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EFFECTS OF THE STRUCTURAL ADJUSTMENT PROGRAMMES
ON THE
FOOD-PROCESSING INDUSTRIES

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1. Introduction

For many of the Sub-Saharan African countries, development of the industrial sector, namely, that of the agroindustry was considered as an engine for change and diversification of the economic structure. Industrialization was perceived as an advantage providing a greater margin for manoeuvre, and allowing for the weakening of adverse exogenous shock effects that several countries in this geographical zone have undergone.

The development of an industrial base, founded upon the processing of agricultural products constituted a fundamental element in the industrial strategy, given that agricultural activity represents the very structure of many African economies. For the Sub-Saharan African countries as a group, agriculture absorbs on average approximately one-half of the gross domestic product. Meanwhile, the simple fact of possessing a comparative relative advantage in production of agricultural inputs is not sufficient to guarantee the emergence of an efficient industrial base, viable and internationally competitive. The development of agroprocessing industries (API) requires in addition to the raw material, important capital and technological expertise which are rare in the African countries; along with a monetized market at the heart of which they could flourish. The relative advantage that presumably, the less onerous access to raw materials represents is often neutralized in face of higher relative costs of other factors of production, as well as the cost of access to markets.

This text presents the major difficulties that agroprocessing industries in the Sub-Saharan countries come face to face with; namely, in view of the challenges that these industries have to overcome in the context of structural adjustment. Therefore, we shall proceed in the first place (section 2), with a review of agroindustries in a few of the countries of this region. We have chosen to this end, four countries where the degree and the potential for development are representative enough of the problems that are generally encountered in this type of industries. It is understood that we do not intend to present an exhaustive inventory of the aggregate of problems that the API are confronted with, but rather to learn a few lessons from the experiences of some of these countries. In the second place, we shall provide a summary of the structural constraints that are present in the agroprocessing sector. Following (section 4), we shall discuss the subject of structural adjustment by identifying the principal measures and risks of adjustment policies. Furthermore (section 5), we shall give an outline of the initial elements of response of the API to the policies of adjustment in their industrial components. Finally, given the importance of openness onto the external markets, we shall provide a background of binding trends that are relaxed in the agroindustries of the

developed countries, in order to comprehend better the context in which the African API would have to evolve if they were to attack the principal solvent markets. Only then, would it be possible to identify the paths of solution for the stimulation of the agroprocessing sector in the Sub-Sahara.

2. Review of the Agroindustrial Sector in Some of the Sub-Saharan African Countries

The countries reviewed in the present section are Cameroon, Ivory Coast, Tanzania, and Zambia, respectively. These countries have been chosen in order to reflect the diversity of economic and political conditions that are found in the Sub-Saharan African countries. These conditions refer to the mode of production: socialistic or oriented towards free enterprise, the geographical localization: landlocked or non-landlocked countries, the institutional and cultural environment: francophone or anglophone countries.

2.1 Cameroon

Cameroon just like Ivory Coast is an example of a market economy where the state nevertheless plays an important role in the industrial strategy, both in terms of implementing incentive policies, as well as operating public and parastatal enterprises. According to the national account figures, the primary processing of agriculture and silviculture, as well as the secondary processing of the agroindustrial sector represent 21% and 7% of the total net national product, respectively; agroindustrial output accounts for over 70% of the total manufacturing production. Table 1 provides the structure of the agroindustrial production for the year 1984-1985.

If one confines oneself exclusively to the agroprocessing subsectors, it will be noticed that according to the statistics in Table 1, the API represented approximately 43% of the gross manufacturing production and 46% of the industrial value-added. The principal API were placed, respectively in the sectors of beverages and tobacco, processing of the agricultural products, production of flour and crops, bakery products, and other food processing industries.

The beverages and tobacco sector is the leading agroprocessing industry of Cameroon. Its output absorbs 18% of the total manufacturing production of the country while its net value-added is superior to that generated by other agroprocessing industries. This subsector is dominated by several large and capital-intensive enterprises that for the most part, use imported inputs (corn, malt, and hop). The processing of agricultural products is the second important agroprocessing subsector. It is dominated by the production of a few products including coffee, sugar, and cocoa.

Table 1**Cameroon****Structure of the Agroindustrial Production**

1984/1985

Economic Activity	Share of Ind. Production (%)	Share of Mft. Value Added (%)
Production of flour & crops	9.9	5.8
Processing of agricultural products	13.5	9.4
Bakery	1.4	1.5
Other food industries	0.5	0.8
Beverages & tobacco	17.6	25.5
Textile & clothing	11.3	11.9
Leather & shoes	3.7	5.1
Lumber & wood products	8.4	9.1
Paper & paper products	0.6	1.0
Rubber & plastic prod.	4.3	5.6
Total agroprocessing	42.9	46.8
Total agroindustries	71.2	75.7

Source: National Accounts, 1984-85.

The interindustrial relations are little developed, in particular, in the case of the API: the high price of certain domestic raw materials in relation to world prices (for example, palm oil, tobacco, and cocoa), the absence of tradable agricultural surplus for industrial processing, and the remissions accorded to many enterprises for the import of raw materials have discouraged the solidification of the industrial structure. Cameroon's API have been developed in the framework of a strategy of import substitution of finished products. As a result, a good many of the API have resorted to massive imports of raw materials in spite of the diversity of the agricultural content of the country. There exists nonetheless, important potential forward linkages between export-oriented agriculture and the agroindustrial sector.

Several structural constraints limit the development of the API in Cameroon. In the first place, demand originating in the domestic and regional markets is limited; in particular, due to the mode of food consumption, and the low level of disposable incomes of the rural population who represent 70% of the total population. Demand originating in the urban milieu is on the other hand, insufficient to allow for a sustained growth by the enterprises, unless the latter orient themselves towards export markets. In the second place, trade and industrial policies put forward by Cameroonian authorities have had a tendency to discourage the development of industries that are based on national resource utilization. Diverse industrial incentive measures have favored the creation of large-scale industrial units that are capital-intensive, and which have resorted to a high level of imports. These oversized investments, in view of the size of the local market, do not allow businesses to recover sufficient gains insofar as they operate markedly below their production capacity.

The API require more than other industries the engineering of an adequate infrastructure in the rural areas as a preable condition for their development. In the case of Cameroon, insufficient transport facilities limit access to the rural zones. In addition, storage and preservation of agricultural product facilities are lacking which as a consequence, lead to an increase in the cost of the agroprocessing products.

2.2 Ivory Coast

In Ivory Coast, the remarkable growth of the agricultural sector has allowed for the rapid expansion of a dynamic agroindustrial sector. According to the national account figures, in 1985, the agroindustrial sector represented 48% of the industrial value-added, and approximately 7% of the gross domestic product of the country. The API employed in 1985, over 72000 persons or 80% of

the industrial labor force. This sector is the principal export industry of Ivory Coast, and it accounted for 58% of the industrial exports in 1985. These exports also include products that are produced by the primary industrial processing with a low value-added, and which are subject to price vagarancies on the international markets. The degree of industrial processing of the principal agricultural materials (Table 2) shows that it is palm oil that proportionately, undergoes the greatest local processing (80%). The domestic processing of cocoa, cotton, and fresh pineapple varies between 20% and 25% of the domestic output, while coffee remains a product mainly exported in its unprocessed form.

Table 2

Industrial processing of agricultural products

(% total production)

Products	1985
Coffee	5%
Cocoa	20%
Palm Oil	80%
Cotton	21%
Fresh Pineapple	25%

The food processing industries in Ivory Coast are categorized in 5 subsectors including: processing of grains and flours, food preservation and preparation, beverages and ice-block products, fats, and other food products. Table 3 presents the distribution of these five industrial subsectors.

Table 3**Ivory Coast****Production of the Agroprocessing Sector
(Volume and %)**

Sectors	Production	
	Tons	%
Flour	166,900	15.6
Pasta	3,060	0.3
Biscuits	6,300	0.6
Shelled coffee	275,000	25.8
Total for seeds and flour	451,260	42.3
Canned pineapple	81,010	7.6
Canned tuna	35,015	3.3
Cocoa (treated beans)	100,520	9.4
Soluble coffee	6,350	0.6
Soluble cocoa	459	0.0
Confectionery	9,494	0.9
Total for food preservation and preparation	232,848	21.8
Beer	130,500	12.2
Carbonated beverages	44,500	4.2
Total for beverages and ice-block products	175,000	16.4
Oils	79,688	7.5
Margarine	2,760	0.2
Total for fats	82,448	7.7
Cubes and fragrance		
Sugar	8,386	0.8
Tobacco	113,000	10.6
Total for other food products	4,060	0.4
Total agroprocessing	1,067,002	100.0

The most important subsector is that of grains and flours which in 1985, accounted for over 42% of the agroindustrial production, followed by the food preservation and preparation sector (21.8%), beverages and ice-block products (16.4%), other food industries (11.8%), and fats (7.7%).

The main items produced by these subsectors are, respectively: shelled coffee (25.8% of the output), flour (15.6%), beer (12.2%), sugar (10.6%), treated cocoa beans (9.4%), canned pineapple (7.6%), and oils (7.5%).

Exports of finished manufactured products represented one-third of the total exports of Ivory Coast, agroindustries absorbing 20% of the total exports. Within the industrial product exports, it is the nonagricultural industries that have experienced the highest growth. The agroindustrial sector has begun to give signs of depletion on the international markets, even though agroprocessing products remain the principal exported manufactured products. The agroprocessing products that experienced the strongest progression on the international market during 1981-1985 are: coffee and cocoa goods (+12% and +22%), vegetable oils (+181%), and seasonings (14%). At the other end, certain agroprocessing products experienced a net regression on the international markets in spite of the strong growth of these markets. These products include dried fruits (-23%), and canned fruits (-17%).

Outside the regional markets of the ECWA, Ivory Coast's exports have not succeeded to penetrate the international markets, except for those products that are produced from the processing of coffee and cocoa. Ivory Coast's exports have been subject to an increasing international competition from the South-East Asian countries, in particular, from Malaysia insofar as palm oil is concerned, and from Thailand for pineapple. The export markets have little diversification, and the ECWA markets no longer offer an alternative for growth in exports due to the economic crisis that affects the majority of the member countries.

2.3 Tanzania

The manufacturing industry in Tanzania is dominated mainly by the food and beverages sector, and the textile industry as is shown in Table 4. In 1986, the agroindustrial sector occupied a predominant position, accounting for 59.7% of the industrial output, 63.6% of the manufacturing value-added, and 78.2% of the industrial employment, respectively. The API occupied a negligible place with 31.8% of the manufacturing output divided essentially between the two sectors of: processing of food products (22.7% of the industrial production), and beverages and tobacco (9.1% of the industrial production). The output of the food processing sector is composed mainly of dairy and meat

products, sugar, vegetable oils, flour-mill and bakery products, as well as canned food and fruits. All these products are produced with the aid of local raw materials which in turn indicates a strong backward integration of the agricultural sector. However, the deterioration in the transport system that the country has experienced, as well as the reduction in the agricultural output are increasingly complicating the regular procurement of agricultural raw materials by the API.

The principal problems that the API face in Tanzania, essentially stem from on the one hand, ruptures in the supply of raw materials, electricity and water; and on the other hand, from lack of investments in this sector. The rate of capacity utilization in the agroindustries rarely exceeds 50%, with the exception of the beverages sector.

Except for the vegetable oils that represented 1.2% of the manufacturing exports in 1986, there exists very little export of agroprocessing products in Tanzania. The exports are composed mainly of oil, and textiles. The import substitution strategy that is followed by the authorities has promoted the establishment of industries geared towards satisfying the needs of the local market, although without attempting to develop the external outlets.

Following independence, the Tanzanian authorities directed the country towards a centralized economy of the socialistic type; the state playing a predominant role in the principal productive sectors. The promotion of the industrial sector was essentially accomplished by the aid of direct investments in the public ventures of the manufacturing sector. The performance of these enterprises which form the core of the industrial fabric, was unequal due to insufficient gross profit margins, absence of finance, lack of qualified management, and low labor productivity.

Table 4**Tanzania****Structure of the agroindustrial production
(1986)**

Sectors	% of manuft. production	% of manuft. value-added	% of indust. employment
Processing of agricultural prod.	22.7	20.2	18.7
Beverages & tobacco	9.1	13.3	9.2
Textile	16.0	16.2	34.5
Leather products	3.7	3.5	5.9
Lumber & wood prod.	2.4	3.4	5.3
Paper, paper prod., printing, publish.	5.8	7.0	4.6
Total agroprocess.	31.8	33.5	27.9
Total agroindust.	59.7	63.6	78.2

Source: Economic survey 1987, Dares Salam, June 1988.

Since the beginning of the 80s, the Tanzanian manufacturing sector has been exposed to numerous difficulties, although there was a slight recovery in the industrial production in 1986. The principal obstacles that the API were subjected to, and from which they cannot escape are the following:

- oversized industrial units that are capital-intensive and are highly dependent on imports of raw materials. The relatively narrow size of the local market has forced these units into operating often below their profitability threshold;
- the shortage of foreign exchange due to the deterioration of the external equilibrium of the country. Consequently, the manufacturing sector has been unable to acquire the necessary equipments and spare parts for the operation of the industrial units. Furthermore, for the units dependent on imported raw materials, shortage of foreign exchange as well as the depreciation of the Tanzanian currency has accentuated the difficulties in the supply of raw materials;
- the decline of agricultural production due to the sluggishness of the producer prices that fall short of being profitable, and low investments in agriculture. The impact of this policy has been felt upstream, in particular, at the supply level of the API.
- the deterioration of the transport infrastructure that has rendered the shipment of raw materials to the processing units more difficult, and at the same time has slowed down the flow of the finished products to the markets.

2.4 Zambia

The Zambian economy is strongly dominated by the mining sector, and namely, the leather industry. The predominance of the mining activity extends to all aspects of the economic life of the country; to the least, at the level of the localization of the population, and the structure of production. The manufacturing sector is relatively well developed, accounting for 21% of the GDP in 1986. Table 5 presents the structure of the Zambian industrial sector. It can be seen that in 1985, the API sector consisting of the food, beverages and tobacco industry was the most important economic sector, representing 38.6% of the industrial production, 44% of the manufacturing value-added, and 34.7% of the employment, respectively. If one extends the analysis to all agroindustries, it will be noticed that the latter represented over 50% of the manufacturing output in 1985.

Table 5**Zambia****Structure of the manufacturing production
(1985)**

Sectors	% of Prod.	% of Value Added	% of Employ.
Food, beverages & tobacco	38.6	44.0	34.7
Textile and clothing	12.1	10.9	17.3
Chemical industries	11.4	8.8	8.2
Primary metals & metallic products	19.0	18.2	17.2
Total agroprocessing	38.6	44.0	34.7
Total agroindustries	50.7	54.9	52.0

Source: UNIDO statistics

At the present, none of the subsectors of the API seem to be particularly developed. The principal products that are produced by these subsectors are: processed meat products, stockfeed products, and products derived from oleaginous seeds. The meat processing sector encompasses the cutting and processing of livestock meat, pork, and chicken. The production of these diverse goods covers approximately 7% of the domestic requirements of Zambia. The oleaginous products subsector produces essentially, oilcakes and refined oil for consumption purposes. The production of oilcakes covers approximately one-third of the domestic needs. The sector of stockfeed provides mainly products derived from corn and millet to stockbreeders.

The intersectorial linkages between the API and other manufacturing activities are little developed, except for the subsector of stockfeed which maintains close backward linkages with the oleagineous sector, the grain processing, the meat, and the sugar sectors. The other sectors are not well integrated, and they depend largely on imports for the supply of their raw material. In this respect, the geographical landlockedness of the country burdens heavily the transportation costs of the imported raw materials, and it is harmful to the development of the competitive sectors.

The manufacturing exports of Zambia are relatively unimportant, and they represented only 5% of the foreign currency earnings of the country, in 1986. There are practically no agroprocessing products in the composition of the exports, the latter consisting mainly of iron and steel (50.8% of the manufacturing exports in 1986). Only the textile sector of the agroindustries is exporting (principally textile wastes), although its exports are marginal at the level of the country as a whole (3.6% in 1986).

The API sector is called upon to play an increasingly important role in the economic activity, given the agricultural resources of the country. This sector is capable of satisfying the standard domestic demand for the principal food consumption products, and providing intermediate inputs to other industrial sectors. Oleaginous, tobacco, tea, coffee, and poultry are the principal agricultural and farming products whose processing can contribute to the development of the API in Zambia.

Table 6 illustrates the relative importance of the API for the four countries studied. It can be deduced that:

- the agroprocessing sector represents more than one-half of the agroindustrial production, attaining in the case of Zambia, 76% of the output of this sector;
- the agroprocessing sector represents at the minimum, one-third of the manufacturing gross domestic product;

- the agroprocessing production for the domestic market is diversified on the whole, although it falls short of fulfilling the agricultural capacity of these countries. This production activity is composed of products that are produced by the second and third industrial processing, and it holds a substantial share of the value-added. For exports the products undergo a less elaborate processing, and their share in the value-added is lower;

- the agroprocessing network is not very forwardly integrated, with the exception of a few subsectors. The majority of the enterprises procure imported raw materials.

Table 6

Relative Contributions of the
Agroprocessing Industries
(%)

	Cameroon (1984/85)	Ivory Coast (1985)	Tanzania (1986)	Zambia (1985)
<u>Agroprocess. Prod.</u> <u>Agroindust. Prod.</u>	60.0	n.a.	53.0	76.0
Agroprocess. / PIB	42.9	48	31.8	38.6

3. Structural Constraints of the Agroindustries in the Sub-Saharan African Countries

The macroeconomic policies followed by several Sub-Saharan African countries have resulted in a slow down of growth and diversification of agricultural production. In several cases, price and tax measures in the agricultural sector have heavily penalized the latter, and have passed the effects forward onto the development of the industrial agroprocessing.

The purpose of the present section is to discuss the principal problems and constraints that the agroindustries in the Sub-Saharan African countries come face to face with. Among these structural constraints several affect all enterprises in the manufacturing sector, without discrimination. Other constraints are however, more specific to the agroindustries as they are linked to the agricultural policies that are proposed in the countries under consideration.

a) Agricultural Price Policy

The development of agroindustries depends to a large extent on the availability, the regularity, and the supply price of the agricultural raw materials. Stagnation, that resulted in a decline of agricultural production in many countries in Africa, affected the handling of raw materials to the processing industries. The decline in the agricultural output was influenced by several factors, in particular, the incidence of climate. However, agricultural farm price policies have had the highest impact on the growth of the output.

In general, the prices of agricultural products in many countries of the Sub-Sahara have been maintained at artificially low levels; on the one hand, in order to transfer excess profits from the exports to the state, and on the other hand, in order to protect the purchasing power of the consumers in the urban areas. This price rigidity has had a disincentive effect on production; it has resulted in a decrease of tradable agricultural surplus which in turn, has led to a shortage of supply of agricultural raw materials for the API. This policy has resulted in a transfer of resources to other sectors of the economy, and it has encouraged the establishment of parallel markets that do not contribute to the emergence of large-scale industries. The final impact of such policies has been to sever the backward linkages between the agricultural sector and the agroprocessing industries.

It is important to emphasize that the low level of administered prices of agricultural raw materials does not necessarily benefit the API. In fact, several agroprocessing enterprises have been unable to procure sufficient quantities of supplies that are necessary for the achievement of a profitable capacity

utilization rate. Moreover, the domestic prices of finished products have for a long time been regulated as well; thus, neutralizing by this very measure the stimulus to their production.

b) Agricultural production

Agricultural production has not followed in general, the demographic rate of growth that prevails in a number of Sub-Saharan African countries. As a result, an increasingly greater portion of the production has gone towards final consumption (autoconsumption or the direct transfer of rural areas to urban milieus) at the expense of creating potential tradable supply surplus for the agricultural processing industries. Two other factors have also influenced the decrease in the level of production: (i) weakness of agricultural productivity due to the utilization of traditional methods of farming and harvesting, and (ii) low public investments in agriculture, given the budgetary restrictions.

c) The market for agroprocessing industries

The API are confronted with the problem of increase in demand and its attributes. The market that these industries were faced with was composed of three segments: (i) domestic consumers who are constrained in obtaining supplies on the markets for their basic needs (generally situated in urban areas); (ii) domestic consumers who have a direct or indirect access to primary agricultural production (generally situated in rural areas); and (iii) foreign consumers (generally situated in developed countries or the urban markets of the neighboring countries). The nature and quality of production, as well as the conditions of trade had to be adapted to these divers segments. The agroprocessing sector has proved to be incapable of efficiently producing goods that are destined to the majority of the population.

Thus, the dominant trends in food consumption have not been significantly modified, and an important portion of the population does not require a sustained agroprocessing output. Furthermore, the monetized segment of the domestic demand of the agroprocessing products has experienced a fall, and a decline in real per capita incomes during the 70s and the 80s. The discriminatory policies in the agricultural sector have limited the growth of rural revenues and demand outside the urban zones. In addition, import substitution strategies that are conducted by many countries have geared the production towards domestic markets at the expense of export markets that were nonetheless presenting more important growth potentials. Production geared towards the domestic market has been preferred as it is considered to be more secure; on the one hand, the industry knows its market, and on the other hand, the domestic market can be

shielded from international competition through protective measures.

d) Policies of exchange rate and access to foreign currency

The economic policies conducted in many countries have resulted in an appreciation of national currencies. The appreciation of the exchange rate has maintained an artificially low price of foreign currencies, and has in turn favored the import of processed products; by the same token, it has discouraged the processing of local resources for consumption, and has reinforced the dependence of certain API on imports of raw materials. At the same time, the agroindustrial units that are strongly oriented towards exports have generated lower revenues per exported unit.

The problem of the appreciation of the exchange rate (that in several cases translates itself into a shortage of foreign currency) has been exasperated by the deterioration of the balance of payment and dependence vis a vis exports of a few commodities. Therefore, the API have been unable to procure the necessary foreign exchange for the purchase of their equipments and spare parts; meanwhile, those that are dependent on imports of raw materials have been unable to supply themselves with the intermediate inputs. In both cases, the industries have been forced to operate clearly below their production capacity.

The problem of shortage of foreign currency affects to a lesser extent the agroprocessing industries confined to the franc zone since as a result of the WAMU accords, the latter have free access to foreign exchange currencies. It goes without saying that the appreciation of the FAC franc has created a bias against manufacturing exports.

e) Industrial incentives

Industrial incentive policies based on measures, such as: tax exemptions, custom rights on imported equipment and raw materials, and the rules of accelerated depreciation have had a tendency to favor the creation of large and capital-intensive enterprises that are founded upon the processing of agricultural resources. The development of this type of industries has not necessarily represented the best resource allocation, given their limited effect on employment and the distribution of income. In addition, the excessive protection accorded to several of these has encouraged the subsistence of inefficient enterprises that often operate at loss.

The protective structures that are in favor of consumption goods, as well as the tariff exemptions on equipment goods and raw materials have discouraged both the production, and the consumption of local inputs. Quite to the contrary, these

measures have reinforced the dependence of the API on imported inputs, and have rendered the utilization of the production capacities vulnerable to fluctuations in the foreign exchange.

f) The infrastructures underlying industrial development

The infrastructures underlying industrial development (road networks, distribution of water and electricity, telecommunications) are insufficient in most of the countries of the region to enable the structural maintenance of an impressive agroindustrial sector.

The absence of a road maintenance system renders increasingly difficult and onerous the shipment of raw materials to the production sites, as well as the delivery of the finished products to the consumer market. The problem of water and electricity supply affects directly the production process of the enterprises of the entire sector but more specifically, that of the agroindustries where water, for example, constitutes an important input. Moreover, in certain countries these inputs (water, electricity) are heavily taxed which in turn increases substantially the cost of the factors of production.

For landlocked countries such as Zambia, the geographical localization constitutes a natural barrier against the imports of finished products. At the same time, these countries remain dependent upon the transport systems of the neighboring countries, in particular, for their imports and exports.

g) Inefficient management

In most of the Sub-Saharan African countries, public enterprises have been progressively occupying an impressive portion of the industrial fabric. These enterprises have been often set to pursue employment goals and the preservation of purchasing powers. As a result, several enterprises have been staffed with an excessive number of personnel who lack the necessary qualifications, and who have a low productivity. The ability of the management to implement incentive programs in order to increase the productivity of the workers is restricted due to the imposition of salary scales and fixed premiums, as well as their lack of autonomy in licensing or employing the personnel. As for the private enterprises, they are forced to conform to a labor legislation that is incompatible with the pursuit of increased competitiveness.

The internal organization of the enterprises is often deficient: several of these suffer from the absence of a well-organized commercial service, and a well-structured system of sales. In addition, there exists practically no quality control.

Several of the agroindustrial units, namely, those that are under the supervision of the public sector have been experiencing technical failures, and are confronted with a number of equipment breakdowns and damages; thus, causing pauses in production. The chronic shortage of spare parts prevents in most cases the implementation of protective maintenance policies, and consequently, results in the obsolescence of the production equipments. In 1988, in Tanzania, the obsolescence of equipments in the agroindustrial sector was to such an extent that the utilization rates constituted on average only 60% of the capacity.

h) The costs of production

One of the principal factors that leads to the failure of the API in Africa is the very high level of the costs of production. Protection measures have favored the implementation of inefficient industrial units. Large enterprises that are oriented towards exports have had access to capital-intensive techniques of production that in turn have necessitated the presence of an important and especially expensive expatriate manpower.

4. The Structural Adjustment Policies in the Sub-Saharan Africa

Structural adjustment policies have as their objective the elimination of macroeconomic disequilibriums, and the rehabilitation of internal and external equilibriums. More particularly, they wish to eliminate the imbalances, rehabilitate trade mechanisms, and reintroduce efficiency rules in the management of the state apparatus in such a manner as to place the economy on a sound and a longer-term, self-sufficient growth path.

These policies that are applied to the industry in the Sub-Saharan African countries have as their objective the realignment of the national productive structures according to the international comparative relative advantages. Entry into foreign competition, and elimination (or reduction) of imbalances contribute in principle, to a better allocation of the factors of production. This would have to translate itself in full term (after a transition period during which the economy would restructure) into greater specialization, a higher degree of efficiency, and a stronger probability of export.

4.1 Contents of the structural adjustment programs

The measures that shape the programs of structural adjustment can be classified in the following six categories in terms of their objectives:

(i) to reduce in the short run, the domestic demand for goods and services, in particular, imported goods (in order to improve rapidly the foreign balance), and the demand from the state (in order to improve the budgetary position);

(ii) to allow the available factors of production in the economy to be allocated to activities according to the rules of efficiency by eliminating: the sources of imbalances, namely, price controls; disequilibriums introduced by the fiscal and parafiscal systems; inequalities in trade policies (homogenizing tariff and non-tariff barriers); market imperfections; and more generally, by checking the mechanisms of regulations that exist outside the market, wherever it is possible and desirable;

(iii) to integrate efficiently the economy in the international economic fabric by increasing the competitiveness of the country on the world markets, thereby, provoking a reorientation of the productive apparatus in a manner as to enable its development in areas where the country enjoys a comparative relative advantage; in particular, by resorting directly or indirectly to the devaluation of the national currency;

(iv) to stimulate the domestic supply in the intermediate and

the long term by increasing the quantity, and the quality of the factors of production that are positively necessary and useable by the productive apparatus; namely, by increasing the physical investments (i.e. infrastructures), investments in human capital (i.e. education-training), and financial investments (i.e. savings and credit);

(v) to improve the global productivity of the existing production apparatus, and stabilizing it mainly by paying special attention to state control.

(vi) to improve the national institutions mainly through a realignment, and a redefinition of the role of the state and its apparatus.

The prominent aspects of structural adjustment are manifested in price policies, income and wage policies, public finance and administration, and in the life of the government ventures.

On the subject of prices, the general rule consists of a return to market mechanisms, and general flexibility. The prices of certain publicly produced goods and services which are governed by decree, experience semi-flexibility in the event of adjustment insofar as they are increasingly regularly revised upward so that their market value, and the economic and financial needs of the state ventures that produce them can be taken into account. Certain goods that are judged as being essential (in the incomes of the agents who produce them or in the consumption basket of those who purchase them) are also sometimes fixed by the state, and are periodically readjusted in order to take account of the basic conditions of demand and supply.

On the subject of income policy, the situation is more complicated. At the domestic level, income policy consists of measures that influence the structuring of wages (the wage rate and hours of work), social costs (that can be enforced on the wage rate, on the wages themselves, or on the wage bill) divided between employers and employees, and direct taxation on earnings. In the context of adjustment three types of measures affect incomes:

- first, reduction of the personnel in the state apparatus is usually accompanied by salary revisions that are designed to protect the purchasing power of the public servants who have been retained,

- further, upkeeping of minimum wages and social costs of employers at their existing level with the intention of: improving the overall productivity of the enterprises, eliminating global wage rigidities, and replacing them with wages and other conditions of compensation that are negotiated

at the firm level (or at the level of a sector).

- and finally, revising direct tax measures on earnings, with the double intention of compensating the less privileged for their forgone purchasing power, and increasing the revenues of the state.

On the subject of public finance and administration, the general rule of structural adjustment translates itself into a reduction (see elimination) of chronic budgetary deficits. This correction requires the synthesis of several measures for the achievement of the desired effect. In principle it is as follows:

- (i) to freeze for a time, the investment spendings on public funds;
- (ii) to reduce the involvement of the funds in the operation budgets of the ministries, in particular, through a reduction in staff; an increase in the productivity of the existing personnel; and transfer of responsibilities of spendings to the public authorities who are located outside the central state apparatus (local collectivities and regional authorities);
- (iii) to eliminate subsidies and direct transfers, in particular, in the case of prices;
- (iv) to increase the efficiency of the fiscal and para-fiscal collection system;
- (v) to eliminate subsidies to state-operated ventures;
- (vi) to modify certain aspects of certain tax rules in order to provide the state with a regular increase in nominal revenues;
- (vii) to privatize several public or parastatal ventures in order to eliminate on the one hand, the burdens that they represent (or that they can represent), and on the other hand, to increase the inflow of funds to the state's capital account;
- (viii) to introduce through the public service networks, as much as it is possible, price formulas or more prosaically, formulas for the recovery of the costs.

On the monetary subject, adjustment programs involve exchange rate depreciation (direct or indirect) in order to contract imports, stimulate exports, and to unify formal and informal markets of the foreign exchange. In the longer run, depreciation has as objective the reorientation of the production apparatus towards the export industries.

4.2 Risks of adjustment

Structural adjustment must contribute to place the domestic economy on a sound and a self-sufficient growth path in the intermediate and the long run. However, the outcomes and the processes of adjustment are not devoid of risks. The classification of these risks become connected in the adaptation process phase of the economy: the transitional phase, and the growth phase.

In the first place, the expected results of adjustment may not materialize, or may do so with extreme sluggishness. Expansion in exports and contraction in imports through depreciation are faced with limitations as a result of the price elasticities of the foreign and the domestic demand, respectively. In the latter case, price elasticity is so much more lower as the rarer is the substitute goods in the country, which is usually the case. Growth in the domestic supply may only manifest itself after a long period due to delays in assigning the productive capacity. In addition, depreciation will be ineffective if the relative prices of the imported goods rise; however, this would not be the case if domestic inflation increases the prices of all substitute goods.

Therefore, the duration of the transitional phase may vary; the shorter it is, the weaker would the pertaining social costs prove themselves to be. To a certain extent, the more judicious and well-managed is the conceived adjustment program for the overall amelioration of the economic efficiency, the faster will the economy clear the path for the necessary means to absorb the social costs of transition. Transparency during periods of adjustment allows all economic managers to understand the modifications of the system of rules, the institutions, and more generally, the signals that they are concerned with. Thus, they will adopt more rapidly the stated contents that the program of adjustment attempts to launch, and at the same time will be able to unveil sooner the real resistances to change.

Even more seriously, is the chance taken on the positive reaction of supply. Measures that are introduced in order to ameliorate the conditions at the center of which the productive apparatus evolves; those that are propitious to the growth of efficient allocation; and those that stimulate the long term supply, may not succeed.

During the transitional phase the economic agents can be influenced via:

- (i) loss of employment and thus, income;
- (ii) a resulting loss in the purchasing power, on the one hand, due to the administration of price liberalization of certain

commodities during the pre-adjustment phase; and on the other hand, as a result of a general increase in prices (inflation) that traditionally accompanies programs of adjustment.

(iii) liberal income policies that attempt to maintain (or to rehabilitate) the competitiveness of the domestic economy, and that result in keeping incomes (especially in the market economy) close to their pre-adjustment level (or if they were to increase, this would occur at a lower rate than the rise in prices).

(iv) contraction of the supply of goods and services that are essentially distributed by the state; particularly, in the areas of health services, education, and training.

In the longer run, the risks are not any less important:

(i) first, economic agents who are excluded from the process of accumulation, namely, during the phase of the development of the human capital will be placed at the margin of the benefits of growth, without having participated in it;

(ii) furthermore, the expected growth through adjustment does not by definition, include all the sectors of activity that were present during the pre-adjustment period. On the contrary, certain sectors will be abandoned, and others will be developed. Those factors of production that would be displaced in order to find their productive niche can firstly, fail to realize immediately their future interest and therefore, not be displaced; secondly, even if they acknowledge their necessary reallocation, they may not know how to do so; and thirdly, they may not possess the means for reallocation. This triple constraint concerns all the factors of production, but affects more acutely the factor of "employment";

(iii) In addition, certain portions of the economy are unable to react properly to the conditions and the favorable climate that structural adjustment promotes due to imperfections in their specific markets;

(iv) more precisely, although structural adjustment may be oriented towards growth, it can neglect certain segments of the economy that without being a central part of the economic engine are nevertheless, important for certain layers of the population. Unattended to, these economic sectors are likely to remain undeveloped, or to develop at a slow pace. Thus, the unequal growth resulting from adjustment can translate itself into stagnation, and an increased impoverishment of certain sectors of the economy that do not in principle justify the demands of adjustment;

(v) finally, the original endowment (namely, of active productives) of the economic agents is such that it is not possible to conceive of an egalitarian participation of all the economic agents in growth; on the contrary, those who are less privileged (the poor or the very poor) necessarily, participate to a lesser extent.

5. Industrial Adjustment and the Agroprocessing Industry

The responses of the agroprocessing sector to industrial adjustment are far from being uniform across the countries in African. The fact of belonging to the same continent does not homogenize the circumstances. One example would be sufficient to illustrate that all or nothing is possible. This does not allow us to say that the industrial adjustment policies are undesirable (besides, they are desirable), but rather that they are incomplete.

It is now clear to all, that adjustment translates itself among other things, into a return to market regulatory mechanisms, and in particular, to market prices. However, the point of departure is not the same for all the countries, neither is it the same for all the production activities in the same country. Thus, in Senegal, as an example, peanut has been accorded a farm price that exceeds the quoted international price, in particular, during the past few years (although this is also true if one were to choose a very long period, and if the trade privileges that France has granted the Senegalian producers is taken into consideration). A return to market prices translates itself into a decline in producer prices which is a disincentive for agricultural production, but by the same token, it is hoped that it would be an incentive for the diversification of the Senegalian crop production. In this case, the user sector will pay less for its raw materials but will turn to a lower capacity (that is, an average cost possibly superior to that of the pre-adjustment period). Moreover, at a certain point in the future (the period during which agricultural supply responds) other agroindustries will benefit from the large-scale production of new crops, and will be able to change to a higher capacity utilization rate; thus, become more competitive.

In another case, for example Guinea, the rehabilitation of market mechanism has been translated into a rise in the producer prices, a growth in the agricultural production, a more regular supply from the agroindustrial sector, and a net gain in the performance of the sector.

Generalization on the effects of adjustment are therefore perilous. They would depend on the conditions of the emergence and the actual functioning of the agroprocessing enterprises, as well as their linkages with the rest of the economy. It is with this expectation that we reach the section concerning the interactions between adjustment and the performance of the agroprocessing sector.

The first point of linkage between adjustment measures and the performance of the agroprocessing sector concerns price liberalization. In the very short run (that is, as long as the

agricultural production scales are not modified), agricultural products are in general, likely to have higher costs; but at the same time the agricultural processed products can be sold at a higher price in the market. In the event where the final demand is relatively price inelastic (that is, among others than the availability of substitute products that are remaining the same) the businesses in agroprocessing sector would need to improve their lot. However, if the final demand is relatively price elastic, the processing operation would have to reduce its profitability margin (that is, to absorb the rise in the cost of its raw materials) by trying to cut down other elements of its production costs (it is also that for which adjustment is aiming). The previous hypothesis will not be possible unless in the framework of adjustment policies the rules for the functioning of the labor market would already have been relaxed (the manpower being often the other principal variable cost of production). In the shorter run (a clumsy expression that signifies neither a very short nor a very long period), increases in the prices of agricultural products will have as their impact, a strengthening of a more regular domestic supply with a better established capacity utilization rate. In this context, soluble demand is characterized, without a doubt, by a relatively low price elasticity due to simultaneous increases in the agroprocessing and the direct agricultural consumption products.

The second point of linkage is related to the problem of harmonizing the effective protection rates. In the case where a change in tariffs and import licences translates itself into a decline in protection for the agroprocessing industries, which is not always the case, the industries may face increased competition (due to an immediate fall in their competitiveness in the short term resulting from a combination of enforced tariffs on their imported inputs, and a reduction in tariffs on their imported finished products). It should be noted that as a general rule, the risk of a growing competition does not appear immediately in the agroprocessing sector. Furthermore, when imported inputs are destined for exports, customs duties levied upon entry are ultimately refunded upon export. The stakes of deprotection in the short term (a simultaneous but a nonessential act for harmonizing the effective production rates), and of growing competition are won especially by the multinational operators from who benefit to streamline their global production capacity. Frequently in the agroindustrial sector, the multinational ventures place themselves on the domestic markets, in order to access these by contouring the problem of trade barriers, and in order to take advantage of the tax incentives offered by the host governments. Presently, the movement towards production streamlining benefits certain countries in Africa at the expense of others, without a systematic bias. In the intermediate run, market opportunities that exist in the Sub-Saharan African countries will be likely to attract more players through a better circulation of information.

The third point of linkage involves the overall budgetary measures that accompany adjustment. In fact, the search for a tax formula (increases in tax levies, and an improvement in fiscal planning) creates a pressure on the agroprocessing enterprises that in the limit, would be in opposition to the strict rule of economic efficiency. Thus, the maintaining of high oil prices (more often imported than otherwise) in spite of declining international prices has provoked in more than one country, a significant decrease in the competitiveness of the businesses on the domestic market (especially with respect to the external operators). Furthermore, tax increases, as well as keeping large segments of the economy outside the tax recipe produce important competing disequilibriums (especially in the "legal" ventures). The problem is mainly the same when there is a question of a necessary reduction on custom tariffs for imported inputs, such as "sugar".

The fourth point of linkage arises from the implementation of confused, opaque and incomplete industrial adjustment measures. Therefore, in the case of Senegal one finds: industrial de-protectionism; a high tax on oil; preservation of protectionism on sugar (traded clearly above the global price); preservation of the employment legislation; and the maintaining of the tax base without expanding and thus redering it more equitable. Unfortunately, Senegal is not the exception. In these conditions the performance of the API and the other industrial sectors have been affected.

Finally, structural adjustment is supposed to stimulate exports by correcting the incentive mechanisms. One often forgets that this stimulation takes the form of eliminating implicit biases against the exports, but which does not take direct measures towards an active support of exporting. In fact, it is possible to have an extroverted economy in the case of a total liberalization of exchange or even in a strongly protected one, on the condition that effective protection rates of exports and imports cancel out one another. Now, increase in exports, that is, the sales made abroad is but a consequence of eliminating implicit disincentives. This is a necessary condition in certain cases (when the price and therefore, the direct cost of production is the principal trade variable), but never a sufficient one. Other variables, in particular, in the agroprocessing sector in the OECD countries intervene. These include: the quality of products, the choice of a high-scale niche with a low price elasticity, the indentification of a trade strategy, and a suitable distribution system.

An agroindustrial strategy must contain adequate and harmonious adjustment measures (seeking efficiency), and at the same time, a clear view of the objectives and the means (namely, institutional) in order to develop the agroprocessing industries (seeking "effectivity").

6. General Conditions of Export Markets for the Agroprocessing Industries in the Sub-Saharan African Countries

The African API have without any doubt, several absolute natural advantages that could serve as the foundation for an efficient industrialization. The elimination of biases that implicitly discourage exports does not constitute by itself a policy for promoting exports. It is still necessary to realize what remains hidden, and what awaits the manufacturers at the other side of the barrier. In this section, we shall outline the market patterns by examining the general characteristics of demand for food products, as well as the basic conditions for penetrating the markets of the OECD such as they appear to be in the next few years. The space that we have reserved for this does not do justice to the richness of the topic, and the diversity of the situations that are encountered in the markets of the developed countries. Nonetheless, we believe that the complexity of the processes of transfer from comparative relative advantage to "exchange" will be clarified.

6.1 The Major Patterns of Food Consumption in the Developed Countries

The demographic and socio-economic profile of consumers in the developed countries has been largely modified during the past years. There has been an aging of the population, an increase in the number of singles and the number of single parents who work outside the household, as well as an increase in the number of couples with or without children, who have joined the labor force. From a demographic point of view, there has been: a stabilization of the population growth that has resulted mainly from low birth rates, a change in the age structure of the population (the aging, and the important increasing number of the 25-40 year olds, the Baby Boomers), and a multiculturalism of the social groups through the heightening of the immigration phenomenon. From the point of socio-economic changes, it is the diversity of the family situations that appears to constitute the most impressive patterns. Therefore, while the typical pattern of the North American household consists of married couples with two children where the wife stays at home, it does not represent more than 7% of the households.

The food consumption market as a result of the influence of demographic changes, as well as the multiplication of socio-economic patterns is broken up into several segments which correspond to the habits, tastes, and the specific needs of consumers. This is namely, translated into the appearance of a variety of new demands by consumers. The division of the market into different segments has therefore replaced the traditional, homogenous market where mass production was the golden rule for satisfying an all in all standard clientel. Factors that allow for a better definition of the different segments of the present

market with respect to habits, tastes, and consumer demands are age, and life-style. In this respect, the principal presently known market segments consist of:

<u>Age</u>	<u>Life-style</u>
0-25 years	"Grey collars"
25-40 years ("Baby Boomers")	"Yuppies"
40-50 years	
50 years and over ("The grey market")	"Super-actives" "Actives" "Not actives"

The market for the "Baby Boomers", and more specifically, the "Grey collars" segment (traditional values: family, suburban life, group recreational activities, etc.) is presently the most important, given that it constitutes one-third of the population in most of the OECD countries. The Baby Boomers are better educated, and are wealthier; they travel more, consume exotic foods, and in general, are better nourished than their elders. The "Grey market" on the other hand, may be considered as the "future market" since as the "Baby Boomers" age, those in the third age group will represent approximately one-third of the population in the next millennium. In addition, it is predicted that the proportion of the retired persons who are financially well-supported would increase in the next few years, namely, due to the expansion of the private and public retirement-savings schemes.

Whatever the considered market segment may be, consumers are increasingly becoming health-conscious, and are demanding safe and nutritious foods. Public campaigns that have been promoted by the nutrition experts (nutritionists, dieticians, etc.) during the past few years are but a sign of this trend. Furthermore, the orientation of studies on nutrition with respect to specific nutrition needs of certain population groups (children, adolescents, pregnant women, old persons, etc.) has without a doubt, also reinforced the market segmentation. This indicates: (i) a reduction in the consumption of red meat; (ii) an increase in the consumption of poultry; (iii) a decrease in frozen food products; and a very promising future for (iv) light products (less greasy, less salty, and less sweet); and (v) biological products.

Consumers spend less time for the preparation of their meals. This pattern is mainly due to an increase in the number of households on the labor market, and an increase in the amount of time spent for daily commute, given the exodus of families to the suburbs. The trend towards micro-wave ovens that the market has been experiencing for several years is directly related to the

fact that there is less time for the preparation of the meals. Presently, over 50% of the North American households (25% by the OECD scale) have a micro-wave oven. This appliance has had the first rating in the sale of all household appliances. For the same reasons, to which the reduced size of the families may be added, consumers are increasingly having more meals outside the household. Hence, in Canada, between 1969 and 1982, the percentage of the food budget devoted to meals in restaurants increased by 41% (22% in 1969 as compared to 31% in 1982).

Although consumers may be very sensitive towards prices, as far as food purchases are concerned they are increasingly demanding for personalized service at the time of their purchase. The growth of specialized shops (the neighborhoods butcher shop, fruit stores, pastry shops, etc.) in the past years, as well as the development of several store systems by the large food distributors (supermarkets, specialized stores, "depanneurs", etc.) are the direct effects of this new demand.

The agroprocessing industries are increasingly becoming oriented towards the innovation of products. This marked orientation of the agroprocessing firms that have sensibly enough abandoned the production of standard products has its roots in two phenomena: the saturation of demand for food products mainly as a result of the leveling of the demographic growth, and a relative fall in the per capita food consumption in relation to the proliferation of supply; as well as the emergence of new specific needs of certain population segments. The product innovation strategy allows firms to exploit specific niches and thus, to become the prize-winners in the competition. In the present competitive context, the survival of a number of producers depends on their capacity to innovate. This pattern of product innovation is such that in 1985, 12% of the foods were considered as innovative in North America. While processed products represented 50% of the market in 1960, today they constitute close to 85% of the share. Moreover, one-half of the total of the newly developed products disappear in the first year, and hardly 20% reach their "first cycle of development" that lasts two years. These figures correspond to the general widespread opinion that the life cycle of products should be shorter today than it was a few years ago. This pressure to adapt imposes moreover, problems on enterprises that do not possess a tradition of product innovation, and who find themselves confronted with lack of competence in research and development as well as in marketing (introducing the product on the market, brand management, etc.), and who have insufficient financial resources.

The enterprises are increasingly devoting more energy towards the development of new modes of presentation/preservation of products that tend to prolong the duration of the preservation of the food product by completely conserving its taste and quality. The principal technologies of preservation that presently exist in

the marketplace, or that are in the process of becoming commercialized include:

- packaging through modified atmosphere (MAP) or controlled atmosphere (MAV) (foods that are minimally cooked are placed in a package where oxygen is replaced by an inert gas that does not produce any reaction in the mass with which it is in contact; this allows to prevent the moulding of the food and thus increases its preservation period);
- vacuum packing (vacuum packing allows for an increase in the duration of the preservation of products, although to a lesser degree than with MAP and PAV; it enjoys a great success in Europe, and has accounted for 30% of the growth rate during the past years; especially in the commercialized washed vegetables, peeled and cut, and cooked dishes that are presented in reduced portions);
- freezing (especially for vegetables, juices, and individual prepared dishes);
- canning (a more widespread mode that has experienced a marked fall in the past years, especially for vegetables; this reflects the increasing preoccupation of consumers with purchasing food products that possess a superior nutritional quality);
- biodegradable packaging (increasingly present as a result of public opinion pressures on environmental issues);
- irradiation (a preservation method that allows in a very important way a growth in the life-duration of a product, but that is stopped in several countries due to an absence of confirmation as to the non-toxicity of the processing, as well as due to important investment and operation costs of such a process).

These new modes of prolonged preservation would have an important impact on the commercialized markets of food products which until now, have been limited due to the perishable character of several food products.

We are experiencing a world-wide spread of the agroprocessing market. On the one hand, this is due to the saturation of the domestic markets, a higher international mobility of capital, the maintained growth of direct obstacles in the international trade for agricultural products, the pressures for the liberalization of exchange for the processed products, as well as the availability of methods for prolonging the preservation period of the food products. The international competition with which the firms in the agroprocessing sector are confronted would have major effects on the success factors (optimal size, competitiveness, etc.) of the sector.

6.2 Strategies of Commercialization of Food Products

The commercialization of food products in the OECD countries rests upon the identification of the product, the choice of the distribution mode, and the adoption of a suitable commercialization policy.

Four strategies of brand naming are utilized by the firms in the agroprocessing sector: the product "without a brand name," that is characterized by a total absence of the identity of the producer; the private product brand, on which the name of the distributor is indicated; the corporate brand, where the name is consistent with the notoriety of the producer; and the domestic brand, which is created through continued advertising in order to differentiate the product physically, along with the image that it projects. The products without a brand name in general, correspond to commercialized items in bulk where the basic function of the products are sufficiently apparent to allow for their sale. The products with a private brand name that are manufactured by traditional producers (who usually sell a similar product under the domestic or corporate brand name) on the behalf of the distributors are usually marketed under the latter's name who generate supplementary revenues with a low risk level, thanks to the fact that the product has been already tested. The principal sale argument is the price, given that the product has generally, a standard quality. The volume of expected sales needs to be sufficient in order to permit the supplementary production costs that are inherent in the alteration of the label to be absorbed. The distributors are inclined to introduce private brands in order to reduce customer loyalty towards domestic brands (making the product seem commonplace) in the hope of diminishing the bargaining power of the producers. The latter accept to play the game in order to increase their production volume (more important economies of scale), and their presence in the display (and hence, their total share of the market) without any additional investments in the marketing of the product. The corporate brand is constructed around the name of the enterprise, and represents the identity of the firm's products as a whole. The corporate brand is particularly adequate when it is difficult to establish a domestic brand name (for example, when there is little product differentiation vis a vis the competing ones). In the course of the years, the firm can construct a notoriety around its name, and thus count on its reputation for the introduction of new products to its clients. A domestic brand is created through a continuous effort to differentiate the product in the eyes of the customers by giving a specific image to the brand in such a manner as to develop customer loyalty. The development of a domestic brand is very expensive in terms of advertisement and promotion.

The choice of a brand strategy depends on: the degree of the

physical elaboration of the product; the relative sensitivity of consumers to price; the possibility of developing customer loyalty for the product; the number of competitors; and the envisaged distribution network. Chances of success of a product that is sold under a domestic brand name are maximized to the extent that: the product is differentiated; the enterprise possesses the necessary resources to sustain product differentiation; the number of competitors are limited; the enterprise possesses long term innovative capacities; the product borrows the distributive network of the retailers (mainly independent), and that it cannot be easily traded under other forms (in bulk, private brand, or recent speciality) that are presented by the supermarkets.

The supermarkets represent from the far, the principal outlets for the food producers who sell their products to the OECD countries. The food distributing sector is in general, concentrated and integrated in wholesale activities, namely, in the institutional network. The power of the supermarkets vis a vis the food producers is considerable. This power is derived from several factors, such as: the important degree of exposure that the large food chains have obtained; the low cost of changing suppliers; each type of product that is bought by the chain represents only a small portion of its global purchases; food products that are generally little differentiated in relation to one another; the low level of profit for the chains from the sale of the products; the food products are relatively of the same quality; for several categories of products the chains represent a credible threat of backward integration, and finally; the chains have a large influence on the consumer purchasing decisions as a result of selection biases that are created through the physical display of the product in the store (at the end of the aisle, the height of the display shelf, etc.).

The power of the food supermarkets allows them to impose their conditions on the producers. Beyond the purchase price of the product, these conditions concern principally: the cost of recommendation, that is, the entry price that all the producers have to pay for each of their products which is to be sold through the supermarket network; the discounts on volume that are offered to the chains by the manufacturers; the cooperative advertisement (promotion fees of a product are shared between the supermarket and the producer); the number as well as the periods of promotion; and the price policy relative to the sale of space on the shelves according to the physical location of the product (total occupied space, end of the aisle, the height, the breadth, etc.). The profit margins that the food chain stores experience from the sale price of different products, thus, constitute only one element among several for their cost-effectiveness. All these elements of negotiation allow the supermarkets to exploit their very great power vis a vis the producers.

In order to bypass the power of the chains, the food processors use a variety of strategies. Therefore, for example, some producers that have big domestic brand names, that is, who have succeeded in developing great consumer loyalty for their products benefit from a more important power than the others with respect to the supermarkets. A famous domestic brand creates a direct demand from the consumers and therefore, forces the supermarket, to a certain extent, to keep the brand product. In the limit, the greater is the risk for the supermarket to lose its customer if it is not in a position to offer the product that the consumer desires, the better-placed is the producer to negotiate for the most advantageous conditions. On the other hand, the supermarkets enjoy a more important power when the manufacturer's product is little differentiated, as in the case of a secondary brand where there is little or no consumer loyalty. However, the manufacturers of non-differentiated products may counter the power of the chains by diversifying their distributive network.

Faced with the power of the supermarkets, product innovation is one of the sole factors on which the producer has a full control. The development of a new product involves a highly complex process where the principal stages entail the recognition of the opportunities (engendering the idea, and defining the market), the design of the product and its place on the market; the component tests and the market forecast, first on a lower scale, and then at the national level; the marketing of the product (planning followed by launching); and finally, the management of profits that the product generates. This is a relatively long process (five years for an industrial product, and two-and-a-half years for a consumption product) that is expensive (between one and nine million dollars), and that has a high risk level (the probabilities of success have been estimated in North America to be approximately 30% for a new industrial product, and approximately 20% for a consumption product).

The main reasons that explain the failure of a product are: (i) the narrowness of the market; (ii) the unsuitability of the product to consumer needs; (iii) the insufficiency or inadequacy of mobilized resources by the enterprise. The omission, or the bad management of one or more of the steps in the development process of a new product can also be a sufficient cause for its failure.