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**PUBLIC/PRIVATE SECTOR COLLABORATION  
IN THE PROVISION OF URBAN SERVICES  
IN THE IVORY COAST**

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## INTRODUCTION

Urban services in the Ivory Coast are supplied by four major sources: individual entrepreneurs, private companies, public/private corporations, and the municipalities themselves. Some essential services, such as water and electricity, are furnished by a single giant company throughout the entire country. Other services, such as transportation and waste removal, are made available to the municipalities by a variety of suppliers. The type of supplier depends primarily on the size and importance of the city.

To obtain a comprehensive view of the different ways in which urban services are supplied in the Ivory Coast, this study will examine the provision of four major urban services (water, electricity, waste removal and transportation) in the city of Abidjan which is the economic capital and the largest city of the Ivory Coast with a population of about 1.7 million. It will also investigate the relationship between the public and private sectors as it relates to furnishing these services, and, in so doing, specify the nature of the interaction between the central government, the municipalities, the public/private corporations and private firms, all of whom are responsible for making available the highest possible quality of services to the greatest number of people in the Ivory Coast.

Finally, for purposes of comparison, there will be a discussion of the way these services are supplied in the city of Gagnoa, a typical interior city located in the south-western Ivory Coast.

## SODECI

SODECI (Societe de Distribution d'Eau de la Cote d'Ivoire) is the company responsible for supplying water in Abidjan and in the rest of the Ivory Coast. There are two reasons for starting with SODECI. First, SODECI presents an apt illustration of the variety of relationships that can exist between the national government, the municipalities and private corporations. Secondly, SODECI's evolution over the twenty-five years of its existence is somewhat typical of that undergone by the other major utilities.

SODECI emerged from the terms of a contract signed between the City of Abidjan and a French company, SAUR (Societe d'Aménagement Urbain et Rural). Following a period of active competition among several French Companies interested in obtaining the right to supply the city with water, SAUR was awarded the contract in October of 1959. SODECI was created in 1960, in accordance with Article 8 of that contract.

At the time of SODECI's creation, SAUR was the only stockholder. Today SAUR remains a major stockholder in SODECI, but there is now strong participation by Ivorians. At present, SODECI's stock is divided among SAUR (48.36%) individual Ivorians (47.61%), the Ivorian State (3.25%) and foreign individuals (0.78%). SODECI envisions an increase in the participation of individual Ivorians of between 8 and 10%, accompanied by a parallel decrease in the level of foreign participation. This is in keeping with a general trend toward Ivorianization of both personnel and ownership within the company.

The contract between the city of Abidjan and SODECI was a "convention de concession". This gave the company a monopoly by making it solely responsible for all aspects of the production and distribution of water in Abidjan. This included the construction, maintenance, repair and management of all related facilities. Between the years

1960 and 1973, SODECI succeeded in supplying the city of Abidjan and the surrounding areas (such as the nearby city of Bingerville) with potable running water twenty-four hours per day. This was in contrast to the pre-SODECI era when the city made water available only to certain central areas for a few hours per day. In effect, this meant an increase in consumption from 6.3 million m<sup>3</sup> in 1960 to 27.338 million m<sup>3</sup> in 1972.

In addition to making the water supply constant, SODECI also vastly improved the quality of the water which, up to that time, had been unpleasant to drink because of its salinity and its unusually high mineral content. From the company's own point of view, one of its most significant achievements was its ability to improve the ratio between the amount of water supplied and the amount of water billed. Within fifteen months of operation, the amount of water billed rose from 55% to 75%. This was made possible by making sure that all users were in fact being metered, and that all significant water leaks were traced and stopped. Today SODECI estimates that it bills about 90% of all the water it supplies. It is important to note that all these improvements in the water supply were done during a period when the population of the city mushroomed from 177,000 in 1960 to 636,000 in 1972. This rapid population increase was reflected in an augmentation of the number of SODECI's clients from 3,947 in 1960 to 29,907 in 1972.

The year 1973 was a benchmark year in the history of SODECI because of the creation of the PNH (Le Programme National de l'Hydraulique), an ambitious plan designed to bring potable water to all regions of the Ivory Coast. The plan called for making water available to all the major administrative districts in the nation, the-prefectures and sous-prefectures. In addition, over 7,160 sources of water were to be created by 1980 in order to supply every village of more than 100 inhabitants. Under the plan,

with the City of Abidjan. This meant that the municipality and the Ministry of the Interior, which is the Ministry responsible for supervising communes in the Ivory Coast, were the two entities which oversaw the manner in which SODECI fulfilled the terms of its contract. More importantly, since SODECI held a "convention de concession" it was primarily responsible for creating and proposing programs of development and investments. This was especially so in regard to projects requiring the sort of technical expertise which SODECI possessed.

Since 1973, SODECI's field of action has been seriously limited. First of all, it is now supervised by two Ministries, The Ministry of Economy and Finance which survey's its finances, and the Ministry of Public Works Construction, Posts and Telecommunications which is responsible for technical supervision of SODECI. Within the Ministry of Public Works itself, the Department of Water (La Direction de l'Eau) was established specifically to monitor the activities of the company.

The Department of Water's goal is to make sure that the government's objectives are achieved. To this end, SODECI is required to submit an annual report detailing what had been accomplished and explaining any failures to attain a given goal. On a more constant basis, the Department of Water's agents make regularly programmed checks on SODECI's installations to verify the quality of both the water and the service. Any problems that are identified are sent to the Department of Water which determines who is responsible for resolving the problem (i.e. SODECI or the state). Checks are made to ascertain that these particular problems are resolved, and, if necessary, penalties are levied.

A second major area in which SODECI has less latitude is in the area of planning. Whereas in the pre-PNH era SODECI was the one to sketch the plan of development for water supply, it is now the supervising

institutions which perform this task for the nation.

It is important to note however, that SODECI has not been completely eliminated from the decision-making process. Since SODECI is still the prime mover in supplying water to the nation, no major plans can be made without consulting it. What now exists is a form of dialogue between the relevant organs of the state and SODECI over what is feasible, profitable and /or advisable in the long run. But essentially it is the state which makes the final decision over what will be done, and it is SODECI which carries out the decision.

A third area in which SODECI has less latitude is in technical matters, prior to the advent of the PNH, SODECI was the major purveyor of technical advice in the area of water supply. The PNH signalled the creation of a special Technical Service which the government used to evaluate its projects, thereby assigning SODECI an advisory or collaborative role.

Last of all in matters of financing projects, it is the institutions responsible for financing various water supply projects which now imposed their own financial criteria. Although these are usually legitimate criteria from the point of view of the financing institutions and the state, they are not necessarily those that would have been evoked by SODECI had it retained the authority to propose financial criteria. As a private corporation SODECI's main concern is that of profitability to the company and not the socio-political considerations that interest the state.

In spite of the limitations on certain realms of activities discussed above, SODECI, remains a private corporation and as such is left free to manage its own internal affairs. The government has no representation on SODECI's twelve man Board of Directors, which is composed of a fairly even mixture of Ivorians and Europeans, and it exercises no influence on the appointment of personnel.

This last statement must be modified however by the fact that the Ivory Coast has a program of "Ivorianization des Cadres" which promotes, and on occasion requires, the appointment of qualified Ivorians to posts which become vacant in private companies. Thus SODECI, like many other private companies operating in the Ivory Coast, has experienced a significant increase in the number of Ivorian personnel. Between 1974 and 1980 for instance, the percentage of Ivorians jumped from 73% to 85%. By 1984, close to 90% of all employees were Ivorian.

One major area of interaction between SODECI and the state is that of price controls. As a private company with certain responsibilities to its investors, SODECI is interested in obtaining as much profit as is possible. If unsupervised, it would charge what the market would bear. However, since it is dealing with a public service, the company is obliged to charge a price that the government finds acceptable and in general, the government's price reflects socio-political considerations.

The price of water in the Ivory Coast is therefore fixed by a "Plan Calcul" on a yearly basis. The price is arrived at by a formula which takes into account SODECI's fixed and variable operating costs, debt service, and the profit which must accrue to the company. The price arrived at consists of two parts, the part which goes to SODECI to cover its operating costs and its approved profit, and the part which SODECI must send to the FNH (le Fonds National de l'Hydraulique). The money which is sent to the FNH is used for debt servicing and to finance any projects conceived of under the PNH. In general the profit margin assigned to SODECI has declined over time. From a previous high of 15% it has now fallen to between 5 and 9%. The decline is attributable to a recession in the Ivory Coast that has resulted in a decline in the consumption of water, and to the government's decision to compensate for falling revenues by diminishing SODECI's profits rather

than raising the price of water for consumers.

Although it is a public service subject to many controls, SODECI, a private corporation, receives no special subsidies, tax exemptions, or special services that would give it any special financial advantages. It operates as do all other private corporations and are subject to the same rules and regulations which apply to entities of this sort. On the other hand, a virtual monopoly on the activities relating to the supply of water in an entire nation is an enviable position for a private company to find itself in.

#### SITAF

SITAF (Societe Industrielle de Transports Automobiles Africains) is the company responsible for collecting garbage and cleaning the streets of Abidjan. Like SODECI, it is a private corporation.

SITAF is the creation of an established French firm SITA (Societe Industrielle de Transports Automobiles). In 1955, five years before Ivorian Independence, SITA had bid on and succeeded in obtaining a twenty year contract on waste removal with the city of Abidjan. SITA in turn created SITAF to carry out the specified tasks. As the parent company, SITA is still the major shareholder in SITAF. A minority of its stock is distributed among private individuals- both Ivorians and non Ivorians. The Ivorian state is not a shareholder in the company.

SITAF has a contract with the city of Abidjan that is neither a pure "convention de concession" or a contract of "affermage". Waste removal facilities are owned by both the city and the company. The city owns "stationary" items such as the disposal dumps, and SITAF owns "rolling" assets such as the vehicles. Under the terms of its contract, SITAF has a monopoly on waste removal services for the city. However, other private companies can and do perform this service for private companies or individuals.

Because SITAF is a private company, the state has no direct input into its internal affairs. SITAF is run by a nine-man Board of Directors, three of whom are Ivorians. As in the case of SODECI, the Ivorian Directors function as private individuals and do not in any way represent the state.

As a private company, SITAF is free to appoint its own personnel; however it is subject to the same limitations which, under the program of "Ivorianization des Cadres", calls for appointing qualified Ivorians to vacant posts. At present, SITAF has 1,507 employees, of which 1,150 are Ivorians, 350 non-Ivorian Africans and 7 non-Africans.

Policy design, planning and decisions concerning investments and major projects are all under SITAF's control. In some cases however, SITAF is required to inform the agency which supervises it of any major purchases that will be used in the performance of its work for the city. Day to day operations are also in the company's hands and are not interfered with by the representatives of the city or state except as they relate to the successful performance of SITAF's contract with the city.

The contract between the city of Abidjan and SITAF is a very detailed document. It stipulates that SITAF must collect household waste throughout the city, the exceptions being the industrial zones. Garbage must be collected every day except Mondays and holidays; moreover, it must not be allowed to remain in the streets for more than forty-eight hours. In general collections are evenly divided between day and night.

SITAF has 160 vehicles of various types. The largest percentage are the Bennes 6000 which are used to make a majority of its circuits. This is the familiar garbage truck which engulfs and compresses garbage. In addition SITAF makes use of special 1,000 litre Bennes

container trucks that make special circuits to the small markets, "maquis" (popular restaurants), and villages that are scattered throughout the city. For special sites such as the main markets of Treichville and Adjame, huge container trucks make pickups many times per day. Finally, SITAF has trucks specially equipped with mechanical arms that are designed to scoop up piles of garbage left on the roadsides. Garbage that is collected is taken to a specific discharge center and from there moved by trucks to the outskirts of the city. In 1985 SITAF collected 417,000 metric tons of garbage in Abidjan.

SITAF was originally supervised by the city of Abidjan and the the Ministry of the Interior which is the ministry responsible for overseeing the nation's municipalities. This arrangement remained intact throughout the nineteen sixties and seventies. In 1983, alarmed by the soaring costs of garbage collection which at the time consumed almost 50% of its budget, the Mayor of Abidjan asked the DCGTX (Direction et Controle des Grands Travaux) to intervene on the city's behalf.

The DCGTX is an independent consulting organization attached directly to the Presidency and not under the supervision of any ministry or department. It can work on behalf of any ministry and is mostly concerned with special studies of different projects proposed or undertaken by the state. Under the aegis of the DCGTX, which first did in depth studies of the cost of garbage collection, SITAF was forced to renegotiate its contract. The new contract, which went into effect in 1985 and is to be in effect for six years, subjected the company to more stringent terms of both control and pricing.

The most significant change in the contract between SITAF and the city concerned the price paid by the city to Abidjan for its services. This dropped appreciably from 6 billion CFA to 3.4 billion CFA per year.

SITAF is unlike all the other public services in

that it does not directly charge the citizens of Abidjan for its services. It is paid by the city of Abidjan. SITAP does have other clients which pay it directly for waste removal. These include hotels, factories, hospitals and other large institutions. However, these account for only 10% of the company's revenues. The city of Abidjan is therefore SITAP's most important customer and the manner in which the company is reimbursed for its services is of paramount importance to all concerned.

Originally, SITAP was paid according to the amount of garbage collected- by tonnage. The amount of tonnage was calculated by an inspection that took place once a year and lasted for an entire week. The more recently calculated formula requires that payment be based on a combination of both tonnage collected and kilometers covered. It also stipulates that the tonnage and kilometrage be checked on a continuous basis. The ultimate result is that the amount paid to SITAP does not increase at as rapid a rate as it did before. One final aspect of payment is that it can escalate in response to changing economic conditions. If the cost of materials, fuel, etc. rises significantly, then adjustments can be made accordingly and the amount paid to SITAP increases.

Supervision of SITAP involves the application of penalties similar to those found in the contract between SODECI and the state. If for example, garbage is not collected within the time limit specified, or if the number of vehicules programmed for use is not being used due to excessive breakdowns, then SITAP is liable to a fine. The ultimate penalty involves the take-over of SITAP's goods and personnel by the city which would then function in lieu of SITAP. This would however only occur in the unlikely event that the company failed entirely to function as expected.

SITAP follows a strict reporting procedure. Each month it must submit a detailed report on the tonnage

collected and the kilometers covered. Each December there is a recapitulative report which covers the preceding twelve months. All reports must be checked and signed by both SITAP and the DCGTX.

SITAP has one important subsidy that other public services do not have. It is not required to pay the TPS (Taxe sur la Pretestation de Service) on work done for the city. This is an appreciable tax exemption calculated to be worth about 1.2 billion CFA per year. Under previous contracts, SITAP was subject to the TPS; however, to compensate in part for the lower amount received in the 1985 contract, the company was awarded this exemption. Apart from this special tax status, SITAP is not in any way subsidized by the state.

SITAP can be rated an efficient organization if one keeps in mind the many constraints on its activities. It is operating in a city where the roads in many neighborhoods are inaccessible to its trucks. The best that can be done in these instances is to leave containers on the roads which go by the boundaries of these areas and hope that people will bring their garbage to the containers. SITAP is also functioning in some areas where people leave garbage containers outside and uncovered on a twenty-four hour basis, and where the speed with which emptied containers are refilled is such that an observer could get the impression that they were never emptied in the first place. In the more densely populated areas of the city, one encounters piles of garbage in impromptu disposal areas, made by people who find that the official disposal area is much too far away.

Both SITAP and the city realize that the task of cleaning the city is beyond the present means of the company and that other complementary methods of waste disposal must be found. At present the ten different communes that comprise the city of Abidjan have shouldered a larger share of the task. Under its latest contract,

SITAF is only required to clean the major thoroughfares within the city. The smaller roads in the city are now the responsibility of the individual communes.

There exist other possible solutions that will have to be developed and implemented if the city is to be properly cleaned. Perhaps it will eventually require the emergence of direct neighborhood involvement to accomplish the task of cleaning the city.

#### SOTRA

SOTRA represents a second major way in which public services are supplied in the Ivory Coast by public/private corporations which are commonly known as SEM's (societe d'economie mixte). SEM's differ from private corporations in two significant ways: first, the participation of the state is much greater in all aspects of operation, and second, there is less emphasis on profits.

The existence of SEMs such as SOTRA in the Ivory Coast is a natural outcome of present Ivorian political-economic philosophy which encompasses a belief in both modernization and capitalism. At Independence, the nations leaders committed themselves to the goal of rapid economic development, and to obtain their goals, they adopted an economic policy which is a mixture of individual, corporate and state enterprise which goes by the name of "state capitalism". Under state capitalism, the public and private sectors are closely linked. Thus one finds corporations jointly owned by the state and the government as well as purely private or state owned corporations. More interestingly, many public services that could be supplied by either the state or by private corporations are in the hands of the SEMs.

SOTRA was created in 1960 to supply public transportation in Abidjan. At the time, public transportation was furnished by small twenty-place 1000kg Renault trucks, six to seven-place private cars plying a

fixed trajectory for a specific fee (30CFA) and a few metered taxis. All of these vehicles were run by individual entrepreneurs. At Independence, the government decided that the capital should have a public transportation system more worthy of its status, hence the emergence of SOTRA. The company was given the monopoly on all public transportation in Abidjan under a "convention de concession" which was to last for 15 years.

SOTRA, like SODECI and SITAF, was founded by a well-known French firm- in this instance the firm was "le groupe Renault Saviem". The company was initially capitalized at 50 million CFA with Renault holding 65% of the stock and the Ivorian state the remaining 35%. In 1975 the proportion of stock owned by each major partner underwent a reversal. At present, SOTRA is capitalized at 3 billion CFA with the state controlling 60% of the stock and Renault 40%.

SOTRA like SODECI has experienced tremendous growth as it has expanded to service Abidjan's booming population. Between 1960-1974, the period of the first contract, the number of vehicles owned by the company increased by 7.9 times, the number of personnel 12.7 times, the amount of kilometers travelled yearly 14.2 times and the number of passengers 13 times.

SOTRA's contract was renewed for seven years in 1975. This second contract period saw comparable increases in the number of vehicles, personnel and passengers. SOTRA also introduced a new service- the "taxi baggage". These were special busses with large overhead racks that were designed to supply the city's traders with vehicles that could accommodate their voluminous packages and baskets. In 1980 SOTRA began a "boat-bus" service on the Ebrie Lagoon- the body of water around which the city is built. The "boat-busses" were to replace the small canoes and motor boats which serviced the lagoon. Today SOTRA estimates that over 25,000 passengers per day utilize the

14 available "boat-busses".

The rapid increase in the number of vehicles over the years has required improved servicing; consequently, SOTRA has developed a sophisticated maintenance organization. SOTRA today runs six active depots for regular cleaning and maintenance at strategic points throughout the city. In addition it possesses workshops capable of completely rebuilding a bus (both the engine and body work) and extending its lifetime to ten years. Today the company has 1,134 vehicles, 5,960 employees and carries 236 million passengers per year.

SOTRA, like all public services, is followed closely by the state. It is supervised by the Ministry of Public Works, Construction, Post and Telecommunications and the Ministry of Economy and Finance. SOTRA has a ten-man Board of Directors six of whom are Ivorians. The six Ivorians who are on the board are representatives of the state.

It is the state which dictates the company's overall plan of development. It is the state which decides what projects will be undertaken, which investments will be made and what the company's general policies will be.

SOTRA is presently working under its third "convention de concession" which is effective from Oct. 1983 for a period of five years. More recently, SOTRA has signed a three year "contrat de program" or plan of action, which is an innovation of sorts. The new "contrat de program" is different from the "convention of concession" in several important respects. First, it addresses itself to specific financial issues, whereas the convention deals with legalities. Secondly, since it is of shorter duration, it is designed to respond more quickly to the changing transportation needs of the city. The present "contrat de program" treats:

-the growth in traffic needs and the quality of services and productivity

-the creation and modification of services to meet those needs

-the growth of personnel assigned to transportation services

-the renewal and development of installations and materials

-the tariff structure

-the monitoring system to measure the effectiveness of the program.

SOTRA continuously studies the transportation needs of Abidjan. It always has available the latest figures and projections on all areas of its operation. This is the major reason why the terms of the "contrat de program" is the product of the joint work of SOTRA and the supervising ministries. Since SOTRA has the expertise on public transportation and is the entity performing the service for the city, its proposals must be integrated into any plan of action. The situation is analagous to that of SOCEDI where once again the public service company actively participates in indicating the limits to the states proposals. However, the state has the ultimate say on what will be done.

The procedure for supervising SOTRA are similar to those used in other utilities. The company is required to submit reports covering specified periods of time, and it is subject to certain penalties for unjustified failure to achieve the objectives set in the plan of action. On the other hand, SOTRA has excellent relations with its supervising ministries. Officials at the Ministry of Public Works describe it as a "model" SEM in terms of both management and performance. In some instances, the supervising ministries act on behalf of SOTRA and try to defend its interests. If, for example the Treasury is late with payments due to SOTRA from the state, they can agitate for prompt payment.

In the domain of personnel, it is the state which

appoints the Managing Director (Directeur General) of SOTRA. The state can also assign civil servants to posts within the company. For the most part however, it is the company which recruits its own personnel. It does this by matching its particular needs with the qualifications of those applying for jobs.

In its day to day management SOTRA is free to run things as it wishes. It awards contracts based on competitive bids without state involvement when doing small scale projects. It also uses its own funds or makes arrangements with banks to finance projects. On the other hand, for large scale externally funded programs, SOTRA counts on the state to guarantee their loans. SOTRA also prepares its own budget, but this is subject to the approval of the Board of Directors which is under the control of the state.

SOTRA's fares are fixed by the state. They are lower than what they would be if fares were designed to fully cover operating costs and produce a profit for the company. The procedure for calculating fares is as follows. SOTRA first calculates what the fares should be if they were to totally cover all relevant costs. Next the state, fixes a fare which takes into consideration both SOTRA's calculations and its own socio-political policies concerning mass transportation. As a rule the state subsidizes entire classes of people such as students and workers. This is particularly true for workers travelling into the center of Abidjan from the outlying less populated districts. Thus the fare which is imposed by the state is always well below what SOTRA calculates it should be.

Today the base fare in Abidjan is 100 CFA. However, the actual price of supplying mass transit for the city would require that passengers pay a base tariff of 150 CFA. To cover the losses incurred by SOTRA, the state subsidizes the company to the tune of 8 billion CFA per

year.

Aside from the above cash subsidy however, the company is not subsidized in any other way. It pays all relevant taxes, such as the customs on vehicles and spare parts, and receives no special services.

Given that SOTRA is not a profit-making organization, the continued participation of Renault in the company would be difficult to understand from a financial standpoint were it not for two facts. First, SOTRA buys all its vehicles and spare parts from Renault. Renault is thereby guaranteed an important market in the Ivory Coast which compensates in part for SOTRA's lack of profits and its inability to issue dividends to its shareholders. Secondly, SOTRA's impressive mass transportation system serves as a showcase for other countries in the zone which might be interested in setting up a similar system. One can also add that the relationship between SOTRA and Renault is a part of the general program of "cooperation" that has long been established between the Ivory Coast and France.

In sum, SOTRA provides Abidjan with an efficient and comprehensive network of mass transportation. However, it is obliged to operate with a state subsidy since the government's primary objective is not that of making a profit but of providing the average "Abidjanais" with affordable public transportation.

#### EECI

Electricity first appeared in the Ivory Coast in 1916 in the early Ivorian capital cities of Grand Bassam and Bingerville. It came to Abidjan in 1938 after the city was designated the nation's new capital. Up until 1954 electricity was limited to these three cities, and its production was in the hands of the Direction of Public Works.

In 1952, EECI was created with the assistance of

l'Electricite de France. It was to look after all activities concerned directly or indirectly with the production, transportation, distribution and utilization of electricity in the Ivory Coast.

With the formation of EECI the way was paved for the electrification of the other cities and villages in the Ivory Coast. The amount of electricity consumed went from 67 million kilowatt hours in 1960 to 1.809 million kilowatt hours in 1984. In the same period, the number of villages and cities supplied with electricity jumped from 16 in 1960 to 650 in 1985.

EECI is the largest enterprise in the Ivory Coast today. Its sales of 67 billion CFA in 1983 represented 6% of that of the nation's industrial sector and 2% of that of all enterprises. In the same year its investments represented 8% of the total of the nation's investments with a cumulative worth of 350 billion CFA.

EECI is a SEM with a mixture of public and private ownership. However the configuration of its ownership is much different from that of the previously discussed SEM-SOTRA. The state's participation in EECI is greater than in any of the other public services. The government owns 91% of all EECI stock, with the remainder distributed among France's CCCE (Caisse Centrale de Cooperation Economique) 5%, Electricite de France 2%, and private investors 2%.

The importance of the state's input into EECI can most clearly be seen at the level of management. EECI is run by a fourteen member Board of Directors. Membership on the Board is proportionate to the amount of capital controlled, hence the state has nine direct representatives most of whom are drawn from the ministries which supervise EECI or from other important state owned institutions. One Board Member is designated the "commisaire du gouvernement" and is assigned the task of reporting on the company's activities from close at hand.

It is the Board of Directors which selects the General Manager of the EECI. He then directs the company within the limits assigned to him by the Board.

Although EECI exists and functions in a manner similar to that of the other public services with "conventions de concession", it does not hold a concession from the state. Instead, the state has signed a series of contracts with EECI which allow the company to exploit specific energy producing facilities, such as the five major dams and the thermal plant in Abidjan. This situation does not however prevent it from exercising a monopoly on the distribution and transportation of electricity. In the area of production, large companies which have the means of producing electricity cheaply may do so, and many do. Companies which manufacture sugar, coffee, and palm oil products use their byproducts as a source of fuel for the production of electricity. However they must sell any excess to EECI since only EECI is allowed to transport or distribute electricity to the public.

EECI is supervised by two ministries, the Ministry of Economy and Finance and the Ministry of Energy. Within the Ministry of Energy itself, the Department of Energy and Infrastructure is directly responsible for following the company's activities. It is these two ministries which spell out the objectives of EECI in conformity with the larger guidelines laid down in the National Plan of Development. At present, EECI's goals include the following:

- To supply energy at the lowest cost
- To secure national energy needs (which has led to the promotion of national energy resources such as hydroelectricity and natural gas)
- To contribute to industrial development by making sure that electricity is available wherever and whenever it is needed for such purposes

- To contribute to improving the quality of life
- To promote energy conservation.

As an aftermath of the drought of 1982-1983 which rendered EECI's hydroelectric installations temporarily useless, an addition to the company's mandate will require that it diversify its present sources of energy.

Since 1976 EECI has been structured in the following manner. There are ten divisions, four operational (Equipment, Studies and Technical Research, Production and Transportation, and Distribution), and six Administrative (General Studies, Finance, Personnel, General Affairs, The Center for Electrical Studies, The Center for Computers). To serve the entire nation, EECI is organized into eight regional divisions which are in turn composed of forty-four districts. Abidjan is the company's most important division since it contains 128,803 of EECI's 328,201 customers.

Although EECI's general objectives are established at the level of the state, like other SEM's, it has autonomy in its internal management. At this level, it is supposed to function like a private company. It therefore appoints its own personnel according to its needs, selects and evaluates its own contractors and runs itself on a day to day basis. Finally EECI elaborates its own budget, but this must be submitted to the Board of Directors for approval

In the domain of electricity, the state's objectives are as ambitious as in that of water supply. At present 50% of all Ivoirians have access to electricity, and it is estimated that by 1990 this figure will reach 60%. Ideally, the state would like to see electricity available to everyone by the year 2000.

In setting such a goal the state is making a socio-political decision. More importantly, this decision relegates the production and sale of electricity at a profit, to a secondary position. Indeed, EECI is only

required to maintain a general state of equilibrium between its expenses and income over the long run. It is not expected to show a yearly profit. Since the Ivorian state is the major shareholder and the controlling force on the Board of Directors, EECI is not obliged to justify its failure to produce a profit and issue a dividend; conversely, the government does not make up the difference in foregone profits (as in the case of SODECI). In the fiscal year 1982-1983 EECI showed a 5 billion CFA loss, in the fateful drought year 1983-1984 the figure rose to over 33 billion.

Because of EECI's technical expertise, all major projects and investments proposed by the state are studied in depth within EECI. The company then makes recommendations to the supervising ministries about the technical feasibility of the projects. The result is a two-way decision making process in which the government's proposals are shaped to conform to the technical constraints given by the company. Financial constraints on projects and investments are generated by the requirement that the company maintain a balanced budget.

The price of electricity in the Ivory Coast is set by the state. In actuality, the state does not fix the exact price, but rather it sets a ceiling above which the EECI cannot go. The price charged for electricity is usually one that is high enough to allow the company to cover its costs and pay for new investments, but not so high as to produce a profit. The circumstances under which the supervising authorities will allow an increase in EECI's ceiling include, undertaking a major new project (such as a dam), or unforeseen economic difficulties (such as the drought in 1983 which forced EECI to close down its hydroelectric power stations and purchase gas turbines). At the time of the drought, EECI was permitted a rate hike of 25%.

EECI gets no overt subsidies. It must pay all taxes

that apply to it as a private company. It gets no special services or special depreciation rates. On the other hand, emergency situations have arisen where the state has arranged that EECI be temporarily exempt from increases in the prices of items such as fuel to avoid an increase in the price of electricity. This however, is not the norm. As a rule EECI is expected to be subject to the same rules that apply to other private companies and SEMs.

#### GAGNOA

Gagnoa is located in the south-western Ivory Coast and is the nation's sixth largest city. Between 1975 and 1985 the city grew at a rate of 8% per year. The most recent census, taken at the end of 1984, placed the city's population at 93,550.

Gagnoa achieved the status of "commune de plein exercice" (meaning that of independent self-governing city) in 1978. It is governed by an elected Municipal Council which, according to the 1980 law concerning the organization of municipalities, is to devote itself primarily to providing the population with the best possible living conditions. The Municipal Council is also instructed to plan the development of the commune while making sure that the plan of development is in harmony with the plans promulgated at the regional and national level.

Gagnoa's chief executive is the Mayor. He is assisted by four Assistant Mayors and a Cabinet. The actual running of the city is carried out by means of four Departments or Services- the Administrative Service, the Financial Service, the Technical Service, and the Archives.

Public services in Gagnoa are provided in a variety of ways- by companies operating on a national scale, by individual entrepreneurs, and by the municipality itself.

As in the case of Abidjan, the city's water is supplied by SODECI. Gagnoa is the location of one of

SODECI's Regional Divisions which correspond roughly to the prefectures that existed in the Ivory Coast in 1973. Because SODECI is closely supervised by The Department of Water and the Ministry of Economy and Finance, the city of Gagnoa is not involved either with the task of supplying water to its citizens or with supervising the supplier.

The same situation exists regarding the supply of electricity. EECI provides Gagnoa with electricity from the hydroelectric station at Kossou. Again, the company is adequately supervised by the Department of Energy and Infrastructure and the Ministry of Economy and Finance, thereby eliminating the necessity of municipal supervision.

In sum, Gagnoa, like almost all cities in the Ivory Coast, is the beneficiary of the national government's plans to make water and electricity available to important population centers. Programs like the PNH, allow the delivery of vital services to cities without burdening the municipalities with the task of overseeing their delivery. The interior cities are also beneficiaries in the matter of price. As a rule, the cost of delivering these services to the interior of the country is higher than in Abidjan where the dense population allows economies of scale; and in consequence, water should be more expensive outside of Abidjan. However, the national government assures that the entire country pays the same rates and in effect, subsidizes those dwelling in interior areas.

Gagnoa has no mass transit. The city does possess however an adequate supply of taxis (recently estimated to be about 450). These taxis do not have meters, but rather charge a fixed rate for a set trajectory. The prices charged by them is low enough to allow the population to use them with great regularity. The taxis are not the property of any large scale enterprise, but are generally owned and operated by individual entrepreneurs. The situation is somewhat analagous to that which existed in Abidjan in the pre-SOTRA era.

The chief responsibility of the municipality of Gagnoa, far as public services are concerned, is the cleaning of the city's streets and markets and the collection of household garbage. This service is supplied by the city's Technical Service which is also responsible for the maintenance and cleaning of sewers, public places, gardens and public buildings. The Technical Service also maintains municipal vehicles.

The Technical Service is directed by a trained technician from the Ministry of Public Works who is assigned to the city's administration. The Service itself is composed of 145 individuals who are organized into 15 teams. The garbage collection team has 30 workers- 6 chauffeurs and 24 laborers. There is also a sixteen-man team of street sweepers and a two-man team which cleans the market. The other twelve teams perform the remaining tasks such as painting, carpentry, weeding, and the overall maintenance of public places.

Gagnoa's Technical Service often contracts out some of its major jobs because it lacks the equipment to do them. Contracts for these jobs are awarded on the basis of competitive bidding. The Technical Service can also ask for help from the Ministry of Public Works or the Ministry of Construction and Urbanism, both of which are equipped to help the nation's cities with studies and with major maintenance work.

Funds to finance the work of the Technical Service are supplied by the municipality. Gagnoa's budget for 1985 was 370,899,000 CFA, of which 129,815,000 CFA came from external contributions (the national government), and 241,084,000 came from the city's own revenues.

A study of the city's Technical Services done in 1985 for USAID/RHUDO, concluded that the Service was unable to adequately perform the tasks assigned to it. The major reasons cited included insufficient funds, shortage of properly trained personnel, and lack of equipment. The

Technical Service was simply unable to cope with the city's rapidly expanding population because its own resources were not growing apace. The situation was vividly illustrated by the description of the city's garbage trucks parked and the city's garbage left uncollected, while the head of the commune's Financial Service journeyed to Abidjan to get the funds to buy gasoline.

Clearly changes will have to be made in the city's Technical Service if it is to be able to supply the services it is responsible for. At the same time, one can imagine alternative arrangements. One possibility is the takeover of some of these services by small private companies. The role of the municipality could then be limited to the supervision of these private companies.

In the longer run, as the city expanded in size, one could entrust these services to some of the large private companies and SEMs which have the know-how to handle large-scale contracts and which already serve the larger Ivorian cities. SOTRA, for example, has already done studies of the transportation problems in other cities in the Ivory Coast, such as Bouake, and San Pedro with an eye to setting up mass transit systems in these towns. With its public services in the hands of capable entities, the municipalities would be free to occupy themselves with other issues that could be of greater concern to the population.

## CONCLUSION

The Ivorian experience has at least two important lessons that can be taught to other African countries. First, it demonstrates that one can have successful public/private collaboration on the delivery of public services to urban populations, even in periods of rapid population expansion. Second, it confirms that if the government so desires, it can make provisions (within the limits of this collaboration) for making these services available at a reasonable price to the urban poor.

Public/private collaboration can be an excellent manner of efficiently providing urban public services. It would also appear that public/private collaboration can exist in a number of different forms and that these forms have their associated advantages and disadvantages.

Purely private corporations are possibly the most efficient purveyors of public services. Because they are owned by stockholders who expect an annual return on their investment, private companies are inclined to produce their services at the lowest possible cost. The desire to make a profit is reflected in tighter, more efficient management, and in a preference for investments that will yield a high rate of return. An inefficient private company, one that is poorly managed or undertakes unwise investments is promptly penalized by the declining value of its stocks, and those responsible for its losses will, in the normal course of events, be replaced.

At the same time, the very qualities which make private companies efficient producers of services are those that can make them indifferent to the issues associated with the public welfare. Their commitment to generating a profit means that the prices they charge are usually the highest that the market will bear. It also means that services will not be supplied to regions or populations that are not capable of reimbursing the

supplier for his investment.

Purely state controlled corporations have their limitations too. Although the state can normally be expected to be concerned with the welfare of its people and therefore be desirous of supplying the largest possible number of its citizens with public services, this very concern can result in decisions that are socially laudable but financially unwise. State owned corporations are also less likely to be efficiently managed since there is less accountability. There are no private stockholders asking uncomfortable questions that must be answered, and the consequences of poor management are not always immediately felt.

The Ivory Coast has experienced the problems intrinsic to state corporations. In the nineteen-sixties and seventies when the Ivorian economy was booming, the government created more than two dozen state corporations "societe d'etat" to foster the development of vital sectors of the Ivorian economy e.g. agriculture, industry, energy, communications. By the early nineteen-eighties however, when the nation's economy went into decline, the state realized that some of the companies were a luxury it could no longer afford. Within some of the state corporations there were problems of inefficiency, low productivity and gross mismanagement, so much so that the government was obliged to abolish or privatize about a third of these companies.

The major methods of supplying urban public services that were examined in this paper represent two of the more successful ways of merging the best aspects of the public and private domains. The first configuration- a private corporation tightly supervised by the state or municipality, is represented by SODECI and SITAF. In each case a public service is supplied by a purely private company intent on producing a profit. To this end, the two companies are efficient in all aspects of their operation.

SODECI in particular illustrates the positive aspects of this type of arrangement. Here is a company that delivers excellent service- as witnessed by its phenomenal rate of expansion and the constant improvement in the amount and quality of its services over the twenty-five years since its creation. SODECI also demonstrates that a private company operating under tight state supervision can still produce profits without violating the state's interest in protecting the consumers. Thus in fiscal year 1984, in spite of a period of economic difficulties and a 22% increase in the cost of electricity, the company reported a net profit of 611,713,000 CFA.

The "Plan Calcul" by which Department of Water and SODECI annually arrive at the price of water is also an example of the way in which a price can be agreed upon which will accommodate both the state's desire to protect its citizens from excessive charges and the private corporation's need to make a profit. Finally, SODECI's policy of expanding its capital by increasing the amount of participation by individual Ivorians, means that the profits being made are going into the hands of Ivorians rather than being repatriated.

The disadvantages often associated with the provision of public services by private companies are demonstrated in the case of SITAF. In this instance, the point to stress is the necessity of prohibiting private companies from operating without adequate checks. In the 1960-1983 period when SITAF was supervised primarily by the municipality of Abidjan, the cost of garbage collection and street cleaning climbed to 6 billion CFA per year, or about half of the city's yearly budget. The renegotiation of the contract under the aegis of the DCGTX for the delivery of what was more or less the same service, indicates that the city, and in the end the people, were being grossly overcharged. As a private

company SITAP obviously would not be willing to perform waste removal services at a loss. The second lower figure therefore represents one at which the city could be cleaned while still allowing the company to show a profit. The SITAP case highlights some of the essential ingredients in proper supervision by the state. First, there must be accurate knowledge on the part of the supervising agent of the true costs of the service. Secondly, the supervising agent must have the resources to provide continuous checks designed to verify that the service contracted for is in fact being provided. Lastly, the supervising agency must have the power to enforce its decisions. In the Ivory Coast the DCGTX- as an independent, non-political enterprise, possessed this particular set of characteristics and was able to institute the necessary controls.

The second configuration of public/private collaboration on the provision of public services the SEMs- is represented by SOTRA and EECI.

SOTRA, whose efficiency rivals that of SODECI, is an interesting demonstration of a company's evolution from private control to government control. The key year in the company's history was 1975 when the government became the majority shareholder and Renault the minority- reversing the pre-existing state of affairs. The first point to be made is that the company has not declined in efficiency in spite of the reversal in majority ownership. What have changed are the company's priorities. Under Renault's control, SOTRA was unwilling to undertake investments that were not demonstrably profitable. The most obvious example of this was a disinterest in creating bus lines in areas where the number of passengers would not justify the cost of the service.

Under the government's majority control, SOTRA not only sets up routes that are not profitable, but charges a fare well below that of the actual cost of the service. AS

we have pointed out, entire groups of people enjoy subsidized transportation. The difference between the actual cost of transportation and what people pay is represented by the 8 billion CFA subsidy paid by the state to SOTRA on an annual basis.

SOTRA's case also illustrates the difficulties encountered by the government in trying to diminish subsidies to the population. According to the "programme de contract" between the state and SOTRA, the base fare in the city of Abidjan should have reached 150 CFA sometime in mid-1985, this hike was designed to permit SOTRA to increase its income and diminish the government's annual payment. However, this increase has not occurred. The nation is still passing through economically difficult times which makes it politically hard to impose such a burden on the workers- the chief users of public transportation.

EECI also represents an SEM, but one that is further along the continuum in the direction of government control. Since the Ivorian state is the majority shareholder with 90% of the stock, all that is asked of EECI is that it maintain a balanced budget. The company therefore devotes itself exclusively to delivering electricity wherever possible thereby fulfilling its mandate to "improve living conditions and promote development". At no point is profit an issue for EECI. Its only criteria for implementing the plans under which it works are technical feasibility and cost.

If the primary objective of providing public services is efficiency and profitability, then private companies seem best suited for performing the task, with the caveat that they be closely followed by agencies having the expertise to evaluate their activities and the power to enforce decisions. If socio-political considerations are the foremost considerations, then the state has to take a more active part at the level of

long-range planning, in deciding what major investments should be made, in project selection and in price controls. If socio-political factors are paramount then the public/private SEM is a particularly suitable vehicle for providing public services, however, steps must be taken to avoid submerging the private part of public/private collaboration. For it is the private sector that gives a certain vitality and efficiency and prevents stagnation.

The Ivorian experience reveals the mechanisms whereby the public and private sectors can successfully collaborate.