Cashew Chain Value in Guiné-Bissau: Challenges and Contributions for Food Security.
(A Case Study for Guiné-Bissau)

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Abstract

Guiné-Bissau is a recent example of political stabilization after a recent period of instability, where the international community can play an important role in cooperation and development, but with innovation and new effective policies. Food security is certainly one of the big issues to be addressed and cashew production and respective chain value one of the main opportunities to improve the quality of life for many families. Guinea-Bissau can be considered one of the most fragile countries in Sub-Sahara Africa, but at the same time with enormous economic potential. Poverty alleviation is very much dependent from agricultural activities and agribusiness will be always at the core of the most possible solutions. Within those possible solutions the contribution of the cashew sector is crucial, which has been playing already a key role in the economy and in the family survival equation. More than 80% of the families depend from agricultural activities and most of them are linked to the production of cashew. This crop represents more than 90% of exports, and at the same time is responsible for income alleviation resources at local family base. However Cashew expansion is a very recent phenomena, with about 20 years of success, beyond all political "turmoil". Today the country is the second biggest in Africa, after Ivory Coast, and the fourth worldwide (also after India and Vietnam). Exports were around 20 thousand tons in 1990 and close to 200 thousand tons in the last year's production. But the most important factors to be considered in a cash crop business is also a very "unique" structure of production, mostly family based and where the average dimension of production per family is dominantly between 1 to 2 hectares. Very much related to those structural characteristics, which vary by region is the role of this crop in the food security dimension of the families, which is calculated to represent in average 4,8/12 months of income needs for food. The research address the Caju chain value in Guiné-Bissau, added value possibilities with transformation, better markets, improved institutional environment and other alternatives aiming to promote the global value creation but also the dynamics of the food system able to promote the family welfare and a sustainable development process.

Key Words: Guiné-Bissau, Cashew Agro-business Chain; Food security

1 - Introduction

Cashew represents one of the most successful food chain values, in regard to specific tropical products, in the last decades. It is recognized that biological diversity is bigger in the tropics, and the same can be said in regard to food consumption crops. The first globalization in the XV century provided the moment for a huge change in the Europe vision of the World but also in the attitudes, human behavior and, of course, in technology and consumption. In food habits it is always an important exercise to think about our consumption habits (European an even worldwide occidental way of living) without the

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introduction of many food items, innovation based on the tropical and subtropical zones, following the identification of useful crops and development of specific crop production technologies.

This exercise will stress the importance of the food innovation a “couple of centuries” ago, but still important today. For example, imagine our meals without potato, rice, corn, coffee, cacao, and many others including tropical fruits. Most of the time, this process, introduction of “new food products” into consumption, has been done in the last century. For example, for coffee and cocoa this is the case, and more evident in “mass consumption terms,” only achieved in the last half century. The same can be said for cashew, which indeed is taking place in recent years, and mainly in the last decades, and where possibilities are far away from being already well explored (great consumption expansion possibilities are expected and foreseen).

2 - Methods an Approach

The main arguments the authors used is always based on a production definition with a global perspective. That is, production means any process that combines more than one input, with some technology, to obtain a tangible or intangible output (tangible or intangible good) with present or future utility. This definition is centered in utility generation, focused in the consumption process, indeed the last step in any production chain. Tropical crops and respective consumption items derived from them should always be studied, on a chain perspective, including consumption, consumption behavior, as the “trigger” to support growth in production activities.

Cashew is indeed a crop introduced in India and Africa continent, identified in Latin America, most certainly in the North/Northeast of Brasil. It is a very interesting food crop, with intrinsic value in nutritional content, very rich in protein and energy. However its value in the market is clearly based on a luxury consumption type of food (“delicacy” item) and growth in the world market has been very strong in the last decades. Guiné-Bissau is one of the lusophone countries taking advantage of this opportunity of expansion, along with India, Vietnam, Ivory Coast and others.

An overview of the cashew market is an essential step, looking at production, processing/transformation and consumption distribution and respective evolution over time. Africa position and Guiné-Bissau specific situation overall in the sector are important issues to better understand the competitive position of the country and respective opportunities and challenges.

Guiné-Bissau cashew production growth and relevance in the world market is a recent phenomena, indeed with less than two decades. However, the potential of this crop in regard to value creation, exports and sustainable development process is enormous. However sustainability concerns will have to be present, because huge challenges and opportunities are on the way with present and future impact. The present research tries to address some of the most critical points on the chain value, and also to explore technological and institutional change opportunities to take advantage of this crop and agribusiness.

The paper uses at a SWOT system perspective analysis (strengths, weaknesses, opportunities and threats) and a set of agricultural development models, starting with the Induced Change and Innovation Model (ICI in Carvalho, 2004, 2013), where changes are always assumed to be made accordingly with a certain economic rational, and also taking into consideration a structural view of the food balance system evolution (World Food Security Equation Model – WFSE, Carvalho, 2013). Beyond that, it is relevant to consider the Demand Constraints rational/model (Carvalho 1989, 2014) in which the demand side of the food system is seen as the main driver of the technology and institutional changes.

Guiné-Bissau is a country situated in the West Coast of Africa, with 36152 Km2 and with a population around 1.5 millions. The estimation is 1 520 830 inhabitants, with 75% living in the rural areas, based on last available data (INE 2010). Population growth is around 2% per year , with expectancy of live of 47 years. In Guiné-Bissau it is estimated that 2 persons in 3 are below the poverty line (meaning less than 2 US$ per capita/day).

Poverty and food security are always linked, but not always dependent of each other. That is, it is possible to have a reasonable food system at a very low level of income; however it is not easy, and many times not possible. For low income level countries in tropical regions, however, to achieve a minimum of food intake and food security status is the most important challenge of the families, and should also be the base for public policy objectives.

Cashew in Guiné-Bissau represents more than 90% of exports, but also represents one of the main activities in most rural areas, and source of income. The estimations performed to evaluate the relevance of cashew production in the household economy and food intake, showed that around 40% in average of the food intake depends on cashew sales. Indeed, in most regions there is a price expressing the direct ratio between cashew and rice. This dada confirmed the responsibility of the cashew chain value in the country, at macro, but also at micro level.

The future evolution of the Chain Value for Cashew will have a deep impact in the country, and it is a collective responsibility, including the international community, to help finding out the best solutions to grow, to add value, and to have an inclusive evolution of the system. The results of the present research aim to contribute to those objectives and purposes. The paper is organized starting with the international market analysis, looking into the main players, production and consumption and defining the relative position of Guiné-Bissau in the cashew food chain, globally and in Africa region. It is stressed the good recent behavior and the main challenges for the future.
It is also demonstrated the relative importance of this sector to the country at macro level, but mainly in terms of food security of the families.

3 – Worldwide sector overview

India is the leading country after disputing the first place with Mozambique in the beginning of the seventies, assuming clear dominance in the market with the independence changes after 1974 in Mozambique. Cashew production was introduced most probably in Cochin after the connections with Latin America performed by the first globalization done by the Portuguese and European worldwide expansion. Cashew is a plant which is originated in the Northeast region of Brazil, and with great expansion in the second half of the twentieth century.

Today Asia is dominant in production and consumption, Africa is the second region in the world, regarding production scale. For consumption, USA and Europe used to be the most important ones. Recently, some significant changes occurred, India assuming also the leading position in consumption which represents an important structural change in the market.

Fig. 1 - Main Players in the Cashew Chain – Production Side

	Raw.Cashew			
Asia	**Nuts(RCN)**	**% of total**	**Processing**	**% of local**
	Mt.		**Volumes**	
India	650 000	27	1 250 000	192
Vietnam	300 000	12	719 000	240
Sub-total	**1 060 000**			**188**
West Africa				
Ivory Coast	550 000	23	40 000	7
Guine-Bissau	160 000	7	3000	2
Sub-total	**1 020 000**			**12**

East Africa				
Mozambique	45 000	2	30 000	67
Tanzania	125 000	5	20 000	16
Subtotal	**182 500**			**31**
Latin America				
Brazil	**150 000**	6	240 000	160

Source: Data in annex 1

USA and Europe continue to grow in consumption, but are no more the leaders in consumption volumes. However they still represent the most important international markets which are not involved in production. Data in table 1 shows some particular issues in the value chain for this tropical crop, growing very fast worldwide, but with clear dominance from Asia, India and Vietnam. Both countries are important in production, but are doing very well in processing activities, meaning that they are net importers also. There is only one region which have "net surplus," exporting region by definition, with very limited processing activities and volumes. Africa is really the main supply source for any other continent/region, because all the others, including the biggest are important net importers. In Africa,Mozambique is the leading processing country achieving almost 70% share in processing in regard to its own production.

The numbers show how important it will be to promote the processing activities in Africa, but also show how relevant it will be to promote new markets and chain dynamics. However, exploring the expansion capacity in raw material will continue to be important for many years ahead. In Africa processing activities are growing in almost all countries, but strong variations are possible in short periods of time, and stable growth trends are still not evident for all. Data in figure 2 shows in more detail the situation in Africa, where information needs to be confirmed and better understanding is needed to look for trends and future forecasts.

Fig. 2 – Estimations for Africa processing quantities

Country	2007	2012*	Change	2013*
Moçambique	39000	20000	"-"	30 000
Ivory Coast	6000	15000	"+"	20 000
Tanzania	16000	10000	"-"	20 000
Ghana		5000	"+"	20 000
Burkina Faso	900	5000	"+"	10 000
Nigeria	18000	5000	"-"	40 000
Kenya	5500			6 000
Benin	1700	10000	"+"	10 000
Guiné-Bissau		2000		3 000

Source: Mendes (2011), based in ACA data and

* Est. ACA in Brou, Roger (2014). Workshop in Guiné-Bissau – ANCA organization

Beyond instability, the information is quite consistent with a great growth rate in adding value activities, which is today an objective for many countries. However, innovation is still an alternative to be studied at all levels of the chain value for cashew.

Consumption behavior will be the main driver of the cashew chain, but proactive solutions can be determinant from the supply side to promote consumption. "Consumption space" is now an interesting concept in which a set of products are competing among themselves but also with other similar

products in a "common space". In food consumption this "idea" of "consumption space" is very much evident, in the sense that human behavior will suffer from natural "demand constraints." This can be seen as a biological limitation in food consumption (human) capacity. However, for cashew it seems we are far away from a "saturation level" and using the development perspective models of the growth theory and/or product cycle, the product seems to be on an expansion phase in most markets.

Fig. 3 - Consumption in kernels (ton.)

Country	1987	1990	1995	2000	2005	2008	2010	2012
INDIA	4869	4883	49995	89319	155490	209713	181054	258589
USA	43848	59185	56814	87035	136667	147441	139317	121215
EU	12040	12530	23324	39160	61282	85667	89451	86344
MIDLE. EST	945	1803	4913	6894	15926	28013	36401	45720
AUSTRALIA	2199	3036	5534	5842	14369	15697	16139	13909
Others	15908	4574	19613	28041	86159	65568	71470	102653
World	79809	86011	160193	256291	469893	552103	533832	628430

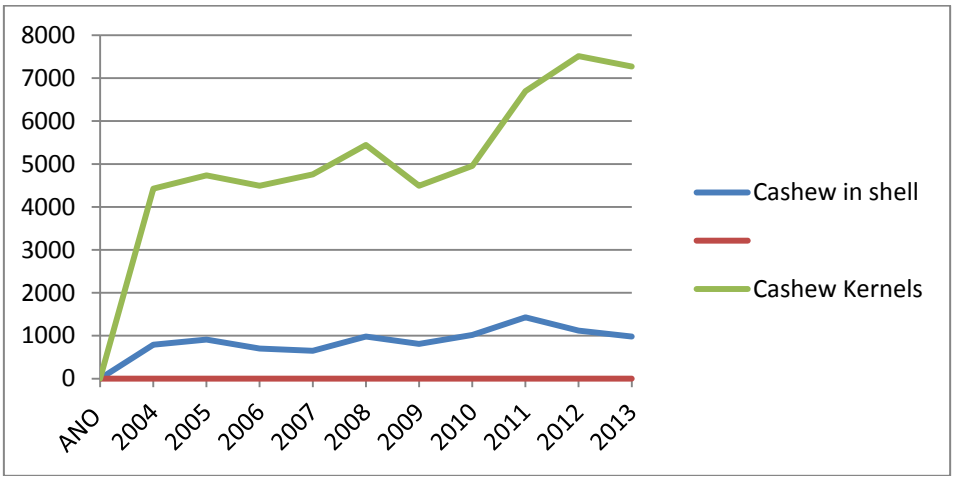
Source: Mota, A. (2014). ANCA workshop organization in Guiné-Bissau

The results presented in fig. 3 confirmed the expansion phase in most markets. The most relevant consumption increase in the last years, ten year period, was in India. For the first time, the main producer is now the main consumer. USA, the biggest consumer up to the end of the twentieth century, increased consumption up to 2008, before the crisis, and now, after some decrease is supposed to recover. In regard to the European Community, the numbers are similar, with increases up to 2010 and with the crisis also some decrease. It is important to note that Europe was about 1/5 in consumption in regard to USA in 1990, but around 2/3 in 2010, which means a great expansion in Europe. All the others seem to keep a strong path of growth, with Australia also showing some negative impact with the economic crisis. However, changes will probably continue with a positive path globally with economic growth in the next years.

The Market conditions change substantially. The markets share is one dimension of the strong changes in market behavior, with more players and less concentration. Another important change is having now some producers with important presence in consumption, with clear relevance for India and Brazil. Accordingly with the last information available in 1990, USA had almost 70% of the market, and only 20 % today (2012), European Union had around 15% of the market share, with more or less the same share today (in 2012), and the rest of the world a very small intervention in 1990, but already dominant today. The most significant change occurred with India, with almost no relevance in the consumption market (more or less 5% in 1990) and today with more than 40% in the global market. Those changes show significant business opportunities, either exploring a general continuous growth in consumption in traditional markets, either in exploring new markets.

Looking at the price behavior, fig 4 (more information in annex 2), since 2004, it is clear that prices have been reasonably stable in the supply side for raw material, but for industrialized/processed material the prices have been growing significantly. This is the result of adding value strategies and probably some pressure from consumption, which shows good prospects for business activities. On the other side, it is necessary to do an intensive inquiry/research and market study to understand why higher prices at the final consumer are not, at least partially, reflected in higher prices in production.

Fig. 4 _ International prices for cashew in shell (raw material) and in kernels



Source: Mota, A. (2014). ANCA workshop organization in Guiné-Bissau

Cashew in Guiné-Bissau

It is not possible to talk about development in Guiné-Bissau, and specifically agricultural sustainable development and food security, without considering the Cashew Value Chain and the food systems connected directly and indirectly with this crop.

The agricultural systems in Guiné-Bissau for Cash Crops such as Cashew is dominated by family farming systems. It is quite evident that from Cashew depends the sustainability of the balance of payments, but beyond that, the satisfaction of food intake and food security for a majority of the families and population.

As a consequence, the overall development process will depend greatly from the food systems based on cashew value chain and respective interfaces. Rice production and other food production systems, together with environmental sustainability concerns, will be central to all possible strategies, which should always be implemented with an inclusive and strong participation process.

The first important fact about cashew in Guiné-Bissau is the relevance of this crop in the economy, globally and at local/family base, but also to realize that this relevance is a recent phenomena, a success "technological change process," with no more than twenty years of existence.

Fig. 5 – Cashew Production Evolution in Guiné-Bissau

Year	Production (ton.)	Area (Hectares)	Information
1980	2907	6015	Source
1990	17500		** CNC-exports
1990	19450	26000	* Mendes (2010) in Carvalho et al (2012)
2000	80000	103000	"
2010	122249		ANCA(2013) Exports
2013	182000		MOTA(2014) Production

Source: Different sources mentioned

The numbers show that cashew production was around 2900 tons in 1980, but only 10 years later the volume achieved a significant dimension close to 20 thousand tons. Since then, growth continues and the economic relevance became evident with this crop deserving a special attention from the government, at global level but also entering in the dynamics of family business and households in rural areas.

It is also important to consider different sources of information, given the instable institutional environment, which is also made in fig. 6, taking into consideration the knowledge about differences in data about exports and production, because it is well known that a significant proportion of the country production is exported through the neighboring countries such as Senegal for example. Of course this concern is already under evaluation by ANCA in regard to the identification of solutions and to find out possible policy measures that can improve the value creation in Guiné-Bissau.

Figure 6 – Cashew (in shell) Exports Information

1980	1990	2000	2005	2010	2011	2012	2013
Ton.	Ton	Ton	Ton	Ton	Ton	Ton	Ton
2201	17500	66000	87120	122249	174002	134410	132000

Source: ANCA 2013

Any evaluation of the production process shows a tremendous success in terms of growth in this crop and this confirms the natural advantages of the country for cashew production but also the national dynamics of the families and entrepreneurial initiatives at family level. This is an important evidence that, when certain conditions are fulfilled, even people without formal education is able to behave with very economical rational (and entrepreneurial) orientation.

Guiné-Bissau is an important natural region for Cashew, with competitive and comparative advantages, which is also evident in terms of the yields in processing output. Table 7 below offers two different types of transformation coefficients, important in terms of competitive and comparative advantages overall. Notice that KOR coefficient ("out turn" measure) means the expected value in pounds (weight expected) for 80 kg of cashew in shell. For example KOR of 54, means 54 pounds of cashew kernels for 80 kg (one traditional sac) of cashew in shell (equivalent to 30,6% in weight).

Figure 7 - Country Coefficients for Quality

Country	KOR	Number of kernels per kg
Benin	45-51	175-210
Gana	48	200-210
Guiné-Bissau	52-54	210-230
Ivory Coast	46	190
Kenya	43-50	180-200

Moçambique	46-52	175-230
Nigeria	46	200-210
Senegal	51-53	220-270
Tanzania	46-52	175-230

Source: Mendes (2011)

Looking to several different dimensions of the production system, it is now possible to say that natural conditions are quite good and providing comparative advantages, the entrepreneurial initiatives in production/agricultural level are quite active, and now the most important challenges are the adding value alternatives in processing and commercialization process and the institutional/governance environment. ANCA – National Agency for Cashew is an important innovation which is supposed to be a key element in the system to help "solving" those challenges.

Food Security and Cashew in Guiné-Bissau

It is an important conclusion from previous research and starting point of analysis that food security and poverty alleviation in Guiné-Bissau is very much dependent, in the present context, from the possibilities that the Cashew chain can provide.

First of all it is necessary to know that income level and development indices are all very low in relative terms internationally. Being aware of all limitation on indices measures and of quality of life evaluation, it is important to take them into consideration to understand the actual situation of the economy/society and to be able to identify the main challenges for the economic development process and for policy design alternatives.

Fig. 8 – Absolute Poverty levels and regional contribution share in overall poverty

Regions	Absolute Poverty Share (%) (less than 2$ per day)	Regional Contribution for poverty in %
Bafatá	72,4	13,6
Gabú	65,8	12,3
Biombo/ Bolama	62,6	9,1
Cacheu	63,8	14,2
Oio	79,6	18
Quinara/ Tombali	69,1	12,2
Bissau	51,7	20,6
Regions without/ Bissau	69,1	79,4
Country Total	64,7	100

Source: INEC/2002 (Instituto Nacional de Estatísticas e Censos/Guiné-Bissau) in Embaló (2008) and Carvalho, B.P. e H. Mendes (2012)

Poverty, measured in terms of people share with income lower than 2 US$ per capita per day is obviously very high in one society where “escambo” (or barter agreements) is still present and frequently used, for example to “trade” cashew” with food, mainly with rice. With all well known limitations, the referred poverty measure provided a quite good indication of development processes and the figures above allowed a global view where around 2/3 of the families are below poverty line.

However there are regions with very high poverty levels and quite good situation in food security (one of the highest poverty levels but with the best position in terms of food security (Fig. 10) is Bafatá). What is important to realize is the fact that global development is indeed in the first stages of the normal changing process with globalization, transfer of technology and access to modern knowledge, very limited up to now. This situation can be seen as a handicap but can also bring some opportunities to do differently with innovation and to do a very “smart move” searching for the best solutions available (with actual knowledge) and learning with others experience internationally.

What is impressive on a very “informal” of “natural society organization” is the family dynamic participation in the cashew business, and ability to react fast with this innovation. Recalling that growth in Cashew production is a recent phenomena (with relevance in the last 25 years), the family base production dominates more than 80% of overall production. Fig 9 shows quite well that average family production structure maintains around 50% of the area under exploration with cashew (1,5 ha in 3,3 hectares) and the rest distributed between rice production and other crops.

Fig. 9 - Average Agricultural Area per family - Hectare / per family.

National Average	Rice Freshwater	Rice Salt water	High Land (Whithout Cashew)	Cashew	TOTAL
Average Agricultural Area (hectare)	0,3	0,4	1,1	1,5	3,3
Cultivated % Cultivated area/ total available	9%	12%	33%	47%	

Fonte: SISA(2009)/GAPLA/MADR in Carvalho et al (2010)

It is an important exercise for development purposes to look to the global achievements, instead of looking only to the challenges ahead. In this case not only in terms of cashew business, but in terms of food security, Bafata is in good position and other two regions are already in average situation such as Tombali and Cacheu. On the other hand, Oio, Quinara and Bolama are really in problematic positions, deserving special attention from public policies.

Figure 10 – Family Classification per region in terms of some indicators, illiteracy ratio, non poverty percentage and indicators for food vulnerability and food security.

2000	2002	A – índice	B -índice	C- indice
%illeteracy	%Non-Poverty	Vulnerabil	Vulnerabil	Seg.Alim
TOTAL		Nível	%	%

RGB	68	35,3	1	45	39
BAFATA	87,5	27,6	0	0	100
BIOMBO	73,4	37,4	1	40	33
SAB	25,5	48,3	0	45	39
BOLAMA	59,4	37,4	2	100	0
CACHEU	66,6	36,2	1	42	40
GABU	85,9	34,2	1	40	25
OIO	82,5	20,4	2	80	20
QUINARA	74,1	30,9	2	88	0
TOMBALI	67,9	30,9	1	25	50

A – Vulnerability level – index between 0 and 2
B – Vulnerability level – index measure in % of vulnerable regions
C – Food Security level – index measure in % of regions with no problems

Source: DENARP (2006), SISA (2009), RNDH (2006) in Carvalho et al (2010)

Fig – 11 – Food Security Availability and respective Vulnerability classification, regarding sources of income and food production possibilities. Data expressed in Food months contribution for each activity.

Region	Sector	Caju	Food Months		Food Months		Food Months	Cash	Local Ag.Prod.	Food Avail.	Vulnerab.
			Equiv.	AGR2	Equiv.	AGR3	Equiv.	Total	Potencial	Potencial	Class
Oio	**Bissorã**	Caju	05-06-	Animal Sales	01-02-	Coal and wood	01-02-	07-09-	05-06-	12-13-	Vulnerab.
	Farim	Caju	03-04-	Cash Crops	01-02-	Animal Sales	<1	05-06-	05-06-	12-13-	Vulnerab.
	Mansaba	Caju	03-04-	Coal/wood	01-02-	Cash crops	01-02-	07-09-	11-12-	17-19	Normal
	Mansoa	Caju	05-06-	Cash Crops	<1	Animal Sales	<1	05-06-	05-06-	12-13-	Vulnerab.
	Nhacra	Caju	05-06-	Coal/wood	<1	Fish	<1	05-06-	05-06-	12-13-	Vulnerab.
Bolama	**Bolama**	Caju	05-06-	Cash Crops	01-02-	Fish	01-02-	07-09-	05-06-	12-13-	Vulnerab.
Quinara	**Buba**	Caju	03-04-	Cash Crops	01-02-	Animal Sales	<1	07-09-	05-06-	12-13-	Vulnerab.
	Empada	Caju	03-04-	Sazonal Migration	01-02-	Cash crops	01-02-	07-09-	05-06-	14-16-	Low Vulnerab.
	Fulacunda	Caju	05-06-	Fish	<1	Cash crops	<1	07-09-	05-06-	12-13-	Vulnerab.
	Tite	Caju	05-06-	Cash Crops	<1	Fish	<1	05-06-	05-06-	12-13-	Vulnerab.

Source: GAPLA/MADR in Carvalho et al (2010) and author elaboration.

The information on figures 10 and 11 provides a global overview of the country characteristics regarding food security vulnerability conditions and agricultural production systems, showing how important cashew is in regard to food security objectives. Data expressed in food months contribution of each activity within the agricultural production actions and alternatives puts in evidence the Cashew contribution in the food security equation for each family. The income generated by Cashew activity represents 3 to 6 months of the needs in food, where the dominant situation is close to a very limited (survival level) situation of 12-13 months of food availability in many regions.

Challenges and Opportunities for Guiné-Bissau and for the Cashew Chain at local but also at global/worldwide levels.

The evidence of opportunities taking advantage of the revealed competitive position of Guiné-Bissau in Cashew production, needs to be viewed integrated with the difficulties and challenges in regard to the commercialization and processing needs. Guiné-Bissau revealed a very good competitive position in terms of raw material production and transformation yields potential (processing output), but very difficult situation in terms of processing/industrial activities, transport and commercialization (institutional environment). The evidence of the dominant position of certain buyers needs to be balanced with improved information and very active measures to promote better and more competitive markets, starting with the incentives to have more clients from different markets and geographies. On the other side, improving alternatives to make the chain more flexible and more dynamic in terms of the number of clients available and types of products, more or less processed and with different composition in terms of value added will certainly improve the impact of the agri-business associated with this activities and creates better opportunities for a sustainable development process.

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Annex 1

World Cashew Production and Processing Shares

Asia	Raw.Cashew Nuts(RCN)	% of total	Processing	% of local
	Mt.		**Volumes**	
India	650 000	27	1 250 000	192
Vietnam	300 000	12	719 000	240
Cambodia	50 000	2	2 000	4
Indonésia	60 000	2	20 000	33
Sub-total	1 060 000			**188**
West Africa				
Nigeria	90 000	4	40 000	44
Benin	90 000	4	10 000	11
Ghana	50 000	2	20 000	40
Ivory Coast	550 000	23	40 000	7
Burkina Faso	20 000	1	10 000	50
Mali	20 000	1	500	3
Guine-Bissau	160 000	7	3000	2
Senegal+Gambia	40 000	2	2 000	5
Sub-total	**1 020 000**			**12**
East Africa				
Mozambique	45 000	2	30 000	67
Tanzania	125 000	5	20 000	16
Madagascar	2 500	0		
Kenya	10 000	0	6 000	60
Subtotal			**56 000**	**31**
Latin America				
Brazil	150 000	6	240 000	160
Subtotal		**2 412 500**		
Total	2 412 500	100		

Fonte: Brou, Roger (2014) in ANCA workshop in Guiné-Bissau

Annex 2

Cashew International Prices

Ano	Cashew in Shell		Cashew Kernels
	USD/MT	USD/LB	USD/MT
2004	790	2.01	4428
2005	910	2.15	4736
2006	700	2.04	4494
2007	650	2.16	4758
2008	980	2.47	5444
2009	810	2.04	4494
2010	1020	2.25	4957
2011	1430	3.04	6697
2012	1120	3.41	7512
2013	980	3.30	7270

Source: Mota, A. (2014). ANCA workshop organization in Guiné-Bissau