



## **SOCIO-ECONOMIC IMPLICATIONS OF INCOME GENERATING ACTIVITIES IN ATHIEME COMMUNE**

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### **Abstract**

Poverty is an evil that is undermining most of the communes of Benin including Athiémé; despite the measures taken part and on the other, it is not eradicated. The present study aims to assess the socio-economic implications of the income-benerating activities in the life of the population of the municipality of Athiémé and make suggestions.

The methodological approach used involves documentary research, direct observations, field investigations, and interviews, analysis of the images and the processing of data.

The analysis of the results shows that 80 % of the population has an income-generating activity. Thus, revenues from these activities contribute to 75 % to meet basic needs. Furthermore, building strategies are proposed to improve the conditions of exercise of these activities and the level of life of these people.

**Key Words:** Township of Athiémé, socioeconomic Impact, generating activities of income

### **INTRODUCTION**

Population growth is one of the main factors explaining the economic situation of sub-Saharan Africa (Gogue, 1991). It remains obvious that the development of a continent, a region, a country or a locality can not do without its demographic dynamics (Pourtier, 2010). However, the imbalance between demographics and economic activities hinders the expected economic development. Moreover, economic development is mainly based on buoyant sectors such as the secondary sector and the tertiary sector. The primary one must be a support for the other two within the limit of normal. In case the latter takes over, the economy is suffocated. This could lead to the reduction of the development rate of a locality. This is the case in Benin where the primary sector is very predominant with agriculture as the main activity (Chabi, 2006). However, this sector of activity, which should be a source of income to enable people to get out of poverty according to Derruau (2002), is not the case in Benin. Worse, there is a blatant inequality between the rate of population growth and that of food production (Akpaki and Aliou, cited by Ohoussa, 2011). In addition to this imbalance, the report is bitter at the monetary level. The UNDP data, 2014, prove it well, they reveal that the monetary poverty in Benin remains at a relatively high rate. As a result, Benin ranks 165th among the 187 poorest countries in the world

with a Human Development Index of 0.476 against 0.436 in 2013, the poverty index was 36, 2% in 2011 (INSAE, 2013). The municipality of Athiémé, is not exempt from this situation. In fact, like the other municipalities of Benin, a large part of the active population of Athiémé invested a lot in agricultural production, fishing, livestock farming, agro-food processing, etc. (Athiémé Town Hall, 2011). Despite the efforts made in these income-generating activities by the population, it can not achieve the expected development. Worse, poverty remains galloping and continual. The poverty index of the Commune of Athiémé established by the RGPH3 considers that 72% of the population of Athiémé would be poor and that 56.5% of the population lives below the poverty line. This finding motivated the present research on the issue of socio-economic impacts of income-generating activities in the municipality of Athiémé.

## **1- Methodological approach**

The methodological approach used is structured around data collection, fieldwork, data processing and analysis.

### **1-1 Data collection**

The data collected in this study are related to demographic data, socio-economic data, and climate data, collected in the documentation centers of INSAE, ASECNA and in the field. The data collection was done using materials, tools and techniques such as a questionnaire addressed to the population, an interview guide for local authorities and resource persons, a note-taking notebook and a digital camera. Documentary research has been done specifically at the level of specialized institutions, libraries and websites whose activities are related to the subject of this study.

### **1-2 Fieldwork / sampling**

Investigative sampling was determined by the quota method, which is based on reasoned choice and representativeness. For this purpose, the target group chosen is the active population composed of farmers, product processors, traders, artisans and resource persons. The following criteria guided the choice of these people:

- living conditions
- the size of the household
- be an isolated producer or processor
- exercise at least one income generating activity.
- to belong or not to a feminine group.
- be at least 18 years of age to collect reasonable and reliable information.
- have lived in the locality for at least the last 10 or 15 years.

### **1-3 Analysis and data processing**

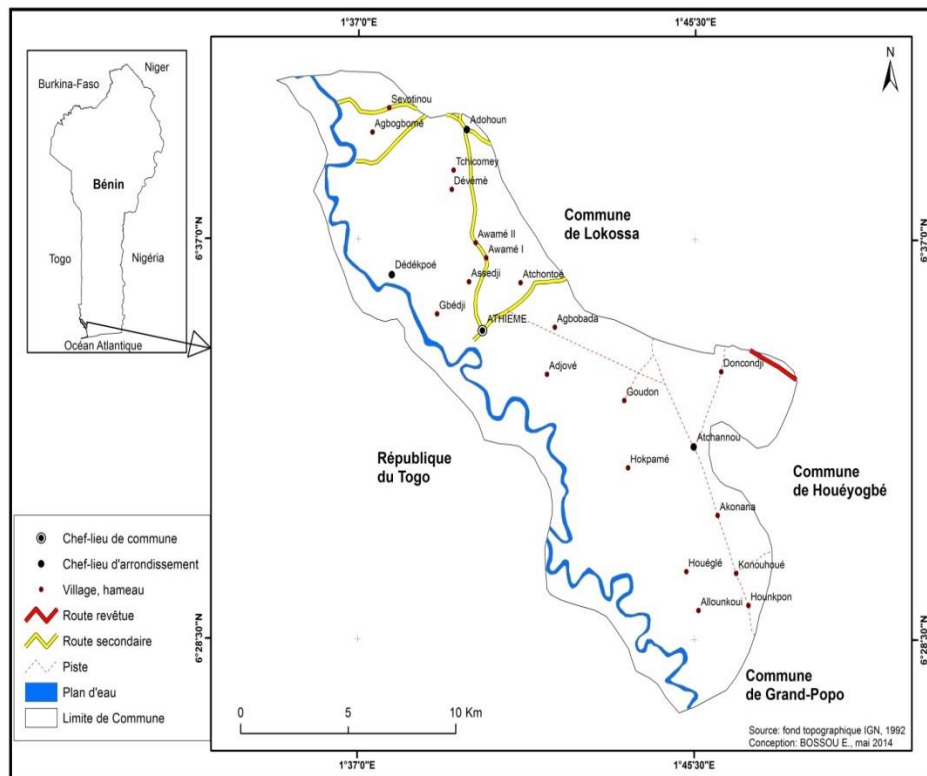
Careful observation of the information made it possible to process the data. This treatment consisted of the counting of the questionnaires and the calculation of certain statistical values. This allowed to better understand the problems and to establish a good interpretation. This procedure led to the results presented (in the form of graphs, figures and tables) and analyzed. The software EXCEL, WORD have been used on this subject. EXCEL software has been used for the realization of graphics, figures and tables. The WORD software made it possible to enter. The maps of geographical maps were obtained from the IGN. The analysis of the socio-

economic impacts of income-generating activities in the Commune is based on the SWOT model (Strengths, Weaknesses, Opportunities, Threats) which means in French: Strengths - Weaknesses - Opportunities - Threats.

## 2- RESULTS AND DISCUSSIONS

### 2-1 Geographical situation of the municipality of Athiémé

The Municipality of Athieme, one of the twelve communes of the departments of Mono and Couffo is located between  $6^{\circ} 27'$  and  $6^{\circ} 40'$  North Latitude and between  $1^{\circ} 34'$  and  $1^{\circ} 46'$  East Longitude. It covers an area of 238 km<sup>2</sup> or 14.83% of the department of Mono. It is bounded on the north by the Commune of Lokossa, on the south by the Commune of Grand-Popo, on the east by the Commune of Houéyogbé and on the west by the Republic of Togo (sub-prefecture of Afangnan) with which it shares a natural boundary that is the Mono River (Bossa, 2013). Figure 1 shows the geographical location of the municipality of Athiémé.



**Figure 1:** Geographical location of the municipality of Athieme

**Source:** IGN Topographic Fund, 1992

### 2-2 Administrative Framework and Settlement

The municipality of Athieme has 5 districts: Athieme, Adohoun, Atchannou, Dedekpoé and Kpinnou which are subdivided into 47 villages and city districts. The local administration has three levels: the town hall, the district, the village or city district. According to the RGPH4 of

2013, the Municipality of Athiémé has a population of 56247 inhabitants. We mainly distinguish two socio-cultural groups: Kotafon (60%), Adja talla (30%). To these majority groups, we must add Watchi, Mina, Sahouè, Hausa and Yoruba.

## **2-3 Physical Framework**

### **2-3-1 Climate**

The climate of the Commune is of the subequatorial type. There are two rainy seasons alternated by two dry seasons:

- a large rainy season from March to July;
- a short dry season from July to August;
- a small rainy season from August to November;
- a long dry season from November to March.

From December to March, the trade wind (or harmattan), which is a dry and hot wind from the northeastern sector, is blowing at a speed of 2 to 3 m / s. Note that because of climate change, this wind has become random and only blows for a few days or not at all for a few years.

### **2-3-2 Relief**

The relief is monotonous and generally flat, eroded in places. It is however marked by numerous depressions and benches (cords) of sand and sandstone. These depressions are watersheds or valleys of rivers. They are sheltered by ponds, swamps and lowlands, very favorable to off-season crops, market gardening activities.

### **2-3-3 Soils**

The soils are clayey, argillaceous hydromorphic black, sandy-clay or sandy-clay very conducive to pluriculture. They swarm with seasonal water and are flooded for the most part by the floodwaters. They are very rich and favorable for off-season and recession crops. The sandy-loamy texture of the Commune soils has a low water retention capacity and exposes it to the negative effects of water and wind erosion.

### **2-3-4 Hydrographic Network**

The lakes of Athiémé commune are characterized by a fluvio-lacustrine complex dominated by the Mono River by its extent and Lake Toho. Thus, the Mono River is the main watercourse with a wide valley (watersheds) that irrigates almost all villages in the Commune. It is completed by the Sazué river and the Toho, Godogba and Djèto lakes. The latter are also equipped with watersheds.

## **2-4 Income Generating Activities in the Municipality of Athieme**

There are several income-generating activities in the municipality of Athiémé. These are: agro-food processing, agriculture, fishing, breeding, trade, crafts.

### **2-4-1 Agricultural Production**

Agricultural production activities are characterized by the family workforce at the head of which men are found. Thus, most of the factors of production are controlled by men. Access to land is through a medium-term renewable loan for foreigners. Men access the lands of culture by inheritance. Generally the fields are family with lineage succession. Women accompany men during field work. They often have a piece of land that is usually lent to them by their husbands.

### 2-4-2 Food Processing

The processing of agricultural products is widespread in Athiémé Commune. The traditional palm grove occupies more than half of the arable land with higher or lower yields. Palm oil, the main activity of the women of the Commune, is manufactured in all the boroughs of this Commune. Indeed, palm oil exists in several forms, the (zomi) much more sought after because of its aroma and its nutritional qualities remains the specificity of the Commune of Athiémé. After boiling and crushing the nuts, the pulp is pressed and burned for about 30 minutes as shown in photos 1 and 2 of Plate 1. The second quality of oil still extracted from the oil palm is the oil of palm kernel.

The preparation of sodabi is exclusively reserved for men. Sodabi is made from the sap of the palm tree called palm wine that is allowed to ferment and that

then heat up at high temperature (photo 3) and it is its vapor collected by a pipe soaked in a cooling system that gives sodabi. Other processing products are gari and tapioca obtained from cassava; Akassa from maize; peanut fritters and peanut oil from peanut processing. Most of these activities are carried out by women, who sometimes form groups to obtain a large turnover that they share.



**Photo 1** : hot pressing of the pulp of the palm nuts



**Photo 2** : preparation of palm oil



**Photo 3** : Preparation of sodabi (local alcohol)

### Plate 1: Some agro-food processing activities

*Shooting*: BOSSOU, July 2014

### 2-4-3 Fishing

It is practiced by pirogue or on foot depending on whether the watercourse is deep or not (Hounguè, 2014). Today, it is the third economic activity of the population of the municipality. It is practiced in a traditional way on all the water bodies of the town: in particular on Lake Toho, on the Mono River and on the water Djètoè. Fishery products are sold in the various markets of the Commune. The fishing population is part of the poor groups of the Commune and is more than 50% out of school.

#### 2-4-4 Breeding

Outside the Kpinnou livestock farm, animal production is a poorly developed activity. It is extensive non-professional (family), and unproductive: the animals are mostly wandering, delivered to themselves.

Only grasscutter farming (introduced by the PAGER project on IFAD funds) and rabbits breeding is done in a modern, controlled and paddock way. Everything else is done loose in the courtyard of the houses or around the houses. Plate 4 illustrates the rearing of small livestock in Adamè village in the district of Adohoun.

l'élevage du petit bétail dans le village Adamè dans l'arrondissement d'Adohoun.



**Photo 4** : cage rabbit breeding



**Photo 5** : goat farming

**Plate 2:** Livestock breeding in Adamè village in Adohoun district.

*Shooting:* BOSSOU, July 2014

#### 2-4-5- Crafts

Trades crafting groups of trades that deal with repairs and services such as carpentry, sewing, hairdressing, photography, mechanics, embroidery, etc. This category of craft is quite developed in the Commune and occupies much more men than women. These craftsmen find themselves more in the agglomerated centers of Athieme, Kpinnou and Atchannou. Plate 3 shows two carpentry workshops in the districts of Kpinnou (photo 6) and Atchannou (photo 7). These pieces of furniture are made at the request of the people, and the wood used to make them are often bought in Lokossa. Carpentry is widespread in the Commune of Athieme. According to the bosses of these workshops, the plank is for the most part bought in Lokossa. The furniture is often made on the order of the buyers



**Photo 6** : Carpentry workshop in Kpinnou



**Photo 7** : Carpentry workshop in Atchannou

**Plate 3:** Carpentry workshops in the districts of Kpinnou and Atchannou

*Shooting:* BOSSOU, July 2014

## 2-4-6- Trade

The Commune of Athieme has two main markets: Zounhoue and Athiémégan. Athiémégan's market is in a dilapidated state, as its premises can no longer house the merchants, they have built small sheds around the market and display their goods there. It is rather the Zounhouè market which ensures the sale of raw or processed agricultural products and manufactured products. The sale in half-big and especially in detail is very developed. We meet along the streets (Kpinnou in particular) that serve the market of small shops with quite varied items. Plate 4 shows displays of agricultural products and household utensils in Kpinnou.



**Photo 8** : display of cassava and crinrin at Zounhouè market



**Photo 9** : display of household items in Kpinnou

**Plate 4:** Display of agricultural products and household goods in the Commune

*Shooting:* BOSSOU, July 2014

## 2-4-7- Manufacture of charcoal

Charcoal manufacturing remains the main activity that a large part of the agricultural population conducts during the dry season. The population also does it when the palm nuts are not ripe for exploitation. It is in a way, their intermediate activity; it is often done individually in the houses.

## 2-5 Constraints related to the development of income-generating activities

At the end of the field surveys, it should be noted that in the Commune of Athiémé, IGAs are subject to enormous constraints which limit their development. These constraints are both natural, financial and technical.

### 2-5-1 Natural Constraints

Among others, the following factors should be listed:

- climatic hazards and non-control of water
- low valuation of existing natural resources, especially lowlands and swamps for pasture and fish farming.
- still largely extensive farming system leading to rapid degradation of natural resources.
- Ecological constraints that hinder the development of water bodies that essentially consist of the silting up of rivers, the pollution of surface waters, with the result that the productivity of these waters is reduced.

### 2-5-2 Financial and Technical Barriers

Indeed, the development of IGA is dependent on the size of the working capital allowing the constitution of a stock of goods (Pierret, 2004). Since most actors have a low level of activity, working capital used for activities is also limited. In addition, many illiterate actors have difficulty in gaining access to micro-credits because they can not present conventional guarantees, not belonging to any group because of lack of trust, sincerity between cooperants and having no relative knowledge. the benefits of microfinance.

Regarding technical barriers: basic tools remain traditional, archaic and human energy is often insufficient, which reduces performance. Apart from CeCPA and some NGOs, which are active around the technical supervision of economic actors, they do not benefit from technical support. To all this is added the insufficiency of warehouses to keep the products. Only one functional storage warehouse has been identified in the district of Dedekpoè, that of Adohoun is out of order.

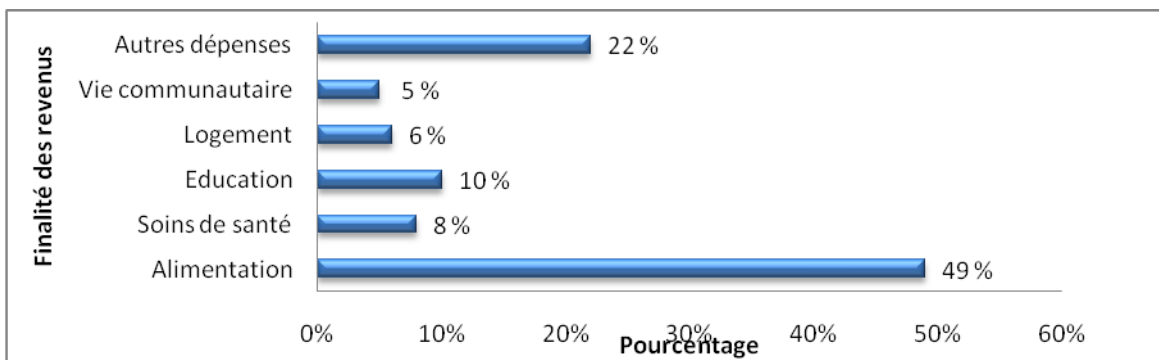
With these characteristics of the AGR in the Commune of Athiémé and difficulties that hinder their promotion and development, it is appropriate to show the impact of these activities on the socio-economic development of the populations of the Commune of Athiémé.

### 3- Distribution of income

Income in general is of two kinds: income in kind and money income. Income in kind corresponds to the share of food products from field work and consumed for food. According to the real-estate investigations, in the municipality of Athiémé, the monetary income constitutes the profit realized after the sale of the products, it varies according to the activities. In the districts of Kpinnou, Atchannou, Adohoun, Dedekpoè, the main source of monetary income is the marketing of processed agricultural products. In Athieme, however, the administrative function is much stronger because Athieme is the administrative center of the Commune and most of the administrative infrastructures are concentrated there: the town hall, the customs, the gendarmerie, the post office, the school district, the recipe for taxes, recipe collection, etc.

#### 2- 1 Management of income from IGAs

The study revealed that the income from the various activities carried out by the population of the Municipality of Athiémé are used for various purposes. The figure below summarizes the main point about the use of income from activities by players.



**Figure 2:** Purpose of benefits from AGRs

**Source:** Results of field surveys, July 2014



Looking at Figure 2, we can see that the benefits are mainly for family investments (food, health care, education, housing) or 75%. In addition, the "other" component has a higher or lower percentage (22%) because of funeral ceremonies, wedding ceremonies, dowry etc. The low percentage of participation in community life is 5%, reflecting the lack of public interest in public life.

### **3-2 Improvement of the standard of living**

Income-generating activities contribute not only to food self-sufficiency but also to household welfare through the resulting cash income. 60% of the households surveyed in the districts of Athieme, Kpinnou and Atchannou affirmed that thanks to the IGAs, they manage to feed their children, send them to school and take care of their primary health care. Similarly, about 15% of respondents use their income for the acquisition of modern building materials such as cement and sheet metal. On the other hand, the district of Adohoun, which has developed market gardening, particularly the culture of the crincrin, is in a precarious situation. More than 70% of households fail to meet their basic needs. The district of Dedekpoè, purely agricultural and less populated than the other four, proves to be the most needy from every point of view. For good reason, locals complain about the flood of the Mono River that comes almost every year to ravage their crops. Another major difficulty is the rudimentary nature of their working tools, to which is added the almost total absence of agricultural machinery. According to the actors, there is only one tractor that serves the whole Commune.

### **3-3 Health situation**

In terms of infrastructure, the Municipality of Athiémé has seven public health centers and two Village Health Units (UVS). But here, the crucial problem that annihilates health efforts in the Commune remains the drastic lack of qualified technical staff and health and social facilities necessary for the proper functioning of health centers. The health centers of the Commune have a technical platform very little provided and defective (Bossa, 2013).

Regarding attendance at health centers, despite the presence of health facilities in all districts, it is unfortunately noted that the attendance rate is very low in all public health facilities. Moreover, the following negative influence factors find themselves at the base of the precarious state of health of a large part of the women, children, young people and men of the Commune:

- the remoteness of District Health Centers (CSA) and the isolation of villages and boroughs. During the rainy season, the isolation of 87% of villages prevents the population from accessing existing health facilities;
- low attendance at health centers by populations still deeply embedded in the traditional health care system, etc.
- The level and seasonal nature of household income does not allow for unpredictable expenses, as sometimes are the costs of health care. Thus, the municipality of Athiémé has a high mortality rate that varies between 12 ‰ and 14 ‰ depending on the district (SAFIC, 2010).

### **3-4 School situation**

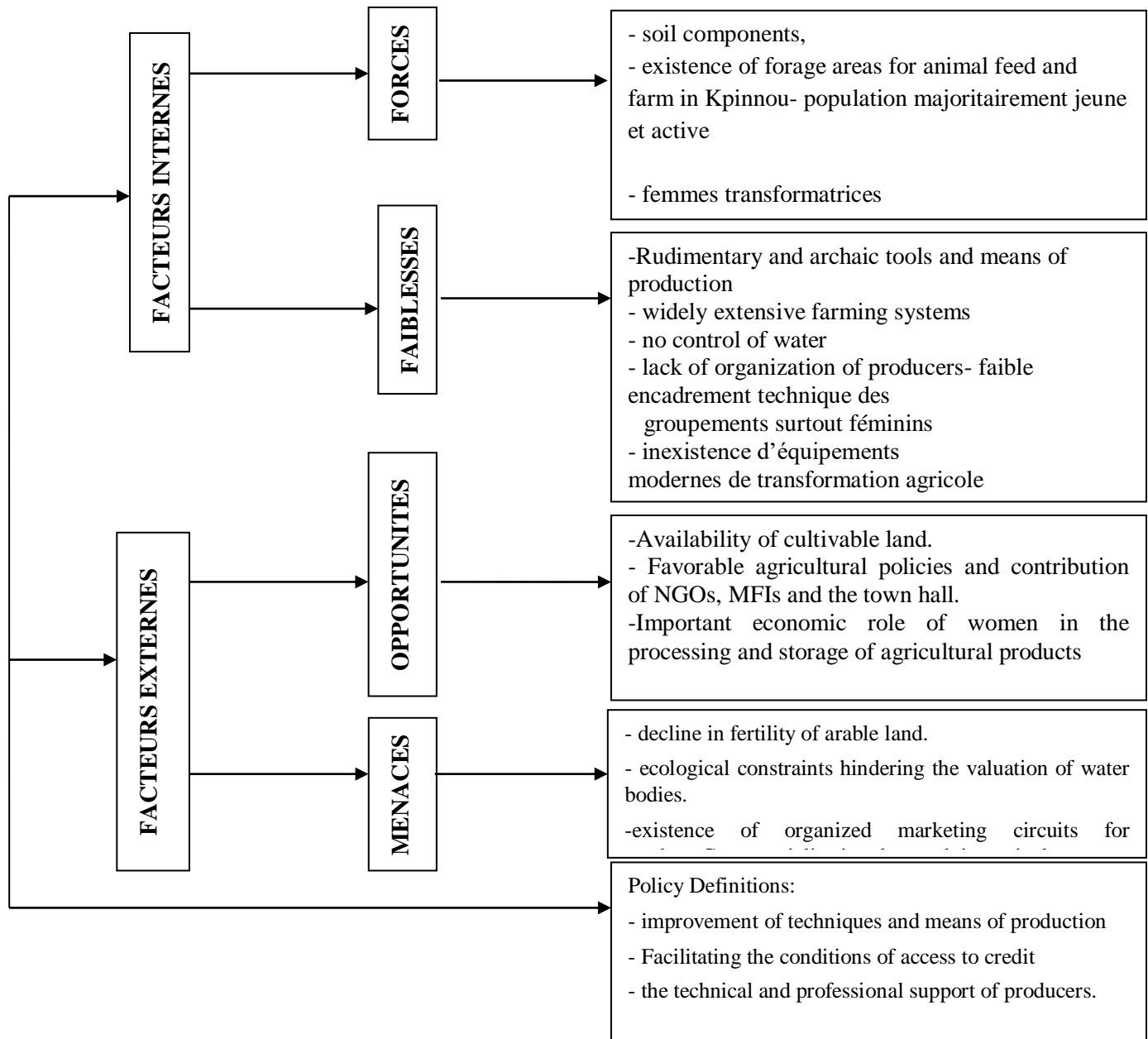
Thus, part of the income (10%) contributes to the schooling of children and their school attendance. Thanks to the income of the production, the peasant pays the expenses of the

supplies. Nowadays, this income becomes more and more insufficient because these expenses often exceed the income of the populations.

Literacy in local languages in the Commune also faces infrastructural problems. For the literate students and their instructors can only meet by squatting the classrooms of the schools when they are available or any space of a public building in their village. In this case, learners and their supervisors have no other choice than the space created by the shading of trees, delivered according to the weather and all kinds of distractions.

The SWOT analysis model applied to the results of this study identified the strengths, weaknesses, opportunities and threats of the activities generating

income in the Commune of Athieme. This analysis model is represented by FIG



**Figure 3:** SWOT analysis model applied to the socio-economic impacts of income-generating activities in the municipality of Athiémé.

**Source:** Field Survey Results, July 2014

### 3-5 Some Suggestions for Strengthening Income Generating Activities

#### 3-5-1 At the agricultural sector level

IGAs trigger, on the one hand, a dynamism and a process of development at the level of the localities in which they are exercised and, on the other hand, they constitute a means of stimulating the population in development projects (TOMETIN, 2010) . To support and help this determined determination of the population to emerge from poverty, concrete actions will have to be carried out. These include:

- rehabilitate rural access roads to facilitate the transport of cultivated products to the markets;
- to promote and develop farming techniques adapted to women at the level of production, processing and marketing;
- improve the evacuation system for agricultural products;
- support the diversification of income-generating activities in this case for actors in the agricultural sector (market gardening in particular, which mobilizes many women);
- The municipal authorities and the CeCPA should focus and solicit funding to promote the five promising sectors of the Municipality of Athécémignées in Table I.

**Table I:** Supporting dies in the municipality of Athieme

<b>Filières</b>	<b>Justifications</b>
Market gardening Existence of bodies of water and lowlands	Oil palm Traditional cultivation, favorable soils
Corn Crop and cash crops	Plantain Banana Favorable soil, enters the food habit
Rabbit, grasscutter, snail Existence of greenery all year round for rodents	
Market gardening Existence of bodies of water and lowlands	Oil palm Traditional cultivation, favorable soils
Corn Crop and cash crops	Plantain Banana Favorable soil, enters the food habit

**Source:** Field Survey Results, July 2014

If it is an activity to be defended and even punished by law, it is the felling of trees for the manufacture of charcoal, because it constitutes a pressure exerted by the man on the natural resources (the forest etc.). This activity may well be supplemented by the planting of fruit trees, whose fruits can be sold and generate income in the off-season. For example, the " bread " tree

produces fruit in July, August and September, which corresponds to the school holiday period. The cultivation of this well-promoted tree can, in the medium term, enhance household incomes and in the long run constitute an export product at the municipal and even national level.

### **3-5-2 At the social level**

It would therefore be appropriate at the municipal level to optimize the contribution of women to the local economy and consequently to the development of their community by adopting measures likely to solve the specific problems they encounter as socio-economic actors (Hugon , 2009). To reach such an ideal, you will need:

- give priority to the situation of children, especially girls, providing them with education and technical training, measures which would have the effect of reducing illiteracy, ignorance and marginalization;
- create or at least increase the number of literacy centers and encourage non-literate women to enroll in literacy classes;
- improve women's access to land and create appropriate technologies to increase productivity;
- Revitalize existing clusters and create others through training sessions on the benefits of group work.

### **3-5-3 At the level of MFIs and trade**

With regard to the problems relating to commercial activities identified in the commune during the field surveys, it would be preferable to:

- integrate micro-credits into a holistic approach to development so that interest rates stop crushing debtors;
- sensitize MFIs on the increase in the amounts of credit granted. This will allow the groups to have sufficient financial means;
- facilitate the access of loans to the poorest by the establishment of a simple mechanism, including the creation of a digital database that groups together the identity of the beneficiaries in order to reduce the annual expenditure related to the reconstruction of contract;
- increase rural incomes through better access to capital and markets. Integrated approaches need to be implemented at all stages of the cycle, from production to marketing and processing;
- renovate the Athiémégan market, which is currently in a state of disrepair, in order to converge merchants and local products while harmonizing the costs of these products;
- bring closer the services of the microcredit institutions towards the beneficiaries;
- improving the quality of existing tracks and opening alternative routes would facilitate the supply of raw materials and the flow of products.

## **CONCLUSION**

Income-generating activities play vital roles in the economy of the Commune of Athieme. At the end of this research, it appears that there is a wide range of income-generating activities of which the two main types are: agricultural production and agro-food processing. Agricultural production is provided by 89% of men, although there are also women who help their husbands and others who undertake market gardening on their own: crincrin cultivation for example. Indeed, agri-food processing is the business of women: 92% of women surveyed find themselves there. The study of the impact of profitability indicates that IGAs have generated a significant income in households, which allows them not only to invest in food, but also in schooling, health care, housing, means of transport ... These effects would be more satisfactory if we succeeded in removing certain constraints such as: illiteracy or low level of education of actors, women, lack of training of actors, insufficient credit, the conditions of access to credit, the scam ...

Faced with these constraints, suggestions for revitalization in the short, medium and long term have been listed. To do this, the cooperative grouping of certain IGAs would be an important asset. Thus, the craftsmen are invited to a grouping in the form of a cooperative in order to stop the unfair competition of the products of importation. Actors and women processors are also called on to revive the groupings in order to benefit from larger credits and to increase their productions. This would allow them to move from precariousness to a much more reasonable standard of living. These various measures will allow the population to start a real process of poverty reduction.

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