Country Profile

Benin is a West African country, bordering the North Atlantic Ocean and lies between Nigeria and Togo

General Information on Benin:

Capital	Porto-Novo is the official capital; Cotonou is the seat of government	Time Zone	GMT+0100
		ISO Code	BJ
Population	6,787,625	Dialing Code	+299
Area	112,620 sq km	Continent	Africa
Languages	French (official), Fon and Yoruba (most common vernaculars in south), tribal languages (at least six major ones in north)	Internet Domain	.bj
		GDP	$6.8 billion
		Export partners	Brazil, France, Indonesia, Thailand, Morocco, Portugal, Cote d'Ivoire
Currency	The African Financial Community Franc (XOF);		
Major towns	Cotonou, Porto-Novo	Import partners	France, US, China, Cote d'Ivoire, Netherlands, Japan
Exports	cotton, crude oil, palm products, cocoa		
Imports	Foodstuffs, capital goods, petroleum products		

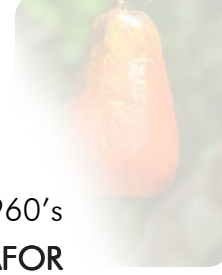
Structure, Organisation and Development Strategies

Structure and Organisation

According to a study conducted by National Centre of Agropedology, the region of cashew cultivation in Benin is spread mainly from **Abomey in Zou in the south to Gamia in Borgou in the north**. Thus, from the agro-ecological point of view, seven districts out of twelve (new reform) namely Borgou, Donga, Atacora, Collines, Zou, Couffo and Plateau, along with some twenty sub districts (new reform) are actually involved in cashew cultivation.

This region has a **favorable climate** for cashew cultivation with total rainfall varying from **800 to 1200 mm per year**, which is spread throughout the year making the region highly favourable for cashew cultivation. The altitude, the wind velocity and relative humidity, are also favourable. Except for few areas, which have less deep soils, the depth of the soil, which is important for good growth of these trees, is also generally sufficient here.

Several functionaries or links are involved in the production chain of cashew in Benin. The setting, rationalization of these links, their organization and coordination are very important to ensure a yield qualitatively and quantitatively sufficient to satisfy the requirement of the domestic and international markets. These structures or links are **Research, Production, Initial marketing, Processing at the industrial and cottage industry levels and Export.**



Cashew was introduced to Benin in the earlier days of its Indiapendence in **1960**. In the 1960's cashew nut tree plantations were established on a **cooperative basis**, during **1967-76 by SNAFOR and later by CARDER**. The total area under cashew was 5323 hectares initially. Some plantations belonging to forest inspections served as **forest tree seed orchards.**

However, vis-à-vis the necessity of improving vegetative matter, seeds of new geographical origins were introduced in 1999 by the **Forest Research Unit (URF)** and the **National Institute of Agricultural Researches of Benin (INRAB)** on the Government's public investment program's financing.

What is important is, the seeds used by the planters gave a poor yield because of the **empirical way** in which they choose seeds from any origin.

PADSE (Project for Improvement and Diversification of the Exploitation Systems), was implemented during **2001,** in a contract with URF to tackle the problems of **non-availability of improved seeds, rehabilitation of old plants, training and supervision**. 700 kg of improved seeds from mother plants was selected from all over the producing regions for planting in 513.75 hectares of land in countryside plantations and in 10 hectares in tree seed orchards. These seeds made it possible to **get 31 different stocks (of Beninese origin)** which were given to 18 experimental tree nurseries in order to get healthy and sound saplings. The outcomes were

- **Rehabilitation of 156 hectares** land around old countryside plantations.
- **Training of 43 personnel** of the cashew sector to ensure supervision of cultivators at the grass root level.
- Writing and circulating the four technical work documents, including two technical plugs.

This contract operates mainly in the different localities of Benin.

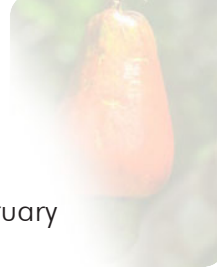
The initial works are run in this same framework keeping in view the elaboration of technical agendas of cashew cultivation in Benin, by URF.

As far as plantation is concerned, **10 m x 10 m spacing** is generally followed while beginning a plantation with provision to refill later. One can find 5 m x 5 m spacing too, although this hIndiars the spatial growth of the trees later on.

The main research institute in this domain is the **Forest Research Unit (URF**) of the State Office, which is **INRAB.** It works in collaboration with organised and non-organised planters, group of planters as well as NGOs.

Production and Yield

General practice of the farmers is to plant by **direct sowing, at the rate of two seeds per bunch**. Use of nursery saplings is less common. The plantation takes place between **April and June**, often after more than one harvest of annual crops.



The maintenance of plantation takes place in October, while harvest takes place between February and May.

Majority of the planters do not use any agricultural inputs, particularly the phytosanitary products. The presence of pathogens like anthracnose and a certain variety of beetle that destroys cortical tissue has been established.

Surveys conducted in 2001 by URF, reveal that, *"the adoption rates of techniques prescribed for the cultivation of cashew nut trees…are very low and they create a bottleneck for the promotion of the network…plantation is mainly done by men (90%). The area covered by plantations with saplings less than 5 years of age is more (60%-70%). This reflects the interest shown by the farmers towards diversification over the last few years."* Similarly, *"the maintenance of plantation is the major constraint for more than 70% of the farmers…the drilling insects are at the lead in causing damages for more than 35% of the farmers."* Finally *" more than 80% of the farmers planning to go for a new plantation in the year 2002."*

The yield varies from region to region and depends on the maintenance. The estimated yields are generally in the range of 350 to 600kg/hectare. In some places, however, it can reach upto 1000 to1500 kg/hectare in the 9^{th} or 10^{th} year.

As the produce is not marketed through the official channel the actual yield cannot be estimated correctly and it may be higher. Frequent pilferage of the standing crops too causes difficulties in accurate estimation.

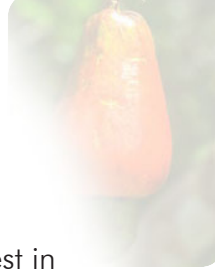
In Benin, there are two types of cashew nut producers. The enterprises that lease out public plantations and the private planters with their own plantations. The large number of small planters comes under the second category.

The public plantations, which underwent heavy losses in the eighties (bush fire, theft of harvest), have been leased out to two private companies.

The first one, SADIAC- Benin, acquired 4503 hectares land out of which 1699 hectares are considered cultivable.

The second one, AGRICAL, got the factory of Parakou and a plot of 780 hectares of public plantations in Borgou, out of which 374 hectares are cultivable in spite of the poor maintenance.

There is lack of sufficient data in Benin on cashew nut tree plantation, its yield and its evolution. The estimations made by ONS in 2000, show that between 1994 and 1998, the total area under cashew nut has grown from 24,282 to 40,217 hectares, yield of nuts from 8,499 tons to 22,119 tons and the average national yield from 0.35 to 0.55 tons nuts per hectare.



Collection of nuts and cashew growers' organization

After CARDER's monopoly in collection was withdrawn large number of people are showing interest in the collection of nuts. Almost everywhere, save in Zou, the collector buys nuts from the grower.

The collector carries out his operations with the funds given to him by the purchaser who is financed generally from the Indo-Pakistani Exporter.

In Borgou, collectors have formed a collectors' group in order to reduce the possibilities of direct purchase by other agents.

The farmers are generally organized in village-groups or in associations such as the Union of cashew growers in Zou (UPAZ), whose objective is to work towards selling products at more lucrative prices.

Even though the law makes no provision for their profession, the collectors are organized region wise and give themselves exclusive zones of intervention, but always headed by well-known purchasers. The latter, since 2000, dispose of an association, still in the making, which can cover other tropical products: The National Association of Purchasers of Tropical Products (ANAPAT).

Stocking and Processing

In villages, the nuts are stored at the planter's residence. The intermediate purchasers don't store the product. The nuts are sent to the exporters, who generally use the stocking facilities provided at the Port of Cotonou. However, the owners of big plantations are installing warehouses for provisional stocking of nuts.

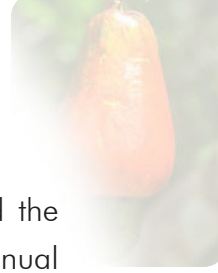
Processing is basically a cottage industry and women are the main labourers. The number of female workers is not known. There could be hundreds of them distributed in Atlantic, Zou and Borgou.

The processing techniques here are grilling and shelling with a stone, followed by delamination of nuts with Kaolin**,** bought in the local market or with ash. The nuts are then in some cases, fried in oil or butter and packed in bottles.

Among the companies installed outside Cotonou, NOVOMAG and BOULAMB generally market grilled and spiced cashew kernels. DANA conducts the quality control of the products that are mainly exported.

Two companies process industrially or semi industrially. They are:

- SEPT (the company for exploitation of tropical products) whose factory is installed at SAVE in Collines district.
- The factory of ex-SONAFEL installed in 1973 at Parakou with a nominal capacity of 500 kg/hour, or 5 tons/day and a provision to expand to 1500 tons/year. It produces peeled off nuts or kernels for exports. Unattractive procurement prices paid to growers led to low supply of nuts forcing the



factory to be shut down Indiafinitely in 1987. AGRICAL Benin SA, the company that acquired the factory during privatisation, is planning to replace the installations by Indian machines with an annual capacity of 2500 tons nuts. It is not operational till date.

Some ventures in semi-cottage industrial installations in some localities in the sub district of Sèmè-Kpodji have ventured into processing of cashew apple into alcohol. But still this sector is largely unexplored.

Marketing/ Export

The marketing chain is generally long and is characterized by networks that usually links an exporter with a tradesman or a purchaser having local links.

The quality is controlled:

- during production of raw nuts , or
- during processing at the cottage level itself.

The quality of raw nuts that are exported, is ensured by one of the below:

- DPQC (Management of Quality Promotion and Packaging of agricultural Products),
- The technicians (normally from India) of the purchasers, who come down to Cotonou and estimate the quality of the nuts before sailing
- The purchasers themselves on the commodity's arrival at its destination.

DANA (Management of Food and Applied Nutrition) and SGS conduct the quality control of kernels exported from Benin, but laboratories for analysis and certification do not exist.

The official standards of quality control for cashew kernels are not specifically defined at DPQC. So the standards for other agricultural products were applied to raw nuts also. For kernels, DANA uses the CODEX Nutritive standards defined by the Mixed Commission FAO-OMS in 1990 and their updates.

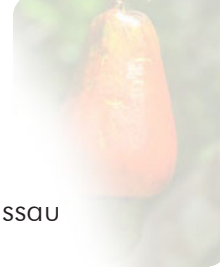
As per the CODEX standards, cashew kernels are estimated for aerobic germs, faecal coliforms, yeasts and mildews, humidity ratio etc.

A large quantity of the cashews is exported raw. A relatively less quantity is converted into finished products (nuts, alcohol), which are mostly marketed locally with very less exports..

The international market of nuts and kernels however has very strict quality standards. The quality determining factors of cashew nuts are often very precisely classified and measured in percentages. These are:

- maximum acceptable defectiveness: 10%
- maximum tolerable humidity: 10%
- maximum foreign body: 0.25%
- maximum number of nuts per kilogram (not counting the undersized nuts): 200%

Source: Committee for a dialogue on the Agreements of OMC; Iarès, September 1997.



Inspite of this, cashew nut from Benin is one of the best three in the world in quality after Guinea-Bissau and Tanzania, and therefore enjoys a premium on quoted price..

Two types of nuts are offered here, the average quality nuts from the cottage industry and the high quality nuts, which are exported. The company, SEPT mainly handles these.

Development Strategy

As of today, a specific strategy for development of the cashew production chain in Benin is not present formally. Benin's general strategy for agriculture, industry and commerce would determine this too.

The Declaration Letter of Rural Development Policy (LPDR) signed in 1991 presents the main objectives of the Government's rural development policy aiming "*to pull up the rural population's standard of living by using the market competition as a way out and by increasing the competitiveness of the Beninese grower, rather than searching for a simple regional or national self sufficiency*." The priorities that follow from this are:

(i) Redefining State's role, improving the efficiency of its intervention, reducing the cost
(ii) Improvement of services and infrastructures which the rural population accesses
(iii) Growth of export through an increase in revenue and a diversification of production
(iv) Struggle against food related insecurity
(v) Guarantee of nation's ecological durability

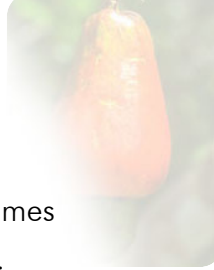
This document was updated in July 2001.

Thus, the development strategy for the cashew sector not only aims to strengthen the administrative capability, but also aims to meet the

- "Exclusive" missions of the public sector,
- Facilitate the emergence and the reinforcement of the private sector in the fields of yield, conversion and marketing of cashew products as well as the services provided for this sector,
- Improve the productivity and increase the competitiveness of its products on internal and external markets,
- Develop infrastructures and rural services whose durability of functioning would be assured,
- Encourage the growers' initiative and organisation in this field and finally
- To introduce policies and methods for natural resource management. This would allow a short-term interest gain for the farmers and preoccupations of a longer term for the community.

So the private sector should take a major role in the investment, which, is monopolised by ventures by small families and small tradesmen, and so is not very well developed.

Apart from this, keeping in view the difficulties that the exporters of raw nuts face, Benin's policy gives more importance to value addition, industrial and cottage processing in spite of the inherent internal difficulties.



The most important difficulty is short supply of nuts for the factories. The exporters of raw nuts sometimes offer prices that makes processing into kernels (as a finished product) for exporting unfavourable.

For processing of the by-products: yellow or red cashew apple, wood, bark, sap, gum, green leaves and roots. Processing of apple at the cottage level is being undertaken in minor quantities, while proposals for in-depth studies of the rest are being undertaken

In Benin, the cashew, unlike that of cotton for example, is yet to enjoy the benefits of a comprehensive, rational organisation.

But, since a few years, many private and public institutes, certain non- governmental organisations and some associations have undertaken some projects in this direction. One can cite:

- The national office of stabilisation and support of Agricultural Products' Prices (ONS) for its project for promoting and organising the cashew network for many years and its help in organising planters and tradesmen.
- The CIDR : International Centre for Research and Development
- PADSE: Project for Improvement and Diversification of Exploitation Systems
- The NGOs ANFANI, ATI
- Professional associations such as GAFA GIE, ATEACB, GAPAB.

Sector Performance

Production

In order to have a better knowledge of the total area covered by cashew nut trees in Benin, ONS has conducted a total census of plantations through CARDER. The results obtained in the end of November 2000 are presented in the following table.

Area by type of plantation (in hectare)

Department	Private	Domainial	Total	%
Atacora/Donga	6226.25	1498.5	7724.75	29.67
Borgou/Alibori	1565.93	1831	3396.93	13.05
Zou/Collines	12439.89	1868.45	14308.34	54.96
Mono/Couffo	18.5	18.5		0.07
Ouémé/Plateau	585.42	585.42		2.25
Total	20835.99	5197.95	26033.94	100

Source: ONS

This table gives an indication of the span of cashew plantations and shows that by the end of the year 2000, the domain plantations represent less than one fifth of the total area under cashew nut trees.

From the quantitative point of view, Benin is a small producer far behind the export giants like India, Brazil, Mozambique and Tanzania.

Evolution of national production during the period 1990-2001 and prospects

For lack of available statistics for this period, which highlights the necessity of co-ordination and rational organisation of the cashew network, an estimation is made out of the quantity of kernels

exported to obtain the production data. Appropriate deduction is made for re-export from the bordering countries and national consumption. The table no.2 shows this:

Estimation of cashew nut production (from 1991 to 2000)

Year	Exported quantity	Cross border trade	Exported Benin's production	National consumption	Total national production
2000	36370	-13457	22913	4044	26957
1999	29222	-10812	18410	3249	21659
1998	26859	-9938	16921	2986	19907
1997	19174	-794	1280	2132	14211
1996	8672	-3209	5463	964	6428
1995	11323	-4190	7134	1259	8392
1994	9459	-3500	5959	1052	7011
1993	6913	-2558	4355	769	5124
1992	4373	-1618	2755	486	3241
1991	1373	-508	865	153	1018
Total	**153739**	**-56883**	**96855**	**17092**	**113948**

Source: ONS compilation from statistical directories 2000, 1999, 1998, 1997, 1996, 1995 and 1994 of INSAE and data supplied by CNEX for 1991,1992, 1991.

Thus, the total national production of nuts has developed from 1,018 tons in 1991 to 26,657 tons in 2000 going by 7,011 tons in 1994 and 19,907 tons in 1998.

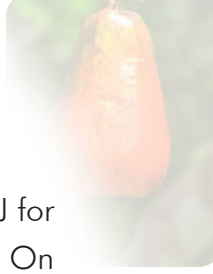
The plan for promoting and organising the cashew network, and planned actions, resulted in an increase of average yield from 460 kg/hectare to 1,770 kg/hectare, an increase in area under cashew nut trees from 40 thousand hectares to 129 thousand hectares, and total nut production from 22 thousand tons in 1988 to 229 thousand tons in ten years.

Types of cultivated cashew nut trees. Development concerning improvement of cultivars.

The "Anacardium occidentale", commonly known as cashew apple tree or cashew nut tree, belongs to the Anacardiaceae family.

The expertise report of the cashew section of PADSE published in November 2000 indicates the existence of a local variety "TK" and of varieties "ST" introduced in January 2000. They are La Villa, ST/22/99, Choluleca, ST/17/99, Monjaras, ST/18/99, Concepcion de Maria, ST/19/99, Nacaome, ST/20/99, Pespire, ST/21/99.

According to the "*preliminary results of the phrenologic observations and the survey on the varities of cashew nut tree in plantation in Benin*", the URF report published in June 1999, two varieties of cashew nut trees are planted in Zou-Nord, the largest nut producing region in Benin and which has been studied for determination of planted varieties. One can find the yellow apple variety (VJ) and the red apple variety (VR). At the present stage of investigations, only the colour of the apple works as a visible factor for distinguishing the varieties.



Each variety comprises different variants characterized by different shades of colour. The variety VJ for example includes fruits with cashew apple having shades of yellow: pure yellow, light yellow etc. On the other hand the variety VR consists of fruits in different shades of red: pure red, wine red, light red, rose red. The shades mentioned are possibly due to mutations linked with local conditions or physiological states of the apples. Nearly 95% of the planters prefer VJ or VR for the following characteristics: big size of the nuts, high percentage of sugar in the apple, grouped ripening of the fruits.

A new study from HONDURAS was done in 1988 about premature varieties with high yield of nuts. But there was no follow up of this experiment and it did not go beyond the first orchard installed at the Centre for Research on Oil palm at Pobè.

In June 1999, working for the genetic improvement of cashew in Benin, the URF conducted a phrenologic study of the species along with a survey on different available varieties in order to bring together the scientific information useful for the trials of propagation by cuttings.

These works were conducted on PADSE's account and which made possible, among other things, the setting up of ten hectares of tree seed orchards in 2001.

There are two main axes for the improvement of the cultivars and the researchers simultaneously use them. These are improvement and breeding through sowing (kernel) and improvement through vegetative propagation (cuttings). The former necessitates certification of the genetic value of the seeds, can induce fewer guarantees until the plants start fruit production and appears to be very constraining and relatively expensive. The latter minimizes the risks of error, allows direct reproduction of good tree specimens with the desired characteristics and is in the reach of the trained planters.

Principal factors influencing production and collection performances

The principal factors influencing production and collection performances are:

- The devaluation of CFA franc January 1994, which doubled the revenue of farmers, though in reality it was not more than the gross revenue.
- The successive crisis in the cotton sector, due to the global fall in production of cotton fibre and the local problems in cotton production management, which was till then the single organized agricultural sector that guaranteed regular minimum revenue for the growers. The loss of interest among the cotton growers was beneficial to the cashew sector, often bringing the two crops upfront, one being perennial and the other annual.
- The relative progress achieved as a result of research and the supervision of the planters either by NGOs or due to projects like PADSE in the important cashew producing regions.
- The progressively rising prices paid to the planters also contributed to the increase in nut production.

The following table shows the evolution of the exported quantity as well as the free on board cost of cashew nuts, the planter's price of which represents about 76% according to a study by BDPA-CETAGRI in 1995.

Change of free on board cost of cashew nut, 1994 to 2000

Year	Production	FOB Value (Euro)	Unit Value (Euro/ton)
2000	36370	18842673	518
1999	29222	14192635	486
1998	26859	8231207	306
1997	19174	6098072	318
1996	11323	4667545	412
1995	8672	4000484	461
1994	9459	101841	328
Aggregates and averages over seven years	141080	59134457	419

Source: ONS, Compilation out of the statistical directories of 1994 to 2000.

The impact of the last factors mentioned will be more observable from the increase in area under cashew nut tree as well as from the yield of nuts starting from the third to fifth years. This is due to the application of results of the research by URF on available varieties, production of improved seeds, rapid growth in planting activity, setting up of ten hectares of tree seed orchards, training of the extension agents and the strengthening of research of URF on cashew.

The renowned label of cashew nut from Benin on the international market is an influencing factor for the flow and the remuneration and hence positively influences the production of nuts.

It is possible to intercrop (recommended) the refill crops, the cashew nut tree (forest species with the compensatory effect against soil degradation) and annual crops like cotton in the first years of plantation.

Processing

Evolution and prospects of processed products

Industrial processing

In 1973, Benin constructed a factory for conversion of cashew nut in parkou (Borgou) 435 km away from Cotonou. With a capacity of 1500 tons/year, it was meant to produce shelled and canned cashew nuts (kernels) for export. But in 1987, it closed down because of some difficulties with the supply in cashew nut. It was taken over by AGRICAL SA, but is still non-operational.

Another private operator (SEPT) in 1999 installed, a processing unit in Save, 170 km from Cotonou. Its capacity is 3000 tons/year. This unit is functioning despite difficulties in raw material supply.

However, PADSE's expertise '*Report of the Cashew Project*' gives hope that in the near future, products like drinks, balsam, sap of cashew nut tree will be processed.

Cottage Processing

Women undertake cottage processing and collect a small income on it. The amount of nuts processed in this way is negligible and is meant only for local consumption. Cottage processing is becoming

more mechanized with the use of implements manufactured by COBEMAG.

Private economic operators such as BOULAMB and ISHOKAN use a better method for processing cashew nuts into kernels, which are marketed locally at relatively higher prices that lowers the demand.

The cottage processing is a full-fledged sector and offers many advantages to the production chain:

- It absorbs surplus nuts, which cannot be exported
- It is developing a local demand, which can stimulate the production
- It offers employment, especially to women
- It uses locally manufactured small agricultural equipments.

Types of processed products that are marketed

Benin produces about ten kinds of cashew kernels:

- W/320: very big, white whole nuts
- W/280: white, medium sized whole nuts
- W/400: white, medium sized whole nuts
- W/280/320: singed whole nuts
- Fancy: speckled nuts
- SSW: shelled nuts
- Butts: butts of the nuts
- Splits: split nuts
- LW: big pieces
- SWP: small pieces
- SB: singed butts

The juice extracted from the conversed cashew apple is marketed mostly for local consumption.

Principal factors influencing the performance of national enterprises engaged in processing

The numerous private and public projects for boosting cashew cultivation, the renewed interest of the planters, the odds of the cotton sector are important factors that have begun to, and will continue to have a positive influence on the performances of these national level processors.

However, the processors face lot of problems like:

- Problems in raw material supply
- Degradation of the kernels' quality due to premature harvest
- Lack of funds
- Credit recovery in kind (in nuts) which reduces the availability of nuts
- Inefficiency of administration in controlling collection and supply of cashew nut to industrialists.

On the contrary, the cottage processors do not face any problems in availability of nuts. It rather draws a profit that is proportional to the increase in low marketable quality nuts.

It should be noted that processing does not have any significant effect on the export of raw nuts. More than 95% of the national yield of nuts is exported.

Exports

Analysis of the national exports of cashew and its derived products between 1990 and 2001 by type of products and destination

The cashew products exported from Benin are mainly cashew nuts followed by cashew kernels.

The statistical directories of INSAE indicate that in 2000 for example, 14.25 tons of kernels were exported out of the total 36552.25 tons of cashew products exported. This represented 0.039% of the weight or 0.094 % (17,930 Euro of total18,994,000 Euro) of the value exported.

The average Free On Board value in 2000 is 0.518 Euro/Kg for raw nuts and 1.26 Euro/Kg., where there is a 41.11% ratio between the values of raw nuts and kernels. A table in the annex shows by destination, the details of the amount of nuts exported between 1994 and 2000 and the corresponding values. It recognizes India, China, Singapore, Indonesia and Hong Kong as the main destinations of the cashew products from Benin.

The following table summarizes these statistics in weight and in value over years to different destinations.

Summary of cashew nut exports statistics by destination (from 1994 to 2000)

Destination	Year	Production (Ton)	FOB value (Euro)	Unit value (Euro/ton)	Export % (value)
Arabia	94-2000	20	8537	432	0.01%
Belgium	94-2000	316	108407	343	0.18%
Brazil	94-2000	1000	48784	49	0.08%
China	94-2000	23094	8805180	381	14.89%
Denmark	94-2000	600	274266	457	0.46%
France	94-2000	390	196403	503	0.33%
Ghana	94-2000	344	174193	507	0,29%
Hong Kong	94-2000	3509	1476630	421	2,50%
India	94-2000	89802	40600991	452	68,66%
Indonesia	94-2000	11494	3359792	292	5,68%
Iceland	94-2000	315	177552	564	0,30%
Nigeria	94-2000	50	6915	137	0,01%
The Netherland	94-2000	150	48021	320	0,08%
Roy.Uni	94-2000	93	7439	80	0,01%
Singapore	94-2000	9147	3501066	383	5,92%
Vietnam	94-2000	632	330754	524	0,56%
Total	7 years	141080	59134457	419	100,00%

Source: ONS, Compilation from the statistical directories of 1994 to 2000.

Degree of organization and co-ordination of the network and its effects on the export performances

In Benin, presently, what distinguishes the cashew sector from that of cotton is the degree of organization and co-ordination between different units.

There are professional families in the cashew sector at national or even regional level. It is only in recently that the planters, at the ONS initiative, have decided, to come together in a cooperative kind of association (Village Group type), which can unite or federate them at different geographical levels.

The cashew nut purchasers are associated autonomously in ANAPAT (National Association of Purchasers of Tropical Agricultural Products). The collectors are restricted to specific geographical zones and each one is attached to a specific purchaser.

Exporters, who are mostly Indo-Pakistani, usually finance the purchasers or wholesalers. These exporters, however, are now approaching the villages for direct supply. The planters appreciate this practice as it makes the marketing procedure shorter and relatively increases the price paid to the farmers. The purchasers naturally sulk at this new trend.

The cashew sector still has links that lack cohesion, are unorganized and not rationally predictable. The cohesion and the rational running of this whole setup is the main objective of the "Project for Promotion and Organization of the Cashew Network of Benin."

Quality of the exported products: standards and existing laboratories for analysis and quality certification, effect of the products' quality on export performances

As mentioned earlier, there are two institutions sharing the role of quality control of the cashew products: DPQC (Management for Promoting Quality and Packaging of Agricultural Products) for raw cashew nuts and DANA (Food and Applied Nutrition Management) for cashew kernels.

The nuts and kernels from Benin are well known for their quality and are the third in the world after Guinea-Bissau and Tanzania in quality, and consequently enjoy an over quotation on the prices offered.

The Beninese Centre of Standardization and Quality Management (CEBENOR), created in 1999, is establishing standards for quality of nuts meant for export. This work is still not completed.

In the absence of well-defined rules and standards, the principal criteria for estimating quality are **humidity** (maximum 10%), **foreign matter** (sand, vegetable scraps), **defects** (stained, premature, mildewed, rotten, moth-eaten, burnt or hollow nuts), **graining** (number of nuts in 1 Kg). Today the **outturn** seems to be the most important criteria for quality as it determines its market value (the kernels' weight in pound for 80 Kg nuts). The **phytosanitary criteria** (residuals of phytosanitary products and aflatoxins) also exist though it is not checked often.

For kernels, the main criteria for quality are: humidity (maximum 5%), acid content (maximum 1.0%), peroxide Indiax (maximum 5 milliequivalent/ Kg), grading (9 sizes), physical criteria (defect, deterioration of colour) and the phytosanitary criteria (Salmonella, Escherichia coli, Staphylococcus, residuals of phytosanitary products, mycotoxins like aflatoxins, presence of traces of heavy metals)

Nuts collected at a premature stage and those coming from any arbitrary origin, especially from the neighboring countries, have begun to have a significant influence. However, for the lack of coordination, one cannot measure or assess the impact of this influence. Also, this has a negative influence on the label "Benin".

Analysis of the constraints in developing export of the Production chain

The constraints in developing export of the production chain will be treated here by areas of interest: Production and collection, Processing, Marketing for exports, National policy of production and marketing and other constraints.

Production

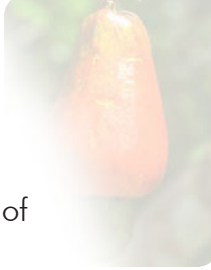
The constraints regarding yield and collection of cashew include:

- Difficulties in accessing land in some localities. This usual problem of agricultural production has a special connotation for perennial (and not annual) crops like cashew. The possibilities of borrowing land or tenancy are very limited for perennial crops.
- Difficulties in maintenance of the plantations.
- Early selling by planters, for which they harvest premature nuts, which is affecting the quality of the kernels.
- Non supervision of cost
- Destruction of plants by bush fire
- Per hectare yield of nuts, low in available vegetable matter
- Non-existence of seed orchards till today. URF is currently working on its solution on PADSE's account.
- Almost non-existent and less focused supervision technique for cashew cultivation.
- Planters' reluctance of using nursery-born saplings.
- Unavailability and hence non supervision of technical agenda (absence of phytosanitary products and specific agricultural fertilizers)

Processing

The conversion related constraints are:

- The embryonic state of the processing industry of cashew products (the only factory for shelling in function is that of SEPT)
- Massive shortages in supply. This had been the principal reason behind the shutdown of Parakou's factory before its privatization, and the present threat of shutdown in SEPT's factory
- Difficulties in matching the exporters' prices



- Serious lack of encouragement for processing of cashew apple and other by-products of cashew.
- Non-existence of an overall financing scheme for production or even a marketing campaign
- Dependency on the exporters who put in money for each harvest
- Scarcity and relatively higher cost of manpower
- Low productivity of cottage processing techniques.

Exports

The constraints under this heading are,

- An inadequate **supervision of production costs**
- A **long marketing chain** that is not favourable for small planters.
- **Absence of local finances** for a marketing campaign. This increases the dependency on exporters, who put in money for each harvest, supervise the market and dictate the conditions
- **Non-existence of a laboratory** for analyzing the nuts (the tests are conducted by the representatives of the purchasers, which leads to the violation of agreements –price/kg-).

National Policy of Production and Marketing

As mentioned earlier, in Benin, there is **no specific national policy of production and marketing** for the cashew sector other than the overall policy of Rural Development, which was made in 1991 and realized in 2001. Most of the participants of the cashew industry, however, very well realize the need of such a policy. Thus the constraints are:

- **No national policy of supply** to the factories
- **No coordination** between the banks and the industries for a financing of the raw materials
- **No cost supervision** for judging the reality of the obtained margins
- There is **no local financing scheme** for production or even marketing campaign.

The possible commencement of the **Project for Promotion and Organization of the cashew sector** will probably contribute to reunite the necessary links for the elaboration of this policy.

Other Constraints

(transport, degree of organization and coordination of the production chain, quality problems, easy access to loan and investments, access to adequate conversion technology, etc,)

One can mention:

- **Non-existence of reliable and coherent statistical data** on production, marketing and export of cashew nuts and kernels.
- **No cohesion and coordination between the different links** in the chain (research, production, supervision, marketing, conversion, export and internal support)
- **Non-existence of a mechanism for stabilizing and supporting, hence securing the cashew farmer's price**. This makes the farmers massively abandon plantations, especially

when prices keep falling for many successive campaigns.

- Frequency and importance (quantitative) of **thefts of nuts**
- **Lack of appropriate loans and grants** for the various activities involved in the process
- Almost **sole-dependency** of the industry on the unique destination, **India,** who consequently organizes the production chain to her own advantage.
- Generally **faulty conditions of the rural frontage roads** increases the transport cost and complicate the problems of dispatching the products
- **Non-existence of banks for agriculture** or investment that might provide long term loans for the installation of big cashew plantations
- Low performing techniques of **quality control**
- Campaign for cashew nuts take place at the same time as cotton, which makes the heading-in difficult
- Absence of a regional cum African coordination network for better exploiting the opportunities of the cashew sector.

Identification of Activities and Projects for Facing the Constraints to Development

The activities and projects to be taken up for facing these constraints to development of the cashew sector are:

Research, Production and Collection of Nuts

- **Reinforcing research** for introducing and protecting the high yielding premature varieties, producing seeds and plants as well as setting up and extending a reliable technical agenda
- Improving the process of **picking**
- **Support** for professional organizations
- Improving the conditions of **stocking nuts**
- **Strengthening supervision technique and advisory personnel** for the planters
- **Organizing** other agricultural networks in the marginal production regions in order to cut down the well-known glut in the cashew network.

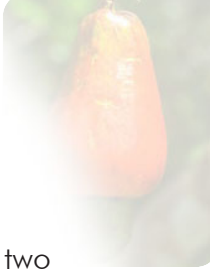
Processing

The activities may concern:

- Implementation of an operation unit for the cashew sector in order to coordinate the agricultural, industrial or cottage industrial activities, marketing or exporting activities.
- Promotion of industrial processing accompanied by a coherent supply policy for the factories
- Promotion of cottage processing by installing small units for village groups that are selected beforehand.
- Factoring the aspect of "intensity of manpower" in the acquisition of conversion equipments.

Marketing and Export Promotion

The actions to be taken here will cover:



- Improvement of the **stocking and storage system** before exporting
- Ending the practice of mixing different qualities of nuts by **fixing standards** for at least two qualities and a price for each quality. Thus, the low grade nuts, whether from the neighboring countries or from Benin, will stop giving worries regarding the protection of the Benin Label
- **Systematization of quality control** before exporting (ensured by recognized laboratories)
- **Reducing the number of intermediate purchasers** in order to develop the network's efficiency and increase the farmer's revenue.

Development Strategies and Policies for the Network

It is a question of:

- **Training of the important personnel** (planters and their associates, nurserymen, cottage industrial or semi-industrial conversion agents, training officials, technicians, extension agents), packaging agents, planters, the staff related to cottage industrial or semi-industrial conversion, and also the support staff.
- **Establishing loan and internal support facilities**
- Creating an **overall financing** for the network by integrating the local banking system
- **Renovating rural paths and the frontage roads** of the plantations in order to facilitate transportation and reduce its cost.
- Introducing an **insurance** to cover the export related risks (non payment)

Network Organization and Regional Cooperation

The activities concerned are:

- Installation of a **framework for a mixed association** (Government, conversion agents, farmers) at the national level
- Implementation of a **zonal or sub zonal network** for the cashew production chains
- Organizing visits and other encounters for **exchanging ideas** between different national cashew production chains.

Improving and Ensuring Quality of Export

- Strengthening and protecting the quality label "cashew of Benin's origin" which presently occupies a preferred place on the international market, by **avoiding the intermingling of Nigerian nuts** in the exports from Benin and by redirecting the present economy management of picking towards a more modern management for consolidating the technical results of the whole network.
- **Setting up laboratories** for analysis and certification

Conclusion

The cashew network of Benin contains huge potentials, which at present are not entirely exploited. The chances of a harmonious growth still remain almost intact in spite of the bottlenecks inside and outside the economy. These bottlenecks will demand combined and coordinated actions from the State, the planters, the purchasers and exporters.

The renewed interest shown in the network especially by the planters gives an added advantage. The single policy (desired or not) of export of agricultural products has been for a long time the reason for many bitter experiences in the State between the sectors of "oil palm" and "cotton". The recent successive crises in the cotton sector should alone be enough to convince Benin about the necessity of actions and fast projects to promote and rationally organize all the other agricultural sectors. The market flow should allow actions, keeping in view , the needs of national consumption of the products and the necessity of internal support.

Appendix

List of Production Zones (Sub Divisions)

The main cashew producing regions in Benin are:

District of Collines Sub Divisions of: Bante, Dassa, Glazoue, Ouesse, Savalou, Save

District of Borgou Sub Divisions of: Bembereke, Kalale, N'dali, Nikki, Parakou, Tchaourou

District of Donga Sub Divisions of: Bassila, Djougou

District of Atacora Sub Divisions of: Kouande

District of Zou Sub Divisions of: Abomey-Bohicon, Djidja, Za-Kpota, Zogbodomey, Cove-Zagnanado-Uinhi

District of Couffo Sub Divisions of: Aplahoue

District of Plateau Sub Divisions of: Ketou

Statistics of Cashew Nut Export from 1994 to 2000, by Destination (In Euro)

Destination	Year	Production (ton)	FOB value (Euro)	Unit value (Euro/ton)
Arabia	1997	20	8537	432
Belgium	1999	316	108407	343
Brazil	1994	1000	48784	48.78
China	1998	14848	4618249	311
China	1997	1128	550926	489
China	1996	1195	590396	494
China	1995	5923	3045609	514.19
S/Total China		23094	8805180	381.28
Denmark	2000	600	274266	457
France	1999	390	196403	503
Ghana	1999	46	10964	236
Ghana	1998	297	163228	549
S/Total Ghana		344	174193	507
Hong Kong	1999	1189	498439	419
Hong Kong	1998	143	65593	457
Hong Kong	1997	1610	674892	419
Hong Kong	1996	567	237706	419
S/Total Hong Kong		3509	1476630	421
India	2000	35771	18568408	519
India	1999	25195	12386077	492
India	1998	515	216008	419
India	1997	8775	1986130	226
India	1996	8864	3516144	397
India	1995	2374	923187	388.89

Destination	Year	Production (ton)	FOB value (Euro)	Unit value (Euro/ton)
India	1994	8309	3005036	361.66
S/Total India		89802	40600991	452.12
Indonesia	1999	73	57356	790
Indonesia	1998	11021	3149987	286
Indonesia	1997	400	152449	381
S/Total Indonesia		11494	3359792	292
Iceland	1996	315	177552	564
Nigeria	1995	50	6915	137.2
The Netherlands	1994	150	48021	320.14
Roy.Uni	1997	93	7439	80
Roy.Uni	1995	125	9528	76.22
S/Total Roy. Uni		218	16967	77.76
Singapore	1999	1581	619480	392
Singapore	1998	34	18141	534
Singapore	1997	7149	2717699	380
Singapore	1996	382	145747	381
S/Total Singapore		9147	3501066	383
Vietnam	1999	432	315509	731
Vietnam	1995	200	15245	76.31
S/Total Vietnam		632	330754	523.74
Total	7 year	141080	59134457	419.16

ONS, Compilation from the statistical directories of 1994-2000

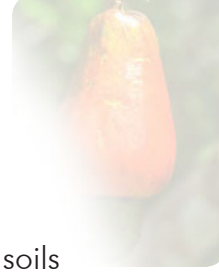
Structure of the Free on Board Cost per Ton Cashew Nut in Benin (In Euro)

The following table shows the structure of the free on board cost per ton cashew nut along with the percentages for each level on the basis of 419.23 Euro/ Ton (End season price).

Items	AccumulatedE/ton	AmortisationE/ton	%
Farmer's price	419,23		76%
Financier's cost on payment	30,49	449,72	6%
Export			
Jute bag	13,34		2%
Collection	9,60		2%
Packing in bags of 75 kg	6,40		1%
Loading in trucks	3,20		1%
Weight indicator	1,28		0%
Packaging service tax	7,47		1%
Sales tax	2,13		0%
Road cost	2,13		0%
Conveyance from Cotonou	16,01		3%
Godomey weighbridge	2,13		0%
Collectors	9,30		2%
Unforeseen and miscellaneous	3,13		1%
Putting on Free On Board	24,39	100,52	4%
Total	**550,25**	**550,25**	**100%**

Source: Table compiled from the data of the " Study of the maize, cashew and chilly networks", BDPA-SCETAGRI, December 1995, Volume 2, page 11. (Extract of the study of feasibility having preceded PADSE in 1996)

Conversion rate of CFA franc in Euro from ONS: 1 Euro = 655.957 CFA francs.



Impact of Cashew Cultivation on the Environment

The cashew plantations provide a long-term solution to the struggle against the degradation of soils and environment. In the course of its cultivation (nearly 20 years), the cashew nut tree has been contributing to the fight against soil erosion and stabilization of the local ecosystem in the same way as the other forest species.

At the initial stages of plantation, cashew nut trees are recommended in the systems as refill crops, more and more in the practice these days in Zou-Nord (in association) with the annual, food-producing crops like cotton.

Source: Extract of the Project for promotion and organization of the cashew production chain.

Downstream Activities: By-Products' Valuation

At present, the yellow cashew apple would be converted into liqueur at Sémé's distillery in between Cotonou and Porto-Novo.

The by-products' valuation map: the trends presented below can be revised:

- Possibilities of retained valuation are crossed with the sign X
- Possibilities of non-retained valuation are preceded by the sign –
- The possibilities of valuation that can be recommended as a subject of study are marked by the sign +
- Possibilities of valuation that can be a subject of investigation with a company are indicated with the sign ^.

1. Valuation of the cashew apple

Yellow apple

- yellow fruit: juice converted into vinegar, which has the advantage of self preservation, other fermented drinks [wine, liqueur (brandy)]
- consumed fresh like a fruit, with or without sugar, with syrup or with salt or chilly in fruit salads.
- Pure juice or diluted with water, in the manufacture of ice cream, jelly and jam.

Yellow and red apple

- making aroma of the yellow and red apple: study recommended
- dried and converted into edible flour for human consumption or as dried prune.
- Dried and mixed in cattle food: a study to be conducted by INRAB is recommended.

2. Valuation of the cashew nut tree wood

The market of wood-charcoal is estimated at more than 60,000 tons of all types of woods taken together.

- mostly production of wood-charcoal and only local production of wood for heating, for economic reasons: the transport cost is very high.
- Utilization of the ash (presence of K), which is mixed into the basal dressing for cashew plantation.
- Manufacture of fishing boat structures
- Manufacture of packing cases in general: a study for integrating handicrafts is recommended
- Manufacture of sap yokes: see COBEMA that manufactures sap yokes and small barrels.

3. Valuation of other by-products of cashew and proposals for secondary studies

3.1 Bark

- ❖ Skin tanning: study recommended
- ❖ Use in the manufacture of indialible inks: in view of exporting bark

3.2 Sap: collected by making an incision on the bark

- ❖ In metal soldering: a study in the form of tests is recommended

3.3 Gum

- ❖ Collection of the gum that sweats out of the bark of old cashew nut trees or trees that are in bad phytosanitary state, Utilization as a substitute to Arabic gum in the preparation of adhesives, manufacture of furniture, bookbinding.

3.4 Green leaves and buds

- ❖ Collecting these is strongly non-recommended, it is done only on the branches to be cut (pruning for growth, for maintenance)
- ❖ Used as fresh, plain or as seasoning for salads
- ❖ Used for garnishing with rice

3.5 Roots

Pharmacological properties.

Private Organizations' Approach to Increasing Loyalty among the Cashew Farmers

A higher number of private organizations have been involved in the financing operations of the cashew sector.

General considerations

In the cashew network, the potential private operators are the exporters like SEPT, AGRICAL, BPS-BENIN, AIGLON, OLAM-BENIN, KNOE-BENIN, and the recognized merchants like SITRAC (Importing, Converting and Marketing Company). SEPT and AGRICAL are in the process of developing a willingness among the investors with an approach towards enhancing loyalty among the cashew farmers.

Each exporter, whether residing in Benin or not, is obliged to invest in the cashew sector: the options for investment are at the level of cashew-growers, plantations, Village Groups, Sub-divisional growers' union, transportation and infrastructures, store-houses for cashew sacks, weight indicators and balancing scales (Village Groups' unions). The collectors work as employees, at the levels of Village Groups, unions, brokerage companies, exporting institutes (warehouses).

In Zou, the exporters are obliged to buy from **UPAZ** (Cashew growers' union, Zou), whose technological know-how is in the fields of **collection, weighing and stocking**, and from brokerage companies like **ANFANIGARBI** created in 1999 and the new institute **ASC** (Council for agro-services).

SEPT's approach

SEPT is involved in this initiative and proposes an interesting approach. SEPT initiates financing for the maintenance of the plantation, the charge of which rests with the farmer, who, is obliged, by a written

agreement to sell a part of the yield to SEPT.

For rehabilitating the plantations that are already occupied by farmers, the private body contributes to the rehabilitation for increasing the yield along with the divisional and sub-divisional authorities. A participation policy is established such that from each rehabilitated hectare, 30% of the cashew sale goes to the farmer, 30% to the private body, 20% to the State (because the plantation is rented) and 20% for the rehabilitation for another plantation.

The cashew growers' groups, like that of Savé, would hold a share of the capital of the company up to 10%-15% and thus would receive dividends.

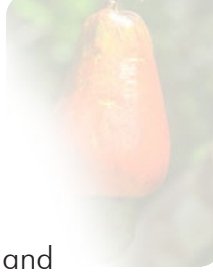
UNAPAB's approach

SITRAC APA-BENIN (created by GEA-BENIN, exploiters' group of Benin, in 1998) has conducted an experimental operation with **378 tons** of cashew in1999. APA-BENIN purchased at a fixed price of 325 CFA francs/kg from the cashew grower and dispatched the products. SITRAC financed the operation on own and borrowed funds, and the products were exported. The net benefit was divided into three parts: 10% for a cashew nut promoting fund, jointly run by APA-BENN and SITRAC, 35% for APA-BENIN and 55% for SITRAC. 7 million CFA francs, initially kept for giving back 25 CFA/kg to the grower, have been misappropriated (wrong choice of legal forms, dishonesty).

In **PADSE's** actions on the marketing of food-giving crops, the private organizations have 75% participation in the functioning of the new brokerage companies (Table 21 – cost of the actions to be taken by PADSE, Vautier report, April 2000).

UNAPAB and SITRAC have a contract of 1000 tons cashew nuts collected in the whole area in **Zou**, in the sub division of **Tchaourou in Borgou**, and in the sub divisions of **Kouandé and Copargo in Atacora** which seemed favourable for this operation.

To make up for the failure in 1999, UNAPAB created its sub divisional boards as an **interface of the national board, the village groups**, GPA, for stocking the products in the sub division and dispatching them to Cotonou. The **village group is in charge of collection and initial weighing**. The Board is in charge of finding partners, selecting transporters and financing a part of the operation. **SITRAC is the major financer** of the operation. The cashew grower's minimum guaranteed price 325 CFA francs /kg is maintained and new modes of payment in two installments have been proposed. From15 February 2000, the sub divisional boards of UNAPAB should pay the cashew grower 150 CFA francs in advance after the second weighing at their stores. The second installment of 175 CFA francs should be paid to the cashew grower on the products' arrival at the port and during the official period of campaign. As for the products collected during campaign the full payment is made at the port of Cotonou. In case any surplus product is discovered after the initial weighing and before delivery to the port, the village group GPA gets its value in money. The Board of UNAPAB and SITRAC is in charge of finding the exporter who offers the most beneficial price.



Conclusion: Recommendations for Action

In view of the promotional activities that characterize the cashew production chain and the wishes and experiences expressed above, it is recommended that:

1. In the PADSE project, the private investors, exporters and recognized tradesmen of the cashew sector, along with the Unions, Cashew growers' groups and brokers, maintain transparency about contracts (between the exporters and their clients), accounts and estimated budgets so that they have increased awareness.

2. The private investors, the cashew growers' Unions and Groups, with their own funds and loans from the investment banks at Cotonou, set up a fund to cover the running cost necessary for the whole process: from product collection to its arrival at the port of Cotonou.

3. The private investors pay the same amount of advance to all the growers for the same quality of cashew defined by official standards. The technical services of DPQC (Management for promoting quality control), in 1995, were in the process of studying the development of the quality standards of cashew. The simplest rule would be to make an advance of 50% of the official price (175 CFA francs/ kg for the year 2000), fixed by the Permanent Supply Commission in the matters of Production, Marketing of Agricultural Products and General Commerce, by the first fifteen days of January. It is in these first fifteen days that the first advance payments are made to the cashew growers. The above-mentioned commission can take a new step by fixing a price for each quality. It is recommended that the rule of 50% advance be applied to all the products (various qualities of cashew), whether they are supposed to be exported or processed within the country.

4. The private investors take part in the financing of PADSE's cashew project at the following levels and according to the illustrated cases:

- **At the level of village groups**: collector's job, setting up drying floors for the nuts, purchase of standard balancing scales, organizing transport for the delivery of the product to the storehouses of the Sub divisional Cashew growers' Union.

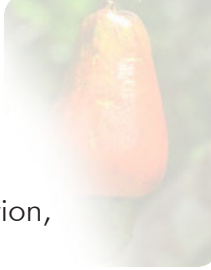
- **At the level of the Sub divisional Cashew growers' Union**: collector's job, setting up drying floors for the nuts, purchase of standard balancing scales, functioning of the storehouse.

- **At the level of the brokerage companies**: collector's job, operation

- **At the level of the export warehouses**: collector's job.

The Particularities of the Cotton Sectors with respect to other Agricultural Sectors including Cashew

The uniqueness of cotton, the spectacular increase in its production and export noticed since 1990, is due to the convergence of many endogenous factors that are:



- Revival of cotton cultivation from 1982, along with loans and grants on factors of production, fertilizers and pesticides.
- Guaranty of sale, which being linked with a bottom price, ensures a guaranty of revenue.
- Organization of the sector: the cotton growers themselves were involved in this (village groups for the supply of factors of production and for the self-run markets).
- An incredible growth of sown lands and the good quality of the Beninese cotton that sells well in the global market.
- Non-existence of well organized agricultural networks for products other than cotton.

Since the devaluation of CFA francs in 1994, a number of studies indicated the importance of developing sectors other than that of cotton, related to various crops, such as cashew, maize, chilly, pineapple, groundnut, by-products of cassava etc.

Even today, in spite of having a wide range of exportable crops, one can see a low-volume export and hence weak structures in these other sectors in question.

In fact, most of the markets are occasional and not tied to a clientele or loyal professional operators. The products come in low and often irregular amounts. The conditions for cultivation, packaging and transporting are less developed and the intermediate costs are generally very high. Information about the international market of a product is lacking. The production-marketing-exporting chain often comprises numerous unprofessional operators.

Brief Survey on Padse and its Cashew Section

The evaluation report on PADSE (project of improvement and diversification of exploitation systems in Zou and Borgou districts); Final version, September 1997.

The total cost of this project is **5.655 billions CFA francs** (including unforeseen costs) over five years. It is **financed by AFD (4.400 billions: 77.81%), Beninese State (0.632 billions: 11.18%), OPA (0.534 billions: 9.44%), and other private organizations (0.089 billions: 1.57%).** It covers five sectors: cashew, groundnut, cassava, potato, and beans. It includes the geographical areas of Borgou, Alibori, Zou, Collines, that is, four out of twelve districts of Benin according to the new reform of the territorial administration.

As far as cashew is concerned, this project undertakes **research, training** of the technicians, nurserymen, farmers and the packaging agents.

Source: Extract of the expertise report of the cashew section of PADSE, November 2000.

Abbreviations

ANAPAT: National Association of Purchasers of Tropical Products
CARDER: Centre of Regional Action for Rural Development
CBCE: Beninese Centre of External Commerce

CCI: International Commerce Centre
CEBENOR: Beninese Centre of Standardization and Quality Management
CIDR: International center for Research and Development
CNEX: National Export council
DANA: Management for Food and Applied Nutrition
DPQC: Management for Promoting Quality and Packaging of Agricultural Products
GIE: Economic Interest Group
GV: Village Group
INRAB: National Institute of Agricultural Research of Benin
INSAE: National Institute of Statistical and Economic analysis
LDPDR: Declaration Letter of the Rural Development Policy
MDR: Ministry of Rural development
ONG: Non-Governmental Organization
ONS: National Office of Stabilization and Support of prices of agricultural products (ex FSS)
PADSE: Project of Improvement and Diversification of Exploitation Systems in Borgou and Zou districts
PAS: Program of Structural Adjustments
PIB: Raw internal Products
PNUD: United Nations' Development Program
RGPH: General Census of the Population and Habitation
SADIAC: African company of Agro-industrial Development Commerce and Construction
SEPT: Company of Exploitation of Tropical Products
UNAPAB: National Union of Cashew growers of Benin

The End