

NACIONES UNIDAS

COMISION ECONOMICA
PARA AMERICA LATINA
Y EL CARIBE - CEPAL



Distr.
LIMITADA

LC/L.711(Conf.82/2)Add.3
1º de octubre de 1992

SOLO INGLES

Tercera Conferencia Regional sobre la Pobreza
en América Latina y el Caribe

(Santiago de Chile, 23-25 de noviembre de 1992)

**APOYO A LA PRODUCTIVIDAD DE LOS POBRES RURALES: NUEVAS
EXPERIENCIAS EN AMERICA LATINA Y EL CARIBE**

**Current experience in increasing the productivity level among
the poor sector in rural areas of Dominica:
the case of Petite Savanne**

Este documento fue preparado por el señor Ronald Green, consultor de la División de Desarrollo Social de la CEPAL con la asistencia del señor Joseph Peltier, dentro del marco del proyecto PNUD/CEPAL de apoyo a la preparación de la Tercera Conferencia Regional sobre Pobreza, (RLA/92/013). Las opiniones expresadas en este documento son de la exclusiva responsabilidad de su autor y pueden no coincidir con las de la Organización.

Este documento no ha sido sometido a revisión editorial.

92-10-1497

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
I. THE PETITE SAVANNE COMMUNITY	3
1. Location	3
2. Population and Education	3
3. Education	4
4. Social Conditions and Infrastructure	5
5. Marital Status	5
6. House and Land Ownership	5
7. Electricity/Power/Lighting	5
8. Economically Active Population and Migration	5
II. THE PETITE SAVANNE ECONOMY	7
1. The Bay Oil Industry	7
2. Rum Industry	8
III. IMPACT OF PUBLIC AND PRIVATE SECTOR PROGRAMMES IN RAISING PRODUCTIVITY IN PETITE SAVANNE	10
1. Road	10
2. Electricity	11
3. Telephone	11
4. The Petite Savanne primary school	11
5. Hope Farmers Cooperative Study Group	11
6. The Dominica Essential Oils and Spices Cooperative	12
7. The Forestry Division	13
IV. OBSTACLES/DIFFICULTIES IN EXECUTION OF PROGRAMMES	14
1. Bay Production and Distillation	14
2. The Public Programmes: road, electricity, telephone	15
3. The Morne Topie Water Project.....	16
V. ACHIEVEMENTS/ACCOMPLISHMENTS/RESULTS	17
VI. CONCLUSIONS AND SUGGESTIONS	18

Notes	19
DOCUMENTS/REFERENCES	20
ANNEX 1	21

INTRODUCTION

Dominica is the most northerly and largest of the Windward Islands located in the middle of the chain of islands forming the Eastern Caribbean. The island is straddled on both sides by Martinique and Guadeloupe, overseas departments of France and part of the European Economic Community. It has a land area of approximately 750 square kilometers and a population estimated at 71,000 in 1991.

Overall, Dominica is considered the least developed of the Organization of Eastern Caribbean States with an estimated per capita GDP in constant 1990 prices of US\$596. Unemployment is estimated at 15 to 25 percent.

Dominica is predominantly an agricultural and rural based country, with basic manufacturing and tourism of much less significance. Agriculture accounts for 26% of GDP and 62% of total merchandise exports; bananas accounts for 90% of agricultural exports, and 65% of GDP. Manufacturing, which has shown signs of growth, accounts for 7% of GDP and 34% of merchandise exports, consisting mainly of soap and soap products.

The tourism sector is small, less than 2% of GDP, but has lately become one of the more dynamic sectors in the economy, focussing mainly on Eco-Tourism.

Table 1

DOMINICA: SELECTED ECONOMIC INDICATORS. GROSS NATIONAL PRODUCT 1989-90

	1989		1990	
	US\$ Mn	%	US\$ Mn	%
GNP at Market Prices	149.9	100.0	163.3	100.0
Gross Domestic Invest.	45.6	30.4	49.8	30.5
Gross National Saving	0.6	0.4	12.5	7.7
Current Account Balance	-45.0	-30.0	-37.0	-22.7
Export of Goods, NFS	70.0	46.7	92.6	56.7
Import of Goods, NFS	122.8	81.9	139.5	85.4

DOMINICA: OUTPUT, EMPLOYMENT AND PRODUCTIVITY IN 1990

	Value Added		Labour Force	V.A. per Worker	
	US\$ Mn	%	Thous.	%	US\$
Agriculture	35.9	25.9	12.322	40.4	2.913.2
Industry	25.5	18.4	8.670	28.4	2.941.2
Services	77.2	55.7	9.512	31.2	8.118.4
Total/Avg.	138.6	100.0	30.504	100.0	4.544.3

Source: Dominica Country Economic Memorandum, March 1992 - World Bank.

The recent growth of the service, construction and manufacturing sectors notwithstanding, agriculture remains the dominant sector in the economy, employing at least 40% of the labour force and produces most of the island's exports. It is clear, therefore, that overall development depends heavily upon maintaining and improving agricultural productivity.

In the rural sector, like the village of Petite Savanne, recent efforts to increase productivity have impacted both the production patterns of the population, the choice of crops and efforts at agricultural diversification and the quality of life of the average village family.

I. THE PETITE SAVANNE COMMUNITY

1. Location

Petite Savanne is located on a mountain ridge on the South East Atlantic Coast of Dominica, fifteen miles from the capital, Roseau. The village, is a cul-de-sac, and is part of the four village, Parish of St. Patrick (Fond St. Jean, Bagatelle, Dubique) and in geographical terms, an extension of the larger, more populous town of Grandbay and the Stowe Estate. It contains in the residential section 552 acres of land, consisting mainly of hilly or steep slopes in and around the National Park. The only unhindered and natural outlet from the village is through the major road linking the community to Geneva.

2. Population and education

Provisional estimates from the 1991 census reported the total population in Petite Savanne as 794 compared with a population of 796 in 1981.

The distribution of the population is shown in Table 2.

The population statistics show that more than one-half of the population or 54% was under 20 years of age in 1981 and 47% in 1991. Similarly, 75% of the population was under the age of 40 in 1981 and the same in 1991, while 10% and 11% were 61 years old and over in 1981 and 1991 respectively.

Approximately 34% of the population are between 20 and 50 years of age in 1991, as compared to 28% in 1981 representing the most active group of the rural labour force in the village.

Although the total population appears to have declined marginally, from the age group structure of the population, it is evident that there is a high rate of out-migration of people from the productive age group from the community, reflecting a general trend islandwide. Young men and women continue to leave rural communities in particular for other villages, neighbouring islands and the metropole in search of employment. This loss of population must ultimately have an adverse effect on the community's labour force and the availability of younger farmers and workers. Should this trend continue, efforts by the public and private sectors to increase productivity in the area and to mitigate the effects of poverty, will be severely handicapped. It should be noted, however, that many families benefit from remittances both from local and overseas sources. Villagers have also pointed to a few persons who have sought employment elsewhere and have improved their status by building new modern houses, while at times remaining resident in the village.

Table 2

PETITE SAVANNE: DISTRIBUTION OF POPULATION BY AGE GROUP AND SEX

	1981		1991 (P)	
	Male	Female	Male	Female
<u>Age Group</u>				
0 - 10	99	106	107	111
11 - 20	126	98	87	73
21 - 40	100	70	128	85
41 - 60	50	67	53	60
61+	43	39	40	50
TOTAL	418	378	415	379
	%	%	%	%
0 - 20	28	26	24	23
0 - 40	41	34	41	34

Source: POPULATION CENSUS 1981, 1991.

P = Provisional

3. Education

Formal education in Petite Savanne is restricted to primary schooling. There is one Government Primary School and one pre-school (Kindergarten) in the village.

According to provisional 1991 Census data 5% of the population have completed elementary school or have primary school leaving certificates, although this does not suggest that those persons are functionally literate. Three (3%) percent have obtained "O" or "A" level passes or from high school. There is no evidence that any member of the community has a university degree while four(4) persons have completed a diploma course.

Only a few persons reported having some form of vocational training or apprenticeship in the building trades, early childhood education and nursing. A few others have had training as teachers and policemen.

Students from Petite Savanne can pursue the Junior Secondary School Programme and also attend the Technical/Vocational Programme at the Grandbay Secondary School about five miles away. Few others attend secondary in the capital, Roseau.

4. Social conditions and infrastructure

Petite Savanne, part of the sub-district of St. Patrick is poorly served with social amenities including health and recreational facilities. There is a small health clinic providing a minimal service. A district nurse is not currently posted in the area and resident must seek medical attention in the nearby village of Bagatelle and at the Grandbay District Hospital.

Fifty percent of the households in Petite Savanne have access to pipe borne water, either within the home or in the yard. Some 35% of the households still rely on public standpipes for water.

Sixteen percent of households are equipped with sewer or flush toilets, while 75% of households have access to pit latrines.

5. Marital status

Twenty-three percent (23%) of the Petite Savanne population are married while 36% have never married. Most babies are born out of wedlock. It should be noted however, that common-law relationship in Dominica tend to be stable and are considered within the overall family structure.

6. House and land ownership

Some 88.2% of the households are privately owned while 84.6% of the land in the community is freehold or owned privately by villagers. Some 63.9% of homes are built in wood while 21.3% are built in concrete and 14.8% are a combination of the two. Concrete houses are actually considered to be superior to the timber based homes and represent an upgrading of the status of the villager. Approximately 42.6% of private homes were built after 1980. This relatively high rate of construction in the community was as a result of reconstruction following Hurricane DAVID in 1979, the increase in income from bay oil, and public sector programmes.

7. Electricity/power/lighting

78.7% of the households have electricity while 20.7% use kerosene oil for lighting. Some 66.7% use firewood for fuel while 28.4% use liquid propane gas and 20% use kerosene oil for cooking along with firewood. Only 19.5% of kitchens are located indoors while 80.5% are located outdoors.

Not all households have a radio or television set, while 86.4% of households have no video cassette recorder. Some 23.7% of households are equipped with telephone.

8. Economically active population and migration

Some 40% of households at Petite Savanne reported emigration in the past ten years. The main reasons given for such emigration are to seek employment opportunities and to seek further educational opportunities.

Twenty nine percent (29%) of the economically active population of Petite Savanne are employed, although 175 persons consider themselves fully employed. Furthermore 51% of the men are employed, and only 6% of the women. Sixty four percent (64%) of the population consider themselves 'not working and not at school'. It is remarkable that 85% of the women are considered to be neither employed nor at school. 1/

Some 26.7% of the population are considered agricultural workers, 15% are craft and related workers, while 26.7% have elementary occupation. 17.8% are considered professionals.

III. THE PETITE SAVANNE ECONOMY

Petite Savanne's economy is dominated by bay oil production and the distillation of rum, while banana introduction in Petite Savanne is a relatively recent phenomenon. Farmers in the area have largely opted out of the banana economy, the dominant cash crop in Dominica.

Instead, bay leaves are cultivated on the hills surrounding the community and rum is illicitly distilled by some villagers, as part of the underground economy.

In general however, agricultural production in the area follows the traditional pattern of agriculture in Dominica.

However, due to the geographic isolation of the village, and the difficulties of marketing and transport, the full potential of the area for the production of bay oil and other agricultural crops, such as bananas, dasheen, and tannia has never been fully realized.

From discussion with farmers, it appears that agricultural production has been constrained by the unavailability of land, which is mainly devoted to the production of bay leaves. Additionally, the government in 1988 declared the forest land contiguous to Petite Savanne a National Park thereby restricting access to land by farmers wishing to diversify the source of their agricultural income. The government has since allocated parcels of land to farmers inside the National Park for limited cultivation.

1. The bay oil industry

The cultivation of bay leaves (*Pimento Racemosa*) at Petite Savanne started in the 1920's first intercropped with the Lime plantations. The production of bay oil soon followed and during the course of the next sixty years, small farmers in the area concentrated on that industry by expansion of acreages cultivated and the marginalization of other crops.

The village established a shipping club in 1964 which evolved into the Petite Savanne Bay Oil Cooperative in 1968 and later into the Dominica Essential Oils and Spices Cooperative Society Ltd. comprising 490 members of which 114 are from Petite Savanne.

Table 3 shows the quantity of bay oil produced in Dominica during the last seven years.

Production of bay oil has been affected periodically by poor quality and fluctuating prices and often times a glut on the world market.

Bay Oil Production in Dominica declined steadily by 18% over the 1984-1991 period. However, the figures for Petite Savanne indicate that with the exception of 1986, 1987 and 1990 where there was an increase in production) production levels remained practically constant.

Despite the above, during the same period, value of income earned from Bay Oil Sales increased by 187% and 220% for Dominica and Petite Savanne respectively. Over the eight year period Petite Savanne accounted for an average 32% of national production of all Bay Oil sold to the Cooperative and 31% of the revenue obtained from sales. These figures further re-emphasize the economic importance of Bay Oil production to the Petite Savanne community.

Table 3

BAY OIL PRODUCTION IN DOMINICA 1984 - 1991

	Dominica		Petite Savanne		% Quan.	% Value
	Quantity (lbs)	Value (US\$)	Quantity (lbs)	Value(US\$)		
1984	40,000	264,183	10,604	71,221	27	27
1985	36,900	335,820	10,603	71,214	29	21
1986	34,528	231,915	11,184	75,120	33	32
1987	31,994	224,400	13,235	93,830	41	42
1988	30,920	257,472	10,533	82,507	34	32
1989	34,101	401,107	10,914	114,027	32	28
1990	32,601	367,971	11,379	157,098	35	43
1991	32,956	494,886	10,611	156,393	32	32

Source: Adapted from Dominica Essential Oils & Spices Cooperative 1992

Acreages under bay cultivation increased by as much as 50% to 75% since 1965 and in recent years, the relatively higher world prices and demand have encouraged farmers to prune their trees and adopt much more effective farm cultural practices. 2/

2. Rum industry

Many households are also involved in the distillation and sale of rum. The local variety, called ZAEED, has been produced traditionally a long time, but is not legal. There appears to be a tacit agreement between villagers and the authorities regarding the production of ZAEED, sold mainly in local village shops throughout Dominica, while some of it is exported to the neighbouring French islands.

Figures for rum production are hard to come by, but discussions with residents suggest that up to twenty-four percent (24%) of households may be involved in the trade, which may account for at least 25% of household income. Some farmers interviewed indicate that ZAEED production is an

adjustment to or a supplement to their incomes from bay oil, and goes a long way in assisting them in meeting their daily needs. It should be noted however, that prior to 1984, dependence on the underground rum economy was much higher, and that farmers preferences have shifted more in the direction of bay oil as prices of the latter have increased dramatically.

Over the years there has been quite alot of discussion involving local and higher authorities regarding legalizing rum production, but to no avail.

III. IMPACT OF PUBLIC AND PRIVATE SECTOR PROGRAMMES IN RAISING PRODUCTIVITY IN PETITE SAVANNE

The four most significant public sector projects undertaken in Petite Savanne during past ten years are the reconstruction of the Geneva Petite Savanne road (or main carriage way), the electrification of the village, the provision of telephone services and the construction of the elementary school.

1. Road

As part of its long term development strategy the Government of Dominica, through its Road Rehabilitation and Maintenance Programme (RRMP) undertook in 1988 to repair this segment of the main peripheral roads around the island.

The Geneva/Petite Savanne road constitutes the only motorable link between the town of Geneva/Grandbay and Petite Savanne and benefited some 6,900 people, in the four villages of Dubique, Bagatelle, Fond St. Jean, and Petite Savanne. The latter is considered the most remote of the four communities.

The government spent some (US\$677,240) on the project and employed a significant part of the casual workers from the four villages.

The road serves the agricultural sector of the area, and in the case of Petite Savanne in particular it facilitates farmers in taking inputs to their farms and transporting their harvest to market outlets in Roseau and elsewhere.

It is estimated that 250 to 300 farmers from the four villages are served by the road, and that it does not only provide access to bay oil farmers, but also to farmers involved in coffee, cocoa, citrus, bananas, mango and avocado cultivation.

Harvested crops, particularly bananas, mangos, and avocados suffer mechanical damage, and a consequent reduction in quality while being transported to the main port of Roseau. But reports have indicated a significant improvement in the quality of fresh agricultural produce coming from the Petite Savanne area. Thus, there has been a reduction in post-harvest losses.

Another significant area of saving is in the maintainance of vehicles. Lower maintainance costs have resulted in greater productivity among the farmers, and in particular, the road has made it easier for bay farmers to purchase additional raw material (bay leaves) from other farmers for distillation. In fact some farmers are now distilling twice a year rather than once.

2. Electricity

Throughout most of the decade of the '80's Petite Savanne remained one of the last villages in Dominica to be electrified.

In 1988 the Government of the Commonwealth of Dominica completed the electrification of Petite Savanne under its Rural Electrification Project. To date there are 144 households from Petite Savanne hooked up to the national grid, of which 133 are residential households and nine are commercial enterprises mainly grocery shops. While no villager is currently employed in Petite Savanne in respect of maintenance, the electrification programme provided temporary employment to a number of casual workers. But the most significant impact of the electrification of Petite Savanne is the boost it has given to Bay Oil production.

Bay oil distillation is a tedious process requiring round the clock supervision. Farmers are now able to work throughout the night without use of the traditional flambeau or hurricane lamps.

Access to electricity has also enabled the farmer to store perishable foods and therefore increase the amount of working time he/she spends in the field or at the distillery.

3. Telephone

Whilst minimal telephone services existed before Hurricane DAVID (1979) the new telephone system came to Petite Savanne at the same time as electricity in 1988.

Access to telephones has given the people of Petite Savanne one of the most important means of modern communication and has enabled them to conduct business with other communities, especially in the capital Roseau, without having to take the costly and time consuming trip. While no figures are available, it can be concluded that the time saved can be reallocated to tending the bay plantations, or distilling oil, or pursuing some other economic activity.

4. The petite savanne primary school

The new primary school was completed in 1989, offering the annual elementary programme. The school is a three story structure and equipped with better facilities, offering also woodwork, sewing and other skills training.

5. Hope farmers cooperative study group

The Hope Farmers Cooperative was established in 1985 with a membership of twenty-two(22). The farmers formed the cooperative to enable them to diversify their sources of income, in light of the uncertainty affecting the bay oil industry at the time, due to over-production and low prices. Bananas have become the third major source of income. The cooperative has supported farmers going into banana cultivation and small stock rearing. Through the Hope Farmers Cooperative, farmers have been able to access credit from the Small Projects Assistance Team and other institutions. The cooperative also represent farmers' interests and negotiate on their behalf with the Ministry of Agriculture, the Forestry Division, the Dominica Banana Marketing Corporation and other bodies.

The cooperative has also been successful in obtaining training for farmers in farm management, record keeping, production of certain crops and livestock.

The Small Projects Assistance Team has provided opportunities for farmers to obtain training through an ongoing programme in agri-business management, through the cooperative.

The Hope Farmers Cooperative therefore has been reported to have occasioned "a drastic change in the improvement of life among its members and the village as a whole, because members started to plant bananas for the first time, and the weekly income from bananas has brought a different lifestyle and activities." 3/

We have seen the impact of the Geneva-Petite Savanne road on agriculture, and the encouragement this has given to farmers not only to increase their production of established crops (e.g. bay) but also to increase their choice of crops.

6. The dominica essential oils and spices cooperative

The Dominica Essential Oils and Spices Cooperative Society Ltd. emerged out of its forerunner, the path breaking Petite Savanne Bay Oil Cooperative, to embrace bay oil producers all over Dominica.

The Coop has contributed in a significant way to the financial and social well being of its members, including those of Petite Savanne.

Through the Dominica Essential Oils and Spices Cooperative, Society Ltd. members are paid a bonus annually, from the surplus funds. This bonus is fixed to the sales of members and is therefore a powerful incentive for increasing their productivity. Infact, the struggle to establish the Cooperative surrounded the surplus realized by private exporters, who resisted the desire of the bay oil producers to establish a monopoly.

In addition, the Dominica Essential Oils and Spices Cooperative Society Ltd. introduced a scheme in the early 1980's to assist farmers with their production costs since purchases were one once a year. A credit scheme advances members the working capital to cultivate, harvest and distill bay leaves made depending on the individual members' acreages owned, and the quantity of oil it is likely to yield. These advances are interest free and payment is deducted from sales.4/ The cooperative also extends credit for distillery repairs.

The Dominica Essential Oils and Spices Cooperative also assist members through training programmes in literacy and business management skills, and discussions at general meetings where their problems are addressed, and at the time provides employment for members at the management level including members from Petite Savanne. Indeed, the Cooperative owns an office building in Petite Savanne which was formerly a distillery, and is presently rented as a shop, storeroom, and offices with lecture room.

One of the most significant benefits to its members is the provision of a guaranteed price scheme which assist members in raising production, and productivity inspite of market conditions. Through the cooperative, the bay oil farmers including non-members, are guaranteed a fixed price for their oil. The cooperative has the option of financing this scheme by borrowing from the bank in order to guarantee purchase and to extend loans to farmers for production purposes.

Indeed, with the cooperative the members from Petite Savanne doubled their activities and output. ^{5/} Villagers dominated the affairs of the cooperative - two of the three Secretary Managers have been villagers. Between 1968 and 1980, two mechanical distilleries installed at Petite Savanne employed workers from the community and "inhabitants enjoyed economic gains." During these years the village spread and flourished as their social and economic well being were significantly improved."^{6/}

Bay oil production is a labour intensive activity. Increasing labour costs has forced farmers to rely more on family labour in order to safeguard profits. Moreover, the rising costs of distilling from \$15 to \$54 - and the rising costs of transportation of other raw materials like firewood have bitten into the benefits directly accruing to farmers. The Division of Forestry in Dominica, the Hope Farmers Cooperative and the Dominica Essential Oils and Spices Cooperative Society Ltd. are working closely to address these problems.

7. The forestry division

At the moment Petite Savanne is facing a land crisis, ^{7/} as overproduction and financial problems have generated increasing environmental concerns, particularly with the availability of firewood.

Land constraints have forced villagers to encroach on the National Park and onto the steep rocky mountainside, for cultivation of bay trees and other food crops. This has resulted in serious erosion and loss of water in the rivers, thereby placing further constraints on the production of oil. ^{8/}

The government, through the Forestry Division, has moved in to assist selected villagers in obtaining land in the National Park for limited cultivation of agricultural crops. Similarly, a Task Force appointed by government in 1987, observed that "the potential exist in Petite Savanne for the establishment of wood plantations both on private and government lands." ^{9/} Apart from providing firewood for the distillation of bay oil, this programme could help provide timber for home construction, restore land fertility, prevent soil erosion, reduce flooding and provide animal forage.

The Forestry Division has assisted farmers in propagating more than 3000 leucaena seedling for planting on the steep slopes, particularly where an erosion problem is already evident.

IV. OBSTACLES/DIFFICULTIES IN EXECUTION OF PROGRAMMES

1. Bay production and distillation

Whilst the impact of Bay production and distillation is positively high, the difficulties do take on significant proportions.

a) Bay Production

In production the difficulties are basically of two kinds - 1. Availability of land; 2. Nature of Monocrop cultivation.

i) Availability of Land. The nature of the Petite Savanne area with its steep slopes, bounding of the national park, and its heavily cultivated areas, make land availability one of the issues that presents serious difficulties for increasing bay productivity and development in the community. Limited land forces use of even steeper slopes with its consequent environmental problems; limited land forces higher crop density thus eliminating the possibility of intercropping, lowering yields and increasing soil fertility. Furthermore, limited land puts pressure on land normally considered for dwelling sites.

In the opinion of community leaders efforts at acquiring land as one solution to this problem by farmers have largely been ignored by authorities. Only 16 out of 60 farmers seeking land from Central Government to cultivate other crops (3 - 4 acres each) in 1978 (Pte Mulatre Estate) were successful in being cultivated land. Recent efforts to encourage Agro-Forestry practices, in the National Park land by allowing properly managed wood fuel plots and some bay cultivation have relieved some of the pressure. Land is still a scarce commodity and a constraint in terms of Bay productivity in Petite Savanne.

The solution still remains making land available for sale at reasonable prices.

ii) Nature of Monocrop Cultivation. Single (prune) stand closely cultivated bay trees have been the norm however it is clear that there are difficulties in that approach - i.e. soil fertility depletion and the need for food production. Recommendations for intercropping have been boosted by experiments that show very positive results with dasheen, tannia and pumpkin. So that whilst diversification potential exists reliable market and land availability are issues that need settling if such intercropping approaches are to be effective.

b) Bay Distillation

The processing phase throws up its own set of difficulties. They are: i) Transportation of leaves to Still; ii) Fuel wood; iii) Health hazard; iv) Labour intensity; and v) Local benefits.

i) Transportation. The distance of cultivated plots and difficult access often means that harvested bay must be headed for long distances to reach motorable roads. The solution to this is a better network of feeder roads or agricultural access road. The situation may be relieved if distilleries are located closer to cultivated areas.

ii) Fuel wood is increasingly difficult to access. Whilst the Forestry Division has allowed limited access to National Park forests, and provided leucaena seedlings for badly eroded areas the solution perhaps lies with a combination of a greatly accelerated agro-forestry awareness programme and practice and the development of new and more efficient techniques to maximize existing fuel (branch bits) sources.

iii-iv) The combination of heat (fire feeding) and cold (evening breezes) for continually long periods and the hard work associated with the distilling process takes its toll. Arthritis, rheumatism, colds and even pneumonia plague the less careful and vigilant. Costs of labour, as a result are rising at a pace that threatens the producer and still owner. Such an environment, it is argued, cries for adaptation, new techniques, education, and better equipment. The modern distilling equipment of the 1970's, although it produced an unmarketable clear oil, must be considered with adjustments.

v) Ways must be found to further enhance and develop the product and by-products of this industry to the benefit of the farmers. This suggests further processing into Bayrum, deodorants, after-shaves, insecticides, organic fertilizers, etc. to increase value added locally.

2. The public programmes - road, electricity, telephone

The public sector programmes of major road reconstruction, installation of electricity, and telephones seem to have proceeded along a fairly typical pattern of minimal formal involvement of the community of Petite Savanne. While it is true to say that the demand for these services was high enough to generate the popular slogan "NO ROAD, NO LIGHT, NO VOTE" preceding the May 1990 National Elections, it is also true that a wonderful opportunity for sharing, planning and learning was lost. Maximizing such opportunities to create a sense of ownership, involvement, and caring which could mean better understanding, better use habits, better maintenance among others does not appear to be a major concern of public sector programme of that nature.

So that besides the short-term jobs as pole diggers, gravel sweepers, etc. which came to some Petite Savanne citizens there was precious little else. Opportunities for planning, implementation, management and evaluation were not considered important for the beneficiary villagers. Even at the formal level of Local Government sharing little of plans, and little acknowledgement much less coordination of peoples institutions on the ground re these major programmes materialized.

Had some level information sharing been the case the main road would have traversed another 1/4 mile servicing a major bay producing area; or the floods that endangered houses at the lower part of the village would have been avoided by proper placement and choice of drains. The latter instead required considerable peoples protest, and when the flood did come, the dish-drains were eventually replaced by much larger culverts.

The many benefits catalogued by community leaders for these public sector programmes far outweigh the sum total of the difficulties they experienced -difficulties which suggest that some form

of community education was appropriate and could at least have accompanied the arrival of these crucial services.

3. The morne topie water project

The Morne Topie Water Project sought to provide potable water to a section (2/5) of the community previously unserved by any pipe borne water. They were assisted first by Save the Children Federation, then later by Small Projects Assistance Team, non-government development organizations. The community had mobilized itself prior to requesting support.

The para-statal body responsible for water was contacted and provided technical inputs, but it was the non-governmental organizations who rose to the occasion with encouragement and resources so that today the project can be touted as an "outstanding project" that has "boosted community participation" and "served as an example to the whole village of what Petite Savanne can do in terms of helping itself."

Today the main difficulty, having built the water system, and developed a committee responsible for maintenance, is whether the para-statal body DOWASCO will seek to exercise control, as is their mandate, according to law. Community leaders feel strongly that the entire village system should be decentralized and put in the hands of a village authority to manage. This is as a result of their experience of very poor services from DOWASCO or the Central Water Authority (which preceded it). Their success at building and managing the Morne Topie Water System has enhanced confidence and pride in the ability to manage community projects. These sentiments were expressed at the community workshop held to elicit community participation and impact in this study.

V. ACHIEVEMENTS/ACCOMPLISHMENTS/RESULTS

Because of the general isolation of the village there has developed a strong tradition of self-help ("koudmen"); 10/ however, over the last eight years this has been on the decline. Many organizations have fostered this spirit of togetherness and have been the main initiators of action for development. Groups like the Village Development Committee, the Women Action Society of Petite Savanne (WASPS), the Petite Savanne Cultural Group have carried out programmes of village development (road building, etc.) of women rights, child care, literacy and training, of maintaining active dance and other social activity. These voluntary organizations whilst fulfilling an important function within the village have for the most part been ignored by public sector programme initiators. Even the formally recognized elected local government body, the Village Council has not generally been consulted or involved despite Government policy. The Community Development Division of the Ministry of Community Development and Social Affairs has espoused a policy of peoples participation, and through its Self-Help Scheme has from time to time responded to requests for assistance by providing materials for road projects but efforts at really empowering people have been half-hearted. Decentralization then is only token, and coordination between Executive entities inconsistent. The fact, however, that existing local institutions are in place, and the existence of a strong spirit of self-reliance and self-help generated and maintained primarily, it would appear by private sector programmes (namely Bay and Rum, NGO intervention)are specially unique features of Petite Savanne that can be built on and nurtured.

Notwithstanding the above both the public sector and private sector programmes initiated in Petite Savanne the last ten years have had a positive redistributive impact within the community. We have already seen that the rehabilitation of the public road, the electrification of the village, the provision of telephone service, and the building of a new primary school have brought major benefits particularly easier access to market, more efficiency in the use of time, greater accessibility to agricultural inputs, and greater employment and educational opportunities.

Added to the growing sense of solidarity and the increasing willingness of the villagers to participate in planning and managing their own affairs the community is well poised to increase their support and commitment for further private and public sector programmes to increase productivity and the quality of their lives. 11/

VI. CONCLUSIONS AND SUGGESTIONS

1. The provision of public sector services to improve the infrastructure of rural communities play a major role in improving farm management and productivity- namely, better techniques, greater access to markets, resulting in increased output (acreages and intensity) irrigation, yet great opportunities for increasing meaningful peoples' participation and education are lost due to exclusively top/down approaches.
2. Generally a stagnated or isolated community being stifled or ignored by centralized, non-accountable forces develops a capacity to resist penetration of foreign cultural forms while promoting its own cultural strengths.
3. There is great potential to tap the existing spirit of self-reliance and self-help existing in such rural communities into a genuine participatory development model.
4. Public sector programming can be used much more effectively to increase productivity if more participatory and collaborative approaches are utilized.
5. Private sector programming can sustain rural populations through a "survival" economy which creates increasing productivity even given realities like isolation, poor communication, and limited land, markets and skills.
6. Non Government Organization programming has sought specifically to fulfill a vacuum in rural communities - a need for productivity at the human resource level - through training, organization building and self-confidence activities, therefore encouraging and keeping alive crucial community spirit, self-help activities and participatory democratic approaches.
7. A mix of the approaches and practices utilized by public sector and the NGO's could usefully create avenues for stimulating productivity.
8. During change phases (i.e arrival of major public sector infrastructure like electricity, telephone, roads etc) there is a very evident need for understanding the forces at play and the practical actions that suggest themselves.
9. The private sector, through intermediary institutions, like the development banks, the NGOs, specialized community based organizations, commodity organizations, and groupings (e.g. Coops) provide a mechanism for farmers to access credit, services, markets, and diversify the income base. These act as incentives to the rural population.
10. Involving people in decision making helps to break down bureaucracy, red tape, and provide an incentive for the villagers to feel in control, that they are being consulted and that benefits from both public sector and private sector programmes will accrue to them directly.

11. The production of rum is legal in Dominica. It is produced by two large establishments namely Belfast and Machoucherie, under licence. However the licencing of small producers in Petite Savanne and elsewhere remains unresolved. It is essential that mechanisms be put in place to properly examine the issue related to this local industry with a view to developing standards and removing the veil of illegality. Therefore, both the public sector and the private sector should examine ways of stimulating local economic activity in order to stem the tide of urban drift and emigration, particularly of the economically active rural population.

12. Follow-up or impact evaluations, give a sense of belonging, enabling rural people to recognize mistakes and shortcomings and provide an atmosphere and mechanisms for the private sector to support public sector programmes.

Notes

- 1/ SPAT: Economic Well Being Opinion Survey (July 1992) pp 9 (mimeo).
- 2/ Maurice Guiste:- The Dominica Essential Oils and Spices Cooperative 1986 pp 36 (Dominica)
- 3/ Bernard Darroux: "A Social Studies Project of the Community of Petite Savanne", Report 1988 (mimeo)
- 4/ Maurice Guiste: Op At.
- 5/ M. Guiste Ibid pp 46
- 6/ Guiste M. Ibid pp 36: Ibid pp 37.
- 7/ M. Guiste: Ibid pp 47.
- 8/ This distillation process entails the use of large amounts of water, usually sourced from nearby rivers.
- 9/ Manley James: "Investigating the Agro Forestry Potential of Dominica" (1990).
- 10/ "Koudmen is a traditional Kreyol patois term for helping or collective self-help
- 11/ Again these sentiments were expressed at Community Workshop 8/92 (See Annex 1).

DOCUMENTS/REFERENCES

SPAT Economic Well Being Opinion Survey July 1992

Statistical Division 1981 and 1992 Census Data

T. Henderson and P.I. Gomes "A Profile of Small Farming in Dominica, St. Vincent and St. Lucia
1984

Manley James "Investigating the Agro Forestry Potential of Dominica" 1990

Ministry of Communications & Works (EDU) "Road Project Summary and Justification" 1988

Dominica Electricity Services "Electrification of Petite Savanne" 1992

Maurice Guiste 1986 "The Dominica Essential Oils and Spices Cooperative" Social Studies Project -
Dominica Teachers College

Bernard Darroux 1988 "A Social Studies Project on The Community of Petite Savanne" - Dominica
Teachers College

Dominica Country Economic Memorandum, March 1992 - World Bank

Dominica Essential Oils and Spices Cooperative Society Ltd. (Unpublished figures) 1992

ANNEX 1

On Monday, 24th August 1992 a workshop was conducted in the village of Petite Savanne located in the South Eastern District of St. Patrick in the island of Dominica. The workshop was attended by eleven(11) community leaders representing different community organizations, health committees, women and youth organizations among others.

The main objective of the workshop was to gather information for the ECLAC study. Using creative and popular methodologies (including small group work, games) which encouraged maximum participation and discussion, participants were able to identify and prioritize programmes/projects/initiatives which over the last eight(8) years had the greatest impact on community development.

The groups final listing was Bay Oil Production, Roads Project, Electrification, Telephone, Agricultural Diversification Projects, (Banana, Peppers, Piggery), Morne Topie Water Project, Rum Production and employment outside the community.

An evaluation/analysis (Force Field) was carried out on three of the projects/programmes (Bay Oil Production, Morne Topie Water Project and the Road Project) one each from the sub-headings Public, Private and NGO supported/initiated, recommendation for improvement were made.

In an evaluation of the workshops which followed eight of the participants expressed satisfaction with the opportunity afforded them to share, exchange ideas, discuss, analyze the past and present situation in the community in a collective, participatory and organized manner. Although the other three participants shared similar view they remained more reserved and expressed their concern regarding follow-up activities as a result of the workshop.

It was clear that there is a greater need for more follow-up activities embraced in a more integrated programme of community animation.