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Animation Capitaliste:
Input Distribution and Senegal's New Agricultural Policy

by

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INTRODUCTION

Senegal's groundnut industry generates consistent deficits and according to most world price projections will continue to do so. Ironically, Senegal has competitive advantage in the crop and no viable alternatives for large-scale agricultural exports. The state's commitment to extending irrigated cultivation, while arguably holding potential for success, is a long run strategy at best for relieving Senegal's recurrent economic crisis. Some analysts project that twenty years will pass before products like winter vegetables earn significant foreign exchange. Even then Senegal will have to compete in narrow, oversupplied markets. The technician approach of the last twenty years has demonstrated the benefits of special inputs and farming techniques, but as a tool of management is an administrative failure. Senegal requires a new phase of institution building designed to create responsible agricultural communities. Only by reducing the inefficiencies inherent in groundnut production and marketing will Senegal realize the structural adjustment so desperately needed by its economy now. Within the groundnut sector, the problem in the short and medium term is thus one of management, not strategy.

Climatic conditions and environmental degradation have caused most of the losses sustained by the groundnut industry. Droughts contributed to marked declines in production, most recently in 1983.

In addition, the discontinuance of fallows and the toll exacted by groundnut production on the soil have precipitated a decay for which fertilizer cannot compensate. Yet the GOS cannot respond to these problems as specifically as it can to the management issue. In the government's Letter of Development Policy of December 1985, one of the five stated objectives of the structural adjustment program is easing "the structural constraints that impose a heavy burden on the economy of Senegal by rescaling the public and parapublic sector and improving their management."¹ In some cases, improving operations implies a more complete rupture between the state and its enterprise. Encouraging the development of decentralized operations, contracted management, or even the liquidation or privatization of an existing structure emerge as responses; another objective is thus

consolidation of the bases of economic growth through...the provision of appropriate incentives for promoting the revival of private investment. In this context, the authorities have specifically designed a new agricultural policy...²

The Government of Senegal launched the New Agricultural Policy in 1984, accompanied by a New Industrial Policy and World Bank adjustment programs, to increase productivity and make markets more efficient. Through the reforms, the GOS seeks to promote food self-sufficiency for farmers who at present must often sell seed stocks or take loans for food and ceremonial purposes long after the harvest. This period is referred to as the soudure, or hungry season. In the context of groundnut marketing, the state is abandoning monopsony by allowing

¹ Government of Senegal, Letter of Development Policy, (Dakar: Government of Senegal, 1985), Annex IV, p. 3.

² Ibid., p. 2.

private traders to operate legally. This competition, it is hoped, will diminish the margins between the producer price and the effective price paid at Dakar. Much of these margins represent shadowy losses attributed in practice to graft for rural notables who control a large segment of the official trading network. Legalizing private trade essentially represents a recognition of the status quo since parallel trade has existed for decades. To encourage greater production, the Government of Senegal (GOS) is diminishing the implicit taxation of farmers by raising producer prices, though it is not clear that Senegal can afford them while world market prices remain low and bureaucratic expenses remain high. Finally, the rapacious control of the state over every aspect of input production and distribution is at last eroding as private interests and village cooperatives are being given greater roles.

As part of a broader effort to streamline the economy, the Council of Ministers of the GOS announced a New Parapublic Sector Policy on July 29, 1985 which laid plans for specific transfers of authority in industry and agriculture. Eighty enterprises in which the government holds a majority share were slated for privatization or liquidation. Businesses operating in the same market which would benefit from agglomeration, such as the groundnut oil crushers SEIB and SONACOS, were scheduled to be fused together.³

³ "La Nouvelle Politique Economique du Sénégal", Bulletin de l'Afrique Noir, April 3, 1986, p. 6.

Parastatals and Disengagement

In the past ten years, analysts have focused increasingly on the contribution of management problems to economic stagnation in Africa. During the 1970's, government control over Third World economies expanded even more rapidly than it had previously. This was due, in part, to external price shocks and internal natural crises. The number of government agencies controlling business and marketing mechanisms quadrupled in some countries.

The motivations for state intervention in business and markets vary. Upon independence, many African nations sought greater control over their economies. Governments saw acquisition of corporate shares or nationalizations as means to diminish foreign ownership and redirect the economic orientation of the nation away from the metropolitan power's interest. Other responsibilities, such as public utilities and infrastructural development were considered natural domains of the state. Governments also used ownership of certain enterprises to foster the development of industries in which there seemed to be little private sector initiative. Cotton and tourism are two prominent examples in Senegal.⁴

Developing human capital also prompted governments to direct markets and operate businesses. After independence, when metropolitan nationals possessed most of the expertise necessary for the operation of industries and services, state ownership offered the opportunity to train indigenous managers. Other non-nationals, most notably Lebanese

⁴ The World Bank. "Report and Recommendation of the President of the International Development Association to the Executive Directors on a Proposed Credit of SDR 10.2 million to the Republic of Senegal for a Second Parapublic Technical Assistance Project" (Washington: The World Bank, 1983), p. 10.

and Asians, dominated local private trade in goods and services, parastatal management offered a convenient way to weaken the relationship between ethnicity and economic roles.

Parastatals became a means of providing employment. The readiness of the parapublic sector to hire recent graduates, for example, lent legitimacy to university degrees. In a perverse way, the expanding corps of bureaucrats represented another facet of socialism. Alternative mechanisms can achieve of the same social goals without the costs and contradictions inherent in bureaucratic management.

Conflicting mandates hinder the effectiveness of parastatal management; providing employment and operating efficiently is conflict characteristic of state operated enterprise. Within the agricultural sector, governments generally cite three aims as justification for intervention: setting stable prices; giving the country's agricultural sectors greater bargaining power on the international market, and protecting producers from usurious money lenders and exploitive private traders.⁵ Parastatal management seldom achieves these ends efficiently.

A government can, however, establish a price or subsidize an operation without running it. Organizing producer cooperatives and imposing regulations on private trade can protect peasants from gouging and exploitation. Finally, networks of cooperatives and private, indigenous trading firms can give the agricultural sector as much leverage on the world market as a parastatal operation.

⁵ Mary Shirley, "Managing State Owned Enterprises", World Bank Staff Working Papers Number 577. Management and Development Series Number 4. (Washington, D.C.: World Bank, 1983), p. 62.

High commodity prices masked the inefficiency of parastatals until the second oil shock hit Senegal. The economic situation the GOS faced in the late seventies, caused by drought, the oil shock, and declining prices for its exports, constituted a crisis and demanded a response. Like many other Third World governments, the GOS then expressed intentions of reducing control over business and markets, partly in response to donor pressure. Only rarely in the past seven years has that form of government overextension yet been reversed significantly; in these cases, the governments privatized enterprises which had previously been nationalized.⁶ Blueprints for change like Senegal's New Agricultural Policy propose ambitious reforms, yet implementation remains an equally great challenge. Innovations in reform strategies and institution building must accompany proposals for reorganization and management changes.

The Development of a Private Sector: Animation Capitaliste

Recently, the word privatization has been used in conjunction with agriculture in Senegal, yet it does not characterize the new agricultural policy. Certainly, legitimizing the parallel trade in groundnuts is simply a recognition of an existing situation. Disengagement is a more appropriate term since it communicates the changes in mentality required by the new policy. First, the involvement of the Senegalese government in commerce and agriculture,

⁶ Elliot Berg, debate: "Privatization: Problems and Potentials," sponsored by the National Council of Young Senegalese Administrators, (CNJDS) and the American Cultural Center. 6:30, February 6, 1987, Novotel, Dakar, Senegal. Berg referred to the cases of Chile and Bangladesh. His point is that while many Third World nations have made claims of moving toward private sector intervention, there has in practice been little progress.

which had increased dramatically in the 1970', was to be curtailed and greater faith placed in the private sector. The official statement of the government appeared in the Soleil.

The state has for the past twenty-five years played an important role as a catalyst to the economy; private enterprise is now to take the reigns in business so that the state may devote itself more fully to its traditional activities.⁷

Simply stated, the state's inability to sustain deficits triumphed over its fundamental distrust of the private sector.

Though the state described its previous role euphemistically as that of catalyst, its new policy will be more deserving of that term. A new relationship is to evolve in which the state initiates and develops services without operating them. In some cases, even this catalytic role will be contracted out to private voluntary organizations and non-government organizations. This approach has been in effect only in the last two years, but its results are promising, especially in the marketing and distribution of inputs.

The New Agricultural Policy addresses five broad concerns. First, the state has planned a less costly method of distributing agricultural inputs. Second, the GOS is to emphasize rural development in its restructuring of the groundnut sector: the establishment of village level cooperatives is the most significant evidence of progress in this direction. Third, the efficiency of regional development agencies is being advanced, and when possible, these bodies are being eliminated. Fourth, a long term strategy of crop production aimed at reducing food dependency and seeking new

⁷ Amadou Fall, "L'Etat et L'Entreprise," Le Soleil, August 26, 1986, p. 6.

competitive advantages in export crops are the subject of current research. Finally, the GOS plans to reverse the degradation of the environment.

Achieving these goals depends upon building new rural institutions and encouraging groups to function as communities. In this respect, the New Agricultural Policy resembles the socialist institution building of the early post independence period under Mamadou Dia. At that time, the Animation Rurale project, cadres created viable communities and raised the political and social conscience of peasants while promoting agricultural development. The state abandoned the project for political reasons in favor of a technicist approach to rural development involving extensive parastatal intervention. The economic crises of the late seventies highlighted the inefficiencies of that approach, and forced the GOS to consider change.

Ultimately, the success of the New Agricultural Policy depends upon its implementation. In the past, policy statements have been more aggressive than the actual enactment. Bureaucratic foot dragging, rhetoric for the donors' sake, financial institutions, and vested elite interests all dilute the resolve of the GOS. Budgetary limits and competing interests in government finance cause further delays. Events during the past year in Senegal, however, point to a pragmatic victory of the need to reform agricultural policy over conflicting actors' interests. The most successful programs combine elements of independence-era rural reform with creative implementation strategies, most notably the use of private voluntary organizations.

Chapter I
STRUCTURAL DEVELOPMENT OF THE GROUNDNUT
SECTOR: 1960-1980

The Government of Senegal's approach to groundnut production in the last twenty years in essence rejected its earliest stated intentions of encouraging economic and political development in the peasants' interests. Integration at the grass roots through rural cooperatives failed to produce a vertical integration: the reverse became true out of political expedience. The promise of Mamadou Dia's policies between 1957 and 1963 was dashed by bourgeois and urban interests and by the marabouts who sensed an erosion of their power base. Largely out of political expedience, President Senghor imposed a more hierarchical relationship between the state and the cooperatives. The New Agricultural Policy represents a partial return to the values of this period, especially in its emphasis on building institutions to generate self sufficiency in credit and input acquisition. Its definition of responsibility is more capitalistic, however, especially in the attitudes toward risk and credit it attempts to create.

The Socialist Interlude: 1960-1963

Mamadou Dia led the transitional government between 1957 and 1960 which oversaw the reorganization of Senegalese administration in

preparation for independence. Politically and economically, he attempted to bring the government closer to local interests. First, the administrative units were made smaller, inviting greater contact between citizens and leaders. Second, developmental and governmental units were made one and the same, thus facilitating coordination.¹ Finally, Dia planned to mobilize peasant initiatives extended rural development program.

Dia organized three rural development initiatives to create a socialist cooperative movement;

(1) An Animation Rurale Service which was to stimulate rural participation in development projects and to encourage the other services to be more responsive to the needs of the population,

(2) a Cooperative Service which was to establish and provide technical assistance to a nationwide network of rural cooperatives which were to be the foundation of an agrarian socialist economy...and

(3) Rural Expansion Centers which were to be multifunctional development services operating at the arrondissement level.²

The program's intent was twofold. First, the GOS desired to build significant institutions of rural development. Second, and more importantly, these institutions would also facilitate the social and political development of the peasants.

One example of the difference between the spirit and practice of this approach and later technical approaches can be observed in the educational system. Teachers under animation rural lived as the peasants did, included adults in the classroom, and taught hygiene as

¹ Sheldon Gellar, Animation Rurale, (Ithaca, New York, Cornell University Press, 1983), pp. 19-21.

² Ibid., p. 22.

well as reading and writing; later, emissaries of the Ministry of Education in city clothes taught a nationally uniform academic curriculum.³ These institutions achieved a qualified success in the groundnut sector.

Previously, services had been intended to integrate the peasants further into the market economy. By the time of independence, the monopsonistic nature of the market had asserted itself and a cash economy had been firmly entrenched. It became less likely that peasants would revert to subsistence farming, though that remained an option if government pricing policies exacted too heavy a surplus. Parallel markets offered additional recourse, especially under the direction of the marabouts who feared Dia's expressed desires to reduce their power.⁴

Barriers to Cooperative Socialism

Structural biases in the newly independent nation's economy favored hierarchy. These biases holds some significance for recent policies which are eclectic and thus contain contradictions. First, Senegal's dependence on France must be considered. Between 1960 and 1968, France paid premium prices to Senegal for groundnuts, in part as a gesture of aid to the newly independent country and partly to insure a regular supply of oil for its own markets. This increased the state's interest in cultivating a crop which would eventually no longer

³ Irving Markovitz, presentation of paper entitled "Animation Rurali: Biography of an African Administrative Agency" at Johns Hopkins SAIS for a colloquium, "Senegal 1987," April 10, 1987.

⁴ Donal Cruise O'Brien, "Des bienfaits de l'inégalité," Politique Africaine, March 1984, p. 37.

benefit from high prices and a guaranteed market.⁵

It must also be noted that there were few agricultural alternatives given Senegal's sandy soil and sparse, irregular rainfall. The crops which peasants alternated, millet for subsistence and groundnuts for cash, are among the few suited to the region. In addition, the millet-peanut-fallow rotation left little room for other potential export crops. As environmental conditions deteriorated in the late 1960's, fallows were eliminated and instead the peasants herded cattle onto the fields after harvest.⁶ Groundnut cultivation mines the soil even today, although the World Bank is implementing programs to slow this degradation.

Finally, the entrenched nature of both rural and urban interest groups has always lended a pragmatic air to Senegalese socialism. Urban bias, dependence on groundnuts for export earnings, the pervasive French influence on market channels, and the strength of the marabouts' power bases all work structurally to mollify any radical policy initiatives. Even President Abdou Diouf, whose early writings at the University of Dakar condemned the elitist and parasitic nature of the Islamic brotherhoods, has adopted a very conciliatory and cooperative tone in his discussions with marabout leaders.⁷

⁵ Though the French may have preferred to continue this aid, participants in the European Economic Community were obliged to renegotiate their preferential trade agreements with former colonies. This led to the Lomé Convention.

⁶ Mamadou Ndiaye, Ministry of Rural Development, personal interview, 9:00, January 2nd, 1987, Dakar.

⁷ Timothy Dean Hadley, Second Secretary, U.S. Embassy, personal interview, 1:00 January 29, 1987. Dakar.

Lessons of the Socialist Period

The experience of rural development programs under Dia was brief but successful regions indicated that a grass roots strategy was viable. Animation rurale developed citizen cultivators who participated in the political life of the country and produced its food and export crops. Essentially, the success of animation rurale killed the program. One analyst notes that the service raised peasant consciousness of their political rights; when officials of the socialist party withheld deliveries of agricultural inputs from peasants who did not pay party dues, the peasants revolted.⁸ Though Senghor had at one point declared that national construction of African socialism depended on Animation rurale, he later shifted to a technicist approach, undertaking paternalistic intervention in the agricultural economy, especially after 1965. Improved seeds and technical packages supplied by the state became the new focus of agricultural policy. Political development strategies focused on coopting dissident youth into becoming law abiding members of society.⁹ With the fall of Dia, however, both the Animation Service and the Cooperative Service declined in stature and hierarchical parastatals which still operate today took over the extension of technology and education in Senegal.

The end of the so-called socialist interlude of 1960-1963 is central in evaluating the significance of the New Agricultural Policy of 1983. Many of the actors remain the same, though their interests have evolved somewhat. Both shifts in policy were expedient responses

⁸ Markovitz, presentation.

⁹ Markovitz, presentation.

to political and economic demands. Yet the new policy represents a rejection of statist, hierarchical solutions as well as an espousal of private initiative. Indeed, some of its innovations reflect a split personality. For example, seed and cereal storage banks are cooperative in nature.

The New Agricultural Policy emphasizes institution building at the grass roots level. Cooperative seed and cereal storage at the village level and the development of an viable rural credit facility exemplify these new shifts. Yet the approach is different in its profit-oriented message. The GOS wants peasants to become responsible borrowers and more entrepreneurial. Large cooperatives are still employed for purposes of marketing, but below that, two types of organizations are now legally empowered to take responsibility for credit, the village section and the producer group.

State Intervention: the Technician Approach

Many of the institutions developed in the mid 1960's alienated peasants as they managed rural development. Instead of coordinating efforts through dialogue and a participatory training method, the new Rural Development Associations imposed technical packages including improved seeds and new fertilizers. The experience of one village with the rice development association, the Société d'Aménagement et d'Exploitation du Delta (SAED), illustrates peasant reaction.

Peasants viewed SAED as an exploitive mechanism which encouraged them to assume debts. In April of 1976, the chairman of one village association voiced his opinion:

Groundnut Production) At the same time, the percent of the crop marketed under ONCAD declined over the 1970's from an average of 73.5% between 1968 and 1977 to an average of 54.0% over the next three years.¹³

While rainfall was responsible for much of the aggregate decline in production, inefficiency and waste exacerbated the fall in revenues. This, in turn, was fueled by the growth of parallel markets which offered more convenient services, if not better prices to producers. Consequently, ONCAD's losses in transport, storage, and decay augmented over the 70's, tripling between 1973 and 1979. It had little incentive to reduce these losses since the state's stabilisation fund, the Caisse de Péréquation et Stabilisation de Prix, or CPSP, financed the losses.¹⁴ Appendix IV illustrates these trends. In essence, state guarantees which were intended to protect the industry from bad climate encouraged corruption and made the groundnut sector a greater deadweight on the economy.

The groundnut cycle begins immediately after the harvest, between March and May with the distribution of inputs like fungicides and fertilizer for the preparation of the fields. ONCAD distributed the inputs on credit according to producers' current production levels. Estimates of need were made by the preceding December so that orders

¹³ Calculated from Appendix IV, Production, Prices, and Marketing of Groundnuts.

¹⁴ The percentage of these losses to the total volume of groundnut deliveries to ONCAD rose from 3.7 and 3.6 in 1972/73 and 1973/74, respectively, to 10.9 in 1977/78 and 11.5 in 1979/80. Altogether, the proportion of "non-marketed output" to total production increased from an average (unweighted) of 22.9% in the three years 1966/67-1969/70 to 42.7% in the period 1977/78-1979/80. de Wilde, p. 108.

could be placed by ONCAD at the fertilizer factories and suppliers. The requisition mechanism had two major complications. First, farmers were forced to estimate their needs without knowing in advance the next season's market price. Second, after estimates were made, regional commissions advised ONCAD on the solvency of various cooperatives. Thus a bad harvest one year could handicap a coop if it could not, consequently, pay its debts.

ONCAD purchased the necessary tools, fungicides and fertilizers on short term credit from the BNDS (Banque National de Développement Sénégalais). ONCAD then distributed these inputs to the cooperatives which in turn distributed them to producers. Theoretically, these inputs could be obtained only on credit; the scheme was called the Programme Agricole. Accounts at the cooperatives level, at ONCAD, and at the BNDS lacked reliability, usually against the interests of the producers.¹⁵ As a result, fertilizers arrived late or not at all at many cooperatives.

The impact of these inefficiencies was double. First, producers assumed debts for essentially useless inputs. Fertilizers have less value for the crop if they are applied late in the season. Second, without examples of successful fertilizer use, demand for fertilizer dropped below that which could be expected under ideal delivery conditions.

¹⁵ Caswell, pp 52-53. Caswell notes that almost 100% of the cooperative accounts were faulty and that in 80% of all cases, the producer was at a disadvantage. The firm Italconsult pointed out in the 1970's the failures in the ONCAD accounts which were two years behind the production schedule, yet no change was effected.

Even without supply problems, the purchase of fertilizer represents a large risk for producers. Regional Development officials instructed peasants to plow the expensive product into the fields before the rains for optimum results. Since rains are difficult to predict, peasants prefer to wait until the first weeding, well after the first rains, for an indication of climatic conditions, before making such a large investment.¹⁶

ONCAD distributed seeds through a different credit. At one point, seeds were ostensibly distributed in May based on tax registration so that each man received 100kg of seed and each woman 50kg; in practice this was seldom the case.¹⁷ Since the groundnut is the seed itself, ONCAD collected this debt in kind early in the harvest with a premium of 25% in quantity for the services. The underlying assumption was that peasants were unable to save their seeds. The 25% premium did not even cover the costs of collection, storage, and redistribution.

In a good year, one kilo of groundnut seed yields about ten kilos of groundnuts. After a good harvest about ten percent of the seeds are saved for the following year. In poor harvests, the number of seeds required became a much larger percentage of the total. Beginning in 1972, ONCAD replenished the gene pool of the seeds with a percentage of specially selected seeds appropriate for different regions.

¹⁶ Valerie Kelly, "Farmers' Demand for Fertilizer in the Context of Senegal's New Agricultural Policy," (Dakar: BAME-ISRA, September, 1986), p. 11.

¹⁷ N. Casswell, p. 54.

Two problems complicated estimations of actual need for seeds. First, at various levels of distribution, middlemen and transporters took a percentage of the goods. Large producers and paysans de pointe were also allocated disproportionately large quantities of seed for use as patronage or for sale for cash.

A second source of differences between seeds distributed and seeds planted is the amount consumed or sold by producers during the soudure or hungry season. This practice is in fact responsible for the structure of annual sales of groundnuts. If graphed with time on the x axis and amount sold on the y axis, a large rise appears at harvest called la grande traite and a smaller rise in the soudure called la petite traite composed of sales of seeds for cash.¹⁸ Even while ONCAD distributed seeds, producers saved groundnuts just for this purpose. That they did this further underlines the unnecessary waste of the distribution system.

During the marketing season, which begins in mid-December, peasants take their harvests to the cooperative collection points to be cleaned, weighed, and purchased. Though there is ostensibly a fixed price, large producers receive more for their produce. In addition, the price paid to most producers is lower than the official one since deductions are made for impurities as well as outstanding debts.

If the peasants lost from abuses within marketing channels and low prices, the government lost large amounts through the credit system funded by the BNDS. Nonpayment of debts was rampant, especially in bad years as Table 1 shows.

¹⁸ Ousman Sané, USAID economist, personal interview, 1:00 January 20, 1987, Dakar.

The GOS had hoped for precisely the opposite. By placing cooperative training and commercial operations management under the same parastatal's control, the GOS planned to integrate its agricultural extension agents and make coops and services mutually responsive. One journalist described the situation in the Soleil:

By placing the commercial operations management and cooperative training staff together at every level, the GOS intended to make the cooperatives independent. Unfortunately, by making the cooperative arm too dependent on the management arm for budgetary support, this objective was defeated. The difference between the two arms' infrastructural endowments at every level is astonishing.²¹

This structure became a paralyzing feature of Senegalese rural development. Combining the extension service with the credit service generates biased allocations of loans in the creditor's interest. This organizational anomaly is typical of the contradictions inherent in parastatal organizations. The mandate of each branch was not made clear and the Cooperative Service was subordinated to the marketing structure.

The excesses of ONCAD's are universally acknowledged. Estimates of the number of part time and full time salaried personnel at the time of its dissolution, range upwards of 5,000. In 1970 and 1971, the JBRD

²⁰ Beaudry-Somcynsky, p. 30/...un agent détient la responsabilité de s'occuper de la formation coopérative dans plus de 100 coopératives...Il ne faut pas s'étonner alors du manque de sensibilisation au potentiel que pourrait représenter le coopérative pour le développement.

²¹ Cited in Beaudry-Somcynsky, p. 30/En mettant en place à tous les niveaux deux structures, l'une chargée de gestion, l'autre de l'encadrement coopérative, le gouvernement entendait assurer la libération des coopératives. Hélas, en vendant la coopération trop dépendant de la gestion sur le plan des moyens, l'objectif a été fausse. La différence des infrastructures comme des moyens matériels entre l'une et l'autre structure est d'ailleurs frappante dans les régions.

hired Italconsult to evaluate the problems related to the size and incompetence of the ONCAD staff. The firm determined that 1,609 would be the ideal staff size. ONCAD's responsibilities did not increase during the next six years but in 1977, 2,127 workers were employed full time.²² The state failed to control rampant corruption. In one case, two employees who stole about \$5,000 each were fined approximately \$100.²³ Corruption created an additional burden on the government's stabilization fund, the CPSP.

The Role of the CPSP

The Caisse de Péréquation et de Stabilisation de Prix, or CPSP, was intended as a clearing house in which the surpluses of some parastatals would compensate the deficits of others. During the early seventies, when phosphate prices cushioned the effect of the oil shock and cash crop productivity remained high, the CPSP generated surpluses. Three primary sources of revenue filled its coffers: the profits of SODEFITEX from the sale of cotton, profits from the sale of sugar, and those of ONCAD from sales of groundnuts to the oil crushers and profits from sales of imported rice compensated for government subsidy obligations. The CPSP subsidized for the local market in imported cooking oil managed by SONACOS, ONCAD's sales of locally produced rice, SAED's sales of tomatoes and ONCAD's sales of fertilizer and farming equipment.²⁴ Table 2 below illustrates the extent of these interventions.²⁵

²² Caswell, p. 65.

²³ Le Soleil.

²⁴ Beaudry-Somcynsky, p. 9.

Table 2

Input Supplies and Subsidies—Annual Averages

Period	Fertilizers (metric tons)				Agricultural Equipment (Nos.)				Total Subsidy ^a (million FCFA)
	Groundnuts	Millet	Paddy	Cotton	Seed Drills	Cultivation	Plows	Carts	
1962/63–1964/65	26,542	3,284	—	—	18,725	8,692	1,127 ^b	2,205 ^b	—
1965/66–1967/68	38,245	5,501	—	—	15,976	19,674	1,365	3,178	863.3
1968/69–1970/71	13,859	8,082	530	—	7,640	15,935	2,217	7,923	347.1
1971/72–1973/74	17,875	14,709	2,350	1,840	11,287	19,116	3,685	3,657	912.8
1974/75–1976/77	37,435	25,822	5,000	6,100	22,034	31,142	4,711	7,932	4,044.4
1978/79–1979/80	28,404	35,473 ^c	4,240 ^c	8,952 ^c	14,544	18,981	3,873 ^c	15,293 ^c	1,766.4 ^c

^aAmount paid by CPSP through the account of the FMDR.

^bAverage of last two years of period.

^cAverage of first two years of period.

Source: Compiled from various sources including annual reports on the groundnut industry in BCEAO (Banque Centrale des Etats de l'Afrique de l'Ouest), *Notes d'Information et Statistiques* and the annual reports on the crop years issued by the governments' *Direction de la Production Agricole*.

Source, de Wilde, p. 107

It is difficult to determine the exact relationship between the CPSP subsidy and the actual loss incurred by ONCAD since figures are not available. The calculated barème and the deficit ONCAD assumed due to the difference between costs and the price received on the world market did not account for all its losses.²⁵

The function of the Caisse was two-fold. First, it balanced the accounts of the government's agricultural parastatal arms. Second, it guaranteed the credit extended by the cooperatives and parastatals. These organizations' loans were financed by the BNDS (Banque Nationale de Développement du Sénégal) which carried none of the risks associated with the loans because of the state's guarantees. Such insurance mechanisms generally encouraged participants in credit programs to default on debt obligations. No where in the chain of commercial transactions from the peasant to the crushers was there a real incentive to act efficiently. Though this minimized risks in the banking system, it increased the debts of the state disproportionately. Thus the CPSP served as a costly insurance scheme. At first, the system operated reasonably well, but toward the end of the seventies, as corruption increased and growing conditions deteriorated, the inefficiencies inherent in the marketing and input distribution mechanisms became more apparent and unbearable.

Senegal's economic situation in the late 1970's constituted a crisis. The second oil shock was not counteracted by a parallel increase in phosphate prices. Revenues from groundnut oil exports

²⁵ de Wilde, p. 107.

²⁶ Moussa Dop, consultant, Arthur Andersen, personal interview, 30 January, 1987.

declined and the corruption of ONCAD was becoming increasingly public. Senegal failed to adjust its consumption accordingly out of neglect and the hope that groundnut prices would rise. The reverse occurred in the mid 1980's.

Since 1980, financial pressure and adjustment have dominated Senegal's agricultural agenda. In February 1980, A national inquiry commission made four recommendations for reform. First, it advised the transfer the Cooperative Service branch of ONCAD to the Ministry of Rural Development. Second, it advocated decentralizing the implementation of coop policies determined by the Cooperative Service. Third, allowing ONCAD to direct marketing channels on the conditions that it keep up to date records and eliminate corruption.²⁷ Finally, the state should recognize the parallel marketing mechanisms and allow producers to sell directly to the oil crushing firms in Dakar. Though the government initially approved this plan, it decided later in 1980 to dissolve ONCAD.

²⁷ Sheldon Gellar, "Circulaire 32 Revisited," in Gersovitz and Waterbury, The Political Economy of Risk and Choice in Senegal, (London: Frank Cass, 1987), p. 135.

Chapter II
EVOLUTION OF THE NEW AGRICULTURAL POLICY
1980-1984

Responding to the country's severe economic crisis, Prime Minister Abdou Diouf presented the Plan de Redressement, to the government in December of 1979. This recovery plan was designed to put Senegal's finances in order and increase agricultural productivity. Subtitled the Medium Term Program for Economic and Financial Adjustment, the plan was to redirect the course of the Senegalese economy over a five year period by emphasizing high priority productive investments, reducing consumption, limiting state intervention in agriculture and industry, and dismantling many parastatal enterprises.¹ Donors had long advocated structural and administrative changes in policy as means of generating a larger surplus and thus applauded the new proposals. Though policy in the next four years demonstrated a considerable indecision, there has been little backward movement in the evolution of the groundnut sector. Rather, there has been experimentation. Some analysts attribute the government's policies to the political motivations of the government were more an internal commitment than a response to donor pressure and demonstrate an increasing reliance on creating new structures for responsible

¹ Pierre Landell-Mills and Brian Ngo, "Senegal--Creating the Basis for Long Term Growth" Draft paper presented at the Johns Hopkins SAIS Colloquium "Senegal 1987" on April 10, 1987 in Washington, p. 1.

cooperation.

The period between 1980 and 1984 is characterized by administrative restructuring and tentative disengagement from control over every aspect of the groundnut sector. Parts of the package such as the provision and instruction in the use of fertilizer were in fact almost dropped by the GOS as described in Chapter Five. The lessons that the government drew from the experience of post ONCAD management were of three types. First, the GOS found that it could not merely restructure existing institutions if the same contradictions in mandates and objectives remained. ONCAD's successor, SONAR is the best example of such a restructured institution. Second, pricing policies could not neglect the alternative incentives of the parallel market. Thus producers needed higher prices for their groundnuts. Finally, independent actors could provide certain services more efficiently, such as bringing groundnuts to the oil crushers or generating seed stacks than the state. The response required to encourage independent intervention, however, was not privatization in all cases.

The Plan de Redressement was thus a watershed in GOS policy that set in motion ideological and administrative shifts. The Plan's statement of intention to correct fundamental economic imbalances served as the foundation for cooperation with the Bank Group. All programs endorsed by the World Bank and IMF for Senegal emphasized the need to reform the agricultural sector and reduce the scope of parapublic enterprises. The first of these were an Extended Fund Facility (EFF) from the IMF and a Structural Adjustment Loan (SAL)

from the World Bank, both issued in the second half of 1980.² To outside observers, the paternalistic intervention of parastatals in agriculture seemed Byzantine in its complexity. The embellishment of colonial patterns of input provision was based on the assumption that peasants were improvident; yet the cost of the program outweighed any assurances of production. Two important GOS declarations evolved from the Plan which profoundly affected the agricultural sector. First, the New Agricultural Policy of 1984 addressed the structural failings of previous agricultural policies. Second, the New Parapublic Sector Policy of 1985 formally outlined the sale of all or part of 180 parastatal enterprises in a definite reversal of GOS actions in the 1970's. The administrative changes of the government between 1980 and 1984 explain the evolution of these three programs.

The Dissolution of ONCAD

On August 25, 1980, the government shocked the donor community by announcing its decision to dissolve ONCAD. The official rationale was that ONCAD had grown too large in size and had become inefficient. Its tenacious grasp on every aspect of the groundnut industry stifled innovation. The pervasive nature of its organization created the second fault noted was its parasitic behaviour and consequent conservatism. ONCAD acted more in the interests of its staff and rural patronage groups than in those of the state or the producers.³

² Ibid., p. 1.

³ Caswell, p. 65 Caswell cites an article which appeared on August 25, 1980 in the Soleil. "Le premier handicap de l'Office était son obésité. Il avait l'arachide, il avait le mil, il avait les semences, les engrais et le matériel, il avait le transport, il

As noted earlier, the donor community expected and had encouraged certain reforms, most notably the detachment of the second branch of ONCAD's double administration.

ONCAD left behind a deficit estimated between 90 and 100 billion F CFA, and 4,261 employees were relieved, though many were rehired by the parastatals which succeeded it. One analyst revealed figures which convey the reckless growth and uncontrollability of ONCAD: "in 1976, ONCAD's expenses (75 billion F CFA) accounted for half the budget of the state."⁴

During the next four years, the GOS instituted several different policies to bolster production, increase the efficiency of the marketing system, and simplify input distributions. Two recurrent phenomena pointed out inadequacies in the existing system. First, peasant debt default was rampant. Second, when official groundnut prices were low in comparison to alternative markets such as Mali's relative to the price of cooking oil, sales on the parallel market soared and reduced the percentage of groundnuts crushed by the oil.

avait l'éducation des paysans: il était tentaculaire. Il était aussi un insatiable employeur...Second handicap: l'ONCAD grossissait de parasitisme. Il était, avant tout...un intermédiaire. Comme tel, il vivait trop bien de ceux qui dépendaient de lui, avec un instinct ce conservatisme si développé qu'il finissait par oublier qu'il a trop presser le citron..."

"L'ONCAD fonctionnait finalement pour lui-même et, accessoirement, pour les paysans et pour l'Etat. Il ne pouvait donc continuer à vivre." The public criticism neglected, however, the problematic nature of its double mandate as the marketing agent and the organiser of the cooperative movement. This fundamental contradiction destroyed any prospects of a more efficient cooperative movement developing.

⁴ George Frélastre, "L'Evolution de la politique agricole du Sénégal," Le mois en Afrique, p. 63. "En 1976, l'ensemble des dépenses de l'ONCAD (75 milliards de F CFA) représentait, comme ordre de grandeur, 50% du budget de l'Etat."

factories.

SONAR, or ONCAD Revisited

After the abolition of ONCAD, Diouf's government created SONAR, the Société Nationale d'Approvisionnement du Monde Rural, to assume ONCAD's responsibilities in marketing and input distribution in the groundnut sector. Ultimately, SONAR became almost as large as ONCAD. Only the cereal management functions of ONCAD remained separate from SONAR, for in 1981, the GOS created the CSA, or Commissariat de la Sécurité Alimentaire to take control of the maize and millet sectors;⁵ SODEFITEX was created to manage rice marketing and production which had in 1979 been turned over by ONCAD to the CPSP and its cadres of merchants.⁶

Poor records accounted for many of the difficulties of ONCAD and the ease with which its officials siphoned funds. Thus, with the dissolution of ONCAD, all credit was suspended until the participating coops straightened up their accounts. This process is referred to as the assainissement des comptes and has yet to take place. Though seed debt was forgiven, debts incurred for other inputs such as tools and fertilizer were not; there was to be no further distribution until the assainissement had taken place.

Peasants continued to default on loans through the early 1980's. In the 1980/81 season, almost half of all marketed production was traded on parallel markets in response to a low harvest and large debts as Appendix V shows. In 1981/82 the GOS cancelled peasants short term

⁵ Pape Sow, Economist, World Bank, personal interview, 8:50 February 2, 1987.

⁶ de Wilde, p. 106.

seed debts.

SONAR's functions were diminished in two ways during the 1980/81 season. First, SONACOS and SEIB took control of the marketing mechanism from SONAR.⁷ The GOS wished to reduce continuing deficits in this way and felt that the crushers themselves had the greatest interest in minimizing costs.⁸

SONAR continued to generate losses. Its staff exceeded 2,000 by 1983. That year, the GOS transferred the distribution of fertilizer to the national fertilizer company as a means of further reducing deficits. Only extension services and parts of the seed distribution network remained in its hands. Fertilizer distribution was to be privatized. and reducing government subsidies gradually.

The state dissolved SONAR during the 1984/85 season. The failure of SONAR reflected a fundamental lack of innovation in the GOS' management of the groundnut sector. Instead of shifting incentive structures and altering the relationship between the peasant and the state agencies, the government had divided ONCAD's functions while

⁷ Jameh, "The Evolution of Marketing and Pricing Policy in Senegal," (Washington: MADIA, 1987) p. 72.

⁸ Part of the failure of tool distribution stemmed from inappropriate factory design. In one case, the GOS built a sophisticated factory, ignoring the recommendations of donors and extension agents. Instead of producing simple hoes and plows, the factory created an expensive, multiple-use tool which few peasants could afford. During the late 1970's, supplies of agricultural equipment had increased dramatically at high cost.

The International Finance Corporation has suggested a preferable scenario in which a foreign manufacturer supplies the iron hoe blade or plow parts and local entrepreneurs attach them to locally produced wooden handles. The I.F.C. would provide credit for the operation and assist the operation in finding low cost imported parts. Encouraging groups of Senegalese people to assume any risk remains the challenge of an animation capitaliste. (De Leede, interview).

attempting to provide better price incentives. The chief lesson of the SONAR period was that effecting real change in the mechanics of the groundnut sector demanded new relationships. To this end, the government advanced a New Agricultural Policy in 1984.

The Role of the Oil Crushers

State involvement in the crushing sector dates to 1975 when the GOS created SONACOS, (Société Nationale de Commercialisation des Oléagineux de Sénégal), by nationalizing private French firms. The enterprise existed as a société mixte combining private and public ownership. The GOS controlled 50% of the capital, with ONCAD accounting for 20% of the total and the CPSP owning 30%. The remainder of the shares were constituted as described in the following table.⁹

⁹ BCEAO: La Commercialisation de L'Arachide 1975/76, p. 13.

COMPOSITION OF SONACOS-TOTAL CAPITAL: Billion F CFA

Source	Capital (Millions F CFA)	Share (%)
CPSP	300	30.0
ONCAD	200	20.0
BNDS	150	15.0
LESIEUR AFRIQUE	142	14.2
SODEC	114	11.4
V.Q.PETERSEN	64	6.4
SEIC and Others	30	3.0
	1000	100.0

At the same time, SONACOS took on sole responsibility for exporting both oil and seed cake. Three years later, the GOS assumed a 10 year lease of the remaining partners with an agreement to buy out the other firms.

For two years, beginning in 1980, SONAR would hold the responsibility of crop marketing after which SONACOS and SEIB would buy groundnuts directly from the cooperatives. State intervention in price formation and subsidization of SONACOS remained the same. The GOS set 600,000 tons as the minimum target for marketed groundnut production. In the case that the harvest fell below that amount, the CPSP would reimburse the companies. Thus, there remained little incentive for efficiency.

Because of the risks involved and the declining prospects for profits, many firms operating before 1980 made agreements with the state to shut down. V. Q. Petersen, which had fused with SONACOS in

return for SONACOS shares in 1975, left SONACOS in 1978, to merge with SEIB.¹⁰ SODEC, Lesieur Afrique, and SEIC made contracts for rental by the state for six to ten years with agreements to sell.¹¹ SEIB and SONACOS divided their operations by region: SEIB crushed groundnuts from Diourbel and Louga in the north; SONACOS obtained its supplies from Sine-Saloum, a much more productive region. SEIB invested in a vast crusher at Diourbel, however the drought of 1983 destroyed any hope of filling its vast capacity. In 1986, even SONACOS and SEIB would combine to realise economies of scale in nut procurement and oil production. As the CCCE reported, SEIB continued to function only by purchasing groundnuts from SONACOS in 1983.

The oil crushers were essentially consolidated into a monopoly. There remained one official channel and one official price in Dakar and thus the relationship between producers and the market was not substantially altered. The state still considered, and considers, groundnuts to be a strategic good and thus necessarily under government direction. During the first stages of reorganization, the GOS experimented with different bureaucratic structures to increase efficiency. Two large problems remained. First, the price incentives to producers remained low. As Graph 1 shows, producer prices had declined in absolute terms.

¹⁰ Jameh, p. 59.

¹¹ Frélastre, p. 83.

Second, no efficient mechanisms for distributing agricultural inputs had been developed. In fact, in the IMF Standby arrangement for the 1982/83 growing season was suspended because of continued state involvement in expensive, centralized seed and fertilizer distribution policies.¹² More profits for SONACOS meant that the state provided fewer subsidies.

Village Level Organization

A significant parallel trade remained, though, incentives had not changed. Between 1981 and 1984, the producer's share of the final price paid by the crushing firms in Dakar averaged 60%, and dropped to 50% in 1984.¹³ Marketing costs account for the difference between the producer price and the price paid at Dakar. The sum of the fixed and variable costs constitutes the barème. Marketing losses account for the largest share of marketing costs and they have increased almost 300% since 1971.¹⁴ They are commonly attributed to graft and corruption. The costs are in general high because the oil crushing firms have not been held responsible for increases. Appendix VI outlines the elements of the barème. Though the new marketing mechanism was intended to be more efficient, it had, in essence, replicated ONCAD under different parastatals. SONAR was somewhat less corrupt. In addition, the new parastatals provided very little credit themselves, yet no new provisions were made for a new system of loans.

¹² Landell-Mills, Ngo, p. 2.

¹³ Jameh, p. 72.

¹⁴ De Wilde, p. 109.

Inputs and credit were intricately linked and thus remained problematic. Real progress has only been made with seeds, which can be generated by farmers themselves and have the potential to remain largely outside of the commercialization process. One analyst noted that in the contract between the GOS and the oil crushers,

marketing is financed with credit from the consortium of local banks and is guaranteed by the government. The credit covers the costs of the provisional barème and repayment is made through the CFSP at 9% interest charge.¹⁵

Shortly after the dissolution of ONCAD, policy makers identified the extensive system of purchasing points as an unnecessary expense in marketing. By the end of 1981, one journalist noted that

a reform of the cooperatives [is] in progress. Authorities seek to diminish their number by eliminating those which were too small or unproductive. The goal was to cut their number in half, from 1,500 to about 750.¹⁶

The government's chief failure in this area was misunderstanding producers' needs. In an effort to cut costs, the GOS sought expedient targets. Reducing the number of coops would cut transport, maintenance, and storage costs. Donor coalitions, sociologists, and independent consultants had long recommended the promotion of the village as the best unit for cooperative organization because of the personal sense of honor binding members of the same community. The strong social fabric would make debt repayment more consistent. Droughts would continue to cause default and for this reason, a

¹⁵ Ibid., p. 70.

¹⁶ George Frélastre, p. 83./Une réforme des coopératives est en cours. Les autres cherchent à en diminuer le nombre en supprimant celles qui étaient de trop faible taille et n'avaient que fort peu d'activité. Le but serait d'arriver à un chiffre de 700 à 800, au lieu de 1.500.

disaster insurance fund must be established. It could not, however, be used for general defaults.

Though political pressure may have hindered the development of village level cooperatives, it is more likely that short term economic expedience directed the government's decision to enlarge the coops. A significant reduction in the scope of the networks it left in its wake was required.

Large coops do make sense for marketing and for financial credit worthiness. Their size seems to make them better overall risks. Yet the micro mechanics of debt repayment in a country without widespread private title to land makes actual collection difficult.

Outside of the context of the state bureaucracy a coalition composed of Sodeva, the CCCE, and the IBRD advocated the creation of village sections as a means of settling the old cooperative accounts and the future basis of a less structured input and marketing system. The small village sections would create larger cooperatives to provide services which exhibit economies of scale. The larger

cooperative structures...would serve mainly to market produce, provide storage space, and some transport. A new rural credit system would be designed to service the village sections as well as specialized producers: for example, in animal husbandry, or vegetable production...Gradually the bulk of the national seed stock would be stored at the village level, thus greatly reducing the enormous overheads created by Sonar while broadening the responsibilities of the section.¹⁷

Donors favored this approach. However, under state management such an operation would be costly and funding for the new projects was not forthcoming. Thus, the old system would have to decay before donors

¹⁷ John Waterbury, "Agricultural Policy Making and Stagnation in Senegal: What is There to Explain?" First Draft, Princeton University, p. 116.

would actually step in.

Opponents to the Village Level

Rural actors with vested interests disliked this plan, yet it is not clear that their opposition mollified the government's decision. First, coop officials may have felt threatened by the establishment of village sections. However, status quo was not an option, and any new plan could destroy their position. They would definitely lose employment and power in the development of village sections, since local coops would elect their managers. In reducing the number of coops, many officials would lose their jobs; as the policy evolved, the number of coops was cut in half.

Though weighers opposed the new system, their corruption was widely acknowledged and thus they did not constitute a serious threat. Technical assistants need not have opposed the new program, since extension services and training were the one component of the RDA's whose need would not be appreciably diminished.

Mouride Interests

Of all rural interest groups, the Mouride marabouts wield the greatest influence, and thus their attitude deserves as much consideration as that of the peasants themselves. Many analysts such as Copans and Colvin note that the interests of the marabouts are shifting and no longer constitute a unified group. In other words, their economic bases of power have been diluted.

Speculation on their importance hinges upon three issues. First, to what extent do they exercise economic power? Second, how do the

marabouts exercise political power? Lastly, while the general context of their relationship with the state has been one of opposition, how divergent are their interests from those of the GOS. The importance of marabout volition is of course dependent on their economic and political strength.

The Mourides have exercised significant control over groundnut production, since their lands produce 25% of Senegal's groundnuts while the marabouts themselves produce between five and ten percent of this.¹⁸ Under the traditional social structure, "young male disciples, or taalibe-s, grouped in religious communities, or daara-s, would be granted land by their master to clear and to farm, turning over the produce to the marabout in exchange for rights of access to the land and for spiritual guidance."¹⁹ As the group evolved into a village, the taalibes continued to give the marabout part of their harvest and one day of free labor on his fields. The marabout in turn provided economic security in bad times as well as spiritual guidance. The power of the marabout over his taalibe is, however, declining. Other sources of economic strength remain. Marabouts usually gain control of any cooperative structure, and thus even if the allocations of SONAR, or SONACOS are distributed per man, the marabout is able to siphon a percentage of seed to sell in the hungry season. The same is true of the commercialization process. Large portions of the barème are typically attributed to Mouride graft and influence. The Mouride participation in official as well as unofficial marketing networks is

¹⁸ Waterbury, p. 64

¹⁹ Waterbury, p. 52.

an important source of the group's income as well as the individual participating. In fact the Khalif General's Secretary, Abdou Karim Fall, who serves as the ambassador of Touba to Dakar, gained his position as a groundnut transporter.²⁰

Marabouts maintain special privileges in groundnut marketing because of their status as wealthy gros producteurs having religious status. Some even hold title to land in a country where title is by law not negotiable. Within marketing networks, large producers are given higher prices, ostensibly because of lower unit handling costs.

One official noted that marabouts would find village level cooperatives ideal clients, especially in terms of their need for credit.²¹ While the marabouts might lose some access to profits from the groundnut trade, other sources would replace them. Marabouts have a demonstrated ability to adapt to any new system of marketing. Because of their large capital endowments and religious status, they have easier access to marketing posts, and even more notably, to credit.

Title to land is one of the privileges the Marabouts have maintained since independence. In Senegal, deeds to land are not negotiable. Instead a family maintains its right to the use of a three to ten hectare plot by farming it. They are not even allowed to improve it significantly by planting windbreaks, for example, since such an improvement would constitute a claim.²²

²⁰ Steve Wagonseil, Information Attache, U.S. Embassy, personal interview, 11:00 January 30, 1987, Dakar.

²¹ cited in Waterbury, p. 117.

²² Lucie Colvin, "Marabouts, Agriculture, and the Environment in Senegal," (Washington: University Research Foundation, 1983), p.

Land policy which limits private ownership is in general an obstacle to encouraging private investment in rural extension services and creation of credit institutions. Without collateral, a rural credit mechanism has no teeth.²³ Marabouts become the privileged beneficiaries of unequal distribution and, since their land is never taken away for defaulting, bear none of the risks associated with the privilege. The CPSP rice credits of the early 1980's are a case in point.

Between 1980 and 1983, the Caisse de Péréquation offered credits to rice wholesalers who had entered the market since 1979, when the CPSP took over ONCAD's marketing position. "In that program, according to its administrators, an estimated 80% of the loans were not secured by the theoretically mandatory property title, the religious quality of the borrowers apparently serving as a guarantee instead."²⁴ Though the repayment rate was high, the program was oversubscribed. Favoritism in Senegal takes many forms.

One analyst noted that

The marabouts exercise decisive influence in cooperatives established within their traditional patronage network. Naturally, peasants "elect" their marabout or one of his representatives as head of the cooperative. In this manner, the marabouts control groundnut marketing, as well as the distribution of agricultural materials, fertilizer, credit in the hungry season. Thus, they act as intermediaries between the state and peasants.²⁵

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²³ De Leede, interview.

²⁴ Colvin, p. 5.

²⁵ Coulon, C. Le Marabout et le Prince (Islam et Pouvoir au Sénégal Institut d'Etudes Politiques de Bordeaux, Centre d'Etudes d'Afrique Noire (Paris: Editions Pedone; 1981), p. 228. cited in Frédéric Martin, p. 43. "Les marabouts en effet exercent une influence

At the village level, marabouts would still be elected to the key management positions, however manipulating accounts would become more difficult under new bookkeeping schemes.²⁶ This adaptability has contributed to what many see as a diversification of Mouride interests. Some analysts, however, see greater cooperation emerging between the state and the Mouride leadership.

The Mourides have used their capital base to diversify into new economic interests. Though some has been allocated to the settlement of new lands in the Fleuve, the Mourides are acquiring urban income sources. Some analysts point out that the decentralized nature of the increased economic strength of the Mourides is diluting their political power. In short, as the Mouride businessmen become wealthy, they bite the hand that fed them and cease to support the interests of the groundnut basin.²⁷

More significant, however, is evidence of recent cooperation. President Abdou Diouf has been meeting unofficially with the Kalife General in Touba about once every three months since the declaration of the New Agricultural Policy. The Mourides may be adapting to the long term interests of Senegal by cooperating with the GOS.²⁸ A

déterminante dans les coopératives établies dans leur zone d'influence immédiate. Tout naturellement les paysans talibe 'élisent' leur marabout ou l'un de ses représentants à la tête des coopératives. Par ce biais, les marabouts peuvent contrôler la commercialisation de l'arachide ainsi que la distribution du matériel agricole, des engrais, des vivres de soudure et donc s'imposer comme intermédiaires entre l'Etat et les paysans.

²⁶ This is described in greater depth in Chapter Four. Basically, peasants receive receipts at the village storehouse for the seed they deposit.

²⁷ Wagonseil, interview.

²⁸ Wagonseil, interview.

recent concrete example affirms this assertion.

As part of a policy which will receive further treatment in Chapter Three, the GOS sent out an order to farmers to save their seeds for the 1986/87 growing season. The traditionally Mouride segments of the groundnut basin responded with some of the highest seed savings in Senegal. It had been feared that near Diourbel and Touba that few seeds would be saved and the government would again have to supply seeds on credit. Cooperation made this unnecessary.²⁹

Donors had advocated special restraint by the GOS in 1986 from giving in to perceived demands for seed on credit.³⁰ It was assumed that areas requesting seed had actually saved seeds. Against the expressed policy of the President and Council of Ministers, the Minister of Rural Development ordered 20,000 tons of seed to be distributed in Kaolack.³¹ Though the press exposed it as an accidental scandal, most assume the government's complicity in the break. A breach of authority offered a convenient way to flinch under pressure from SONACOS and fear of a small harvest without risking a withdrawal of donor funds.³² However, the real problem at the local level lay in the functioning of the RDAs.

²⁹ Wagonseil, interview.

³⁰ Ambassador Lannon Walker, U.S. Embassy, Senegal, personal interview, 10:00, January 30, 1987.

³¹ Bonna Coly, SONACOS, personal interview, 10:00, February 6, 1987, Dakar.

³² Jean Francois Damon, consultant, personal interview, 5:00, February 3, 1987.

Senegal's Regional Development Associations lost credibility with peasants by giving conflicting, uninformed advice. As Uma Lele has noted,

That the farmer often knows more, at least in about what is wrong, with new innovations, and that extension agents often do not follow their own advice have become parts of a folklore of extension in developing countries.³³

In Senegal they were perceived by peasants as tyrannical, poorly coordinated with other extension services, and ill informed.

Production goals, priorities, and technological packages were set by the RDA's without consulting the farmers. And technological packages were often either already known by the farmers or poorly adapted to local conditions.³⁴

After 1980, the government began contracting with the RDA's thus establishing concrete goals and obligations. Continued government support depended on meeting the terms of the contracts. The most inefficient were reorganized, pared down, or eliminated.

SAED and SODEVA were among the largest to be restructured. Unfortunately, many of the contracts made between RDA's and the government failed to distinguish responsibilities clearly and eliminate overlap. Since the New Agricultural Policy did not address this flaw directly, the GOS strategy is in practice to emphasize reforms in the most significant RDA's and allow others to wither away through neglect. Duplication, however, continues to survive as an inefficient legacy of the technicist period.

³³ Uma Lele, The Design of Rural Development Lessons from Africa, (Baltimore: The Johns Hopkins University Press, 1975), p. 63.

³⁴ Abt, p. 152.

The New Agricultural Policy is ambitious out of necessity; complex interrelationships among structures supplying inputs, providing credit, training peasants in new methods, and marketing crops force the GOS to address many problems at once. In a sense, the different elements of the policy check and balance the others, combining cooperative structures with profit motives. Disengagement does not necessarily deny socialist principles, but instead diminishes the influence of statist ones.

Chapter III

DISENGAGEMENT AND ANIMATION CAPITALISTE

In the reorganization accompanying the New Agricultural Policy, a double challenge confronts the state. First, the GOS must prepare and test viable plans for new marketing and input supply mechanisms. Second, it must implement the plans, a task which may require the construction of new networks and mentalities. Bureaucratic interests and rural patronage systems may hinder implementation. Yet, as the case of SONAR demonstrates, streamlining existing institutions seldom provides a solution in Senegal.

The experience of the last six years demonstrates creativity as well as resolve. With the advice of donors, Private Voluntary Organizations and private consultants, the GOS has adopted different approaches to individual enterprises from which it seeks to distance itself. Some operations were slated for liquidation or divestiture by the New Parapublic Sector Policy. More intricate operations or those considered strategic require newer strategies. Conventional responses to the challenge of disengagement include the allocation to firms or individuals of import and distribution licenses for businesses such as the imported rice trade. Within Senegal's groundnut trade, the networks which have evolved over twenty years demand a more sophisticated approach. The social, political, and financial goals of the GOS depend in part on the policies enacted in this sector because

of its dominant role in employment and foreign exchange earnings. The groundnut chain is more complex than marketing and distributing an imported product or managing a hotel.

Social goals play a dominant role in determining the approach taken by the GOS. Luxury trades and business services such as telephones and shipping serve a limited social purpose and thus may easily be privatized.¹ A service such as Dakar's public bus company presents a different problem. Some argue that privatization would lower costs to consumers, yet it may result in diminished service to outlying areas and narrower operating hours. In situations like this, the GOS feels compelled to maintain control. The groundnut sector's political, social, and economic importance engender the same attitudes in the GOS, yet the vast costs and inefficiencies of government management demand a shift. Regulations and macroeconomic policy should become the government's methods of assuring its social and political goals. An independent, less centralized chain of groundnut production and marketing will help the GOS achieve its goals at the microeconomic level.

Privatization

Concepts of what constitutes privatization vary widely, and while analysts apply it loosely to Senegal's recent experience, the nature of GOS disengagement from the groundnut sector demonstrates a subtle range of approaches. The specific method applied depends on existing markets, national and regional mentalities, and the incentives and initiatives of private sector entry.

¹ Ousman Sané, interview, 1:00 January 20, 1987.

Disengagement in the 1980's now complements the previous expansion of state control in Western Europe and less developed countries. European examples have brought the privatization issue to the forefront. In Britain and France, where the semi-socialist mandate of governments in the 1970's prompted the governments to increase control over the economy through acquisition of private sector companies, the reverse is now occurring. Three general approaches characterize such disengagement.

The most accessible image of privatization is the public sale of shares in a company such as the early 1980's sale of British Petroleum.² This form of privatization, sometimes called formal privatisation, is all but impossible in the underdeveloped capital markets of Senegal. The second type, functional privatization, involves contracting services from the private sector which the state or local government formerly provided.³ The third is the assimilation of "the public enterprise as far as possible to a private one, by alteration of the legal status and organisational formula, of the maxims of conduct."⁴ Essentially, a public enterprise may be compelled to behave as a private company by removing structural contradictions and conflicting goals, as well as increased emphasis on the profit motive.

² Ruth Karen, "Privatization: Why? When? How?" Development Business, No. 217, February 28, 1987, p. 8.

³ Dr. Heidrun Abromet, "Privatisation in Great Britain" in Annals of Public and Cooperative Economy, June 1986, p. 152.

⁴ Ibid., p. 153.

Formal Privatization

Advocates of privatization are careful to stress the limits of market capitalization in underdeveloped countries. Even in Ivory Coast and Nigeria which have capital markets, trading is weak and regulation inadequate to avoid manipulation by a small share-buying public. If such an exchange were to be established in Senegal, it would imply a contradiction between the socialist goals of the state and the distribution of wealth emerging from privatization. Elites would benefit. The only consolation to a socialist government is the savings of public funds.

One banker who studied the current plans of the GOS noted that while market privatization would distribute ownership more widely than contract sales, it would first require the encouragement of risk taking among investors such as

Senegalese middle to high income civil servants and private businessmen...This class of investors is for the time being very limited indeed and, although the Government seems anxious to develop it as soon as possible, this desire may take some time to be fulfilled.⁵

The country's "Letter of Development Policy of 1986" ordered a study on the development of a capital market and discussions are underway with the Ministry of Finance to create a share distribution service with local banks in Senegal. Giroday notes that

This service would be limited to the distribution of shares at least initially and would not include financing.... It is too early to tell whether those...local banks might be interested in extending their services to include financing.⁶

⁵ Jean B. de la Giroday, "Report Mission to Senegal on Privatization," (Washington: Giroday and Associates, International Banking Consultants, 1986), p. 14.

⁶ Giroday, p. 14.

The most important issue beyond setting up a distribution system would not be finance, but marketing. Conventional wisdom holds that "securities are sold, not bought;"⁷ Thus to distribute ownership broadly, dissemination of information is crucial.

Privatization as outlined in the "Program for Medium and Long Term Adjustment" is more limited and now takes one of two forms. The first is liquidation of the assets of companies which are neither viable nor essential to the functioning of strategic industries. The second is the sale of licenses or operations to businessmen. Creative share issues remain a long term option.⁸ Among the agricultural sector's parastatals, privatization is more likely to involve new contractual relationships either with the parastatal's management or with independent institutions which implement policies.

⁷ Jonathan R. Hakin, "Investment Banking and Development Banking" IFC Occasional Papers (Washington: International Finance Corporation, 1985), p. 16.

⁸ The lack of a capital market does not make an issue of shares impossible, though. Turkey, for example, organized a short series of stock issues without such an organized market. Its first issue marketed income without equity: as Karen notes, the Turkish government "conceived the brilliant idea of offering its citizens a share of the revenue it collects from the...traffic across the bridge that spans the Bospourous, connecting European Turkey with Asia Minor. To do this it prepared a stock issue starting in denominations as small as \$10. It pegged the yield a few percentage points higher than the going interest rate and...indexed it to the rate of inflation." After explaining the issue clearly in the media, the issue sold out in three hours. Later, with the advice of Morgan Guaranty and Lazard Frères, the Turkish government planned a series of share issues of public enterprises involving equity, not just income stream. (Ruth Karen, "Privatization...", p. 18.)

Contracting

Contracting may involve an actual supply task such as garbage collection or it may be the management of a state owned operation. Hiring consultants or outside organizations to implement public sector reforms may even be construed as a contractual privatization. The latter is the most relevant to Senegal's groundnut sector; few existing companies can be hired to step into marketing or input distribution; neither the capacity nor the incentives exist.

Private Voluntary Organizations (PVO's), foreign enterprises, and donors may be called on to effect changes beyond the administrative capacity of the government. The GOS had been unable to build a service of village seed storage banks, for example, and ultimately enlisted the help of Catholic Relief Services. In effect, it constitutes a disengagement of disengagement in that the government hires another organization to reduce government involvement in enterprise.

Private Behavior in the Public Sector

An even larger number of options is opened by the third type. Establishing incentives within a public company, decentralization of decision making, debureaucratization, exposing public sector services to competition by removing subsidies, and dismantling monopolies all add a capitalist dimension to public operation.⁹ In Senegal, the performance contract, or contrats-plan, between the state and its partially owned parastatals, as well as between the state and separate

⁹ Theo Thiemeyer, "Privatization: on the many senses in which this word is used in an international discussion on economic theory." in Annals of Public and Cooperative Economy, June 1986, p. 141.

management bodies, add a stronger element of accountability to the parapublic sector. Employment of individuals is no longer fundamentally secure, but rather is tied to performance projects.

Obstacles

Given the underdeveloped nature of the Senegalese capital market, access to ownership will only be an option for the elite. Very often, the potential buyers involved in politics are accorded special preferences.¹⁰ In effect, there is an "oligopoly which is further limited by Senegalese legislation on illegal sources of wealth."¹¹ Large amounts of investable capital in Senegal have been accumulated through corruption; as a result many Senegalese fear punishment and prefer less obvious visible investments than purchasing blocks of shares. Some propose that the law be relaxed, but such a change would have to be accompanied by a crackdown on corruption. If the history of fraud and graft in ONCAD is any indication of government prosecution of individuals, that seems unlikely.

In the groundnut filière sales of equity in the oil crushers are a long way off. The more immediate problem is opening the transport and distribution networks to private trade. The healthy parallel market in groundnut marketing facilitates the state's goals of disengagement. During the 1985/86 season, in fact, private operators accounted for over 40% of SONACOS' purchases by the end of January.¹² When the GOS

¹⁰ John De Leede, World Bank Economist, telephone interview, 2:00 October 27, 1986 Washington.

¹¹ De Leede, interview.

¹² Fall, "Année Faste de l'Arachide" le Soleil, February 1, 1987, p.

dropped the producer price to 50 F CFA/kg from 60, for example, over half of a harvest estimated at 600,000 disappeared through private crushing and sales abroad. In this arm of the groundnut trade, legalizing private trade in nuts has already contributed to shrinking the loss margins which formerly constituted the barème.

Privatizing the marketing and distribution of inputs is more problematic than the privatization of groundnut trading. Seed multiplication requires contracts with growers as well as distribution networks. Fertilizer suffers from weak demand, a poor history of delivery, and high cost. What is needed is a sort of animation capitaliste on both the supply and demand sides. Rationality will govern the choices of peasants; the past and current state of incoherence in price incentives and options forces them to behave very conservatively.

The Problem of Implementation

The success of the New Agricultural Policy depends on its implementation: In the past, great plans have faltered when viable projects are carried out slowly or not at all. The GOS seed bank project of 1983 ground to a halt through inefficient allocation of resources and ultimately a lack of funding. Though much of the delay and sideways motion associated with post-ONCAD agricultural policy results from financial difficulties and experimentation, there is also a bias among the bureaucracy against too vigorous a program of disengagement. Though Abdou Diouf's new dictum may "Less government,

better government," the civilian officials who run the country disagree. Implementation of new policies is often executed best when it is contracted out.

Non-Government Organizations

Donor communities, consulting firms, local government committees, and independent private voluntary organizations all play roles in establishing new programs. Those which possess or develop detailed knowledge and familiarity with local communities have the best chance at success. Their use is based on government recognition of its own limitations.

In some situations, activities need to be undertaken that are simply beyond the capacity of any existing government agency. In these cases it is often impossible to build administrative or technical capability...Governments in developing countries have used a number of private sector organizational arrangements for project implementation--they have created joint ventures, contracted for technical assistance or consultant services,...and allowed private voluntary organizations to carry out projects alone or in conjunction with government agencies.¹³

PVO's are finding an increasing role in the implementation of grass roots reform of input distribution in Senegal. These functions cannot be removed from state tutelage by a straightforward privatization since they require institution building to effect disengagement.

Hyden notes five advantages of Non-Government Organizations (NGO's) managers of rural development. PVO's like Catholic Relief Services are one kind of non-government organization. First, they are in closer contact with the poor than Africa government and thus the results of their work are more firmly redistributive. Second, the

¹³ Dennis A. Rondinelli, John R. Nellis, G. Shalbir Cheema, "Decentralization in Developing Countries," World Bank Staff Working Papers "58 (Washington: World Bank, 1984), p. 25.

motivation of NGO personnel are fairly idealistic and thus less complacent. In addition, NGO's are more cost-conscious and less vulnerable to corruption. Fourth, their structures are smaller, more flexible, and more decentralized. Finally, because of their independence, non-government organizations can stimulate demand for existing government services.¹⁴

Micro-Policy Reform

The size and nature of the policy change determines to some extent the appropriateness of different organizations as coordinators. One analyst makes a useful distinction between micro and macro-policy reform as a ruling characteristic for implementation strategies. The terms refer to the relationship between the administration and policy implementation, not the size of the proposed reforms. NGO's are particularly useful in carrying out micro-policy reform while macro-policy reforms are best implemented by the state.

Macro policy reform is defined as that which can be effected bureaucratically through existing mechanisms with "the stroke of an authoritative pen."¹⁵ No new institutions need be established. Changing the tax on imported luxuries or reducing subsidies on urban food prices are good examples. Such a reform may require the accommodation of various interests and requires political groundwork, not detailed administrative coordination.

¹⁴ Goran Hyden, No Shortcuts to Progress, pp. 120-123.

¹⁵ David C. Korten, Micro-Policy Reform: the Role of Private Voluntary Organizations, (Washington: National Association of Schools of Public Affairs and Administration, 1986), p. 1.

Micro policy reform demands changes at every level. Altering existing marketing systems and agricultural techniques, or redistributing land may be considered micro policy reform. Like macro reform, it may require the expenditure of political capital, yet it cannot be effected without creating new structures and relationships.¹⁶ In other words, the equations and not just the variables must be changed. The distinction does not concern the magnitude of change per se, but the level of detail of the task. Thus, a nationwide land reform is a micro-policy concern whereas changing the tax on whisky imports is a macro concern.

The reform of Senegal's groundnut sector requires the creation of grass roots institutions to facilitate credit extension, input distribution, and marketing. New seed storage banks offer an example of a viable new mechanism implemented by a private voluntary organization. The problems inherent in rural credit and fertilizer marketing could also be better solved with such participation. PVOs are not a panacea, but rather a complement to government resolve on other reforms. Indeed, government pricing policy regulates the incentives under which private interests are expected to act. Given the complexity of the interrelations of these factors in groundnut sector reform, much of the experimentation and sideways motion of the GOS since 1984 is understandable; the evidence of progress is comendable.

¹⁶ [It] depends for its implementation on the accomplishment of sometimes highly complex and difficult institutional changes--commonly involving the development of significant new capacities and forms, and a reorientation of institutional goals. Korten, p. 2.

Chapter IV

SEEDS OF OPTIMISM

Seed generation and distribution offer the greatest potential for state disengagement in the near term of any aspect of peanut production. Because the ideal seed mix includes a large percentage of improved seeds as well as locally generated supplies, two seed supply structures must be developed; first, village level coops should help peasants save locally produced ordinary seeds and eliminate the ponderous distribution system. The second structure, the national network of improved seed supply, raises more complex questions about the government's role. Since the GOS considers seed stock quality a national security interest, an efficient operation with high standards critical in maximizing the size of groundnut harvests. Whether the state is still the best manager of selected seed generation and distribution, however, remains debatable.

The state's current measures now represent a partial break with past practice. Some unwillingness to cede control of improved seed in the near term is understandable since organizing local seed generation has only proven effective in pilot programs. It would be reasonable to establish the mechanisms of local seed storage before continuing with the déperissement of the other arm of supply. Yet it still remains unclear that the GOS actually intends to relinquish control of the selected seed arm.

The Potential of Seed Storage Coòps

In the long term, cooperative seed storage programs, as well as the cereal banks concurrently being developed, will encourage important forward and backward linkages. With clear and thorough training, demand for maintenance products like fungicides could spur broader private trade of such inputs. Second, the cooperative structure also provides a working forum for discussion of new ideas. Fertilizer, for instance, could find greater demand with examples of success within a village section. This example would be more accessible than that of the privileged paysans de pointe which have been used traditionally by the GOS.

The third important linkage is human capital. The GOS perceives the need for greater literacy and math training in rural populations, yet the creation of new education programs have been thwarted by inadequate finance, low demand, and competition from koranic schools which teach little more than memorization and religious tradition. The positions of responsibility accorded to the elected managers of village coops require a degree of education and the prestige associate with these offices should increase the demand for basic education. In the past, the links between marketing and education were largely negative; ONCAD had discouraged mathematical literacy in its extension services fearing that peasants would grow to understand their exploitation. Coops have the potential to erode this contradiction in Senegalese policy.

Opposition

Berg argues that government attempts to foster village level cooperative seed banks created yet another conflict in policy. He asserts that they are inefficient and impede the growth of free markets.¹ First, the seed banks require short-term donor assistance. Second, there is no guarantee that they will function in the long term. Third, given legal status, private traders can offer financial and storage services. This analysis is flawed because Berg overlooks the closed nature of the village social structure and the potential for abuse by the limited number of adequately capitalized lenders. While national credit schemes in the past burdened the government with repayment failures, and exacted an interest cost equivalent to that of money lenders' high rates, these do not negate the potential efficiency of cooperative developments. Moreover, village sections may serve as the basis for sustained input demand as well as for the creation of other cooperative structures.

Berg's argument hinges on the importance of efficiency, yet it is an efficiency measured in terms of short term costs. It also raises privatization to the level of myth. Though the private sector may be valuable revitalizing Senegal's economy, it is not the standard by which to judge all new developments. Disengagement need not imply rejection of socialist principles or other non-economic national goals such as the integration of all ethnic groups.

Linkages are distant prospects because of the state of private capital investment preferences and the need to establish success at the village level first. Given the six year history of magasin

¹ Elliot Berg, personal interview, 8:00 p.m. February 3, 1987, Dakar.

semencier proposals and their slow and partial implementation, what evidence is there that any real savings will be effected?

The success of recent projects accounts for most of the optimism regarding seed supply. Acceptance of the village level as the unit of credit extension and the work of NGO's are creating viable cooperative institutions. An appreciation of innovation demands examination of the structure of seed demand, and past distribution networks, as well as the latest approach, a second generation of Senegal's SODEVA-ACOPAM project.

Seed Storage

The groundnut itself is the seed for the next season. This fact makes seed provision the logical first choice for state disengagement from input distribution. Though a new system carries the start up costs of warehouses and training, it also eliminates some of the need for transport and associated costs. It is hoped that local production and storage will eventually reach a capacity in excess of 80,000 tons, or two thirds of the total needed.

This total is based on two factors of production. First, the oil crushers have a capacity of about 900,000 tons. 120,000 tons of seed are required to produce 1,000,000 tons of groundnuts, so a target harvest of just over 1,000,000 tons will supply the crushers and leave enough seeds for planting. Second, it must be noted that the crushers developed that tremendous capacity in response to huge harvests in the early 1970s. SEIB's vast crusher at Diourbel is now redundant. In 1973/74, for example, the harvest exceeded 1.5 million tons.

Under the system existing before 1980, ONCAD had been responsible for marketing, credit, and input distribution. It was assumed that peasants would not save their seeds and thus ONCAD provided seeds on full credit. Debt forgiveness persisted in years of bad harvests. In 1980, for example, the GOS forgave payment of seed credit.² As a result, ONCAD's deficits were astronomical and by 1980 its debts exceeded 100 billion F CFA.³

With the 1980 dissolution of ONCAD, the GOS planned further disengagement from the peanut sector. For two years, SONAR maintained the former marketing and input responsibilities of ONCAD while the CSA was created to manage millet and maize marketing.⁴

In 1982, SONAR changed its operation in two significant ways. First, 8 F CFA/kilo were withheld from the purchase price of groundnuts in return for free seed distribution in addition to 2 F CFA/kilo for fertilizers. Second, marketing responsibilities were given to SONACOS, allowing SONAR to focus on inputs. Nevertheless deficits persisted and ranged between six and nine billion F CFA as illustrated in Appendix VII. Charges did not reflect costs; even without the responsibility of marketing, SONAR still ran proportionally large deficits

State management of seed and fertilizer was by its nature a source of deficits. In a plantation economy with fewer producers and large production units, a centralized scheme of seed distribution might have worked. Yet even plantation economies seldom require state managed

² Laura Tuck, p. 166.

³ Ibid., p. 166.

⁴ Pap Sow, World Bank Economist, Dakar, personal interview.

support structures. In Ivory Coast, for example, agricultural parastatals concentrate on raining and network set up, but not marketing and distribution of inputs. In the groundnut trade, local generation would have been even more economical. Excessive faith in state control superceded economic rationality.

The mentality surrounding both ordinary seed stock management and selected seed generation is inherently contradictory because of the declining nature of the groundnut trade and its importance to Senegal. The industry is for the medium term a losing proposition; no one predicts any increase in world groundnut prices because of the strong demand for substitutes like soy and sunflower oil. Only a luxury trade could bolster demand. Cutting losses should be a primary concern. The government fears that yielding control may have disastrous results and cause a decline in foreign exchange earnings from peanuts. Management, not strategy, is the real problem.

The SODEVA/ACOPAM Project

SODEVA, a Senegalese Development Agency, joined forces with a European aid program, ACOPAM, to build local capacity for seed savings.⁵ ACOPAM directors perceived seed banks as a means of developing further investment through local savings. In addition,

⁵ SODEVA/ACOPAM "Le Magasin Semencier Villageois Etude de Case" (Kaolack, Senegal: SODEVA, 1984) , p. 4. (Appui Coopérative aux Activités de Développement Assistées par le Programme Alimentaire Mondial.)

A Norwegian technical cooperation organization, OIT/Norvege, organized a village level cooperative seed storage project as part of its ACOPAM project, or Cooperative Support for Development Activities assisted by the World Alimentary Program. The program encompassed Burkina Faso, Mali, Mauritania, Niger and Senegal. Chad and the CAE were dropped because of political problems.

strengthening village sections through the storage projects would permit the sections to apply for commercial credit. Laws passed in 1983 had empowered village sections to do this, but most credit programs would require in turn some sort of collateral or demonstrated savings.⁶ Not only would the building and training give the village sections the ability to store their own seeds, it would also create economic linkages and raise the cooperative potential of the village.

The original project was ambitious. The GOS hoped to build 600 village storehouses, however, donors could only finance 200. The bank withdrew this assistance in May of 1982, declaring that

Though SODEVA is doing its best to ameliorate its own management and to transform rural areas into more self sufficient production centers, however, its objectives cannot be realized under the GOS' current agricultural policy.⁷

Though villages paid for approximately 35% of the cost of each storehouse,⁸ financial difficulties strangled the program. As a

⁶ Ibid., p. 31. The law stated that "The rural cooperatives are constituted of village units or quartiers hereafter called "sections." The sections are democratic structures involving community participation and consist of all village members resident in the territory... "Les coopératives rurales sont constituées en unités villageoises ou de quartiers, ci après denommées 'sections.' Les sections sont des structures démocratiques de participation communautaire regroupant l'ensemble des adhérents resident dans le ressort territorial..."

⁷ Ibid., p. 36.

"Elle a été définitivement arrêtée lorsque la Banque Mondiale a annulé en mai 1982 le financement prévu à la construction de 200 magasins semenciers."

"La SODEVA s'efforçait d'améliorer sa gestion et d'amener le monde rural à une plus grande responsabilisation mais que ses objectifs ne pouvaient être réalisés dans l'environnement de la politique agricole suivie par le Gouvernement du Sénégal."

⁸ Ibid., p. 46.

result, organizations like the Peace Corps and Catholic Relief Services have stepped in to give the program a better chance; in the case of the latter, the project parallels the ACOPAM plan almost exactly and is described below.

The Role of PVO's

Two breakthroughs in the creation of cooperative seed storage warehouses will result in a more efficient and immediately realizable input distribution network. First, the village has been widely accepted within the government as the unit of management.⁹ Second, non government organizations have been engaged to implement the storage program in a sort of disengagement within disengagement.

The village is a more immediate and less hierarchical form of organization than larger political units. Often its residents are related either by blood or marriage. As in many other African societies, the personal politics of gift giving and maintaining good relations act in part as a form of insurance. A personal sense of honor which binds members of the same community called jom makes debt obligations to the community more strongly felt. Defaulting would in essence mean stealing from a neighbor or relative.¹⁰ For this reason, donors favor the village section. Practical and political considerations, however, have obstructed progress until very recently.

⁹ Interview, Prospère Youm.

¹⁰ Jeff, footnote here? Sheldon Gellar "Circulaire 32 Revisited: Prospects for Revitalizing the Senegalese Cooperative Movement in the 1980's, in Gersovitz and Waterbury.

First, there is the greater cost associated with a large number of small seed storage warehouses. Especially given the top down strategy associated with the Senegalese experience of rural development, in which the government was expected to finance most new projects, thus village level storage with the many buildings required, seemed expensive. Second, Mouride marabouts and rural notables hold a vested interest in larger cooperative structures which they often controlled and exploited. Village control, under which all issues and accounts are discussed publically, greatly diminishes the chance of graft and constituted a threat to marabouts' wealth. Bureaucratic footdragging accounted for some delays in the early 1980's since the new program would obviate many jobs. Finally, inadequate financing of the government ACOPAM Project also slowed progress. Because of the administrative nature of these last two problems, a new implementation strategy evolved in 1985 and commenced in early 1986.

The CRS Project

Catholic Relief Services organized a village seed/cereal bank project in conjunction with the GOS to move village level cooperation forward. The aim of the project is to train and animate 250 village groups to store their own seeds and cereals.¹¹ The plan's implementation depends on significant village participation in building small warehouses of about four by nine meters and in managing their operation.¹²

¹¹ Telegram from CRS Senegal to Mr. Schaufele, Jr., Senior Director for Africa. February 5, 1986.

¹² Letter from Saba Gessesse, Country representative to William Schaufele. February 14, 1986.

The cost of the warehouses varies between 200,000 and 300,000 F CFA (\$650 to \$1,000) and is financed as part of a \$880,000 GOS grant for the project.¹³ The warehouses are constructed of concrete blocks and corrugated metal roofing with ventilated eaves and a reinforced door. Elected officials' bags of seed are to be stacked on wooden pallets resting on an earthen floor. It is estimated that each building will have a capacity of about fifteen tons of seed.¹⁴

The project has a wide geographic distribution with warehouses being constructed in the groundnut basin, the Fleuve, Casamance, and the Tambacuanda region. It is intended that other NGO's will follow their lead by implementing similar programs. Church World Service and the World Food Program have expressed interest and the Peace Corps has begun a cereal bank project in the groundnut basin.¹⁵

With the assistance of CRS staff, village residents build the warehouses. Building maintenance is discussed both during construction and during the training seminars given to the villages. Traditionally, peasants have saved seeds individually, yet because of state disengagement, a more sophisticated level of selection, consolidation, and conservation is required; the training program is essential for consolidating the village effort and developing an efficient operation. Village wide elections for the operations committee (comité de gestion) ensure later village participation in management. The responsibilities of the president, representative,

¹³ Site Visit Reports, Village Seed stores in Kaolack region.

¹⁴ SEMA report, Section 332.

¹⁵ Steve Reid, Peace Corps House, telephone interview, 3:30, January 28, 1987, Dakar.

treasurer and secretary are roughly as follows: receive seed deposits and make records, keep documents, manage distribution at planting time, and present the financial reports to the General Assembly of the village.¹⁶ Certain offices have prerequisites: the secretary, for example, must be literate and the treasurer trained in arithmetic.¹⁷ These qualifications, as noted, will also raise local demand for education.

The CRS project and others like it which are merging pick up where SODEVA/ACOPAM left off. In fact, the training manual used by CRS/, Le Magasin Villageois, Manuel de Procedure, is that of ACOPAM/SODEVA published early in 1984. Neither the aims nor the procedure have changed. Instead, the method of implementation has shifted toward a sort of double disengagement. Not only is the government to be one step removed from the generation and distribution of inputs, it is also to contract out the creation development of new structures.

Several factors explain the new approach. First, SODEVA failed to reach its target of 600 store houses by 1984 largely for financial reasons;¹⁸ those it did build were limited to one geographic area. Second, independent organizations like CRS proposed to fill the gap left by the government's plans for disengagement. Third, the use of PVO's constituted a less expensive means of allocating funds than a government implemented strategy. All the advantages cited by Hyden applied to the Senegalese case.

¹⁶ CRS notice on Seminaire de formation, Magasins Villageois, November 17, 1986 (one page).

¹⁷ Ibid.

¹⁸ Waterbury in The Political Economy of Risk and Choice, p. 213.

Selected Seeds

One third of Senegal's annual seed requirement of 120,000 tons is to remain under government control. A fair case can be made for intervention. Since small harvests are disastrous for foreign exchange earnings, quality must be maintained. More practically, seed quality is one of the few variables the GOS can control.¹⁹ In addition, if there is a major production shortfall, there must be a national security stock to supply regions where peasants are forced to sell all of their seed. With appropriate legal mechanisms for maintaining standards, and a reasonable economic incentive, private intervention would be superior to the parastatal reshuffling proposed by the Caisse Centrale.²⁰

Some critics question the need for selected seeds. Before 1972, no such program existed. Though harvests were larger in the past, the data cannot yield conclusions since the selected seed program in part responded to drought and environmental degradation. French and Senegalese studies then showed that improved yields would result from a rotation of the gene pool. A SEMA study noted that other countries which exported peanuts in the 1960's failed to respond to the drought and became net importers of cooking oil. The report cited Niger, Burkina, and Mali as having allowed the quality of their seed stocks

¹⁹ It was interesting that opinion varied widely on the question of government control of selected seed production. Opinion in the Ministère du Plan, for example, was that it was absolutely necessary. Only the Ministry of Rural Development foresaw a significant change.

²⁰ French government advice has traditionally favored public control over private initiative, thus it is natural that Caisse admonitions differ from those of A.I.D., let alone Arthur Andersen or SEMA.METRA, two private consultants.

to deteriorate, thus destroying their groundnut export industry.²¹ At the same time, the value of these seeds is dependent on a combination of other input and climate conditions which imply an augmentation of risk. The Caisse Centrale estimated the approximate demand for them in a 1984 study.

If one considers that 1,000,000 hectares are cultivated annually on average, and that each hectare requires 120 kg of seed, then 120,000 tons of seed are needed annually. Peanuts being an autogamete plant, the purity of the planted seeds can be maintained only if the stock is renewed every three years. Thus 40,000 tons of selected seeds must be subtracted annually. In addition, 5,000 tons of the previous generation must be produced for the following year's replication and so on.²²

At other points, however, reconstitution every four years is deemed acceptable. The steps required are outlined in Appendix VIII

Selected seed production

The first three multiplications produce the prébase and must be carried out in research stations. The Institut Senegalais de Recherche Agricole (ISRA) in Hamn near Dakar is the state agency in charge of research and at present supervises seed production. Because the quality of the prébase determines the ultimate quality of the N2 seeds distributed, and because their quality depends on the care taken in their development and growth, it is essential that these steps be carried out at ISRA. According to the Caisse Centrale, the importance of the groundnut crop to the GOS makes privatization of the existing

²¹ SEMA.METRA Conseil. Projet Transitoire de Gestion et de Production Semencière, Independent consultation prepared for the government, 1986.

²² C. Agel, P. Thenevin (Dakar: République Française, Ministère des Relations Extérieure, Cooperation et Développement, 1984), p. 73.

research center untehabable.²³ For similar reasons, the production of the base must also be carried out under government supervision. Currently, paysans de pointe with high technical skills contract this task.

Questions are often raised as to whether the later multiplications could be contracted out on a private basis. I.S.R.A. would be maintained as a research center and the later stages contracted out. This is in effect the thrust of SEMA recommendations. Government opinion on this matter remains unclear. The Minister of Rural Development, for example, is confident that the later stages of multiplication can be managed by large scale subcontractors regionally.²⁴

In terms of cost, it makes little sense for ISRA to supply more than just breeder seed; the government cannot afford it. There are two key impediments to a policy of contracting. The first is legal. In terms of government food security, the issue of groundnut production is very sensitive. Thus, the quality of selected seed is the first priority. If a number of competing breeders can be created who are rewarded with small premiums for quality and risk losing contracts for negligence, ISRA need only establish standards and testing procedures. Legal instruments detailing enforceability may also be required. Yet, legal mechanisms for the enforcement of standards do not exist.²⁵ The second problem is economic. There is

²³ Ibid., p. 74.

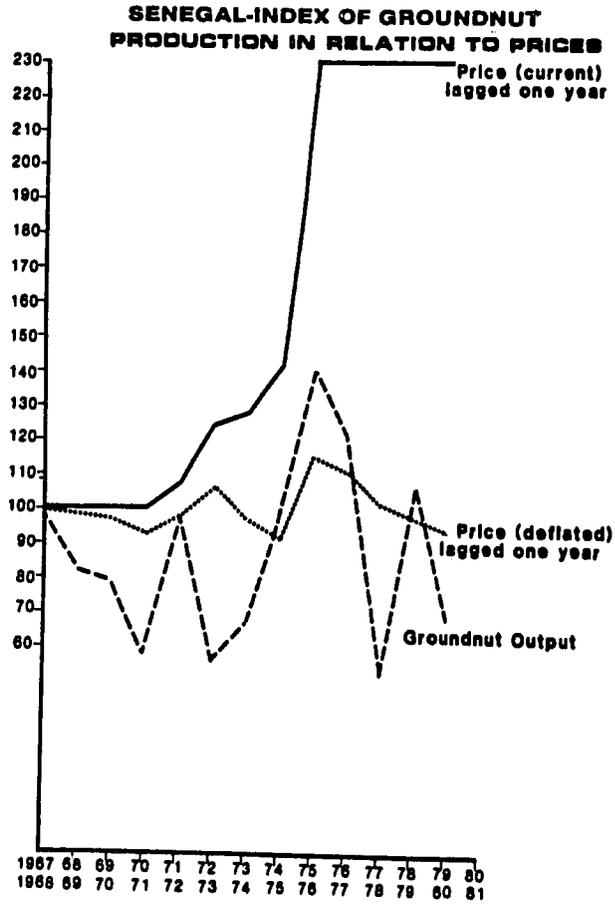
²⁴ Mamadou Ndiaye, personal interview.

²⁵ Abt Associates, Inc., Senegal Agricultural Policy Analysis (Cambridge: Abt Associates, 1985), p. 123.

little incentive within a system of fixed prices and variable costs for the private sector to enter the market. Too many more profitable opportunities exist elsewhere.

The problem of developing seed stocks requires an extensive grassroots program. The results of recent seed storage bank projects are promising. The work of private voluntary organizations is sustaining cooperation reminiscent of animation rurale. In more prosperous regions it could eventually provide the basis for rural savings which will become increasingly important in Senegalese rural development. Savings can mobilize the credit which could make rural development less dependent on central management or sources of funds. Ultimately, cooperative programs may generate both the motivations and the savings which can support a disengaged development.

Graph 1



Source: de Wilde, p. 110.

Chapter V

FERTILIZER AND CREDIT

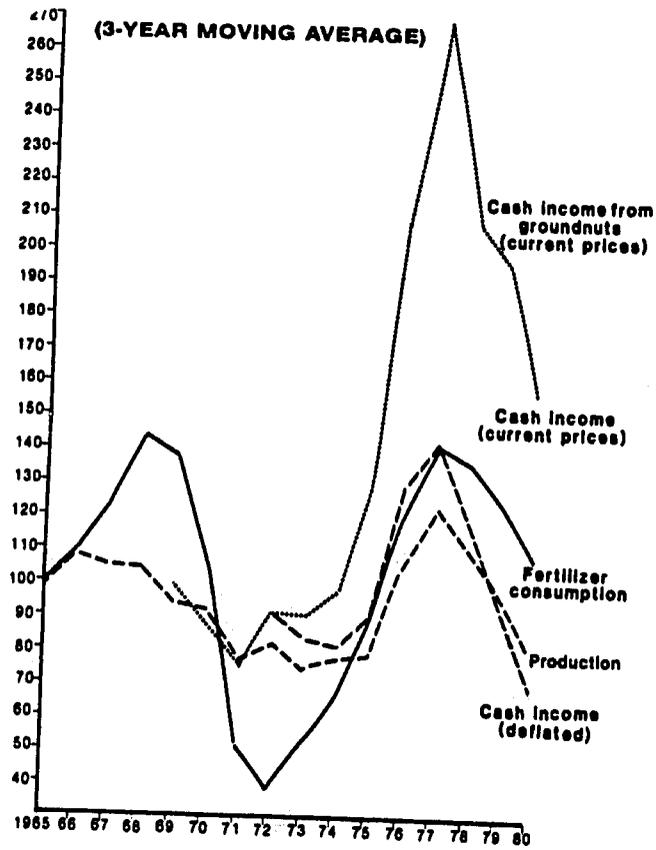
Under the New Agricultural Policy, the GOS plans to develop a system of cash purchases of fertilizer at full cost through private networks; since peasants have previously only done so from parastatals on credit with heavy subsidies, this is no easy task. In addition, the government is ambitious in its goals for strengthening demand. The policy stated that "concerning fertilizer, the objective is to distribute between 100,000 and 150,000 tons of chemical fertilizer."¹ Considering that fertilizer consumption has tumbled to about 30,000 tons annually from over 100,000 in 1980, that seems improbable. (See Graph 2 below)

¹ Cited in "Sénégal-Un nouveau plan quadriennal pour une nouvelle politique agricole," Afrique Agriculture, Number 125, January 1986, p. 27.

"En ce qui concerne les engrais, l'objectif est la mise en place de 100 à 150,000 t d'engrais chimique."

Graph 2

Indices of Fertilizer Consumption
and Producer Income



Source: de Wilde, p. 111

72A

Unlike seed distribution, which is based on a process that can be executed locally, fertilizer must be imported or produced centrally and then distributed. Because of the weak structure of demand, private sector involvement in the fertilizer trade depends on the development of a reliable rural credit mechanism.

ONCAD distributed fertilizer to peasants during the 1970's on a credit basis. Even when repayment was exacted, government subsidies exceeded 50% on average.² From the government's point of view, the program was a qualified success for it distributed a significant amount of fertilizer, albeit at high cost. Before the dissolution of ONCAD, the World Bank suggested several reforms to reduce its inefficiencies. First, the fertilizer would be concentrated to reduce shipping costs. Second, the various types of fertilizer would be priced to reflect costs; as the system had operated, farmers in regions with higher rainfall received subsidies since theirs were more sophisticated. The bank also recommended the gradual elimination of subsidies and lower cost for cash payment.

Demand Problems

In an effort to determine fertilizer use and perceived need under the NPA, the agricultural research agency ISRA sponsored surveys in 1984/85 and 1985/86 on these subjects, respectively. It was found that farmers never considered insufficient fertilizer to be a primary impediment to production during the years since ONCAD's dissolution.³

² Martin, p. 38.

³ Valerie Kelly, "Farmers' Demand for Fertilizer in the Context of Senegal's New Agricultural Policy: A Study of Factors Influencing Farmers' Purchasing Decisions," (Dakar: BAME-ISRA, September, 1986) p. 5.

Seeds and rainfall topped the list of peasant concerns and only in less than a third of the surveys did fertilizer come third. Though peasants view fertilizer as useful in terms of economic return, it is expensive and depends on unreliable weather.

At the present time, farmers prefer chemical fertilizer for peanuts to spreading manure on fields (fumier) or herding cattle on fields (parcage).⁴ Though this tends to support the demand for fertilizer, other factors militate against its use on the groundnut crop. First, the decision to use fertilizer on a given crop is not based on calculated economic returns, but rather on the difference in yield for one crop on fertilized versus unfertilized fields. Farmers perceive a 70% improvement in millet production and only a 37% increase for groundnut production.⁵ Even though the economic return would be greater on groundnuts, the peasant is thus more likely to use it on millet. Another demand related problem results from peasants' application of fertilizer. Most farmers apply chemical fertilizer on groundnuts after the first weeding, not at planting as recommended, in order to avoid the risk of poor rains and out of fear that the weeds will use up the fertilizer. Furthermore, fertilizer is perceived as a luxury requiring credit for purchase. The most significant barrier to increasing fertilizer consumption, however, is inadequate funds. One ISRA survey noted the extent of indebtedness: farmers resorted to the following means of supporting their families.

⁴ Ibid., p. 6.

⁵ Ibid., pp. 10-11.

13 percent of farmers sold peanut seed
24 percent sold one or more pieces of agricultural machinery
36 percent sold one or more traction animals
71 percent sold small ruminants
31 percent sold cattle

The Retenue System

At the time of ONCAD's dissolution, the World Bank's recommendations had not been implemented. Fertilizer lay under SONAR's direction, yet the organization created no new method of payment.

The GOS tried to finance the distribution of fertilizer during the 1981-82 season by including distribution costs in the groundnut barème and by retaining 2 F CFA/kilo of the official producer price.⁷

This system of withholding is referred to as the retenue system. During the following year's campaign, the government doubled the price of fertilizer from 25 to 50 F CFA/kilo, introduced cash sales, and varied the price according to fertilizer type. However, the reform did not last; in April of 1982, the president rescinded the unpopular price increase to maintain support in the 1983 elections.⁸ The other significant change effected in 1983-84 was that the retenue would

⁶ Kelly, "Acquisition of Agricultural Inputs in the Context of Senegal's New Agricultural Policy," (Dakar: BAME-ISRA, October, 1986)p. 3.

⁷ Martin, p. 39. "En 1981-81, le gouvernement essaya de financer la distribution de l'engrais en incluant le coût de cette distribution dans le barème des prix de l'arachide et en introduisant une retenue de 2 F CFA/kilo sur le prix officiel de l'arachide versé au producteur."

⁸ Martin, p. 39.

finance the following year's fertilizer and not reimburse fertilizer debts already incurred during the season as it had in 1981-82 and 1982-83. Credit was thus extracted from peasants for SONAR.⁹

The GOS continued its attempt to cover costs by increasing the retenue. In 1983, the amount withheld increased from 10 to 20 F CFA/kilos, to cover seed costs of 15CFA/kilo and fertilizer costs of 5F CFA/kilo. From the peasants point of view, it represented a decline in the producer price from 60 to 50 cfa/kilo and the following year's marketed production reflects this trend. Total estimated production declined from 1,109,400 tons to 68,300 tons.¹⁰ and official commercialization fell from 912,600 tons to 209,200 tons while sales in the parallel market increased from 56,800 tons to 69,200 tons.

Though the retenue system had been intended to finance the distribution of fertilizers and provide it in adequate amounts. It was not to have excluded cash sales. In practice, the system offered little flexibility to peasants, was inadequately financed, and poorly managed. In addition, the program cost the government a great deal of money, since the 5 F CFA retained covered only one third of the government's expenses.¹¹

⁹ Frederic Martin, p. 39 "...la retenue prelevee en 1983-84 et en 1984-85 a servi à financer la distribution d'engrais de l'année suivante et non pas à rembourser les dettes d'engrais des producteurs comme en 1981-82 et 1982-83.

¹⁰ Waterbury, p. 204.

¹¹ Agel, Thenevin "Note sur la Filière Arachide.", pp. 8-9.

By this time, several organizations had replaced ONCAD in the functioning of the market, most notably SONAR. Though most World Bank recommendations addressed issues of cost and debt repayment, other problems diminished the use of fertilizer. As usual, poor record keeping crippled the credit system. Supply delays made timely use of fertilizer impossible. The strategies chosen to distribute fertilizer and encourage its use failed to reverse the decline in fertilizer use as the following table

At the national level, implementation of the revenue system had not been considered carefully enough. The GOS' parastatals managed affairs sloppily. Thus, when peasants received fertilizer on credit, SONAR did not convert the record of credit to an actual payment to the fertilizer manufacturers and distributors.¹² In addition, the records themselves lacked credibility because of manipulation by rural notables and poor accounting.

At the regional level poor management and inadequate finance delayed fertilizer distribution. Fuel shortages and inadequate transport slowed deliveries to village sections. In other cases, deposit locations were unstaffed or inputs like storage sacks were not ordered in advance. All of these delays contributed to an inefficient use of fertilizer.

Different parastatals provided varying degrees of efficiency in service. Though SAED occupied itself primarily with rice, and SONAR with groundnuts, it is interesting to note the differences that stem from different organizational structures. SAED's leverage over a

¹² Eric Crawford et al., "A Field Study of Fertilizer Distribution and Use in Senegal, 1984. Final Report," Travaux et Documents No. 1. (Dakar: ISRA, March 1985), p. 8i.

Table 3

Price Relationships and Quantities of Peanut and Millet
Fertilizer Sold in Senegal 1965-86

Agricultural Season	Producer Price of Peanuts (FCFA/kg)	Fertilizer Price Paid By Farmers (FCFA/kg)	Pn/Fert Price Ratio	National Fertilizer Sales for Peanuts & Millet (metric tons)	
1965/6	21.5	12	1.79	26.106	4.685
1966/7	20.5	12	1.71	38.423	9.122
1967/8	18	13	1.38	48.214	12.096
1968/9	18	12	1.5	25.891	09.645
1969/0	18.5	11	1.68	12.790	8.400
1970/1	19.5	11	1.77	6.490	6.199
1971/2	23.1	12	1.93	12.598	10.485
1972/3	23.1	12	1.93	22.426	16.435
1973/4	29.5	16	1.84	16.610	10.776
1974/5	41.5	16	2.59	30.473	24.909
1975/6	41.5	20	2.08	36.892	28.201
1976/7	41.5	25	1.66	46.859	30.644
1977/8	41.5	25	1.66	34.247	19.328
1978/9	41.5	25	1.66	36.700	33.133
1979/0	45.5	25	1.82	22.915	13.841
1980/1	46 ¹	25	2	23.595	26.640
1981/2	60 ²	25	2.4	16.250	19.540
1982/3	60 ²	25	2.4	1.500	8.100 ³
1983/4	50 ⁴	50	1	1.200	14.700
1984/5	60 ⁵	90 ⁶	.67	8.920	11.548
1985/6	90	105 ⁶	.86	5.075	8.582
1986/7	90	64	1.4	not av	not av

- (1) 50 FCFA minus retenu of 6 FCFA for debt repayment
(2) 70 FCFA minus retenu of 10 FCFA for seeds
(3) Millet data for 1982 and 1983 unavailable; data shown are for all cereals (millet, sorghum, maize, and rice)
(4) 70 FCFA minus retenu of 15 FCFA for seeds and 5 FCFA for fertilizer
(5) 80 FCFA minus retenu of 15 FCFA for seeds and 5 FCFA for fertilizer
(6) Price of fertilizer distributed under retenu system. In 1985/6 small amounts of fertilizer subsidized by USAID were available for cash purchase at 60 FCFA/kilo; there were no recorded sales in the Sine Saloum.

Sources: 1965-79 from United States Agency for International Development (USAID), 1983; 1980-present, personal communication from USAID/Dakar. Data are approximate as different sources frequently contain conflicting information.

Source: Kelly, "Farmers' Demand for Fertilizer in the Context of Senegal's New Agricultural Policy", p. 17.

number of essential inputs such as water gave it power to impose sanctions for debt default. While peasants were relatively pleased with SAED, SONAR's fertilizer distribution system failed to meet expectations. Both SAED and SONAR delivered materials late, but SONAR's prices were considered too high.¹³

Whether SAED was better financed than SONAR... is not known; SAED may have been more effective but also more costly than SONAR. Other important factors include those which would be difficult to duplicate in other areas of Senegal. SAED's control over key production inputs (water, services, chemical inputs) gives them unusual leverage over farmers; without this, the credit system would not be as effective.¹⁴

Price Effects

In the wake of the imminent dissolution of SONAR in 1985, the GOS gave SODEVA responsibility for the sale of fertilizer. SODEVA multiplied the number of sale points by seven, to increase access to peasants. In an effort to improve the timing of delivery and increase cash sales, SODEVA sold fertilizer at the time the groundnuts were produced.¹⁵ The price of 45F/kg and the lack of rural credit minimized sales in all but the well-watered regions. Most of the 30 to 35,000 tons of fertilizer distributed annually in the early 1980's was given to cotton, corn, rice, and vegetable growers, and seed multipliers. Very little went to groundnut producers. A combination of government subsidies and infrequent recent use have increased the elasticity of demand for fertilizer.

¹³ Crawford, et al., p. 88.

¹⁴ Rapport de Synthèse, p. 86.

¹⁵ Agel, Thenevin, La Filière Arachide 1983/84, p. 56

The chief justification for government intervention is largely circular, that of price. If prices were to reflect actual costs of fertilizer, few peasants would buy them. For example, in 1982/83 when fertilizer was sold at between 45 and 52 F CFA/kg, many peasants stated that they could not afford it because of inadequate credit.¹⁶ The importance of fertilizer in the New Agricultural policy is two-fold: first, it should increased production; second, it should prevent environmental degradation.¹⁷ Thus, since higher prices result in diminished use, too quick a transfer to cost prices may displace demand inordinately and reduce productivity.

Animation Capitalist

Certain factors militate against private sector involvement in fertilizer distribution. First, demand is weak largely because of easy government credit and subsidized prices. Second, few firms have experience as suppliers, and as a result competition may be limited. Third, realistic application packages which reflect both costs and benefits must be developed: current recommendations reflect the relatively high rainfall of the mid-seventies in which larger amounts of chemical fertilizer yielded significant increases in the size of crops. The recently developed 60 F CFA/kg fertilizer represents progress, though it will still require short-term subsidies.

¹⁶ In the Sine Saloum, only 7 percent of farmers said they had bought fertilizer in 1982/83, when it was available for cash purchase at 45-52 F CFA/kg. Forty-eight percent said they would have bought "some" fertilizer at 45 F CFA/kg if it had been available at the time of peanut marketing in 1983/84. Crawford et al., p. 82.

¹⁷ Ministère de Développement Rurale Rapport de Synthèse, p. 111.

Because they are interconnected, any policy designed to increase private sector activity would require reforms in other sectors such as pricing and rural development training. The GOS plans to implement

a system of attractive prices for producers which are compatible with likely returns given groundnut producer prices, costs of transport, and profit margins; such a system requires that subsidies benefitting the peasants be maintained for three years...¹⁸

The subsidies were scheduled as follows:

Season	Subsidy
1986/87	24 F CFA/kg
1987/88	16 F CFA/kg
1988/89	8 F CFA/kg
1989/90	0 F CFA/kg ¹⁹

It is unlikely, however, that the scheduled 87/88 reduction will be enacted since there are elections this year. In 1982, the GOS repealed a similar price increase. Some economists fear that Abdou Diouf will make up for the delay with a sudden reduction in subsidies.²⁰

The 1987/88 Season

The increase in the producer price of groundnuts to 90 F CFA/kilo provides strong incentives for peasants. Some say they are too strong since this year's harvest is estimated to produce a deficit of 17

¹⁸ Ministère de Développement Rurale, "Rapport de Synthèse," p. 112/...un système de prix attractifs pour les agriculteurs, tout en restant compatibles avec les prix de revient à la production, les transports, et les marges commerciales; cela impliquera le maintien encore pendant 3 ans de subventions...

¹⁹ Ibid., p. 16.

²⁰ Ousman Sané, interview.

billion F CFA.²¹ A boon to both producers and oil crushers is that private sector research has produced a fertilizer which costs 60 F CFA/kg compared to about 90 F CFA in 1984. It will be sold, at a price ranging between 60 and 70 F CFA/kg, depending on the region and transport costs.²² This change in relative prices should bolster demand, yet better training in new methods is required. For example, as of 1985, "while ISRA has implemented a limited amount of on-farm research which has resulted in dosage recommendations which better reflect the realities of the 1980's, no extension agency [had] yet acted on those recommendations."²³ If current high producer prices can be made in the face of low world prices, a new private sector fertilizer network may evolve. The Ministry of Rural Development has praised progress in this sector yet there are still no tangible results.

Three years have not sufficed for the completion of the debate over one of the most essential elements of the New Agricultural Policy - the inputs policy, particularly the question of fertilizer.²⁴

²¹ Landell-Mills, presentation.

²² "Engrais-Bonne Performance du Secteur Privé" le Soleil, February 6, 1987, p. 4.

²³ David S. Kingbury, "Evaluation of the Agricultural Development Assistance/Sahel Development Fund Program"

²⁴ "Engrais - Bonne Performance du Secteur Privé," le Soleil, p. 4./Trois ans n'ont en effet pas suffi pour débattre entièrement des axes les plus essentiels de la Nouvelle Politique Agricole, la politique en matière d'intrants, particulièrement en matière de fertilisants.

Much of the hope for improving the distribution of commercially marketable inputs like tools, fungicides, and fertilizer lies in the development of viable rural credit. Since 1980, the processes by which credit is extended have shifted uneasily. By giving Village Sections and Producer Groups the legal status required to obtain loans, Senegal is now building a more stable credit mechanism.

The forms of credit distributed by ONCAD cost both the state and producers an excessive amount. The interest rates were not the problem; though the rates seemed high, they were roughly the equivalent of rates charged by private money lenders did not constitute usury; they merely reflected the poor credit payment record of their clients. The state forgave loans in especially difficult years and in practice, the loans offered a form of insurance as well as credit.

Under ONCAD, the state had extended two forms of credit, one for seeds and another for periodic expenses like draft animals, fertilizer, machinery, and tools called the Programme Agricole. The Programme Agricole offered greater flexibility to peasants than private money lenders because of the ease of default. "For the years between 1970 and 1980, the nationwide repayment rate for all inputs distributed under the auspices of the Programme Agricole averaged only 60 percent."²⁵ In addition, though ONCAD targeted its loans for specific uses, farmers found ways of using the credit for other purposes. For example, many large producers could obtain an excess of seed or fertilizer to sell for cash or loan again in turn. Marabouts especially abused the system and thus diluted the social goals of the

²⁵ Tuck, p. 163.

programme which ostensibly justified its expense. **Credit in the New Agricultural Policy**

Under the New Agricultural Policy, agricultural credit is to be allotted based on two principles. First, the recipients of credit are to be held responsible for repayment. Second, financial considerations, not social considerations are to guide the issue of rural credit.²⁶

Policy makers who aspire to creating the equivalent of the French *Crédit Agricole* choose an ambitious example. Its nineteenth century philosophical roots certainly appeal to the Senegalese technocrats. As one Ivoirian banker noted, agricultural credit is the result of a social project which sought to avoid the drawbacks of capitalism and of collectivism; to realize its vision, the society had to endow itself with appropriate institutions.²⁷ Yet the French system achieved success only after decades of experience and special legislative and fiscal advantages accorded by the state. Such a system must play at the same time the role of a profit oriented bank and an institution dispensing social services. Unlike a development bank which seeks to promote long term investments, an agricultural credit bank must operate on a more immediate, short term basis. In

²⁶ République du Sénégal-Ministère du Développement Rural, "Document final-Reunion des Bailleurs de Fonds sur le Secteur Agriculture" Dakar, 17 et 18 Juin 1986 (Dakar: République du Sénégal August 1986), p. 20.

²⁷ Patrice Kouame, "L'agriculture, le crédit, et le paysan: L'exemple ivoirien" Le Moniteur Africain, No. 815, p. 3./

C'est un project de société qui se veut à l'écart des inconvénients du capitalisme et de ceux du collectivisme, et qui, pour sa réalisation concrète, devait se doter d'institutions appropriées.

Senegal, the lack of rural savings accentuates the tenuous nature of rural credit institutions. Creating a viable system of agricultural credit will be the most difficult element of the New Agricultural Policy to implement, thus overcoming obstacles to loan extension and building alternative credit institutions are important focuses of inquiry.

With the declaration of the New Agricultural Policy, the GOS stated an intention to remove the burden of rural credit from the Treasury. No clear plan outlined the means of accomplishing this goal. From the government's point of view, the problem was chiefly non payment, and the new system will address this by changing the burden of payment from the larger cooperative level to that of the individual by way of the village.²⁸ To evaluate the nature of new proposed systems requires an understanding of obstacles to rural credit extension and their relationship to the new systems of input distribution being established.

Obstacles to Credit

Establishing a rural credit system will remain difficult because of imperfect information, past government behavior, and the lack of incentives for large-scale private investment. Threats of curtailing further loans must be credible. Second, a bureau extending credit must ensure that the borrower will have future need of credit. If not, the incentive to default is high. Machinery and tool loans are good examples. If a group accorded credit purchased a truck and later sold it for cash, there would be no leverage against the default by

²⁸ M. Amadou Ndiaye, Ministère de Développement Rurale, interview.

refusing credit in the following year. Thus, other credit facilities and sources need access to information on default to avoid extending credit to unreliable clients.

The process becomes a matter of game theory and defection because of a lack of traditional western responses to default. Peasant assets are minimal. Land tenure does not involve ownership of title. Withholding payment for harvests is also problematic because of the multiplicity of overlapping rural institutions.

Seizing income has proved to be particularly difficult in Senegal. This is partially attributable to flaws in the credit programs. The most common of these allowed farmers to sell their output through a different cooperative from the one where they acquired their income. Since effective communication between cooperatives was lacking, farmers could avoid repayment fairly easily.²⁹

Even freer information about sales and credit would not prevent a farmer from giving his crop to a relative to sell for him.

In creating a new rural credit operation, the GOS has attempted to address the problem. First, by making future credit extension dependent on repayment, and separating the Caisse's losses from Treasury obligations, the GOS intended to develop among peasants a more responsible attitude toward debt. The creation of village sections contributed to this strategy substantially. Second, by opening credit access to the regions, such a system would foster greater rural investment.

Instead of contracting credit on an individual basis, branches of the Caisse National de Credit Agricole give loans to Village Sections and Producer Groups. The Village Section may be composed of a few

²⁹ Laura Tuck, "Financial Markets in Rural Senegal," in Gersovitz and Waterbury, pp. 177-8.

villages, actually, but the numbers of individual members may not exceed 250. The average number of actual villages per section is two and one half in the groundnut basin.³⁰ The Village Sections are officially defined as being multisectoral, democratic, and endowed with personalité juridique or juridical status.³¹ Multisectionality implies that the sections should develop projects in fishing, artisanal workshops, and forestry as well as agricultural, however only a minority of the cooperatives are actually using credit to animate new activities: lack of sufficient credit is the main obstacle.³² Juridical status gives the section the right to take on credit, much as the invention of the corporation allowed businesses in nineteenth century America to take risks and expand their activity without placing an unlimited onus of risk on the individuals involved.

Though village sections were created in 1983, they remained inactive until about 1985: peasants were enthusiastic that the Caisse National would deal directly with their village sections; peasants assumed mistakenly, however, that each village section would be a collection point and in this matter they would be disappointed.³³ As noted earlier, large cooperatives make better economic sense for marketing and thus village sections would have to sell their crops to the higher coop to which they belonged. As of December 1986, that

³⁰ Matar Gaye, "Les Sections Villageoises et le Credit" (Dakar: BAME-ISRA, January 1987), p. 4.

³¹ Gaye, p. 4.

³² Gaye, p. 5.

³³ Gaye, p. 8.

number of coops was estimated at eight hundred and ninety two.³⁴

The GOS has given another entity, the Producer Group, juridical status. Such groups are made up of individuals, usually within the same village section, who take out loans for a specific project. They may, for example, wish to start a hoe factory. Their debts are independent of those of the village section and serve the purpose of encouraging more entrepreneurial activity. Villages would of course tend to behave more conservatively. Typical groups are composed of bachelors seeking to accumulate the wealth necessary to start a family. Little data, however, is available on their functioning; unlike the village sections, they are not stable or clearly organized.

AID established three experimental operations in Dakar in 1986 with the Banque Nationale de Développement Sénégalais, the BNDS. The Thies serves the Niayes region and part of the groundnut basin, and the Matam office covers the Fleuve at present. The Dakar branch is of little use at present, however, a fourth is scheduled to open in Ziguinchor to serve the Casamance. BNDS has nine regional branches, however the GOS is not absorbing any losses incurred.³⁵

The CNCAS, was as of 1986 capitalized at the level of 1 billion F CFA.³⁶ As planned, the CNCAS is undercapitalized and scheduled to expand at far too slow a rate. With a larger capital endowment the CNCAS would be able to create six additional facilities by 1990 instead of 1992 as is now planned.

³⁴ Pap Sow, "Notes on the Agricultural Sector." p. 32.

³⁵ Rapport de Synthèse, p. 107.

³⁶ Rapport de Synthèse, p. 107.

By creating a new rural credit system, the GOS seeks to advance its development goals and reduce the burden of agricultural marketing on the treasury. Decentralization of credit will increase the efficiency of individual transactions and adopt the general goals of the state to regional circumstances. Ultimately, a decentralized rural credit scheme will accommodate loans for agricultural equipment and seasonal inputs, rural entrepreneurial investment, funds for coops' marketing costs after harvest, and loans for the soudure, or hungry season.

Credit Allocation

The GOS has tried several approaches to credit allocation. The systems employed have included retenu systems, standard allotments based on tax records which give each man the same amount of fertilizer, and no system at all.

In 1985, credit was accorded to villages based on the amount of nuts officially commercialized in the previous season.³⁷ It must be noted that this does not require a complete settling of accounts since it is the village section, not the individual now being accorded credit. The village section handles individual allocations.

Repayment continues to allude Regional Development associations such as SODEVA.³⁸ Patterns of default continue and the best response would involve three recommendations. First, give the mechanism teeth; don't extend credit to past defaulters. Second, a guarantee fund for calamities is necessary to protect producers from climatic risk. President created one last year with the support of the CPSP and

³⁷ Matar Gaye, p.11.

³⁸ Kelly, "Acquisition and use of Agricultural Inputs in the Context of Senegal's New Agricultural Policy," p. 20.

Stabex among other actors which would act as an internal Stabex.³⁹ Finally, the GOS should prioritize its lending programs to coincide with farmers' preferences. Seeds and inexpensive tools, and not fertilizer and SISMAR tools are farmers' highest priorities.⁴⁰

Policy Implications

For the state to disengage itself from risk, it must endow such a rural credit system with two separate forms of support. The guarantee fund organized by the government will prove valuable if it is not used too liberally. Second, the agencies implementing the program must encourage rural savings to complement rural loans. Ultimately, the GOS should encourage the development of parallel rural financial markets. In Kenya, for example, tribal unions generate savings with systematic lotteries. In the long term, at the level of each regional bank, guidelines for reserves provide insurance against defaults. For example, "At Ivory Coast's Banque Nationale de Developpement Agricole the coefficient for transforming deposits into loans is set at 60%; thus for every 100 Francs on deposit, sixty may be lent."⁴¹

Creative parallel financial markets should also be encouraged both as a means of providing competition and of generating investible capital. Inputs for example may be self-financed. For example, after the groundnuts are sold, traders could sell receipts for fertilizer at a price lower than the market price, say 55 F CFA/kilo compared to the

³⁹ Abdou Diouf, "Projet de Décret portant création et Organisation d'un Fonds de Garantie (Dakar: République du Sénégal, 1986), p. 1.

⁴⁰ Kelly, p. 20.

⁴¹ Kouamé, p. 6./"le coefficient de transformation des dépôts en prêts est fixé à la BNDA par le règlement intérieur, c'est à dire que sur 100frs de dépôts, 60 peuvent être prêtés..."

going rate of sixty. It would in essence constitute a loan to the trader.

Finally, the GOS should hire or create a private voluntary organization to act as a liaison between the village sections and the credit institutions. No such program is now planned by the GOS, however, it would advance the social goals of the country by encouraging a wider variety of people to available credit instruments.

The role of the PVO would also be to adjust the program to locally perceived needs. Much of the success of the CRS program in comparison with the SODEVA-ACOPAM project emerged from its ability to respond to locally perceived needs and interests. This is equally true, if not more so, with a credit system since it will eventually have to serve a variety of needs.

Most likely, an international PVO would implement the project and in turn develop a local, community group of a voluntary nature. Low time commitments would make it possible for almost any farmer to participate, though as with the elected seed bank assemblies, it is very likely that rural notables and marabouts will rise to positions of importance.⁴² The new mechanism would require years of controlled observation. First there is the Caisse National de Credit Agricole du Senegal, the

The new CNCAS must play a paradoxical role and there is no guarantee that it will succeed. Its performance depends on the implementation of village cooperatives and their record of credit repayment. The CNCAS has a small set of teeth. Better records and a policy of denying future credit to defaulters will limit chronic

⁴² Carlson, p. 11.

losses in individual villages. The long term viability of the program will depend on its ability to generate savings as well as repayed loans.

Chapter VI
MARKETING, PRICE POLICY, AND INPUT
DISTRIBUTION

Trends in the amount of marketed production have been downward since 1960, and though a significant amount of the decline may be attributed to climate, soil degradation, and price incentives, the inefficiency of the marketing system has contributed to the problem. "Impurities" and losses during transport and storage had risen from an average of 3.65% of the harvest in 1972/73 and 1973/74 to 11.5% in the 1979/80 season.¹ Price effects also contributed to the decline in the percentage of each harvest marketed in official channels, most notably in the 1983-84 season. In that year, the state lowered the producer price to 50 F CFA per kilo from 60 and lost about half of the harvest on the parallel market.

Pricing and marketing play determining roles in the size of a harvest and the percentage of that harvest actually marketed. While opening the marketing mechanism to private traders will increase efficiency, the effects of prices in line with world markets would be even more difficult to gage. As one consulting firm's report notes,

The multiplicity of peanut pricing effects poses a dilemma because positive effects on one objective may be adverse on others. A higher peanut price may increase producer incomes and stimulate more production and a larger volume of exports, generating foreign exchange to finance imports; at the same time, it also discourages

¹ de Wilde, p. 108.

food production, aggravates Senegalese food deficits, and is likely to increase domestic food prices.²

The IMF has encouraged the GOS to reduce producer prices and bring them in line with the world price for groundnut oil. The state has done the opposite for the 1986/87 season, pushing the price to 90 F CFA/kilo. The GOS is acting against the advice of donors³ and may generate a loss of 17 billion F CFA on the groundnut filiere in 1987.⁴ The GOS it may have a rational motivation for setting it so high. The producer incentives should insure a large harvest relative to climatic conditions and thus help new marketing and input distribution mechanisms develop before the state lowers the price in the future. Too small a harvest would also compel the government to shoulder large deficits since it holds large shares of SONACOS and SEIB. "Since the late 1970's, the mills have been operating well under their annual crushing capacity of 900,000 tons of peanuts. The amount of peanuts sold directly to them has declined over the years, reaching a record low in 1980-81 when only 68,000 tons were available for processing."⁵

The Politics of Price Formation

The GOS justifies its intervention in groundnut pricing in two ways. First, it asserts that fixed prices reduce uncertainty for producers. Second, the state argues that stable prices protect

² Abt Associates, p. 136.

³ Ambassador Lannon Walker, personal interview.

⁴ Landell-Mills, presentation of draft paper, April 10, 1987.

⁵ Abt Associales, p. 138.

consumers and producers from speculators.⁶ These arguments, however, are weak. Fixed prices actually add an element of uncertainty. First, the price is usually announced after the beginning of the marketing season. In addition, the prices are not fixed in practice; large producers receive prices higher than the ostensible set price and small producers receive much less.

The speculation argument is also dubious, since as much as speculators may gain from sudden price swings, they also assume risk. Stable prices can destabilize revenue to a producer because in bad years, his small crop is not compensated for by higher prices. This argument is limited since Senegal is a price taker on the world market. The costs associated with stable, uniform prices are also very high. Variable prices might force cultivators to keep stocks of goods as insurance against higher input and consumer goods prices.

Options

The decline of the price of groundnut oil and cake on the world market and the decline of the dollar in terms of F CFA has set back Senegal's agricultural policy brutally. When the GOS announced the 90 F CFA/kilo producer price, peanut oil prices exceeded 700 dollars/metric ton and the dollar was worth 500 F CFA;⁷ prices for groundnut oil in 1986 were closer to 540 dollars/ton and the dollar traded at approximately 370 F CFA. "For three tons of peanuts in shell, SONACOS pays the farmer 270,000 F CFA or in excess of \$730. The other three

⁶ Martin, pp. 20-22.

⁷ C. Black, Memorandum from the U.S. Embassy in Dakar to the Secretary of State in Washington and the U.S. Embassy in Abidjan, Ivory Coast. "Situation of peanut crop collection and crushing, February 11, 1986.

tons will produce approximately one ton of peanut oil at 545 dollars, one and one half tons of cake at about 150 dollars a ton...SONACOS can hope to realize \$770 leaving it a wholly inadequate 40 dollars to cover transportation."⁸ The situation has since then deteriorated. The dollar traded at 300 F CFA in January of 1987 and the price of peanut oil has not increased.

Even with a good harvest, and 500,000 marketed tons, SONACOS will generate losses. At \$540/ton for groundnut oil and 300 F CFA/\$, sales of groundnut oil on the world market would generate 24 billion F CFA. At 90 F CFA/kilo, the government 45 billion F CFA on groundnuts alone; at 80, 40 billion; and at seventy, 35 billion. The price increase was unwarranted and was probably partly motivated by the upcoming election.

At present, the fear of peasant retreat into subsistence is a destabilizing factor in government policy. Farmland planted with groundnuts has continued to decline. Cereal cultivation now takes up two and one half times the area that the so-called industrial crops, cotton and groundnuts do. The government fears another resort to the parallel market and artisanal crushing of oil by peasants which would send foreign exchange receipts very far down. As long as world prices remain very low, the GOS should keep its prices at a reasonable level. Seventy F CFA would be preferable to ninety as long as the Mourides are not mobilized to vote against the state at the polls or on the markets. The President's regular meetings with the Khalif at Touba would help avert misreading of intentions. In the mean time, improving the efficiency of current operations would improve the

⁸ Ibid., p. 2.

financial position of the groundnut sector. Most apparently, a more efficient marketing sector would reduce losses, but in an indirect way, the cooperative mechanisms for credit, seed generation and fertilizer distribution can make important contributions.⁹

Marketing

Before and since the dissolution of ONCAD, trade on the parallel market continued to expand. After the declaration of the New Agricultural Policy, which allowed private traders to operate legally, cooperatives can sell their groundnuts either directly to SONACOS or SEIB or to private traders who in turn sell to the crushers. The policy is essentially a revival of the government approach between 1960 and 1965 when licensed merchant groups called organismes stockeurs operated alongside the state cooperatives.¹⁰

Those presently operating are called opérateurs privés stockeurs, or OPS, and are garnering an increasing share of the harvest marketed.

In the 1985/86 season

marketing of groundnuts by SONACOS represented 58% of the estimated production of 590,000 tons. Of the 892 collection points that had been established, OPS...covered 14% of the collection points but their contribution to the total quantities marketed by SONACOS represented 24%.¹¹

⁹ République du Sénégal "Bilan Provisoire de la Campagne Agricole," October 1985, p. 9.

¹⁰ Abt, p. 142.

¹¹ Pap Sow, "Notes the Agricultural Sector," January 1987, Dakar, p. 15.

for the 1986/87 season. SONACOS withdrew from direct purchases from producers; only the OPS and the coops were to manage marketing activities.¹² In response, the OPS expanded their activity widely; by the end of January, the OPS had by some estimates traded 40% of a harvest projected to reach 600,000 tons.¹³ With the producer price at 90 F CFA, the percentage marketed officially should definitely exceed that of the preceding year. Because the animation of the private traders was simply the recognition of an existing situation, it was probably the easiest reform to implement. Only if the government strives to fund many new traders will the reform become expensive because the economies of scale inherent in transport and storage favor better capitalized entrepreneurs. The example of transport illustrates the point.

Very few statistics are available on the operations of private groundnut traders. The cost structures associated with transport and credit give some indications of constraints faced by traders. Transportation costs exhibit economies of scale. In one two variable model study of cereals shipments, "a 1% increase in distance was found to decrease cost per kilometric ton by 0.6 % and a 1% increase in quantity shipped led to a 0.14% decrease in cost per ton kilometer...[On] shipments travelling further than 100 km, costs per kilometric ton are often lower than the official rates."¹⁴

¹² Ibid., p. 15.

¹³ Amadou Fall, "Anné Faste des Arachides," Le Soleil, p. 3.

¹⁴ Mark D. Newman, "The Private Sector under Senegal's African Socialism: Lessons from Senegal's Grain Marketing Systems." Draft Paper Presented at Senegal Country Day, SAIS, April 10-11, 1987.

The analysis was carried out with double logarithmic functions

returns more closely, demand for such inputs as fertilizer will eventually reflect economic considerations and not faulty perceptions.

CONCLUSION

The New Agricultural Policy proposed ambitious reforms, and three years later the results are mixed. As part of a strategy of structural adjustment, it set out to reduce government deficits and inefficiency in two ways. First, the GOS would disengage itself from direct management of the mechanics of marketing and input distribution. Private interests such as the oil crushers were to shoulder the burden. Second, the government would guide and encourage efficient alternatives to statist intervention. In this second sense, the government's policy represented a return to the values of animation rurale of the early 1960's; by building rural institutions, the GOS and peasants together would create the basis for collective responsibility. The glue in the 1980's holding the elements together, however, would be more economic than political. Collective honor would be complemented by the profit motive.

The nature of the problems of the groundnut filière compels the government to create new social and economic institutions. With the exception of pricing policy, the required reforms are a challenge of micro-policies. The GOS cannot merely liquidate assets or change a tax. Even dismantling the parastatals and regional development associations of the ONCAD era would in itself be an inadequate response because of the dependence of peasants on the regime. Declining groundnut oil prices continue to impede the government's progress.

The new strategy encompasses two arms. One consists of disengagement and institution building; the other involves the encouragement of risk taking and trade by individuals. Streamlining the development agencies, building seed storage banks, and developing credit institutions are elements of the first; opening groundnut marketing to private traders, operating private trade in fertilizer, and encouraging producer groups to take credit risks for small profit oriented projects are elements of the latter. The slow growth of the institutions and risk taking indicates that a new kind of extension agent is required. This would be the conerstone of a viable animation capitaliste.

One of the greatest flaws of current efforts at creating new rural cooperative structures is a tendency to return to the double administration of bodies like ONCAD in which an interested organization providing a service or credit also acts as the extension agent. The Caisse Nationale de Crédit Agricole Sénégalais is operating without parallel, independent extension agents, even though previous proposals suggested creating independent rural advisory services composed of people with banking experience to act as intermediaries between the bank and rural groups.

It is for this reason that Catholic Relief Service's seed bank project is doubly important. First, and most immediately, it represents a successful attempt to promote self-reliance among peasants and encourages them to work-together, with all the linkages that implies. The seed bank project also has broader implications. The training and advisory services are independent of the state and

function locally, making them more responsive to rural needs. They are thus less likely to impose behavior from above but rather adapt a more general program to the specific interests of a local community.

The potential of private voluntary organizations in the disengagement process remains inadequately explored. The state has given the Groupement de Producteurs legal status, but they have yet to diversify into areas of borrowing other than traditional inputs. This is the task of an animation capitaliste. National or international private voluntary organizations could set up experimental programs and adjust them to local needs. Ideally, the organization would become locally staffed and self generating; examples of successful risk taking will push the project forward far more quickly than any credit extension service.

The example of bachelors seeking to accumulate enough wealth to marry is one example of potential which needs to be explored. They are still disfavored in credit allocations within the sections villageoises and would benefit most in forming groupements de producteurs since their incentives for profit are among the highest in a village. They may wish to enter the input or marketing trade as a means of making money.

Two flaws largely beyond the scope of this inquiry mar the current agricultural policy's implementation. First, there is an inadequate emphasis on rural savings. Second, the pricing policy of the government is designed to satisfy too many conflicting interests. The

CNCAS functions on a short term basis and relies almost completely on government capitalization. Developing rural savings programs will in the long run allow the Caisse to function more securely. In Kenya, for example, tribal unions and village savings cooperatives generate individual and collective savings. Capital generated by groups is then spent on projects ranging from beekeeping to general stores which generate further profits. In Senegal, encouraging savings would in turn provide collateral and remove some of the exposure to risk faced by banks.

Pricing policies remain a problematic issue since the world price for groundnut oil has dropped precipitously and no longer covers the costs of production. Improving the efficiency of operations and marketing will reduce the barème as will decreasing the cost of inputs, but the margins are very narrow. Unless world prices recover, and few analysts predict such an event in the short term, the industry will continue to generate losses. Pricing policy must pass between two dangers. If too low, peasants will resort to the parallel market, total revenues will decline, and unit processing costs increase astronomically. When the government prices are too high, volume grown and marketed officially will rise, and unit processing costs diminish, but at current world prices create astronomical losses.

Because of their complexity of organization and implementation, the development of the cooperative aspects of the New Agricultural Policy is the most crucial issue. The mentality is still too firmly ingrained that the government will provide services without remuneration and that obligations to the government are not really

obligations at all. Cooperative structures for seed storage, credit, and input purchase can solve the problem by giving people obligations to each other.

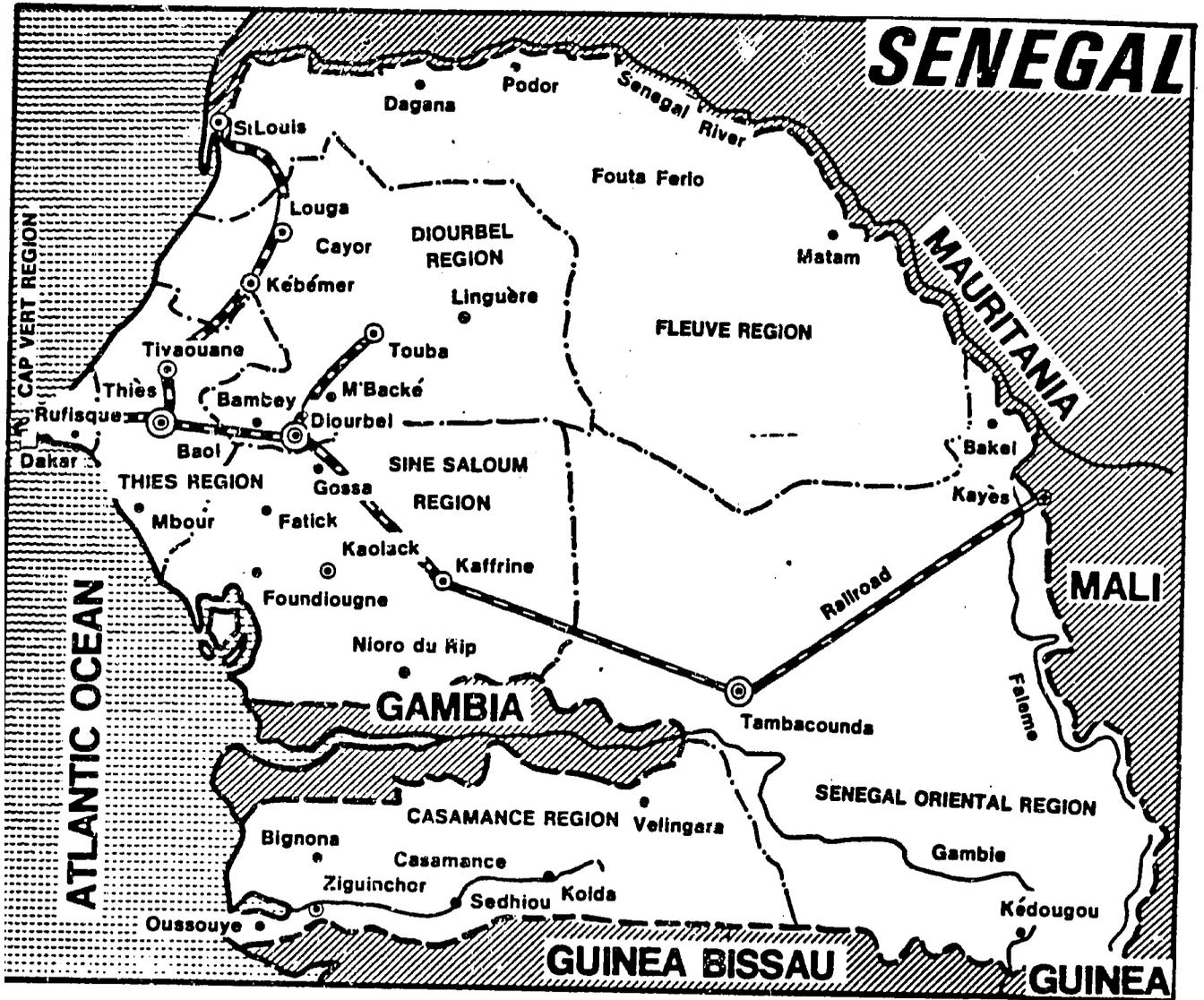
APPENDIX I

List of Acronyms

ACDI	Agence Canadienne de Développement International
ACOPAM	Appui Coopérative aux Activités de Développement Assitées par le Programme Alimentaire Mondial
BCEAO	Banque Centrale des Etats de l'Afrique de l'Ouest
BNDS	Banque Nationale de Développement du Sénégal
CAA	Commissariat à l'Aide Alimentaire
CCE	Caisse Centrale de Coopération Economique (France)
CNCAS	Caisse Nationale de Crédit Agricole du Sénégal
CNRA	Centre National de la Recherche Agronomique
CPSP	Caisse de Péréquation et de Stabilisation des Prix
CRDI	Centre de Recherches pour le Développement International (Canada)
CSA	Commissariat à la Sécurité Alimentaire
DGPA	Direction Générale de la Production Agricole
EFF	Extended Fund Facility (IMF loan)
FAC	Food and Agriculture Organization of the United Nations
F CFA	Franc CFA (= 0,02 Francs Français)
FMI	Fonds Monétaire International (IMF)
IBRD	International Bank for Reconstruction and Development (World Bank)
IFPRI	International Food Policy Research Organization
ISRA	Institut Sénégalais de Recherches Agricoles
MDR	Ministère du Développement Rural
MPC	Ministère du Plan et de la Coopération

NPA	Nouvelle Politique Agricole
OMVS	Organisation de la Mise en Valeur du Fleuve Sénégal
ONCAD	Office National de Cooperation et Assistance au Développement
ORSTOM	Institut Français de Recherche Scientifique pour le Développement en Coopération (France)
PAM	Programme Alimentaire Mondial
SAED	Société d'Aménagement et d'Exploitation des Terres du Delta du Fleuve Sénégal et des Vallées du Fleuve Sénégal et de la Faléné
SODEFITEX	Société pour le Développement des Fibres Textiles
SODEVA	Société de Développement et de Vulgarisation Agricole
SONADIS	Société Nouvelle pour l'Approvisionnement et la Distribution au Sénégal
SONAR	Société Nationale d'Approvisionnement du Monde Rural
SONED	Société Nouvelle des Etudes de Développement en Afrique
SRDR	Société Régionale de Développement Rural
USAID	United States Agency for International Development

Appendix II
Map of Senegal



Source: Gellar.

Appendix III

EVOLUTION OF GROUNDNUT PRODUCTION

CAMPAIGN	SURFACE PLANTED (1,000 ha)	PRODUCTION (1,000 t w/ shells)	YIELD (kg/ha)
1970-71	1,049	583	556
1971-72	1,060	989	932
1972-73	1,071	570	532
1973-74	1,026	675	658
1974-75	1,052	980	932
1975-76	1,203	1,412	1,174
1976-77	1,346	1,208	897
1977-78	1,113	519	466
1978-79	1,179	1,061	900
1979-80	1,069	676	632
1980-81	1,085	490	452
1981-82	1,015	884	870
1982-83	1,139	1,109	973
1983-84	987	568	575

From the Caisse Centrale report "La Filière Arachide- Réactualisation 1983/84", p. 5.

Production, Prices, and Marketing of Groundnuts

Year	Producer Price ^a		Nonmarketed Production ^b						Total Final Marketings ^c			Income of Producers ^d				
	Production ^f	Delivered to ONCAD ^g	Current	Deflated ^h	Total	Seed	Marketing Losses ⁱ	% Total Output	Volume ^f	% Production	Value in Current Prices ^d	From ONCAD		Total ^e		% Value of Exports and Local Sales
												Current	Deflated ^h	Current	Deflated	
1967/68	1,005	834	18.0	17.8	183	100	—	16.2	842	83.8	26.1	14.7	14.6	—	—	—
1968/69	830	623	18.0	17.4	232	98	—	28.0	589	72.0	22.5	11.2	10.0	13.0	12.6	57.7
1969/70	789	601	18.0	16.8	194	109	—	24.6	595	75.4	25.9	11.1	10.4	12.5	11.7	44.4
1970/71	583	454	19.5	17.5	183	122	—	31.2	400	68.8	20.4	9.6	8.6	11.9	10.7	56.9
1971/72	989	764	22.5	19.1	234	129	—	23.7	755	76.3	33.9	17.8	15.1	19.8	16.8	58.4
1972/73	570	466	23.1	17.5	178	130	16.7	31.2	392	68.8	25.0	10.7	8.1	12.3	9.3	49.2
1973/74	675	501	25.5	16.5	231	144	16.8	34.2	444	65.8	44.3	12.9	8.4	17.6	11.4	39.7
1974/75	980	768	41.5	20.6	234	156	26.5	23.9	746	76.1	64.0	31.5	15.6	33.7	16.7	62.4
1975/76	1,412	1,178	41.5	20.0	302	158	84.2	21.4	1,110	78.6	77.8	48.1	23.2	50.6	24.4	65.0
1976/77	1,208	957	41.5	18.2	360	167	63.7	29.9	847	70.1	85.4	34.8	15.2	37.5	16.4	43.9
1977/78	519	441	41.5	17.6	242	176	45.3	46.6	277	53.4	36.2	17.7	7.5	19.3	8.2	53.3
1978/79	1,061	775	41.5	16.5	356	181	—	40.3	633	59.7	58.5	31.4	12.2	37.0	14.4	63.2
1979/80	676	392	45.5	17.0	414	179	44.1	41.2	262	48.8	35.7	17.4	6.2	29.2	10.4	81.8

^aIn FCFA per kg.

^bIn thousands of metric tons. Includes, however, sales by farmers in parallel market, which were considerable in 1978/79 and 1979/80 and were estimated in the latter year at 118,642 metric tons.

^cExport and local sales of all groundnut products except for sales in unofficial or parallel market.

^dIn billions of FCFA.

^eIncludes estimated value of on-farm consumption and sales in parallel market.

^fIn thousands of metric tons.

^gIn thousands of metric tons. Excludes seed reimbursed to ONCAD by farmers.

^hDeflated with the consumer price index for the traditional African family (1967 = 100).

ⁱLosses due to marketing deficiencies, including losses in transport and storage.

Source: Annual reports on the Senegalese groundnut industry appearing in BCEAO, *Notes d'Information et Statistiques*.

Appendix V

GROUNDNUT PRODUCTION 1980/1981

TOTAL PRODUCTION (in tons)		489,000
1 - Consumption by producers	75,000	
Personal seed savings	60,000	
Parallel market trade	162,400 *	
BNDS Reimbursement	1,600	
Total		299,000
2 - Official market trade		190,900
2.1 - Groundnuts for Crushing	189,300	
Oil crushers	(150,000)	
SONAR	(36,950)	
Seed Reimbursement	(1,650)	
2.2 - Confectionary Groundnuts	1,600	
3 - Distributed seed capital		119,200
3.1 - Groundnuts for crushing	117,600	
N1 N2	(36,950)	
Seed Reimbursement	(1,650)	
Ordinary Seeds	(79,000)	
3.2 - Confectionary Groundnuts	1,600	
4 - Receipts at oil crushers		67,000
4.1 - Crushed	67,000	
SONACOS	(52,000)	
SEIB	(15,000)	
5 - Raw Losses (2-3-4)		4,700 **

* For these four campaigns, a large estimate of consumption by producers and personal seed savings was used (about one third of the total seed capital by the estimations of SODEVA). The quantities sold on the Senegalese parallel market and in neighboring countries are obtained by deducting 2, 3, and 4 from the total production estimated by the Ministry of Rural Development.

Parallel Market sales were particularly strong in 1980/81 and 1983/84 since parallel market prices were much higher than the official producer price. (The entries under 1983/84 are low)

** Raw losses are observed in the difference between the quantities purchased from the cooperatives and the quantities received by SONAR and the oil crushers.

GROUNDNUT PRODUCTION 1981/1982

TOTAL PRODUCTION (in tons)		883,700
1 - Consumption by producers	80,000	
Personal seed savings	60,000	
Parallel market trade	53,900	
Total		193,900
2 - Official Commercialization		689,800
2.1 - Groundnuts for crushing	685,100	
SEIB	(81,200)	
SONACOS	(538,300)	
SONAR N1	(12,100)	
N2	(53,500)	
2.2 - Confectionary groundnuts	4,700	
3 - Distributed seed capital		123,000
3.1 - Groundnuts for crushing	120,000	
N1	(12,100)	
N2	(53,500)	
Ordinary Seeds	(54,400)	
4 - Receipts at oil crushers		532,300
4.1 - Crushed	530,800	
SONACOS	(386,100)	
SEIB	(144,700)	
4.2 - Confectionary groundnuts	1,500	
Raw losses (2 - 3 - 4)		34,500

GROUNDNUT PRODUCTION 1982/1983

TOTAL PRODUCTION		1,109,400
1 - Consumption by Producers	80,000	
Personal seed savings	60,000	
Parallel Market Trade	56,800	
Total		196,800
2 - Official market trade		912,600
2.1 - Groundnuts for crushing	899,000	
SEIB	(124,700)	
SONACOS	(698,500)	
SONAR N1	(13,800)	
N2	(62,000)	
2.2 - Confectionary Groundnuts	13,800	
SONACOS	(8,500)	
SONAR	(5,100)	
3 - Seed capital distributed		138,900
3.1 - Groundnuts for crushing	133,800	
N1	(13,000)	
N2	(62,000)	
Ordinary Seeds	(58,000)	
3.2 - Confectionalry Groundnuts	5,100	
4 - Receipts at oil crushers		718,000
4.1 - H P S (SONACOS)	8,700	
4.2 Crushed	700,900	
SONACOS	(532,500)	
SEIB	(168,400)	
4.3 - Confectionary Groundnuts (SONACOS)	8,400	
5 - Raw losses (2 - 3 - 4)		55,700

GROUNDNUT PRODUCTION 1983/1984

TOTAL PRODUCTION (in tons)		568,300
1 - Consumption by producers	80,000	
Personal seed savings	60,000	
Parallel market	69,200	
Total		209,200
2 - Official market trade		359,100
2.1 - Groundnuts for crushing	354,500	
SEIB	(12,700)	
SONACOS	(251,000)	
SONAR N1	(5,800)	
N2	(32,800)	
Ordinary seeds	(52,200)	
2.2 - Confectionary Groundnuts (SONAR)	4,600	
3 - Distributed seed capital		125,400
3.1 - Groundnuts for crushing	120,800	
N1	(5,800)	
N2	(32,800)	
Ordinary seeds	(82,200)	
3.2 - Confectionary Groundnuts	4,600	
4 - Receipts at oil crushers		218,000
4.1 - H P S (SONACOS)	8,000	
4.2 - Crushed	210,000	
SONACOS	(150,000)	
SEIB	(60,000)	
5 - Raw losses (2 - 3 - 4)		15,700

These four tables were translated from the Caisse Centrale report, "La Filière Arachide Réactualisation 1983/1984," pp. 7-10.

Appendix VI

Table 16
 SENEGAL: GROUNDNUT MARKETING COST SCHEDULE (COUTS DU BAREME DE
 COMMERCIALISATION DES ARACHIDES D'HUILERIE) IN MILLIONS FCFA,
 1980/81 - 1983/84

	1980/81	1981/82	1982/83	1983/84
1. Fixed Costs				
1.1 Services:				
Grading and Quality Control	130	93	-	-
Cooperative Magt. Charges	158	60	-	-
Seed Quality Control	329	161	-	-
Costs to Sonar	1,055	678	-	-
1.2 Fixed Financial Charges				
Cost of Moving Funds	20	20	15	14
Insurance	8	34	39	37
Decortication Costs	-	142	264	69
Overheads (Oil Firms)	823	900	1,342	1,571
2. Variable Costs				
Coops. Marketing Margin	145	500	650	214
Materials	462	220	439	384
Commission to Coop. Presidents and Weighers	230	550	789	1,279
Handling Charges	29	288	388	182
Transport	345	4,100	4,362	1,848
Financial Charges	953	3,600	4,900	1,360
Storage	21	124	361	113
3. Losses Imputed in Bareme	346	911	905	450
4. Value of Groundnuts Purchased	7,535	43,365	57,624	18,459
5. Gross Marketing Costs	12,589	55,746	72,075	25,980
6. Gross Costs (F/Kg)	83.5	89.99	87.55	98.52
7. Net Marketing Cost (F/Kg)	33.5	19.99	17.55	28.52
8. Quantity Marketed (Mt)	150,700	619,500	823,200	263,700
9. Value of Total Losses	235	2,170	3,342	785
Producer Price (Gross)				
in F/kg	50	70	70	70

Source: Adapted from C. Agel and P. Thenevin, op. cit. 1984, p. 23.
 in Jameh, "The Evolution of Marketing and Pricing in Senegal", p. 71.

Appendix 7

DEFICIT GENERATED BY THE SEED CHAIN
(millions of F CFA)

Season	1980/81	1981/82	1982/83	1983/84
SONAR's				
Expenses	10,146	13,294	13,146	11,942
Receipts				
Reimbursement	513	-	-	-
Retenue	-	6,174	8,990	11,942
Subsidies				
Variable costs of the barème	980	500	620	350
Fixed costs of the barème	1,055	678	-	-
other subsidies	7,598	5,932	3,536	6,275
<u>Total subsidies</u>	9,633	7,110	4,156	6,625

Source: Agel, Thenevin, "La Filière Arachide (reactualisation 1984)
p. 25.

Appendix 8

STAGES OF SELECTED SEED MULTIPLICATION

	stage of multipli- cation	seeds used (in shell)	density of sowing Kg/ha	surface covered	usable production (in shell)
	G0	1.0 Kg	100	100 M2	14 Kg
Prébase	G1	14 Kg	"	1.400 M2	140 Kg
	G2	140 Kg	"	1.4 ha	1.4 T
Base	G3	1.4 T.	"	14 ha	14 T
	G4	14 T.	"	140 ha	140 T
N1	N1(M1)	140 T.	"	1,400 ha	1,250 T
	N1(M2)	1,250 T.	"	12,500 ha	5,000 T + 5,000 T
N2	N2	5,000 T.	"	50,000 ha	40,000 T

Source: Agil and Thenevin, "La Filière Arachide (réactualisation 1984)", (Dakar: Caisse Centrale, 1984), p. 74.

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