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Agricultural Raw Materials and the Emergence of Agri-Food Industry in Côte d'Ivoire

Noufou Coulibaly[1*], Yapi Yapo Magloire[2], Kone Siaka[1] & Kouassi Yao Daniel Mardochée[3]

[1] Department of Management, Business and Applied Economics, National Polytechnic Institute Houphouet Boigny, Yamoussoukro, Côte d'Ivoire

[2] Agriculture and Animal Science Department, National Polytechnic Institute Houphouet Boigny, Yamoussoukro, Côte d'Ivoire

[3] Higher School of Agronomy, Agroeconomy section, National Polytechnic Institute Houphouet Boigny, Yamoussoukro, Côte d'Ivoire

[*] Noufou Coulibaly, Department of Management, Business and Applied Economics, National Polytechnic Institute Houphouet Boigny, Yamoussoukro, Côte d'Ivoire. Email: noufou_coulibaly@yahoo.fr

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Abstract

The agricultural sector in Côte d'Ivoire still faces difficulties like, low modernization, low yield, low rate of processing, poor marketing, despite the government efforts in the Agri-Food Industries (AFIs). The purpose of this study was to assess if local agricultural products were sufficiently used as raw materials by the AFIs. The Leontief model was used to estimate vertical and horizontal coefficients, based on data from the 2013 employment resources table of the ivorian economy, in order to appreciate the dependence on raw materials supply, between agricultural sector, the AFIs and the international market. This study showed that, the ivorian AFIs were weakly dependent on the external market (20%). Despite the large supply capacity of the agricultural products (about 95%), very few were used as raw materials (5 to 15%) by agro-food industries because of the weak industrial fabric, due to several constraints as the hostile administrative and political environment and the lack of industrial culture. The processing rate was estimated at 5% for cashew, 15% for cocoa and coffee and less than 1% for food crops. We identified the determinants for the emergence of an efficient industrial fabric namely healthy business climate, a prerequisite for attracting domestic and international investors.

Keywords

Agri-Food Industry, industry dependence, ripple effect, agricultural sustainable development, branch integration level, value-added branch, intermediate-consumption branch, end-use branches

1. Introduction

According to economic theory, when Agri-Food Industries (AFIs) use agricultural products as intermediate inputs (raw materials), their dynamics suggest that they address a high demand for goods from agriculture. This has the effect of increasing farmers' income, reducing rural poverty and promoting standardization and intensified agricultural production to meet both quantity and quality demands. Also, with the job creation they generate, AFIs help the agricultural sector to be decongested, by moving the surplus of agricultural labour towards them, in addition to adding value to agricultural products. In view of the above advantages, it can be argued that AFIs can play a leading role in agricultural development and poverty reduction in Africa and especially in Côte d'Ivoire (Rastoin & Ghersi, 2010; Noufou, 1993). And yet, according to the FAO and UNIDO (FAO, 2012; Chevassu, 1997), the Agri-Food Industries (AFIs) are a palliative to sustainable development. They are likely to promote agricultural growth. Through the development of food industries and agribusiness, access to markets, financing and technical assistance can be facilitated for smallholder farmers, thereby effectively involving them in modern value chains. AFIs also help achieve food security.

Since independence in the early 1980s, Côte d'Ivoire, a forest country in West Africa, has experienced outstanding economic growth. The Ivorian economic model was often cited as an example in West Africa and labeled the "Ivorian success story". Indeed, the importance of raw materials, training, professional experience, capital and national entrepreneurs for sustained development in the industrial sector prompted the Government to put in place from 1968 institutional, legislative and financial means to promote the creation of national industries (Kanvally DIOMANDE, 1990). It is in that spirit that, the Government embarked, alone or together with the foreign private sector, on massive public industrial investment during the 1970s to achieve the objectives set by its development model. This led to strong growth in the industrial sector and, in turn, in the economy. The strategy was based on significant foreign input (money, technology, assistance) and local development of agricultural potential, with a view to the development of Agri-Food Industries (AFIs), according to Chevassu (1997).

Despite the Government's investment efforts, the agricultural sector still faces difficulties: low modernization of farms (3%), weak yield (17-25%), unachieved self-sufficiency and/or food security, significant post-harvest losses (30-70%), low rate of processing (10%), poor marketing (30-40%), high poverty (47%), etc. The country's economic development model has led to serious economic and financial imbalances that have inhibited the emergence of a dense industrial fabric. These imbalances reached their peak in the 1980s and resulted in the implementation of Structural Adjustment Programs (SAPs), which gradually led to the economic and political crises the country has been experiencing since 1999. In light of the foregoing, one may ask the following questions:

- Is the agricultural sector lived up to its mission as a raw material supplier to Agri-Food Industries? Or, does the Agri-Food Industries sector request agricultural products for its raw materials?
- What were the failures behind the AFIs sector not leading the Ivorian agricultural sector towards sustainable development?
- What might be the constraints to the emergence of a harmonious industrialization?

In response to these concerns, we found it appropriate to analyse the inter-sectoral relations of the Ivorian economy, especially the Agro-Food Complex (AFC), in order to understand the structure of relationships among the branches of the economy, with a view to identifying the failures of sustainable development in the agricultural sector.

The purpose of this study is to analyse the inter-sectoral dependence of the Agri-Food Industry in Côte d'Ivoire. Specifically, this involves: Evaluating the raw material dependence of Ivorian Agri-food Industries on the national and international markets. In other word, to assess, if local agricultural products are sufficiently used as raw materials by the agri-food industries; or, to appreciate the level of commercial exchange between the agricultural sector and the agri-food industries (AFIs dependence on raw materials). Also, to identify the constraints to and opportunities for sustainable industrialization, and to make recommendations for sustainable development in the agricultural sector, and in other hand, for a rebalancing of the Ivorian economy.

2. Literature Review

This section discusses some studies of tools and practices for analysing the structures of agri-food industry sectors.

Rastion and Ghersi (2010) in their studies on the global food system: "*Concepts* et *méthodes*, *analyses* et *dynamique*" applied to the 2005 Supply & Use Table (SUT) or Input-Output Table (IOT) of France, the calculation of horizontal and vertical coefficients. These are indicators that characterize the Agri-food complex. The study shows that agriculture, historically a high value-added sector, is seeing its structural coefficient rise and become closer to all other sectors as it modernizes. This is justified by the different industrial strategies implemented.

As for Koko (2013) in his study on "*The role of agri-food industries in agricultural growth: Case of Côte d'Ivoire*", raised the question to know what was the impact of agri-food industries on agricultural growth in Côte d'Ivoire. The descriptive study, based on the 2008 Supply & Use Table, allowed him to analyse the horizontal coefficients, the vertical coefficients and the degrees of integration of the various branches of AFIs. With these indicators, it was possible to assert that agri-food industry and agriculture were poorly integrated, given the 17% of agricultural production entering the AFIs processing process. In other words, his study showed that with this structure, AFIs were not determinants of agricultural production and growth. In addition, He noted that 93.96% of the value added of the entire agri-food production complex originated from agriculture, and that the consumption of raw agricultural products

accounted for 58.34% of household food consumption compared to 41.3% for products processed by AFIs.

The definition of these indicators and their calculation methods provide the necessary information to develop the Input & Output Table (IOT), the Overall Economic Table (OET) and the Social Accounting Matrix (SAM), which are major economic analysis instruments. Leontief (1936), is the forerunner of the input-output table, commonly referred to as SUT. It was at Harvard University, then a professor, that Leontief invented this table which is a synthesis of the exhaustive representation of François Quesnay's economic flows, of Keynes' demand logic and of Leon Walras's hypothesis on general equilibrium of the economic system, forming the theoretical basis for the model (Buda, 1995). The study of interrelationships among the different branches of the economy underpinned by this table began in the early 1930s leading to two articles published in 1936 and 1937 in *The Review of Economics Statistics* and both included in his 1941 book entitled *Structure of the American Economy, 1919-1929* (Akhabbar & Lallement, 2011). In his first article of Leontief (1936) presented the SUT not only as an extension of François Quesnay's Economic Table, but also as a descriptive and statistical analysis tool providing "an empirical background to the study of the interdependencies among the different parts of a national economy, based on the theory of general economic equilibrium" (Akhabbar & Lallement, 2011). In his second article (Leontief, 1937), he better outlined the theoretical basis of the SUT with strong hypotheses linking intermediate and final productions of goods and services. Also, the advent of computing in the 1950s improved the development of the SUT and promoted its use as a model of economic analysis (Institut de la statistique du Québec, 2011). It is therefore a valuable framework for the analysis of trade flows between Agri-Food Industries and Agriculture.

The IOT or SUT analysis is based on a linear equation system showing the distribution of a branch's production across the economy (Yu et al., 2010). The SUT is a dual entry table that tracks all economic transactions in goods and services. It helps describe the structure of the national economy and product flows, which makes it useful for prioritizing operations and highlighting the driving branches and the driven branches of the economy. It is considered, not only as a predictive medium to predict the effect of a given policy on the production of branches, but also as an economic impact analysis tool, because it helps measure the effects of the variation of an element of final demand for a strategic product on the entire economy (Zaoujal, 2012).

3. Methodology

3.1 Method

To meet its objective, this study is conducted as follows:

- First, assessment of the dependence of branches of the economy on the world market. This will involve assessing the level of dependence of the branches on the world market. A strong external dependence could be a handicap to the revival of the agricultural sector's economy, partly because

of the decrease in the local demand for agricultural products (low local value addition to agricultural products), and of shocks or price variations on the international market.

- Secondly, we will make a diagnosis of the constraints to industrialization, and;
- Finally identify the opportunities or determinants of the evolution of industrialization in Côte d'Ivoire.

3.2 Model of Assessing the Dependence of Branches of the Economy

The Input-Output Table (IOT) or Supply-Use Table (SUT) invented by Leontief (1936) is the ideal tool for analysing trade flows between Agri-Food Industries and Agriculture. To meet the objectives of the study, the Vertical coefficients (calculated from the Supply matrix) will be estimated. The SUT is summarised as follows:

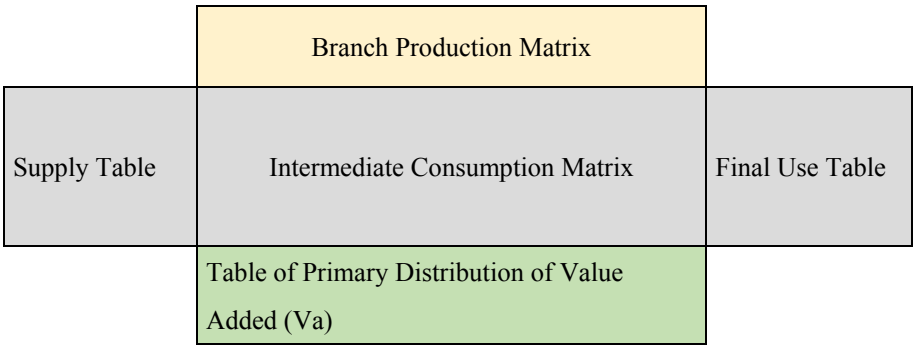


Figure 1. Simplified Representation of an SUT

The indicators used to assess the dependence of branches of the economy on the national or international market are as follows:

The estimation of the share of imported resources in the total resources of a branch is the indicator that will help assess the dependence of branches on the world market. This indicator (C) is part of the "Vertical Coefficients" and is calculated as below:

$$c = \frac{M+\frac{MC}{PB+M}\times M+DD}{RT} \quad (1)$$

Where:

PB: Gross Production by a Branch; RT: Total Resources; M: Imports; MC: Commercial Margins;

MC_M: Commercial Margins on Imports; DD: Import Taxes.

This equality will make it possible to determine the share of imported resources in the total resources and to analyse the dependence of branches on the international market. Given the sensitivity of raw material supply, the following scale was adopted:

- If 0≤C≤15%, meaning that maximum 15% of raw material demand comes from international market, then the branch is said to be slightly dependent.
- If 15≤C≤50%, then the branch is averagely dependent on the international market;

- If C>50%, then the branch is said to be highly dependent on the international market.

3.3 Data of the Model

The data used in this study comes from the 2013 Supply-Use Table (SUT) of the Ivorian economy, after an investigation in the Ministry of Planning and Sustainable Development in Côte d'Ivoire. This table is composed of 44 branches (Institut National de Statistique de Côte d'Ivoire, 2016), but grouped into 21 branches as part of this study. The Agro-Food Complex (AFC), includes the agricultural and food industry sectors. The agricultural sector is composed of 5 branches that are: Subsistence Agriculture (SA), Industrial or Export-Oriented Agriculture (IEOA), Breeding and Hunting (BH), Fishing and Fish Farming (FFF) and, Animal and Fish Production (AFP). The agro-industrial sector is composed of 7 branches as follow: Grain Processing and Manufacture of Starch Products (GPMSP), Cocoa and Coffee Processing (CCP), Oilseed Industry (OI), Bakery, Pastry and Pasta (BPP), Dairy Industry and Fruit and Vegetable Industry (DIFVI), Beverage Industry (BI), Tobacco Industry (TI).

4. Results and Discussions

4.1 Dependence Analysis

The analysis of the SUT resource structure, based on the estimation of *the share of imported resources in the total resources (C)*, is the indicator that will help assess the dependence of the branches. This indicator is part of the vertical coefficients, and its formulation is illustrated by equation 1. Calculations of this indicator have been estimated and compiled in Table 2.

Taking the Agri-Food Complex (AFC), it results from the Table 1, above that about 83% of resources are produced locally. So only about 17% of resources depend on the world market. The dependence on the world market is therefore relatively average according to our scale. When the AFC is broken down according to these two major entities, agriculture only depends on the international market by about 5% compared to about 20% for AFIs. These rates illustrate, on the one hand, a slightly dependence on the world market, in terms of supply of raw materials, and on the other hand, the strong internal capacity to produce resources (yams, cassava, taro, banana, rice, maize, vegetables, coffee, cocoa, cashew, mango, etc.). However, it also appears that some individual branches making up the aggregated branch of AFIs, i.e., Grain Processing and Manufacture of Starch Products (GPMSP), Meat and Fish (AFP), Dairy Industry and Vegetable & Fruit Industry (DIFVI), and Beverage Industry (BI), are dependent on imports by 46.21%, 43.88%, 27.71% and 21.80% respectively.

The relative high rates of reliance of these branches on the world market for their supplies (wheat, corn, rice, meat, milk, fruits and vegetables, etc.), or the averagely dependent on the international market of these branches, denote an issue of food security and sovereignty, as indicated by the Government in "Stratégie Nationale de Développement des Cultures Vivrières" (Ministère de l'Agriculture, 2013). For averagely dependent branches such as meat and fish, dairy and vegetable industries, the high import rate is mainly due to low domestic production. This shows a shortfall. Research for better domestic

production, and the development of entrepreneurship can be solutions in the fields of breeding, fish farming, fruit production and market gardening.

Table 1. Structures for Total Resources of Branches in Percentage Terms

Proportion relative to Total Resources (%) Branches	Imported Resources [c] (%)	Local Resources Produced (%)
Subsistence Agriculture (SA)	7.31	92.69
Industrial or Export-Oriented Agriculture (IEOA),	3.11	96.89
Breeding and Hunting (BH)	11.70	88.30
Fishing and Fish Farming (FFF)	**45.04**	54.96
Animal and Fish Production (AFP)	**43.88**	56.12
Grain Processing and Manufacture of Starch Products (GPMSP),	**46.21**	53.79
Cocoa and Coffee Processing (CCP),	0.52	**99.48**
Oilseed Industry (OI)	6.42	93.58
Bakery, Pastry and Pasta (BPP),	2.35	97.65
Dairy Industry and Fruit and Vegetable Industry (DIFVI),	**27.71**	72.29
Beverage Industry (BI),	**21.80**	78.20
Tobacco Industry (TI),	12.94	87.06
Wood Industry (WI)	12.10	87.90
Chemical Industry (CI)	24.05	75.95
Construction and Public Works (CPW)	0.02	99.98
Energy and Water (EW)	0.13	99.87
Miscellaneous industries (MI),	17.07	82.93
Oil Extraction/Mining and Refining Industries (OEMRI),	52.95	47.05
Public Services (PuS),	10.45	89.55
Private Services (PrS),	9.39	90.61
Other Branches (OB),	38.26	61.74
Total for Agriculture	**5.21**	**94.79**
Total for AFIs	**20.23**	79.77
Total for AFC	**16.79**	**83.21**

Source: Our calculations based on 2013 SUT at current prices (Ministère de l'Agriculture, 2013).

Key: Agri-Food Industries (AFIs), Agri-Food Complex (AFPC).

The dependence on the international market of the Ivorian economy, being weak, in the light of our results, leads us to assume, that Côte d'Ivoire has enough agricultural raw materials (95%) to develop its Agri-food industries; and indirectly, the sustainable development of the agricultural sector. It is also a great opportunity to attract and encourage national and international donors, to invest in the Agri Food Industries sector, and to develop agribusiness.

According to Gerard De Bernis (2012), FAO & ONUDI (2010), industrialization is traditionally advocated as the best way or strategy to lift people out of poverty, based on the argument that it generates strong *economies of scale, a high* potential for increased productivity, and therefore, *in fine*, much higher development than the primary and tertiary sectors. This justifies the merits of the orientation of the Government's economic policy. AFIs' low raw material dependence on the international markets illustrates the abundant existence of raw materials, which can support their development in Cote d'Ivoire. With this asset, a low rate of processing of agricultural products is noted. The processing rate is estimated at 5% for cashew, 10 to 15% for cocoa and coffee (Industrial or Export-Oriented Agriculture), and less than 1% for food crops (Subsistence Agriculture), according to the Government of Côte d'Ivoire (Ministère de l'Agriculture et du development rural (2012, 2016)). This finding also reflects poor coordination between the agricultural sector and the industrial sector and, therefore, macroeconomic policy incoherence, in the sense that the industrial sector was recommended to boost growth in the agricultural sector. What could justify this record?

The effort to make private capital and foreign firms Ivorian, which has been the Government's main strategy for industrializing the economy since the 1970s, involved enticing foreign investors to settle in Côte d'Ivoire with tax facilities; and then taking equity stakes in these foreign firms for them to become domestic firms within 10 to 15 years. Contracts provide for the transfer of these assets and the assistance required for skill transfer to nationals during a transitional period. For multinationals, it was a question of looking for ways to ensure that nationals are prepared through them so that they can play an active role at the national or regional level, or someday at a global level in the management of such big transnational firms. For state-owned firms, the strategy was to recruit European executives and technicians.

Unfortunately, this policy to make expatriate staff and private capital Ivorian has not allowed Côte d'Ivoire to see many entrepreneurs emerge, in turn, to build a dense industrial fabric, despite conducive factors such as the development of general infrastructure, telecommunications, higher service level than anywhere else in Sub-Saharan Africa, as well as rural development offering a wide variety of agricultural products to processing industries.

One could therefore wonder why the strong growth of the local market during the first two decades of independence induced by the initial choices of the (liberalism, political stability, external openness, voluntarist growth) model as well as the abundant financial resources that the strategy entailed did not result in the building of a dense fabric of industries? So, did the Ivorian strategy present serious hazards

in terms of skill transfer? A failure of this strategy may jeopardize continued industrial growth. Yet, this hazard is inherent in successful unbalanced growth through external openness.

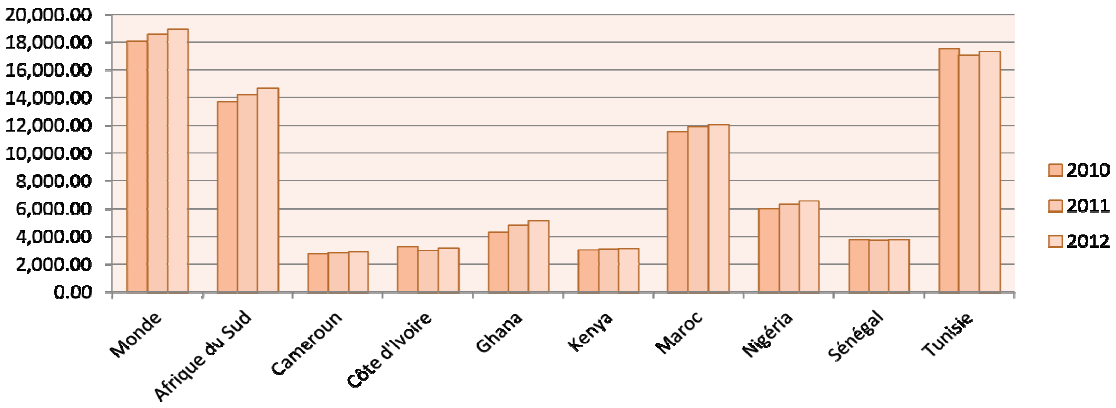
Indeed, several constraints were behind this failed industrialization, and are grouped into three broad categories: first, those related to the nature of the industry; second, those related to the hostile administrative and political environment; and third, those related to the lack of industrial culture. These constraints are the same as those identified by Chevassu and Valette (1977) and N'Guettia (2000, 2012).

4.2 Constraints to the Emergence of Sound Industrialisation

4.2.1 Constraints Related to the Nature of Industry

If few Ivorians (about 5%) have created industrial firms, it is certainly not because of a lack of entrepreneurship, as private initiatives have emerged in the craft, trade and service sectors over the last decade. It is therefore reasonable to ask whether the specificities of the industrial sector are not responsible for the sector's low attractivity to local entrepreneurs, including:

- *The indivisibility of industrial investments*, which is a barrier to entry in relation to real estate, trade, crafts, transportation or services. The industry is considered a capitalistic sector. The profitability for these capital investments is determined by the market size, which allows for economies of scale, and by the rate of utilization of production capacity, which usually requires a longer maturation period than other sectors to reach cruising level. In Côte d'Ivoire, the market for industrial products is limited by the size of the population and its low purchasing power. Large potential consumers of manufactured goods belong to advantaged social classes. The strong income growth generated by the success of the Ivorian model until the outbreak of the crisis encouraged the privileged strata to adopt the consumption model conveyed by expatriates, which explains their preference for imported industrial products over local products. For all these reasons, the import-substitution industry could only develop with strong protection barriers (tariffs, quotas and export licenses, tax exemptions by investment codes). Despite all the facilities granted to the industry by the Ivorian Government, the profits that this sector could expect remained very limited compared to those offered by competitive sectors. Therefore, how to convince the still very small number of Ivorians with significant savings capacity to invest in the industry, knowing they will have to wait at least 4 to 5 years before having a chance to draw profit from their capital.
- *The higher technicality* (competence, professionalism, etc.) of the industry is another barrier to entry. As illustrated in Figure 2, the labour productivity of Ivorian firms is very low compared to that of the Maghreb countries and South Africa, or even lower than that of Nigeria, Ghana and Senegal.



Source: World Bank, 2012 in IOS Partners (2014)

Figure 2. GDP Per Employee (Labour Productivity in Firms)

As a matter of fact, the industry requires greater managerial capacities than other sectors. *Organizational capacity*, fostered by integration into national and international technical, financial and information networks, which facilitates the ability to forecast and plan technological changes and innovations, and is essential to competitiveness is also an entry barrier.

- *The business climate*, which helps (or not, if bad) firms to emerge, is also an explanatory factor for the attraction of Foreign Direct Investments which can be a factor in the industrialization of the country. Thus, labour productivity is affected as shown in Figure 3 above. With the exception of Cameroon and Kenya, Côte d'Ivoire has lower labour productivity in firms, than most African countries, and the average of the world's countries. It is not healthy in Côte d'Ivoire, because the country has been experiencing an economic and political crisis since 1999. Based on a CIRES (2014), out of a panel of 3,000 firms, the estimate of the cost frontier indicates that no Ivorian business is 100% efficient. The overall economic efficiency is estimated at 0.528, indicating that Ivorian firms produce 52.8% of the efficiency of production factors. Their efficiency is only moderate.

4.2.2 Constraints Related to Administrative and Political Environment

- The policy to make private capital and foreign firms Ivorian frightened investors, who had to change their nationalities to avoid tax pressure and a transfer of their firms and skills, and at the same time to benefit from funds originally intended to revive Ivorian SMEs, which is a circumvention of the then legislation in force.

- *Lack of policy coherence*. For example, the Government-endorsed import of rice inhibits an efficient revival of the local production capacity for this commodity, which is essential for food security and food sovereignty.

- *The cost of production factors* such as petrol, electricity, water, credit or capital, and communication to a lesser extent, is today the most significant constraint to the development of SMEs. For many promoters, the only concern for the Government is to bail out its coffers without worrying about the impact of tax burden on firms. In addition to these, there are shortcomings in the judicial system, which only increase banks' reluctance to participate in the financing of SMEs/SMIs. They complain that they have difficulties in recovering their debts and in enforcing guarantees. It takes, according to them, three to four years to have court permission to access the guarantees given. By then, the debtor has time to arrange their insolvency.

- *Administrative burden* for setting up a business has significantly improved with the creation of CEPICI (Investment Promotion Centre). However, the conditions to settle, to import production factors, to export production, etc., are still difficult (see Figures 3 & 4) because of administrative and customs harassment (subjective cumbersome procedures). It is also observed that some nationals seem to have more difficulty than large foreign firms in obtaining licenses, especially when they do not belong to social groups linked to political leaders network. Figures 4 & 5 show that taxation is very high in Côte d'Ivoire, compared to countries around the world.

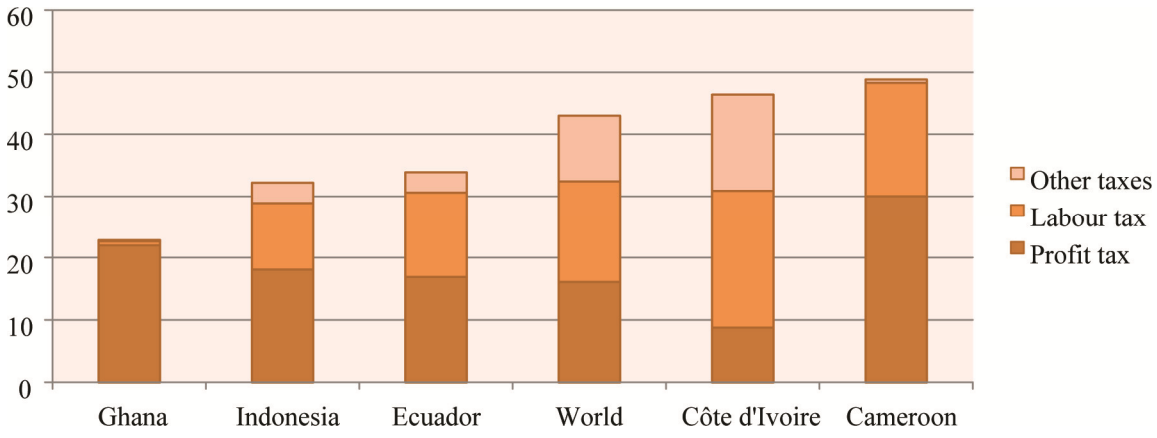


Figure 3. Taxation Rates Compared in 2014

Source: Paying taxes 2014, Ministère de l'Industrie de Côte d'Ivoire (2014).

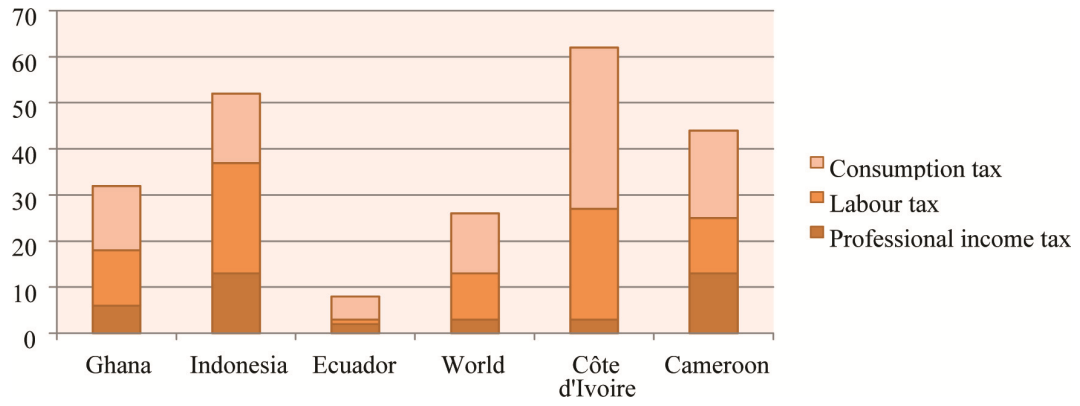


Figure 4. Time Spent on Tax Related Formalities (Hours)

Source: Paying taxes 2014, Ministère de l'Industrie de Côte d'Ivoire (2014).

- *Poor governance* also remains a major handicap to the emergence of a broad industry base which, even the single window strategies and the political will to talk about could not stem.

- *Lack of* technical and economic *information* in the different sectors of the economy, a necessary ingredient at the time of the creation or during the operation of a firm also remains a handicap.

- Also of note is *the weak competence of government entities responsible for promoting firms* in feasibility and market studies. While profit taxation is the main argument in favour of Côte d'Ivoire, it is clear that the tax burden on labour and consumption (especially the import of inputs) largely offsets this competitive advantage.

In light of the radar on the competitiveness of Ivorian companies illustrated in Figure 5, the country remains the least competitive compared to countries in Africa, Latin America, and Asia. All this illustrates the deficiencies in the emergence of a dense industrial fabric.

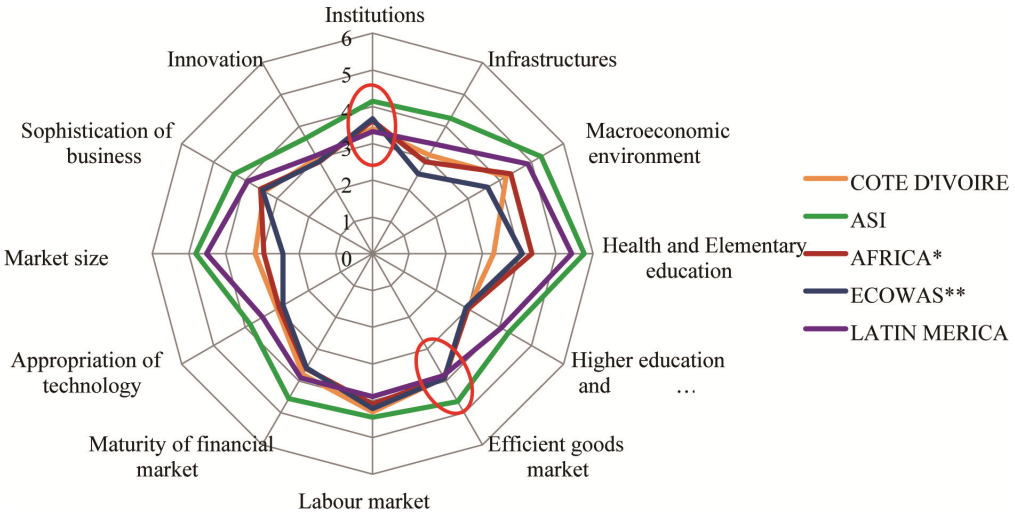


Figure 5. Analysis of the Competitiveness of Côte d'Ivoire and of Selected Countries

Source: WEF 2013 (Ministère de l'Industrie de Côte d'Ivoire, 2014).

4.2.3 Constraints Related to Lack of Industrial Culture

Indeed, we believe, like Mathieu (1990), that the fragility of the African economic sphere is due to cultural logics (solidarity, mutual aid ...) that are incompatible with the business world in the industrial sector. These traditional behaviours create a community constraint of rights and obligations that largely determine individual economic calculation. Africa is thought to be a huge community transfer society, which partly explains the failure of macroeconomic models. Cultures and traditions do not respect the rules of the game of market economy, and induce strong family and social pressures, compromising the economic calculation, whereas this should ensure business balance through the professional virtues of rigor, sober management, sustained operation, and self-financing. Individuality is only in relation to the group and for the group in the Ivorian culture. Rationality, rigor, diligence, and professionalism are not Ivorian entrepreneurs' strong points. According to our investigations, 65% of Ivorian firms suffer from poor management or governance, and 39% from poor business organization; about 33% for financing reasons. 83% of Ivorian firms experience these failures, reflecting an overall problem of governance, mainly due to family and social pressure.

We agree with Chevassu (1997) statement that, the low level of industrialization and the small number of Ivorian entrepreneurs are much more due to psycho-ethnological factors ("mentalities are not suited to industrial matters") than to large foreign firms accused of stifling any attempts to emerge, and to technical factors (lack of training, funding).

4.3 Determinants for the Emergence of an Efficient Industrial Fabric

Based on the constraints to a powerful industrial fabric presented above, and in accordance with the guidelines of the Ivorian Government (Ministère de l'Industrie de Côte d'Ivoire, 2012), actions have been identified and are as follows:

- The Government will need to develop policies that are consistent with each other; instil good governance for a healthy business climate, a prerequisite for attracting domestic and international investors.

- The Government should stimulate and encourage a sound integration of training and research institutions with the business world in order to improve the professionalism of the country's future executives.

- It will also need to identify and coach national investors' first, then international ones. This will have the benefit of forming a class of investors.

- The Government should develop an industrialization program, in which the following actions need to be taken:

  - The Government should encourage banking in order to build up funds in financing institutions (banks, microfinance institutions) by facilitating access to such institutions, like *Orange Money* outlets. This will have the advantage of building up capital and selling it at motivational rates for investors (maximum 5%).

- Government entities responsible for promoting firms (Ministry of Industry, CEPICI, Chamber of Industry and Commerce, etc.) should direct investors to national or international research firms for feasibility and market studies.
- Government entities responsible for promoting firms (Ministry of Industry, CEPICI, Chamber of Industry and Commerce, etc.) should direct investors to national or international research firms for feasibility and market studies.
- Adopt outsourcing or fragmented production processes as an opportunity. Indeed, this globally advocated strategy distributes the production of the different material and immaterial (services) components across the planet depending on what the actors in different countries can offer. Outsourcing thus remains an opportunity for the Ivorian economy, in sub-regional value chains, in terms of extra-industrial production, to compensate for technological, and managerial and organizational capacity failures.

5. Conclusion

It can be noted that the agricultural sector's dependence on resources is low (5%), while that of AFIs is relatively high (20% about). Our study shows that about 80% of the raw materials of the Agri-Food Industries are produced locally and only about 20% are imported. This dependence is more or less pronounced with the Grain Processing and Starch Product Manufacturing branch which imports up to 46.21% of its total resources used in production. It can thus be argued that the commodity dependence of agri-food industries is low, even if, this reveals a problem of food security and sovereignty.

Production in the agricultural sector is sufficient as raw material to revive the development of the agri-food industry and, by extension, to induce a sustainable development of the agricultural sector. So, it also emerges from this study that, the supply capacity of agricultural raw materials (about 95%) is a great opportunity for the development of the Agri-Food Industries and Agribusiness, while the rate of processing of agricultural products is very low (1 to 15%).

This finding also reflects, the poor coordination between the agricultural sector and the industry sector, and therefore an inconsistency of macroeconomic policies, in the sense that the second sector has been recommended to boost the growth of the first one.

The Government has gradually moved away from enforcing the rules of market economy, thereby contributing to the emergence and development of the economic crisis that has lasted since the early 1980s. The Ivorian Government indeed tried in 1968 to put in place significant means and measures for the creation of mainly national SMEs/SMIs. However, the conversion of state bourgeoisie into private entrepreneurs did not occur.

The low level of processing of agricultural products results from the weak capacity of the industrial fabric, due to several constraints. In our view, this industrialization failure is due to the specificities of the industrial sector, the lack of industrial culture and the constraints related to the hostile administrative and political environment. Transition in the aftermath of independence proved to be

slow and difficult due to very diverse factors: fast technical progress, very small size of national market, weight of short-term profitability, multinational groups' strategies, and weight of cultural and social factors.

In light of the above, actions have been proposed, including:

- The Government should develop policies that are consistent with each other, and work towards a healthy business climate.
- The Government should stimulate and promote a sound integration of training and research institutions with the business world.
- The Government will need to work towards a technical and financial support program for SMEs.
- In light of the foregoing, we recommend the encouragement and attraction of donors to develop Agri-Food Industry, entrepreneurship and agribusiness. We also recommend the development of research on imported products, whether or not locally produced.

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