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The Kribi deep sea port creation as a catalyst to population mobility and development

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Abstract

Portal towns have been a major determinant of population mobility and trickle-down development in their backyards in most developing countries. This paper examines the population dynamics and development spill overs of sea port construction to their host town. The Kribi Deep Sea Port is triggered by the visions 2035 philosophy/futurist paradigm of the Cameroonian government. This paper posits how the creation of the deep sea port has stimulated in-migration and development in Kribi. The study connotes how the concept of urban attractiveness enables this emerging town to draw onto it a wage earning population. Field observations in Kribi town and the port site were made once, every month for six months during which 86 inhabitants, the local and administrative authorities and port technicians were interviewed. Extensive secondary source research was as well used to obtain results. Findings revealed that the Kribi Deep Sea Port has led to a rapid population upsurge of 250% increase in 26 years as the population moved from 40,706 inhabitants in 1987 to 93,246 in 2005 and 102,000 in 2013. This growth has also fostered the development of the infrastructure of Kribi with a new urban town on 26000 hectares of land, an improved transport network and a host of industries. The paper suggests that the multiplier effects resulting from the port's creation may lead to urban problems typical of most third world cities today if not checked.

Keywords: Port Creation; Deep Sea; Population Mobility; Development; Kribi

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1. Introduction

The transport industry is concerned with the movement of goods and services from one region to the other involving several modes such as road, rail, air and sea. The industry has generated revenue for the sustenance of several states (World Bank, 2013). Sea transport which conveys a greater bulk of goods from one region to the other around the world is done through ports. Sea ports constitute a major attractive force for the movement of people into a city (Tiafack and Mbon, 2014).The concept of urban attractiveness states that, "the sum total of all individual conceptions about the desirability of a given area constitutes the aggregate attractiveness of the area". On a larger scale, it simply defines the ability of a city to draw and hold people. Attractiveness is related to the movement of people to and from places. Through out the world, population tends to be increasingly mobile and a significant proportion of the population moves annuallybetween and within countries, cities, rural and urban areas. More often than not, the decision to settle in a specific area may depend on many factors.These factors are job opportunities, availability of housing, nearness to friends and family as well as economic costs. What ever the motive, a city's attractiveness is closely related to its population growth or decline. When an area is perceived to be more attractive than its surrounding environment, the population may increase as many people settle there in preference to other areas. However, the influence of sea ports increases the degree of attractiveness of a city.

In Cameroon, land, air and sea modes of transport can be observed with sea transport dominating in terms of revenue generation into the economy though faced with difficulties. Sea transport is dominant through the creation of port traffic in Douala, Garoua, and currently Limbe and Kribi. These ports are being used for the movement of goods in and out of the country leading to the improvement of trade links between Cameroon and the world.

The Kribi Deep Sea Port was created under the decree N^{o} 99/132 of 15th June 1999 on its organization and operation. It was a project initiated in the 1980s before its official creation in 1999. The port was received in 2008 when Cameroon had reached the completion point of the Heavily indebted poor country initiative (HIPIC) marked by its debt relief. In 2010, construction works for the Kribi port started and the state of advancement of the work monitored by the Cameroonian government. Realised by the Chinese enterprise China Harbour Engineering Company (CHEC), the Kribi port is estimated to cost some 240 billion franc CFA.The Chinese government financed 85% of the construction works carried on at the Kribi port with a loan from the EximBank, while the remaining 15% came from the Cameroonian government. This port is called the Kribi Port Industrial Complex. The complex is made up of a port, industries and infrastructure. Upon completion the sea port will give birth to a new town. The main sea port will be located in Mboro, the mineral port at Lolabe, a pleasure port in the Grand Batanga sites, as well as an industrial and commercial zone.

The creation of the Kribi Deep Sea Port and its envisaged role as a complementary port to that of Douala will contribute to increase the population of Kribi and the development of the town. Recent population census results shows that the population growth rate of Kribi is 7.38% (BUCREP, 2005), hence high. The steadily high population growth rate is an indicator of the attractiveness of the town and available opportunities in the area.With the coming of the deep sea port, Kribi has become a pull heaven for migrants seeking for jobs earmarked for a better standard of living.

The completion of the Kribi port will mark the beginning of a new era in the economic development of the town and Cameroon as a whole. It will have as outcome the population growth of Kribi, job creation and wealth production. Economic growth will be accelerated through the creation of industries, urban infrastructure, transport and communication development and the exploitation of natural resources. These factors amongst others were the raison d'être for the Kribi deep sea port creation by the state. The Kribi port in addition, is a catalyst to population in-migration and development of the town. This is coupled with the old perception of port creation and existence as economic tools of revenue generation in countries. It is explained by the fact that the increasing in-migrants will expose the town to several people who will bring in new ideas. The migrants will as well improve on the urban functions of the town like commercial activities, education, and industry as well as recreational which are factors of urban development (Kengne, 2012).

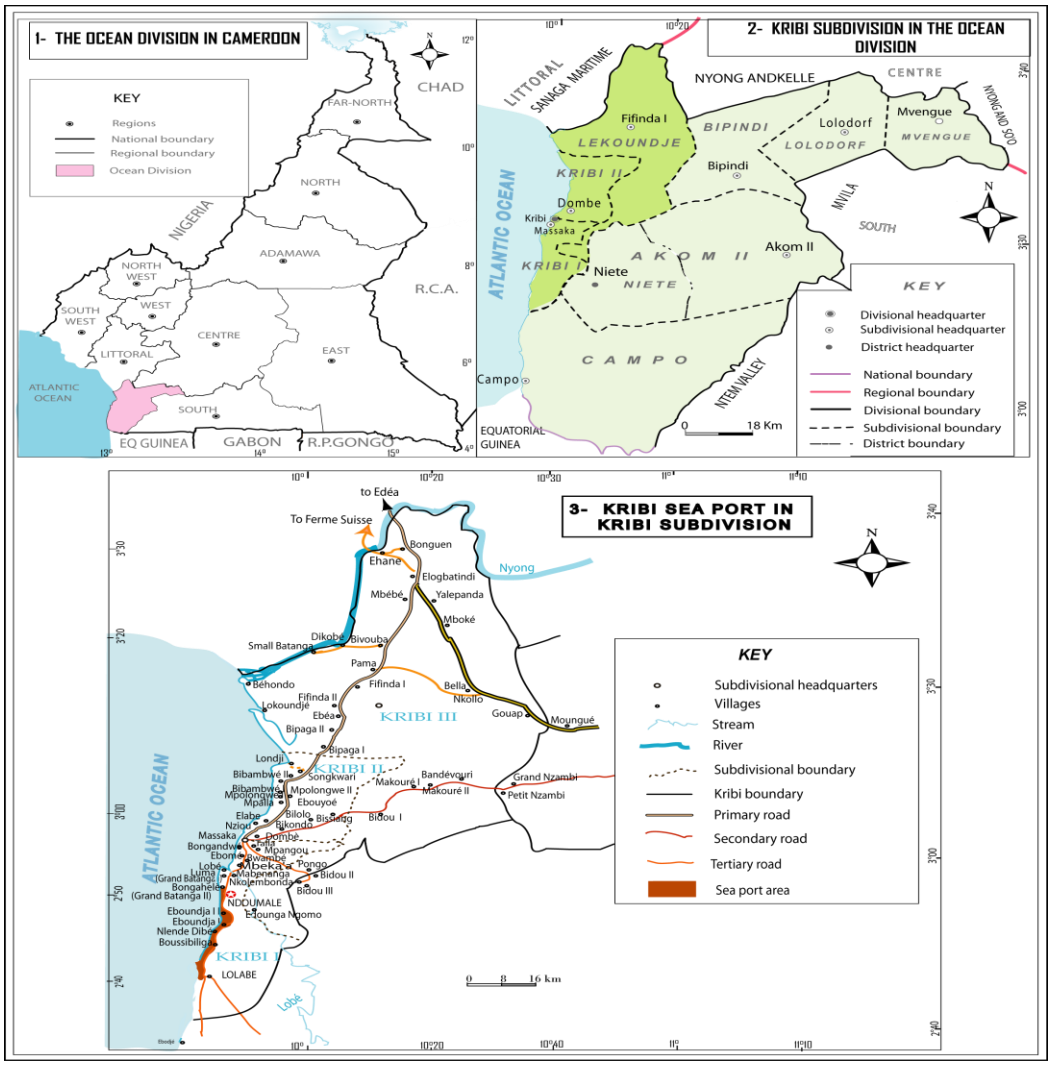

Figure 1. Location of the Study Area (Source: Adopted from the Kribi Urban Council and modified by Tende, 2015)

This paper is focused on the role played by the Kribi Deep Sea Port creation in the movement of people to Kribi and how it has improved on the development of the town. The objective is to show that the port is a pull factor to population mobility in Kribi. Population changes in Kribi are examined as well as the consequence of this movement to the development of the town.

Kribi is a coastal town found in the South Region of Cameroon. It is located between longitudes 9° 54' and 9° 57' East and latitudes 2° 56' and 3° 03' North. Kribi is the headquarters of the Ocean Division and stands as one of the main touristic sites of Cameroon, thanks to its fine sand beaches, colonial vestiges and hotels for accommodation (Figure 1).

2. Methodology

Field observations were done for six months to follow up the development infrastructure of the town. A total of 86 persons were interviewed for one month at random. They comprised four government officials, six visitors, ten technical workers on the port site, and six inhabitants of the town to collect first hand data on the field. Extensive secondary source research was also done and the population census data of Kribi exploited to show the rate of population increase. Spot 4 Satellite Images of Kribi for two comparative periods (2001 and 2014) were used to show and explain the progression in the growth of the built-up areas and spatial expansion. The images were treated to obtain the proportion of built-up areas or settlement. The field research was primarily qualitative, complemented by quantitative data generated from secondary sources. The data collected was treated using Microsoft Excel Spreadsheet. The results obtained form a coherent narrative for analysis.

2.1. The concept of urban attractiveness

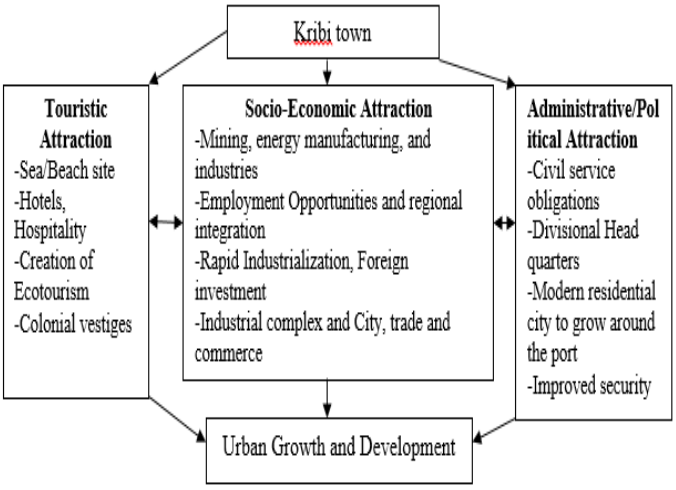

Figure 2. A Model of Urban Attractiveness of Kribi
(Source: Field Inspiration)

The attractiveness of a city is regarded as one of the most important pre-conditions for its future economic success. The principle of attractiveness proposed by J. Forrester states that every class of society and all geographic locations strive to be equally attractive. The concept holds that urban cities attract target groups as they aspire for a good transport system which is accessible and mobile, easy access to public services and amenities, a rich cultural sector and a good natural and physical environment. The attractiveness of the Kribi town draws unto it residents or employees, visitors or tourists as well businesses or industries. An increase in the number of residents, a proliferation of visitors and an increase in the number of industries in Kribi makes the town attractive. The cultural vestiges and fine sand beaches attract visitors, new businesses and industries attract residents seeking for employment and public safety while a good transport system, accessibility and mobility attracts businesses. This network of urban attractiveness observed in Kribi is influenced by the creation of the Deep Sea Port as a major driving force (Figure 2).

3. Results, analysis and discussion

The results from the findings reveal that spatial expansion, population growth, in-migration, infrastructural as well as economic developments have contributed to the development of Kribi town.

3.1. Spatial expansion, population growth and mobility in the Kribi Town since 1987

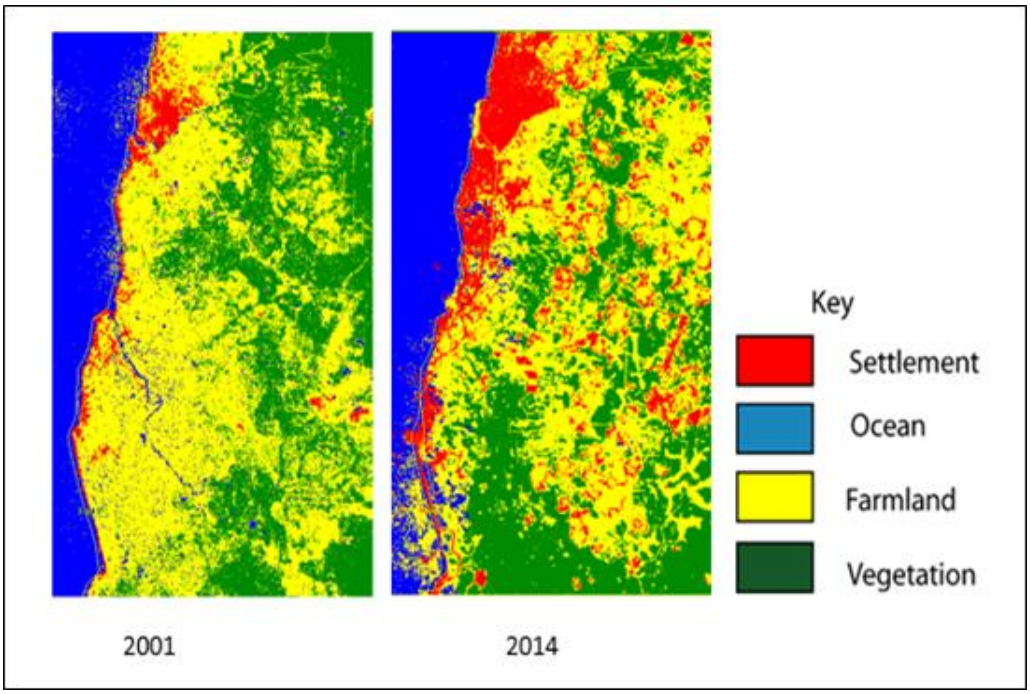

Figure 3. Satellite Images of Kribi for 2001 and 2014 (Source: Kribi Urban Council, Field Work, 2015)

Kribi town has experienced an accelerated population growth since 1987 which is accompanied by a rapid spatial expansion from the movement of people into the town. The rapid urbanisation of Kribi through growth and mobility accompanied by spatial expansion are signals of an improved Kribi town (Figure 3).

The image of Kribi in 2001 reveals that the settlement or built-up area of the town was less than 15.76% of the total surface area. Thirteen years later (2014), the image of Kribi shows that the settlement or built-up area has more than doubled to about 39.19%. The change in the built-up area is an indication of the spatial expansion of the town triggered by rapid population mobility. However, spatial expansion in Kribi from 1987 to 2014 as seen in the section that follows.

3.1.1. Spatial expansion in Kribi since 1987

The spatial expansion of Kribi and occupation of land has experienced significant increase for the past 30 years. This expansion was triggered by the growth of the population progressively. The growth and expansion of economic and commercial activities led to the first population influx from other parts of Cameroon into Kribi and a steady expansion of the city (Tiafack and Mbon, 2014). Urban development of the Kribi town started even before the independence of Cameroon. The first Master Plan of the Kribi town was drawn in 1958 that englobed the Mboa-Manga, Upper Talla, Dipembe, Nanga-Njango, Ngoye-Wammie, Njamoue and the Dombe quarters. By 1967, the Mokolo, Afan-Mabe and Mpangou quarters emerged to further extend the growth of the town.

With the increasing number of in-migrants into Kribi, the state introduced another Master Plan of the town in 1980 through the SDAU. From the plan, other quarters such as New Bell, Petit Paris, Ngoye, Bangandoue as well as Mokolo 2 emerged to accommodate the increasing population. However, with the increased introduction of more development projects and job opportunities, more people migrated to Kribi town leading to the creation of other quarters such as Talla, Mboamanga, Zaire, Mboro as well as Nkolbiteng. As a result of this, new urban towns have emerged.

3.1.2. Population growth imprints in Kribi since 1987

The creation of the Kribi Deep Sea Port is a catalyst to population mobility to Kribi town. This is seen in the increase in population growth rate and in-migration to Kribi. Empirical evidence proves that the rate has improved faster following the decree ordering the Deep Sea Port creation in 1999 (Table 1).

Table 1. Population Density of Kribi from 1987 to 2013

Year	Surface Area/km2	Population	Density
1987	2723	40706	7.9
2005	2723	93246	34.5
2013	2723	102000	40.1

Source: BUCREP (1976, 1987, 2005 and 2010 projections)

The population of Kribi in 1987 was 40,706. This population more than doubled to 93,246 in 2005 because of the touristic attraction of the town which brought in many tourists from home and abroad. During

this period also, Kribi had become an economic development pole that experienced a high rate of population mobility from colonial periods.This was triggered by the creation of Sociéte Camerounaise des Palmerais (SOCAPALM) and Sociétes des Heveas du Cameroun (HEVECAM) accompanied by the tarring of Edea-Kribi road. The in-migrants found the coastal town favourable for settlement as unemployed workers gained employment in SOCAPALM and HEVECAM. This increased the population as the workers moved in with their families.

By 2005, the population of Kribi stood at 93,246 inhabitants. This increase was witnessed six years after the decree authorizing the creation of the port became operational. The population density of Kribi increased from 7.9 inhabitants /km^2 in 1987 to 34.24 inhabitants /km^2 in 2005. The population had changed dramatically during this period with a high rate of population mobility. It is worth nothing that, in-migration into Ocean Division is very recent (BUCREP, 2005). The 2005 Census data of the Ocean Division revealed that the migration rate of the population to Kribi was 63.2%. Unemployed Cameroonians seeking for job opportunities have moved into Kribi town in large numbers as several opportunities have been announced by the government (BUCREP, 2005). People from all works of life are seen in this town including those from neighbouring countries. This has transformed the town into a cosmopolitan area bringing in new activities unknown in this area.

The 2013 projections of the population reveal that the town of Kribi had a population of 102,000 and population density of 40.1 inhabitants/km^2. This figure when compared to the 34.5 inhabitants/km^2 of 2005 connotes that growth rate in Kribi is constantly on an increase. Such a dramatic increase within a short period of time is explained by the fact that the Kribi port attracts in-migrants into the town. Associated to this growth of the population is the rate of increase in urbanization that has transformed Kribi into an urban area. This confirms that urban mobility has increased as the population is becoming more urbanized and the infrastructure changing (Table 2).

Table 2. Evolution of urban Population in Kribi from 1987-2013

Year	Total Population	Urban population	Rate of urbanisation (%)
1987	40,706	21,505	52.8
2005	93,246	59,928	64.3
2013	102,000	87,947	86.2

Source: BUCREP (1976, 1987, 2005 and 2010 projections)

At present, Kribi has become a very attractive destination as people move in from various parts of the country and beyond. The effect of this attraction does not only come from the influence of HEVECAM and SOCAPALM, but also from the creation of the deep sea port which has reduced unemployment and created new jobs for the rising population. The development of the port's infrastructure which will have 20 terminals on a 6.5 linear quay will enable the port to treat about 100 million tones of goods a year (Nsegbe, 2012). The rate of urbanization has increased from 52.8% in 1987 to 64.3% in 2005. This change has been instigated by the creation of the port which has several job opportunities. In 2013, the rate of urbanisation was 86.2% with a persistent increase as many people now migrate into the town (Nsegbe, 2012).

3.1.3. Mobility responses in the emergent Kribi Town

The touristic attractions of Kribi and creation of the seaport has infected a new development dynamics in the area. In 1997, the Ministry of town Planning and Housing carried out a study on the mobility rate in Kribi town. The study showed that 12.6% of the household heads have lived in Kribi before independence, 26.5% were from other divisions of the south region, 17.3% from the Centre region, 23.3% from the Littoral region and the remaining 20.3% from other parts of the country and from neighbouring countries. Field survey was conducted to determine the period of mobility and installation into Kribi town and the results proved that movements have rapidly increased. The mobility responses and population installation in the Kribi town was conducted for three different periods on some 66 persons in 11 quarters of the town. Out of the 66 persons interviewed, 20 revealed to have moved into Kribi between1980 and 1990 to seek for employment in HEVECAM and SOCAPALM. The number dropped to 19 between 1990 and 2000 as no major employment opportunities were available apart from the touristic attractions. The 2000 to 2015 period has witnessed an increase in the number of persons to 27 who have move into Kribi. The trend of in-migration is on the increase (Table 3).

Table 3. Mobility and Period of Installation in the Kribi Town

Quarters	**Period**		
	1980-1990	**1990-2000**	**2000-2015**
Mboamanga	2	3	1
Talla	1	3	2
Nanaga-Njango	3	2	1
Ngoye-Wammie	3	2	1
Mokolo	2	2	2
Mpangou	3	1	2
New Bell	4	1	1
Petit-Paris	1	1	4
Bangandoue	1	1	4
Mboro	-	1	5
Nkolbiteng	-	2	4
Total	20	19	27

Source: Field Work, 2015

This increase in the number of persons that settled in Kribi is clear indication of the presence of a pull factor. The creation of the Kribi Deep Sea Port stands as a major spring board to the movement of people into Kribi, enabling the town to become more urban and developed.

3.2. Developmental imprints and challenges in Kribi

The Kribi town is and will experience a dramatic transformation in terms of urban development and growth upon completion of the Deep Sea Port. The development will not be achieved without certain constraints and challenges. Some present and futurist development imprints and challenges that might plague the town are discussed in the section that follows.

3.2.1. Present and future infrastructural development imprints in Kribi

The Deep Sea Port is a panacea of infrastructural development in Kribi. Way back in the 1980s, the tarring of the Edea-Kribi National road N⁰ 7 had been a pull factor to the infrastructural growth of the town. The transport network infrastructure is experiencing a transformation as new roads are being created and tarred (Plate 1).

Plate 1. The transport network development in Kribi (Photo captured by Tende, 2015) Partial views of road construction works in Kribi. Note the Tara Plage road (A) and the Bouamanga road (B) are indicators of development in the town.

Associated to the availability of transport is employment and income generated by the port as a driver of productivity, growth and attraction of new firms. Immediate economic fall outs from the Deep Sea Port shall include custom earnings and jobs to be created either directly or indirectly. Estimates reveal that the port upon completion will generate some 50 thousand employment opportunities. This will enable the town of Kribi to become a new Eldorado for settlement (Table 4). The influx of in-migrants has enabled the growth and development of infrastructure (Plate 2).

Plate 2. The touristic, commercial, residential infrastructural development in Kribi (Photo captured by Tende, 2015) Photos of hotels to accommodate tourist in Talla (C) and housing infrastructure for in-migrants to Kribi (D).

In 2007 for example, about 53 hotels, 19 Inns, 15 restaurants were recorded as newly constructed in Kribi (Nsegbe, 2012). The number has increased to 59 hotels, 25 Inns and more than 25 restaurants in 2014. The present and future development projects envisaged in Table 4 reveals the extent to which the Kribi town will be if well executed. The Kribi port will trigger the birth envisaged of a new urban town which will occupy 26000 hectares of land. The port currently employs 1,125 people with 609 of them being Cameroonians. This connotes that the Kribi port will become a crowded hub of international commerce. The port is created to assist in the achievement of the goals of Cameroon to reduce poverty to less than 10% by 2035 and increase the economic growth rate to 10% by 2017. The chain of events is intended to elevate Cameroon to a middle income country status by 2035. It would not be a mistake to think that the Kribi port will reduce the unemployment rate in Cameroon from the numerous stakeholders and their plans of how the port will be used. Some include a United States enterprise to exploit Cameroon's rich oil resources, the French GDF-Suez company which already has a contract for extraction near the port and the CamIron an affiliate of the Australian company Sundance Resources which will build a railway between their iron mining site and the port for export (Fisken, 2013). Others include the construction of the Kribi-Edea railway line to link this industrial town to others. These constructions will develop the town. When seaports develop, trade and economic movements emerge hence employment is created. This encourages workers to move into a town with their families and settle. This is the case with the town of Kribi. Population increase has led to the construction of houses for the in-migrants and the creation of services such as banks, school, hospitals as well as commercial activities to enhance development. The port will promote the development and industrialization of Cameroon as it will favour the transportation of important minerals, primary products, and goods in and out of the country. Several businesses will also be created as a result of the ports existence. These enterprises include firms, agencies, companies, services and businesses (Table 4).

Table 4. Present and Future Development Projects Envisaged in Kribi

Development Projects and Partners	**Investment Value**	**Expected Fallouts of Projects**
Kribi Energy Centre (Gas factory)-Bipaga, (Parenco, Rio Tinto Alcan Group, SNH), America, Canada and Sweden	90 billion FCFA for Phase 1	Some 2000 jobs
Petrol exploitation and refining (Total EMP/SNH), 2009	10, 000 billions	60,000 barrels per day
Kribi Aluminum factory (Rio Tinto Alcan Group), Phase 1, July 29/2009	25,000 billion FCFA	More than 30, 000 jobs, Kribi-Edea Railway, Highway and Sea Port Development
Mbalam Iron Ore Mining (Cameroon Iron SA and the Australian Sundance Resource Limited, ASX)	12 billion FCFA (research)	800 million-1 billion tons, Mbalam-Kribi Railway and Highway, Aerodrome maintenance

Mamelles Iron ore exploitation (SteelCam, SA an Swiss Banks)	250 million EU	300 direct jobs, 600 indirect, port development, schools, roads, hospitals, mine installations, energy
Lolodof Uranium exploitation and valorization (NU Energy Corporation Cameroon)	NA	40 jobs, road maintenance and District Hospital Equipments
Deep Seaport Complex (4ports)	12 billion (research)	More than 4000 jobs, promote tourism, fishing and mining
Chad-Cameroon Pipeline (COTCO) 12/6/2004	30 billion FCFA	Water supply, schools, flood control works, road maintenance
Kribi Power Development at Mpolougue Corporation (KPDC) 7/2009	135billion FCFA	Numerous Jobs
Kribi Car Assembly Plant through Indian and Chinese Venture with Cameroon Automobile Company	NA	Some 5000 jobs and several other indirect ones

Source: Fisken 2013, Tiafack et al 2014, Field work 2015

The Kribi Deep Sea Port will have a measurable effect on various sectors in the economic development of the town and Cameroon. The tourism sector will experience a boom with the existence of the port since Kribi is one of the most important tourist's destinations in Cameroon. Kribi is projected to grow to about five times its current size as more people will come in and settle. Improvements in transport infrastructure, job creation and technology transfer will be acquired.With the coming of the Deep Sea Port, significant transformations will occur on the planned and unplanned areas. The Car Assembly Plant introduced by the Indian and Chinese Venture to work with the Cameroon Automobile Company signed on the 11th of June 2015 will provide some 5000 thousand jobs to the Cameroonian population. The Kribi Deep Sea port will raise the global profile of the CEMAC region and create new trade relationships between member states and foreign partners such as China, France and the United States.

3.2.2. Envisaged development challenges in Kribi

The Kribi town is envisaged to be an Eldorado of development with the creation of the port, but might face future challenges if control and adequate management is not carried out. The challenges might emanate from pollution in all its forms especially environmental from the Chad-Cameroon Pipeline and handling of iron products. Waste production and health risk emanating from auxiliary activities and enterprises, migrant households, new service places such as administrative structures, markets and hospitals will emerge and affect the population if not controlled. Urban disorder that accompanies the creation of projects and population growth in cities will likely hit Kribi town. This is because almost all states land in Kribi are being occupied illegally with little or no land titles established by the land speculators concern (Tiafack and Mbon,

2014). Such mal-practices may likely jeopardize the efficient planning of Kribi town as numerous development projects are on-going.

Other social ills such as land tenure disputes are already visible in Kribi town between the Batanga people (indigenes) and in-migrants from other areas of Cameroon and beyond. The unemployed and unskilled population is fast re-locating from other cities like Douala and Yaounde to Kribi. These movements might lead to an increase in the crime wave and prostitution. The Kribi port will no doubt decongest the other port towns from the problems of overcrowding and overpopulation, but might fall in the same problem if precaution is not taken. The attractiveness and sustainability of Kribi leave much to be desired. This is because an increase in the population of Kribi will increase overcrowding, overload job opportunities, congestion and increase pollution.

4. Conclusion

The development of portal towns is important since they constitute the pivot centers of internal and international exchange. The Kribi Deep Sea Port and resulting investments will inject more money into the Cameroonian economy and create new opportunities for employment and regional integration. It is believed that if the development of all the relevant sectors is handled efficiently, then the port will certainly help Cameroon to combat poverty at best. The vision 2035 emergence would have been achieved and Cameroonians will experience an improved standard of living.

The creation of the Port in Kribi has contributed to the economic and social development of Kribi and Cameroon. This paper which has investigated on the contribution of the Kribi port to the mobility of the population and development, confirms that the creation of a port has influenced the continuous influx of the population.The growing population has come to seek for greener pastures in this area and their presence has improved on the development of the town. Therefore, port creation, population mobility and development are directly linked. This is the case with many port towns such as Douala which is a major port city in Cameroon. Nevertheless, in as much as the port enhances development and urban growth, it has several demerits to city growth and planning which if not checked will challenge sustainable development of Kribi town. This paper suggests that the authorities of the Kribi town learn from the errors of the Douala city as a result of the existence of a port and make Kribi a sustainable town to live in.

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