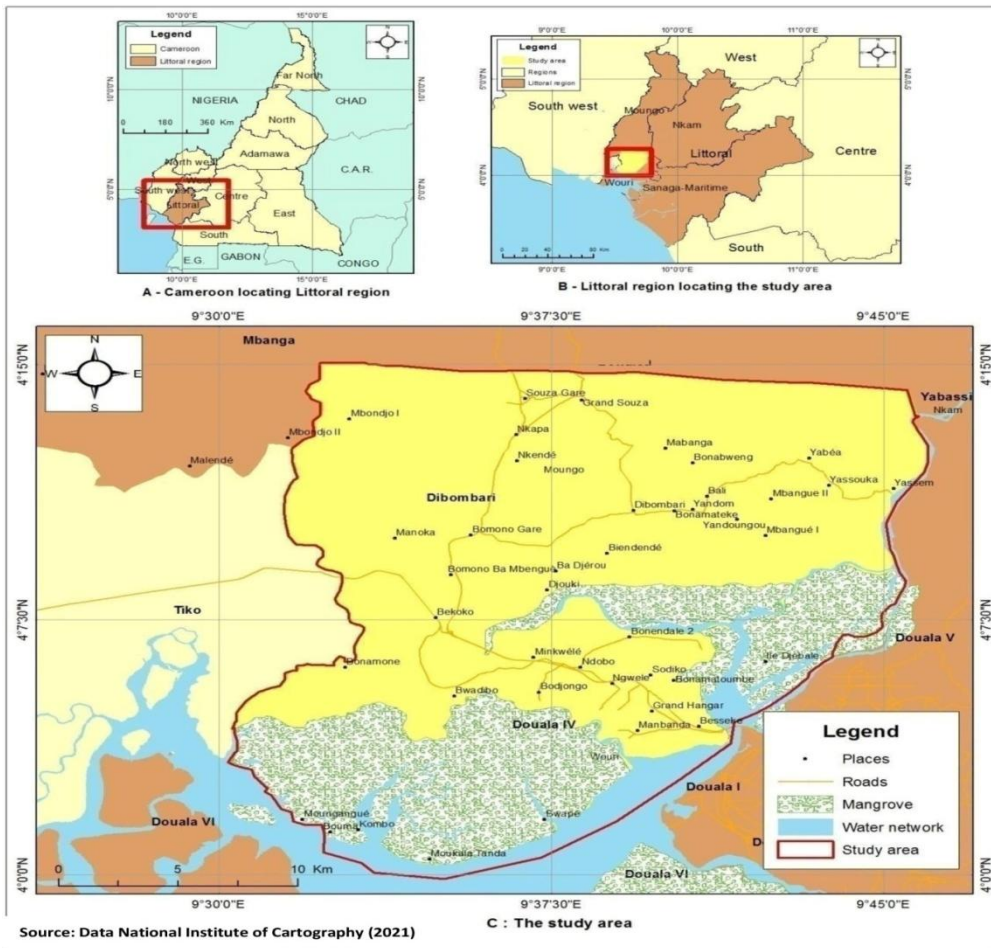


Figure 1: Location of the study area

**Data collection and treatment**

With a total population of 8523 inhabitants, a total of 70 questionnaires were administered to various households. Primary data were collected through field observations, questionnaires were administered to the producers, consumers and traders, and interviews were conducted to individuals and groups of individuals. Secondary data were obtained from the Regional Delegation of Agriculture and Rural Development, Regional Delegation of Property and Land Affairs, Regional Delegation of Forestry and Wild life, Regional Delegation of environment, nature protection and sustainable development, Regional Delegation of Public Health, Douala urban council. Social data from *in-situ* observations; investigations and interviews were treated in accordance to thematic approach; implying that it groups information according to a well-defined plan. Physical data were treated according to their nature to verify the genuineness of the existing data. The data were later analyzed following a horizontal and vertical approach in a systematic and transversal manner. The spatial analysis took into

consideration the repartition of the study area into geographic units while considering the demographic composition of the population, administrative delimitation and socio-cultural characteristics of the locals.

## Result and discussion

### 1 -Crop farming systems in the North West of Douala

The Five Year Development Plan agricultural policy after independence permitted the development of industrial plantations and rural agriculture. Palm plantations were developed around the localities of Souza, Bonalea, Dibombari, Ayato, Mungo ,Mpaki, Magamba, Abo North and South, The estimated surface area covered by these plantations in 1975 was 6845 hectares. During this period, the natural vegetation was still well represented on the landscape. Plantation farms represent a small portion as compared to the population which practice peasant agriculture during that period(Cornelius M.L; 2010; Malaysian Palm Oil Board 2020).

Table 1 shows the surface areas occupied by thetypes of land uses from 1975 to 2020.

**Table 1: Land use evolution from 1975 to 2020.**

Land use type	Periods			1975-2020 Evolution	
	1975	1986	2020	Meters	Percentage
Water surfaces	4511	4513	4440	-62	-1.46
Cropland	3754	4017	5852	1836	45.68
Low vegetation	14876	11809	9200	-2588	-20
High vegetation	5819	4613	3378	-1230	-26.64
Settlements	1099	2597	4298	1699	65.25
Industrial	6845	9521	11502	1979	20.80
Mangrove forest	20231	17200	15888	-1300	-7.58
Soil surface	inexistent	2865	2563	-290	-10.38
<b>Total</b>	<b>57135</b>	<b>57135</b>	<b>57121</b>	<b>00</b>	<b>65.67</b>

Source: Landsat image classification, 2020

Table 1, shows that from 1975 to 2020 the surface area used for cultivation of crops increased from 3754 in 1975 to 4017 in 1986 and to 5852 meters in 2020 showing a meters usage of 1831 and a 45.58%.

This cultivable land is increasing more towards the suburban and rural parts of the study area while it is decreasing in the urban considered part of the study area. This decrease in the sizes of thecropping systems is because land which was first used for extensive farming is being invaded by urban functions. The increase in cropping systems in the

suburban and rural areas is due to an increase in the population and demand for food within the suburban and urban areas. The direct consequence of this farming is seen in the reduction of vegetative and forest resource, land size occupation (Délène V. Tchindjang M. and Fogwe Z. N. 2009). This new trend indicates a predominance of natural green surfaces (mangrove forest), and little crop cultivable land in the peri-urban area as elements of surface occupation. The development of cropping systems is absent because the population size is small considering the fact that this area was first considered as a residential area with a weak industrial invasion. The few habitable settlements were along the National Road 3 (Douala-Bafoussam). The figure 1 shows the land use pattern in 2020 within the study area.

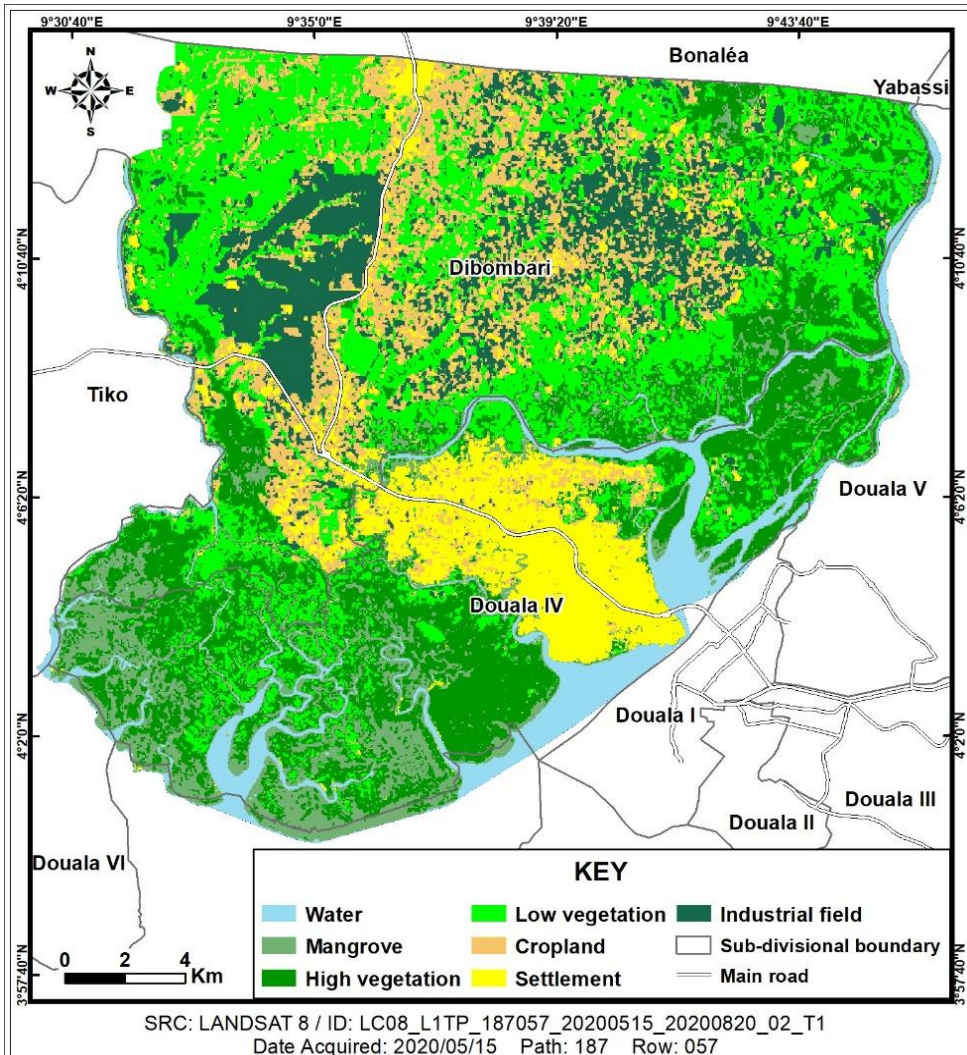
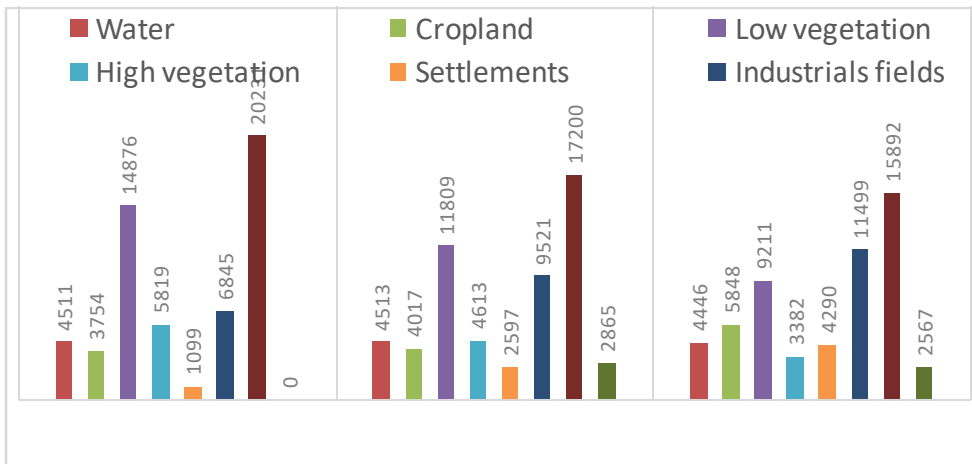


Figure 1: Map of land uses in the North West front of Douala in 2020

Figures 1 show the types of land use occupations in 2020. The figure portrays some types of modifications done by man on the land surface through increased settlement and industrial constructions but with a direct consequence of urban sprawl seen on the decrease in the sizes of the cropping systems (Obenengu W. 2006). Their extension is seen on the map towards the more rural regions of the North West Douala (Bonalea, Djouti, Ngombe and Magamba). Furthermore, the sizes of intensive cropping systems of vegetables has decreased from 200 square metres to 50 square meters and further North West to the rural areas, is the extension or increase in the sizes and numbers of peasant palm plantations. Their sizes range from 4 to 12 hectares within which are found 56 peasant palm plantations and one industrial palm plantation owned by SOCAPLAM, (Sub Divisional Delegations of Agriculture and Rural Development for Dibombari and Fiko Sub Divisions. 2020). The figure 2 shows dynamics of land uses within the study area.



Source: Treatment of Lands at images, 2020.

**Figure 2: Dynamics of land uses in North Western Douala from 1975 to 2020.**

As the economic crisis started in 1986, settlement surface area increased from 1099 meters in 1975, 2597 meters in 1986 and 4298 meters in 2020. From these statistics, as settlement occupied surfaces are increasing, crop growing surfaces are also increasing further rural showing an increasing push of the forest further rural. Now therefore, the expressing as man advances the forest or vegetation retreats (Priso D. (1998).

**1.2. Stakeholders involved in the crop farming sector.**

The major stakeholders involved here are institutional and non-institutional.

**Table 2: Stakeholders involved in agriculture system**

<b>Institutional</b>	<b>Non institutional</b>
<b>Councils</b>	Individual farmers
City council- Bonaléa Dibombari-Douala IV	NGO'sor CIG's
<b>State</b>	XXX
Agricultural posts	
<b>Traditional rulers</b>	XXX

Source: Fieldwork, 2021.

### **1.3. Stakeholders' cropping systems of the suburban space.**

These are stakeholders' practices on the farming systems as well as crops cultivated. The practices vary with the types of systems and crop types cultivated.

#### **1.3.1. Intensive subsistent crop farming systems of the suburban space.**

Crop farming systems characterize farming types between Bikoko to Souza. The intensive crop farming systems vary in size and in the crop types cultivated. Two types of intensive crop farming systems were identified: intensive subsistent and extensive commercial. Farming systems within this area have developed as a response to environmental changes coming from changes in the physical landscape, rainfall, type and intensity of crop production and human intervention (Borneo Post. 2019; Zdruli, P., & *al.* 2016). Crop farming is carried out by low status and unemployed persons. This is their major source of income and nutrient satisfaction. Since the 1990's, agricultural practices have changed between Bikoko to Souza (Fogwe, Z.N. etTchotsoua M. 2007). There has been the introduction of new species and hybrids, seeds, methods and techniques in farming (Fogwe, 2017). Farming is practiced on vacant lands of the periphery which consists of areas around settlements, road sides, streams and river courses. The agricultural landscape is declining due to the wave of rapid urbanization. The farm tools, and methods used vary from one farm type or crop type to another.

#### **1.3.2. Intensive crop farming population.**

Growing of food and non-food crops between Bikoko to Souza is practiced by almost everybody who leaves in this area. Crop farming practiced activities vary from one farm type to another. Everybody is involved in one way or the other. This shows that, close to 35% of Bonaberi urban space is occupied by houses and industries (Fombe, L.F *et al.*2001).The remaining 65% is green space of which 50% is mangrove, and 15% used for agriculture. Though neighboring towns of Penja, Njombe, Loum and Tombel supply the town with food crops, city dwellers and those living in this area are involved in crop farming.

#### **1.3.3. Urban intensive subsistent crop farming methods.**

This is the cultivation of crops like cereals and vegetables along the swamps from Bikoko to Souza. The crops are planted around compounds, communal lands, public and private vacant lands (spaces next to roads, rivers, factories and administrative buildings. This

practice is done in small holdings, whose surface area varies between 20 to 30 square meters. The farm inputs are simple, ranging from organic manure to simple tools, such as hoes, digging axes, machetes, knives, spades, pesticides and fertilizers.

Intensive subsistent small crops sized farms ranging between 10 to 15 square meters contain bitter leaf, maize, cassava and other vegetables are found along the swamps of the Wouri and Mungo Rivers. In these farms, mixed cropping is practiced; crop associations with short fallow periods are noticed as the crops grow. In these intensive crop farming systems, simple farm equipment are used in cultivation. NGO's and CIG's assist farmers, their role is felt in this study area as they help or provide farm implements and seeds to the farmers because most of them are poor and cannot afford. In collectively owned farms in this community, all processes are carried out as a group.

### **2.1. Extensive commercial crop farming systems of the suburban space.**

In this farming system, a single crop is planted on a farm size ranging between 2-10 hectares. It is owned by private individuals and state owned corporations like SOCAPALM, CDC and other private firms with the cultivating of palms for palm oil and kernel oil, and rubber for latex. The remarkable presence of oil palm and rubber plantations near settlements in Souza, Dibomb are and Nkapa ushers in divergences and convergences of stakeholders' influences. Two main methods are used in extracting oil; in the traditional method, the farmer hires labor and family/relative assist in harvesting, gathering, transporting and pre-processing of the bunches. The industrial method is carried out by the large Agro-industrial complexes (SOCAPALM). The oil is conveyed and put in tanks and trucks and later on taken to the soap manufacturing perfumeries in Douala. The distance separating the oil palm plantations and the major soap producing companies is about 15minutes' drive. The industry could be referred to as being a raw material oriented industry 'MAYOR', 'SANET', 'MAY' soap; perfumeries Grandeur, this oil is further processed to remove the cholesterol content into white nourished oil (cholesterol free) and the wax used to produce candles. The remaining kernel is fried to produce white kernel oil. The chaffs are used to feed pigs in the pigsties located along the river courses in the study area. These chaffs help in fattening process of the pigs and birds and oil increases the protein intake. The chaffs are sold to pig and poultry farmers around the urban sphere. SOCAPALM produces thousands upon thousands of litres of palm oil, kernel oil called "*Mayanga*" which is sold to companies in the urban areas and used to produce medicine, polish and hair oil.

### **2.2. Extensive subsistence farming of Douala suburbs**

This is a system of farming wherein crops are planted in small plots and rotated as well as the plots. Such is the case of shifting cultivation and rational bush fallowing. These primitive farming systems survive in the rural parts of our study area such as Dibombari and Bonaléa. This is because the area is still forested and has enough land with a sparse population density (Cadena, M., & al.2019).

#### **Shifting cultivation practices**

This is the farming system wherein, the farmer clears the plot in November and December. The tools used are primitive sticks, cutlasses and hoes. The grass is allowed to get dry and in the month of January ending it is gathered around large tree trunks and burnt. Tilling begins in mid -February waiting for the early rains in March. This initiates



planting crops like beans, cassava, maize, plantains and some natural fruit trees which are in the farms like pear fruit, mangos, guava, these crops last for just 3 months and they are harvested. The crop cultivation is considered a secondary activity which makes it less important. They consider palm oil production and fishing as primordial. Moving from one plot to another when the fertility drops makes the practice poor. In this farming system the farmer does not move with his belonging and homes as opposed to the farmers of sedentary farming. A modern form of shifting cultivation is earned out, whereby, the farmer has a permanent home and only the food crop farms are rotated as fertility dwindles. In some cases, the farmer has about 3 or 4 of such small farm plots. This is to always keep him in abundance diversification thus a social practice.

### **Rotational bush fallowing**

This is a modern method of shifting cultivation where the farmer has a permanent residence but for the fact that in the plots crops are rotated when fertility drops. The crops are rotated because tubers are planted and its fertility. The farmer puts up with the environment by carrying out fair practices. Though food cultivation is aimed as satisfying the household (a social practice), other social advantages are inherent. Such are the cases of marriages celebration gifts and offers. The farm products are taken to the market for sale (economic practice). The practice of mixed cropping is recommended by agriculturalist as a good method to be used to eliminate weeds and pest (Fogwe Z.N. 2012).

In these plots, crops that are planted in the farms thereby exposing practices (fair environmental) like mixed cropping, mixed and relay intercropping. All these farming practices show that agricultural activities dominate or characterize the suburban space between Bikoko to Souza. The presence of several cropping systems is characteristic of the fact that this region still contains primary economic activities and should be considered as a rural area rather than an urban space. That is why this work is recommending that crop farming activities should be used as an indicator of suburbanization or used to measure or characterize the suburban space in general and in the north west of Douala in particular.

## **3. Perceptions and Strategies of Stakeholders**

### **3.1. Perceptions and strategies of local councils**

Local councils on their part have ways that they perceive agricultural activities. The city council encourages large agro-industrial plantations because they pay their taxes to them. In this case, some of their activities are not well monitored as it was supposed to be from the idea of quantity, quality sold and the manner of production (practice). This area has not fully developed as an urban area since there still exist a mixture of state owned and private owned farms (plantations). While the state is giving up parts of their farm plots to the council and chiefdoms for people to settle, the manner and method of handing over such land is still unorthodox. As at the end the land will not be distributed to the autochthones (indigenes) in an equitable manner hence it becomes a source of conflict between relatives, families and tribes with consequent insult words like *come – no - go* (*les cotière*”, *les sawa*”, *“les Bah”nus*”). (Case files HCM/089,104, 144 and 210/2013, HCM/111, 142, 177, and 191/2014, HCM/011, 043, 082, 146, 234, and 251/2015). The encroaching of urban functions into the rural functions has made land to be regarded as modern gold as it is sold and resold from one person to another. The crop farming land uses mix with costly space occupying urban activities. These make the indigenes to sell

and resell land since locational rents for the activities varies. In this region as the urban activities yield more locational rents they gradually start substituting rural functions. Von Thunen, 1867. That is why the number of court cases is on the rise.

The Dibombari and the Bonaléa Council on their part encourages small scale intensive crop producers between Bikoko to Souza since the sale of the products from these farms acts as a source of income (Daily hawker's fee) to the Council. This fee was called as taxes and is collected in two dimensions. Farmers who come and sell in markets pay 100, 150, 200, 250 133 CFA FRs per day/per space occupied in the market. Middlemen /women (*buy and sellam*) pay to Council authorities before they begin sales in the markets in the study area (Table 5.3). As well as patent (licences) for those involved in foodstuffs.

The field investigations reveal that the Councils place economic perception to agriculture (crop production) than social, environmental and political. The councils have provided land to the farmers where their products are sold. The presence of these stalls expresses economic and social suburbanization which has helped to expand economic development towards the peripheries (Mainet G. 1984). Market places are retreating towards the newly developed quarters. This helps to reduce the number of people visiting the city centre to buy goods from specific markets are brought closer to the customers thereby making those living around the peripheries to enjoy variety which did not use to exist when this area was typically or purely rural. When markets come closer to the periphery of cities, this permits farmers to sell near or in their farms (farm gates). This holds for the perishable vegetables, this is because the farmers lack modern and good ways of preserving their farm products before decomposition. They dispose of them just in the neighboring and closer markets. This permits the farmers to use the revenue obtained from the sales of their farm products in the construction of modern houses which grants this area an urban status rather than a rural one (Nkumbesone, 2017). The council collects daily hawker's fee and in return construct modern markets in these villages. Such is the case of Bomono Gare and Bomono-ba-Mbengue markets built by FEICOM.

The population from the city moves out to buy from these peripheral or suburbs markets raw foods. In one way, the payment of taxis and other means of transport help to increase the circulation of income, reduce congestion and other environmental problems in the few food markets at the city centre such as Sandaga, Douala central market and Deido market (environmental strategy). The request for suburban market is political as it helps to take the markets closer to the population which happens to be made up of poor and less financing viable individuals. The people who work and sell in this market (*buy and sellams*), or middlemen have gained employment, hence helping to curb, solve or reduce the problem of unemployment within the major city. This is an attempt to occupy them and reduce urban misery within those who are uneducated and cannot procure jobs within the city. The disturbing issue is the inability of the council authorities to follow up and know-how and under which deplorable conditions these youths or persons sell in such markets. The extension of marketing points/places towards these peripheral zones has helped to reduce the degree of loss especially the perishable goods like vegetables.

### **3.2. Perceptions and strategies of the state in crop farming activities.**

The state on its part has put in place agricultural posts at the level of sub-divisions. Such is the case of the sub-divisional delegates of agriculture and rural developments at Douala

IV (Bonassama), Dibombari (Bomono) and Bonaléa (Souza). These state planned institutions have (motive) to take care, educate, work with farmers and help improve their methods of cultivations and farming techniques. The aim is to improve (to increase production) so as to meet up with the Sustainable Development Goals of Cities by 2035. The farmer delegation activity or relationship is felt in the considered rural areas of our study area such as Dibombari and Bonaléa. The inter-relationship is less at Douala IV as farm/ sizes are small and they are few. The concentration of agricultural extensive workers is felt with what they do in the parts considered rural as agricultural activities dominate there. Their perception here is to improve agricultural productivity. Thus the farmers are organized into groups so much so that messages and techniques can be well disseminated to them. Financing the farmers is done through groups or NGO's or Common Initiative Groups (CIG) cases in point include association of Young Palm farmers of Abo North, Association of "myiondo" producers in Bomono-ba-Mbengue, Association of Ndole farmers in Souza. The provision of subventions is done through these groups.

The subventions are in the form of farm equipment or tools like – improved seeds; high yielding species of cassava, farm tools like spades, cutlasses, will barrows, grading/grinding machines for the production of *waterfufu*, "*nkoumNkoum*" (dried) "*myondo*", cassava flour used in bread production.

**3.3. NGOs and CIGs perceptions and strategies**

NGOs and common initiative group have their perceptions towards crop cultivation within region of study. They provide farmers with some funds, equipment's and education is provided to them who in turn hand it down to members who practice these agricultural activities in the suburban and rural areas of the study Ngwa, 2000. With the MACTOR software, the perceptions of stakeholders were analyzed to show the links between them and identify the inter relationships or interplays/synergies between the stakeholders and their objectives. The results were as follows:

**Table3: Stakeholders’ objectives in crop farming system**

Source: Fieldwork, 2020

	Soc	Econ	Env	Pol	Absolute sum
DUC	1	1	1	1	4
DC	1	1	1	1	4
D4C	1	1	1	1	4
BOC	1	1	1	1	4
Farmers	1	1	0	0	2
GIC's & NG	1	1	1	0	3
Chiefs	1	1	0	1	3
State	1	1	0	1	3
▶ Number of agreements	8	8	5	6	–
Number of disagreements	0	0	0	0	–
Number of positions	8	8	5	6	–

1: actor unlikely to achieve objective  
 0: Neutral position  
 1: actor likely to achieve objective

Table 3 shows the value of stakeholders’ objectives in crop farming systems in the suburban. It was noticed that from all the stakeholders decisions are not in for or in favor of all the objectives. All communal stakeholders (DUC, BOC, BC, and DC) were in support of all the objectives. There was a partial environmental interplay in the field. Farmers are linked to socio-economic stakes and paying attention to the political and environmental stakes. This is characteristic of the suburban space since most of farmers are becoming economically motivated by the high land prices as urban functions are taking over farming lands (Tchindjang M. and Fogwe Z. N. 2009). This caused an economic situation where environmental NGO’s and CIG’s went closer to farmers by paying attention to environmental consequences in favor of sustainable development. All the stakeholders involved in crop farming practices in the North Western metropolis of the city of Douala do not have the same influences and power. The state is the important stakeholder and influential since it has the highest induce. The State that defines the agricultural policies and then continuous to their evaluation through intermediary de-concentrated services.

**Table 4: Perceptions of some crop farming CIG’s on cropping suburbanisation in North West Douala.**

Area	Food crops				Cash crop		Perception
	Maize	Cassava	Vegetables	Plantains	Palms	Rubbers	
Mbangue 11	-	-	FillesBona’ ebele	-	-	-	Eco/Soc/ Env
Mbangue 1	Fembo	-	-	-	-	-	Eco/Soc
Bomono-ba- Mbangue	Others	Others	Others	-	-	-	Eco/Soc/ EnvPol/ Cul
Nkapa	Individuals	-	Individuals	-	Groups	Individuals	Eco/Soc/ Env/Pol/ Cul
Abo South	Individuals	Individuals	Individuals	Individuals	Groups	Individuals	Eco/Soc/ Cul
Souza	Individuals	Individuals	Individuals	Individuals	Groups	Individuals	Eco/Soc/ Env/Pol/ Cul
Dibombari	Individuals	Individuals	Individuals and Bamenda women	Individuals	Groups	Individuals	Eco/Soc/ Env/Pol/ Cul

**Eco:** Economic **Pol:** Politic **Soc:** Social **Env:** Environmental

Source: Fieldwork, 2020.

Table 4 shows that there are some C.I.Gs working for the interest of the women of the communities who are members. They are found in villages within the suburbia, their objectives are varied from one CIG to another. CIG’s perceptions on how crop farming activities characterize suburbanization are based on economic, social and environmental motives. The crops cultivated provide large scale output for sales, gifts to orphanages and prisons. Furthermore, mixed cropping and mixed farming are practiced and when corn and cassava are harvested they are turned into flour and used in the production of bread,

cassava flour is consumed as “*nkoum-nkoum*”, “*waterfufu*”, “*garri*”, “*myiondo*”, “*bebobolo*”, starch and for the production of the local gin “*Afofo*”. When the leaves of “*manioc*” are crushed and the green pigment is drunk, it helps as a blood tonic. Income generated the sales of these products is often used to buy machines, fertilizers, seedlings, herbicides, pesticides, fungicides and insecticides as well as basins, cutlasses and hoes. This is to uphold their economics motive. The NGO’s and CIG’s offer education to their members and other neighboring persons on the dangers chemical farming in the suburban area. These chemicals once washed end up as toxins in plants, pollute the environment. The Coming together of farmers, organizing joint sales, keeping of their revenue in co-operative credit unions and financial houses such as Express Union account No 3465 /2012 (Fembo ladies at Mbangue 11) registered in Souza, has help to increase their economic wellbeing (economic suburbanization). These acts bring out the fact that these ladies congregate or have a gregarious attitude. Educating the farmers on how to cultivate is another way of improving their social wellbeing. The environmental friend methods of cultivation used by these NGOs and CIGs brings in their social strategy since CIGs are there to help the local populations, which intend are financed by International NGOs whose aim is to help reduce poverty so as to meet up with the SDGs (Sustainable Development Goals) by 2025 or the 2035 Emergence plan. To attain emergence means life in the suburban has been ameliorated.

### Conclusion

In a nutshell, this paper was to show how crop farming systems have reduced in size in the North Western front of Douala. It equally brought out and explained that several cropping types or farming systems activities carried out by the inhabitants can be used in characterizing suburbanization in the North West of Douala. The objective of this paper was to identify the farming systems of North West front of the Douala metropolis, explain the way in which they are distributed and how can that distribution be used to characterize suburbanization. Farming methods or practices used, the stakeholders involved, their perceptions and strategies used to determine the suburban nature of North West Douala from Bikoko to Souza. Results show that these farming systems activities have altered suburban nature of North West Douala and they can as well be used to characterize suburbanization between Bikoko to Souza.

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