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AGRICULTURAL STATISTICS FOR THE DEPARTMENT DU SUD, YEAR 1985-1986: SECOND SEASON 1985

Report #26

ADS-II
Agricultural Development Support II Project

AGRICULTURAL STATISTICS FOR THE DEPARTMENT DU SUD, HAITI: AGRICULTURAL YEAR 1985-86
(Second Season, 1985 - First Season, 1986)

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AGRICULTURAL STATISTICS FOR THE DEPARTEMENT DU SUD, HAITI:
AGRICULTURAL YEAR 1985-86
(Second Season, 1985 - First Season, 1986)

0. INTRODUCTION

The following tables and graphs present the principle results of the first full year of the Agricultural Development Support - II Project's (ADS-II) recurrent agricultural survey in the Departement du Sud. Some of this information has been reported in preliminary form in previous ADS-II publications. This report provides revised estimates for most crop and animal-related data and includes additional information resulting from a more complete descriptive analysis of the data from the second survey. In some cases, both yearly and seasonal information are reported. In other cases the user is encouraged to consult ADS-II publication #22 for interseasonal comparisons and contrasts.

Currently, the survey is expanding its geographical coverage to four departments (Sud, Grand Anse, Sud-Est and Ouest) for the second agricultural season of 1986. Plans call for the survey to be national in scope during the first agricultural season of 1987 and beyond, providing estimates for all nine departments.

The user should exercise caution in interpreting the information in this report. In particular, the divining of trends from changes in estimates of long-run variables between seasons is discouraged. With information from only two seasons currently available, the indicated changes in estimates should be used for little more than formulating tentative hypotheses which may be either verified or refuted by future surveys. In most instances, the changes in estimates reported herein are not significant. Even in cases where significance is apparent, conclusions should await further information.

The user should also be aware of a number of factors which have affected the estimates for the second survey. These factors have consequences for both sampling and non-sampling error.

1). As a result of the pilot survey, the survey frame was modified to provide a more efficient sample for obtaining information on key variables. For a description of this process, see ADS-II publication No. 21. As a result of this modification, the number of segments in the Departement du Sud was reduced from 55 to 40. Judging from the CVs obtained from the second survey, the modification apparently achieved the anticipated efficiency gain. However, although this modified sample incorporated an additional replication in the intensive mountain stratum and maintained the same sample in the extensive mountain stratum, the sample sizes in the intensive plain, extensive plain and rural village strata were reduced and the samples redrawn. The rice stratum was completely eliminated. Thus, the results from the second survey present information obtained from a smaller (1750 vs. 2750 total households), and largely different sample. Consequently, some variation in estimates was anticipated as was

the loss of precision in strata where the sample was reduced. To avoid unwarrented concern over changes in strata estimates, only departmental-level estimates are presented in this report.

2). In an attempt to lower enumeration costs, take advantage of existing agricultural expertise present in the general area of the survey and to avoid the creation of a large, independent group of ADS-II/Ministry enumerators, field-based personnel of the Natural Resources Division of the Ministry were utilized as enumerators whenever possible. The results of this experiment were not satisfactory. Natural Resources personnel demanded and received the usual payment for enumeration work rather than the more modest salary adjustment originally envisioned. Although release-time from other duties was granted, divided loyalties became a problem and survey work was too often given a low priority, resulting in delays and sub-standard work. Although the overall quality of the data from this pass is considered to be equal to or better than the pilot survey, consistency problems in some segments common to both surveys have been noted. Results from future surveys will help clarify these problems.

3). A serious flood occurred in the Departement du Sud in early June causing major damage, disrupting agricultural activities and complicating survey logistics problems.

4). Continuing socio-political unrest resulted in the suspension of the survey in two segments and complicated enumerator-farmer relations in others. Although the magnitude of the impact of this problem is unknown, it may have severe consequences for the continuation of the survey in some survey segments.

5.) The results reported herein represent direct expansions of farmer responses to questions concerning their agricultural activities. No other adjustments to the data have been made. Consequently, in presenting these data, it is assumed that no systematic bias exists in the farmer responses.

6.) The user should consult "The Pilot Agricultural Survey in the Departement du Sud: Methodology and Conclusions", ADS-II report No. 21, August, 1986, to become familiar with any additional problems of interpretation or inference occasioned by the methodology. To aid the user in placing the survey information into a more comprehensive geographical and natural resource-based context, the ADS-II report No. 27, "A GIS Atlas of the Department du Sud: Comparisons of Strata for the National Agriculture Survey", should be consulted.

Many people have contributed to the overall survey effort. In particular, the support of Ministry, Faculty of Agriculture and USAID personnel and the assistance of USDA/NASS consultants is gratefully acknowledged. Of course, the information in this report would not exist without the work of the enumerators and the cooperation of community leaders and hundreds of farmers throughout the Departement du Sud. A complete list of key ADS-II personnel involved in the survey is presented on page ii.

I. CROP, LIVESTOCK AND FARM STATISTICS

Crop Area Estimates. Area estimates for some twenty-eight crops are presented in Tableau 1.0. The table is divided into sections for monoculture, association and combination (monoculture plus association) estimates. Area estimates and CV information for both the Pilot survey (2nd season, 1985) and the second survey (1st season, 1986) are provided. In the last two columns, the expected number of crop seasons per year and the total estimated areas for the agricultural year are presented.

As expected, considerable differences in the overall crop mix between seasons have been demonstrated by the surveys. The total area dedicated to maize cultivation increased dramatically during the first season, making maize the predominant crop in the Departement du Sud followed closely by sorghum. See Figure 1 for a comparison of the most important crops in terms of area, during the agricultural year. Figure 2 presents a comparison of the most important crops in terms of the percentages of farm families who cultivate them, for the two agricultural seasons.

To estimate annual areas, simplifying assumptions concerning the number of crop seasons per year for each crop were made to avoid double counting. This correction is necessary for crops which remain in the field a relatively long time during the year. Sorghum, for example, is often relayed with maize, being planted several weeks before the first season maize crop is harvested. The sorghum remains in the field until harvested at the end of the second season. In this case, the same sorghum area would be reported by the farmer in both surveys. Consequently, an adjustment for annual estimates is necessary: in cases where one cropping season is assumed, annual area is assumed to be the greatest of the two estimates. In other cases, annual areas are determined by summing the two seasonal estimates.

Tableau 1.1 presents estimates of the number of parcels and average parcel size for each crop in monoculture and association during the first agricultural season of 1986. Information is presented at the parcel-level rather than at the jardin-level since, by survey definition, a jardin may include more that one parcel. The tableau also indicates the percentages of total parcels accounted for by each crop. Thus, the tableau indicates that maize parcels comprise 28.99% of total monoculture parcels. Maize was found in 45.71% of all parcel associations.

Additional parcel-level information is presented in Tableau 1.2. The number and areas of irrigated crops in monoculture and association are presented. The percentages of each crop found in irrigation is also presented.

Jardin-level information is presented in Tableau 1.3. Information on the topography of jardins (by number and area) is included as is the utilization of fertilizer for selected crops and the utilization of hired labor by agricultural activity.

Graphic illustrations of selected data are presented following the tables.

TABLEAU 1.0: COMPARAISON DES CULTURES PRATIQUEES PENDANT LES SAISONS AGRICOLES
DEPARTEMENT DU SUD

A: MONOCULTURE (en hectare)

CULTURE	PILOTE (2eme Saison,1985)		2EME ENQUETE (1ere Saison, 1986)		ESTIMATION	
	TOTAL	CV	TOTAL	CV	PLANTATION/ ANNEE	HECTARES/ ANNEE
MAIS	2190	0.15	17530	0.21	2	19720
SORGHO	31130	0.13	14140	0.10	1	31130
RIZ	3690	0.32	3670	0.30	2	7360
POIS ROUGE	30	0.30	810	0.42	2	840
POIS CONGO	480	0.31	380	0.22	1	480
POIS INCONNU	30	0.52	30	0.70	2	60
POIS NOIR	3370	0.30	2020	0.27	2	5390
POIS BLANC	0	n.a.	20	0.70	2	20
POIS SINISTRE	0	n.a.	0	n.a.	2	0
ARACHIDE	20	0.32	1320	0.17	2	1340
MANIOC AMER	520	0.20	1210	0.15	1	1210
MANIOC DOUX	50	0.33	170	0.45	1	170
PATATE	2770	0.13	1980	0.12	2	4750
IGNAME	360	0.25	550	0.23	1	550
POMME DE TERRE	0	n.a.	0	0.45	2	0
MALANGA	300	0.41	420	0.28	1	420
MAZUMBEL	70	0.27	250	0.23	1	250
CANNE A SUCRE	4740	0.25	1950	0.23	1	4740
TABAC	340	0.22	100	0.39	2	440
VETIVER	390	0.31	810	0.20	1	810
COTON	0	n.a.	20	0.70	1	20
SISAL	0	n.a.	100	0.31	1	100
GIROMON	330	0.56	20	0.70	2	350
TOMATE	110	0.40	60	0.40	2	170
CHOUX	0	n.a.	0	0.45	2	0
CAFE	230	0.23	1420	0.16	1	1420
FIGUE-BANANE	60	0.40	140	0.41	1	140
BANANE	770	0.17	3120	0.18	1	3120
AUTRE	330	0.25	20	0.38	n.a.	n.a.

TABLEAU 1.0 (SUITE)

B: ASSOCIATION (en hectare)

CULTURE	PILOTE (2eme Saison,1985) TOTAL	CV	2EME ENQUETE (1ere Saison, 1986) TOTAL	CV	ESTIMATION PLANTATION/ ANNEE	HECTARES/ ANNEE
MAIS	12680	0.10	29810	0.15	2	42490
SORGHO	27730	0.11	27740	0.15	1	27740
RIZ	2240	0.16	1450	0.29	2	3690
POIS ROUGE	2810	0.47	1230	0.45	2	4040
POIS CONGO	19950	0.14	16050	0.17	1	19950
POIS INCONNU	290	0.22	3790	0.36	2	4080
POIS NOIR	5950	0.18	2720	0.10	2	8670
POIS BLANC	70	0.36	60	0.33	2	130
POIS SINISTRE	120	0.28	140	0.18	2	260
ARACHIDE	500	0.21	3720	0.26	2	4220
MANIOC AMER	9990	0.15	12210	0.15	1	12210
MANIOC DOUX	550	0.17	4960	0.21	1	4960
PATATE	15990	0.15	11470	0.13	2	27460
IGNAME	10250	0.18	4850	0.11	1	10250
POMME DE TERRE	0	n.a.	40	0.46	2	40
MALANGA	4390	0.22	3620	0.22	1	4390
MAZUMBEL	2520	0.25	980	0.23	1	2520
CANNE A SUCRE	270	0.15	2150	0.19	1	2150
TABAC	60	0.52	70	0.40	2	130
VETIVER	80	0.36	1600	0.35	1	1600
COTON	10	0.50	60	0.40	1	60
SISAL	0	n.a.	300	0.45	1	300
GIROMON	410	0.38	250	0.30	2	660
TOMATE	0	n.a.	60	0.55	2	60
CHOUX	0	n.a.	60	0.55	2	60
CAFE	5070	0.23	5950	0.21	1	5950
FIGUE-BANANE	1290	0.47	820	0.28	1	1290
BANANE	8060	0.20	11290	0.14	1	11290
AUTRE	630	0.33	280	0.35	n.a.	n.a.

TABLEAU 1.0 (SUITE)

C: COMBINAISON (en hectare)

CULTURE	PILOTE (2eme Saison,1985) TOTAL	CV	2EME ENQUETE (1ere Saison, 1986) TOTAL	CV	ESTIMATION PLANTATION/ ANNEE	HECTARES/ ANNEE
MAIS	14870	0.09	47340	0.12	2	62210
SORGHO	58860	0.09	41880	0.10	1	58860
RIZ	5930	0.21	5120	0.23	2	11050
POIS ROUGE	2840	0.46	2040	0.32	2	4880
POIS CONGO	20430	0.13	16430	0.17	1	20430
POIS INCONNU	320	0.21	3820	0.36	2	4140
POIS NOIR	9320	0.16	4740	0.13	2	14060
POIS BLANC	70	0.36	80	0.30	2	150
POIS SINISTRE	120	0.28	140	0.18	2	260
ARACHIDE	520	0.20	5040	0.20	2	5560
MANIOC AMER	10510	0.14	13420	0.13	1	13420
MANIOC DOUX	600	0.16	5130	0.20	1	5130
PATATE	18760	0.13	13450	0.11	2	32210
IGNAME	10610	0.17	5400	0.10	1	10610
POMME DE TERRE	0	n.a.	40	0.43	2	40
MALANGA	4690	0.21	4040	0.20	1	4690
MAZUMBEL	2590	0.24	1230	0.19	1	2590
CANNE A SUCRE	5010	0.24	4100	0.15	1	5010
TABAC	400	0.21	170	0.28	2	570
VETIVER	470	0.26	2410	0.24	1	2410
COTON	10	0.50	80	0.35	1	80
SISAL	0	n.a.	400	0.35	1	400
GIROMON	740	0.33	270	0.28	2	1010
TOMATE	110	0.40	120	0.34	2	230
CHOUX	0	n.a.	60	0.51	2	60
CAFE	5300	0.22	7370	0.17	1	7370
FIGUE-BANANE	1350	0.44	960	0.25	1	1350
BANANE	8830	0.18	14410	0.12	1	14410
JACHERE	6340	0.18	11590	0.07	2	17930
AUTRE	960	0.23	300	0.33	n.a.	n.a.

TABLEAU 1.1: NOMBRE DE PARCELLES EN MONOCULTURE ET ASSOCIATION
(1ere SAISON, 1986)

	MONOCULTURE				ASSOCIATION			
CULTURE	NOMBRE TOTAL	CV	POURCENTAGE DU TOTAL	SUPERFICIE MOYENNES DES PARCELLES (HA)	NOMBRE TOTAL	CV	POURCENTAGE DU TOTAL	SUPERFICIE MOYENNES DES PARCELLES (HA)
MAIS	36100	0.14	28.99	0.49	51900	0.11	45.71	0.57
SORGHO	35500	0.10	28.50	0.40	37900	0.08	33.38	0.73
RIZ	8900	0.28	7.14	0.41	2500	0.25	2.17	0.58
POIS ROUGE	1300	0.43	1.08	0.62	1400	0.27	1.20	0.88
POIS CONGO	1300	0.22	1.01	0.29	35700	0.13	31.46	0.45
POIS INCONNU	100	0.70	0.07	0.30	9500	0.23	8.33	0.40
POIS NOIR	4100	0.26	3.33	0.49	5800	0.11	5.12	0.47
POIS BLANC	0	0.70	0.04		100	0.31	0.11	0.60
POIS SINISTRE	0		0.00		400	0.14	0.38	0.35
ARACHIDE	2700	0.14	2.19	0.49	7100	0.31	6.26	0.52
MANIOC AMER	3000	0.13	2.41	0.40	24300	0.12	21.46	0.50
MANIOC DOUX	600	0.49	0.46	0.28	11100	0.27	9.80	0.45
PATATE	5100	0.10	4.08	0.39	24600	0.10	21.71	0.47
IGNAME	1900	0.23	1.54	0.29	21800	0.20	19.25	0.22
POMME DE TERRE	100	0.45	0.05	0.00	200	0.47	0.16	0.20
MALANGA	2000	0.33	1.62	0.21	15800	0.29	13.97	0.23
MAZUMBEL	700	0.20	0.54	0.36	3200	0.24	2.85	0.31
CANNE A SUCRE	2900	0.20	2.33	0.67	3300	0.17	2.94	0.65
TABAC	200	0.39	0.19	0.50	100	0.35	0.12	0.70
VETIVER	1900	0.23	1.52	0.43	1100	0.15	0.93	1.45
COTON	0	0.70	0.04		200	0.26	0.16	0.30
SISAL	300	0.31	0.27	0.33	300	0.45	0.24	1.00
GIROMON	0	0.70	0.04		3100	0.50	2.71	0.08
TOMATE	200	0.38	0.20	0.30	200	0.57	0.20	0.30
CHOUX	100	0.45	0.05		200	0.57	0.20	0.30
CAFE	2600	0.15	2.06	0.55	7500	0.18	6.65	0.79
FIGUE-BANANE	300	0.35	0.25	0.47	1900	0.28	1.70	0.43
BANANE	11500	0.17	9.26	0.27	25000	0.14	22.07	0.45
			99.25					

TABLEAU 1.2: NOMBRE ET SUPERFICIE DE PARCELLES IRRIGUEES EN MONOCULTURE ET ASSOCIATION
(1ere SAISON, 1986)

	MONOCULTURE			ASSOCIATION		
	POURCENTAGE DE PARCELLES IRRIGUE		10.17	POURCENTAGE DE PARCELLES IRRIGUE		3.84
CULTURE	NOMBRE DE PARCELLES	CV	% DU TOTAL DES PARCELLES	NOMBRE DE PARCEL	CV	% DU TOTAL DES PARCELLES
MAIS	8930	0.35	24.74	1900	0.47	3.66
SORGHO	60	0.44	0.17	60	0.70	0.16
RIZ	2460	0.29	27.64	1030	0.28	41.20
POIS ROUGE	60	0.70	4.62	220	0.70	15.71
POIS NOIR	60	0.70	1.46	60	0.70	1.03
PATATE	60	0.45	1.18	130	0.31	0.53
IGNAME	60	0.70	3.16	100	0.70	0.46
MALANGA	60	0.70	3.00	60	0.45	0.38
MAZUMBEL	210	0.37	30.00	20	0.68	0.63
CANNE A SUCRE	310	0.38	10.69	170	0.70	5.15
TOMATE	110	0.70	55.00	50	0.70	25.00
CAFE	60	0.70	2.31	130	0.31	1.73
BANANE	230	0.32	2.00	250	0.30	1.00

	SUPERFICIE DE PARCELLES	CV	% DU TOTAL SUPERFICIE	SUPERFICIE DE PARCEL	CV	% DU TOTAL SUPERFICIE
MAIS	4090	0.34	23.33	900	0.39	3.02
SORGHO	40	0.44	0.28	180	0.70	0.65
RIZ	1200	0.32	32.70	540	0.32	37.24
POIS ROUGE	140	0.70	17.28	230	0.70	18.70
POIS NOIR	40	0.70	1.98	20	0.70	0.74
PATATE	10	0.45	0.51	80	0.31	0.70
IGNAME	10	0.70	1.82	60	0.70	1.24
MALANGA	20	0.70	4.76	10	0.45	0.28
MAZUMBEL	50	0.25	20.00	10	0.58	1.02
CANNE A SUCRE	230	0.40	11.79	60	0.70	2.79
TOMATE	50	0.70	83.33	20	0.70	33.33
CAFE	10	0.70	0.70	50	0.36	0.84
BANANE	90	0.43	2.88	150	0.30	1.33

TABLEAU 1.3: CARACTERISTIQUES DES JARDINS

NOMBRE TOTAL DE JARDINS 241000

TOPOGRAPHIE	NOMBRE DE JARDINS POURCENTAGE	CV	SUPERFICIES DE JARDINS POURCENTAGE	CV
MONTAGNE (PENTE)	36.15	0.07	50.01	0.10
PLAINE	60.28	0.11	47.54	0.10
MARECAGE	3.57	0.29	2.45	n.d.

UTILISATION DES ENGRAIS

POURCENTAGE DE JARDINS (TOTAL) 11.62

CULTURE	NOMBRE DE JARDINS	CV	POURCENTAGE
MAIS	16600	0.31	18.86
SORGHO	1100	0.45	1.45
RIZ	1600	0.33	13.98
POIS ROUGE	800	0.50	29.40
POIS CONGO	300	0.60	0.85
POIS INCONNU	100	0.70	0.93
POIS NOIR	800	0.47	7.95
POIS BLANC	0	0.70	48.68
ARACHIDE	400	0.55	3.72
MANIOC AMER	200	0.50	0.68
PATATE	1100	0.56	3.70

UTILISATION DE MAIN D'OEUVRE

Pourcentage des Jardins ou la Main d'oeuvre Salariee est employee 51.88

Repartition de la Main d'oeuvre (%):

PREPARATION DU SOL	93.76
SEMIS	81.99
ENTRETIEN et SARCLAGE	96.61
RECOLTE	69.85
AUTRES	35.32

Figure 1

L'IMPORTANCE DES CULTURES

ANNEE AGRICOLE — DEPARTEMENT DU SUD

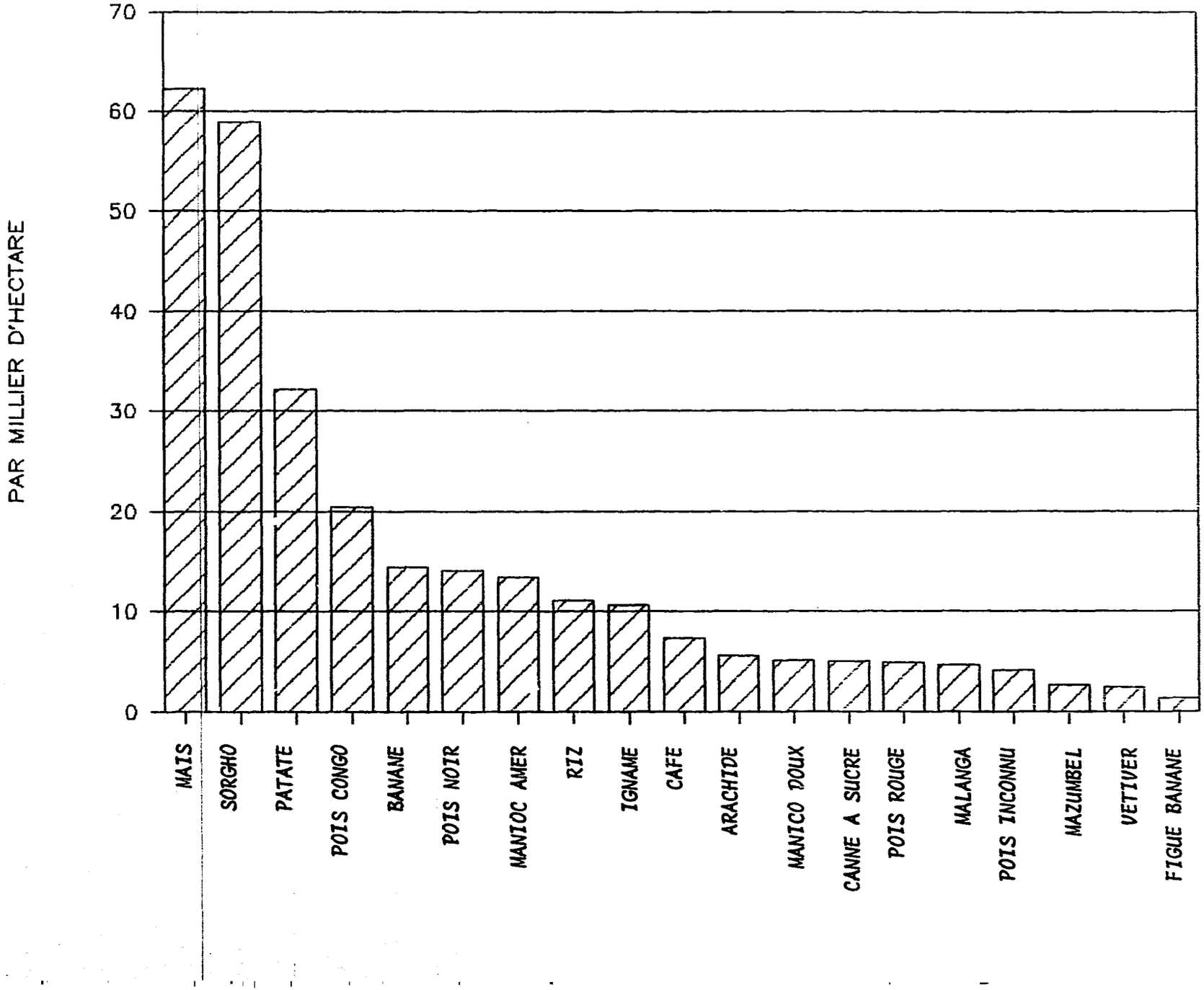


Figure 2

CULTURES PRATIQUEES PAR LES MENAGES

DEUX SAISONS AGRICOLES

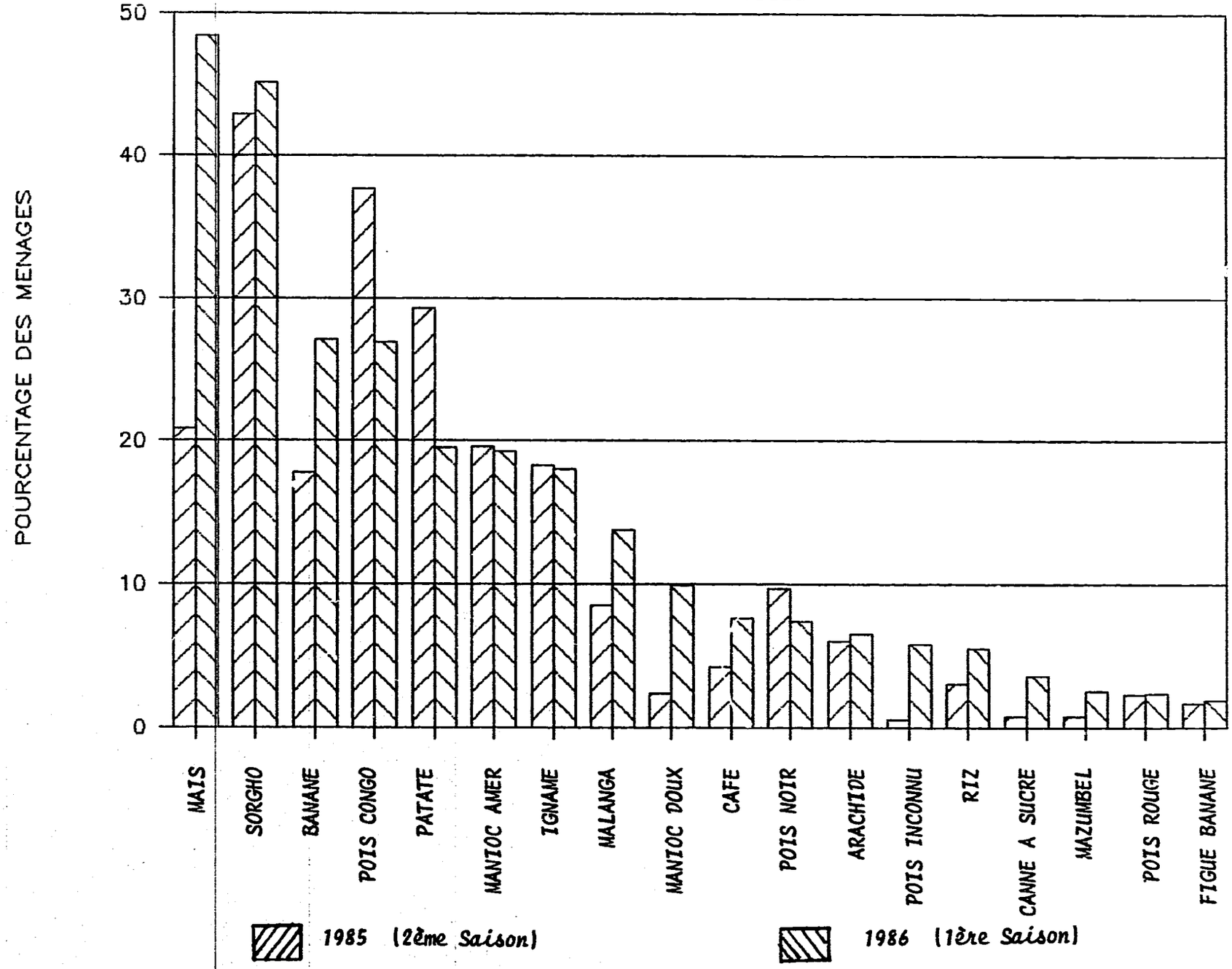


Figure 3

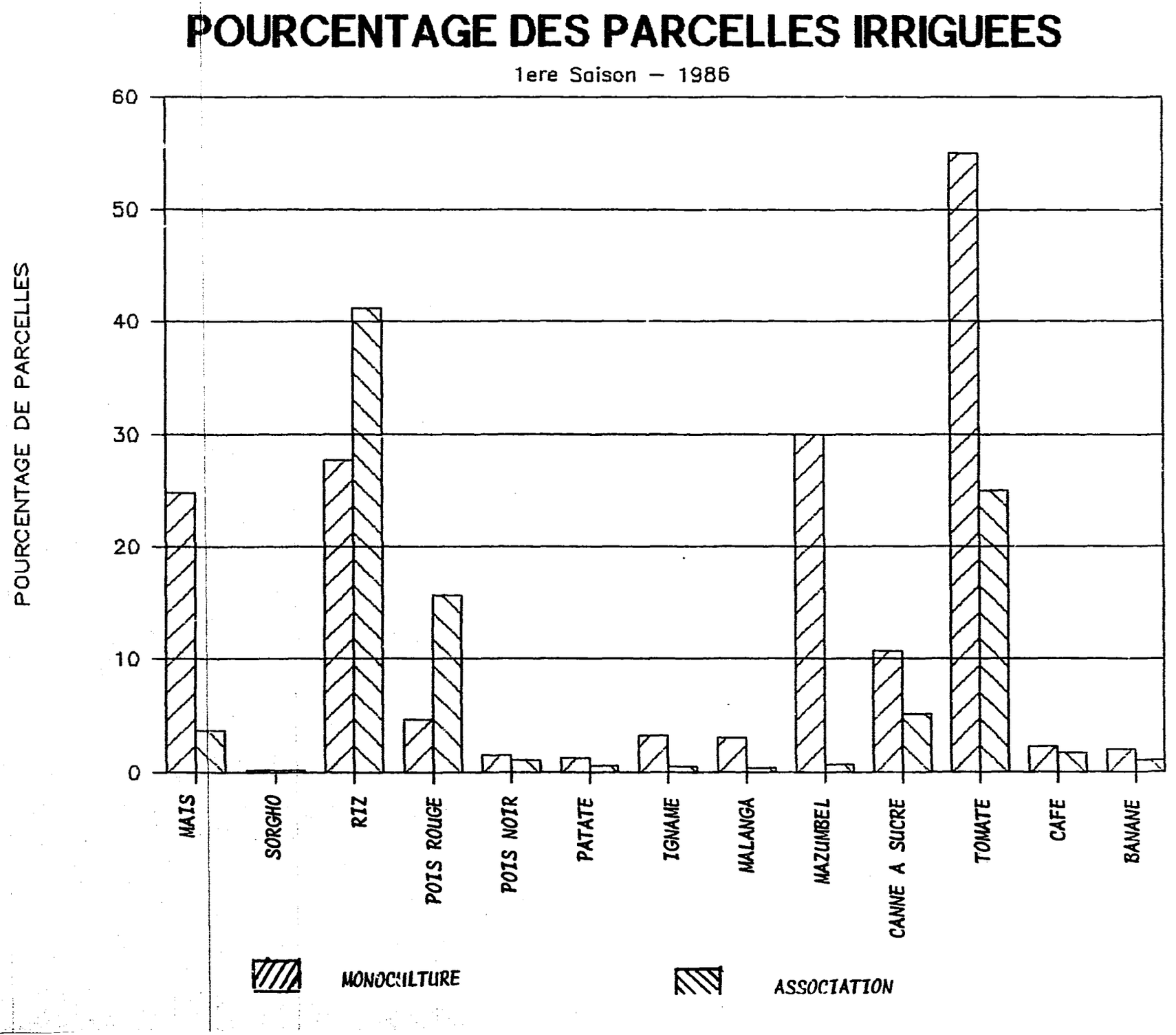

POURCENTAGE DES PARCELLES IRRIGUEES
1ere Saison – 1986
POURCENTAGE DE PARCELLES
60
50
40
30
20
10
0
MAIS
SORGHO
RIZ
POIS ROUGE
POIS NOIR
PATATE
IGNAME
MALANGA
MAZUMBEL
CANNE A SUCRE
TOMATE
CAFE
BANANE
MONOCULTURE
ASSOCIATION

Figure 4

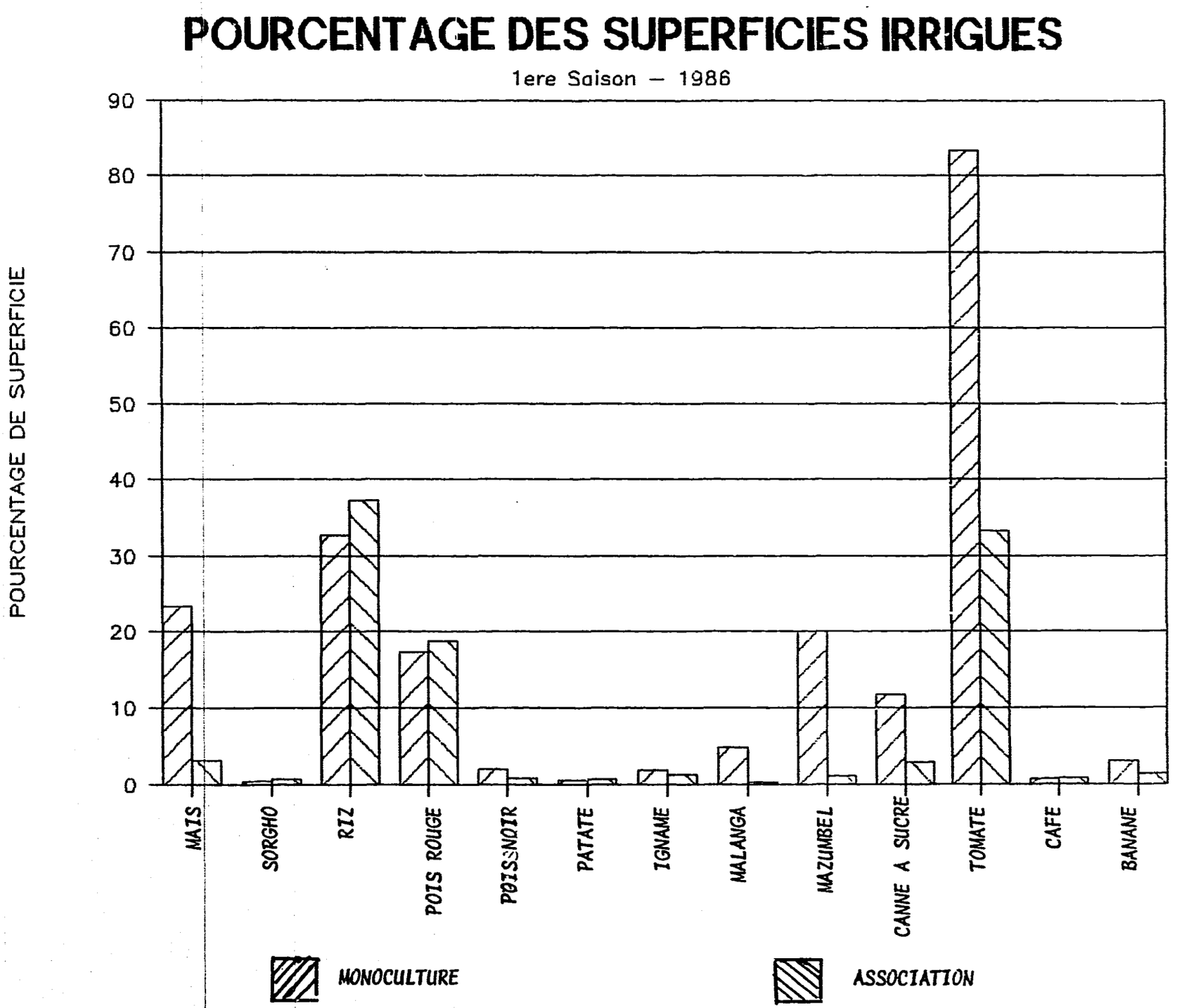

POURCENTAGE DES SUPERFICIES IRRIGUES
1ere Saison — 1986
POURCENTAGE DE SUPERFICIE
90
80
70
60
50
40
30
20
10
0
MAIS
SORGHO
RIZ
POIS ROUGE
POISSNOIR
PATATE
IGNAME
MALANGA
MAZUMBEL
CANNE A SUCRE
TOMATE
CAFE
BANANE
MONOCULTURE
ASSOCIATION

Figure 5

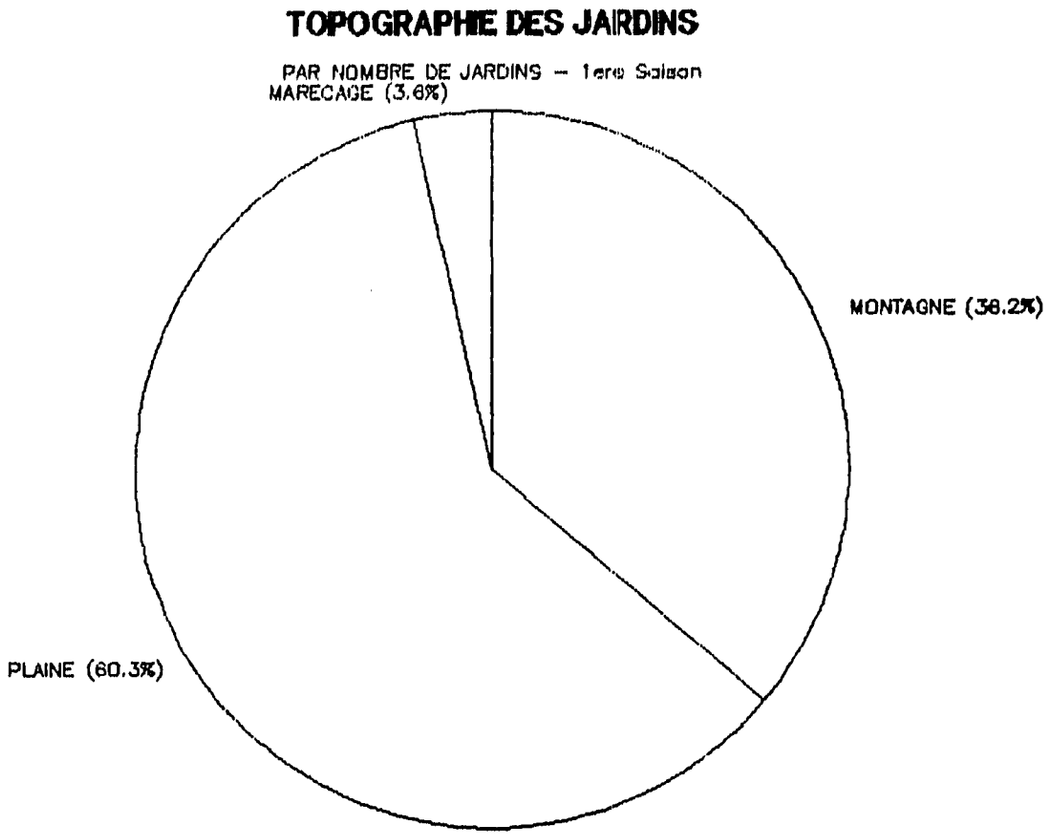
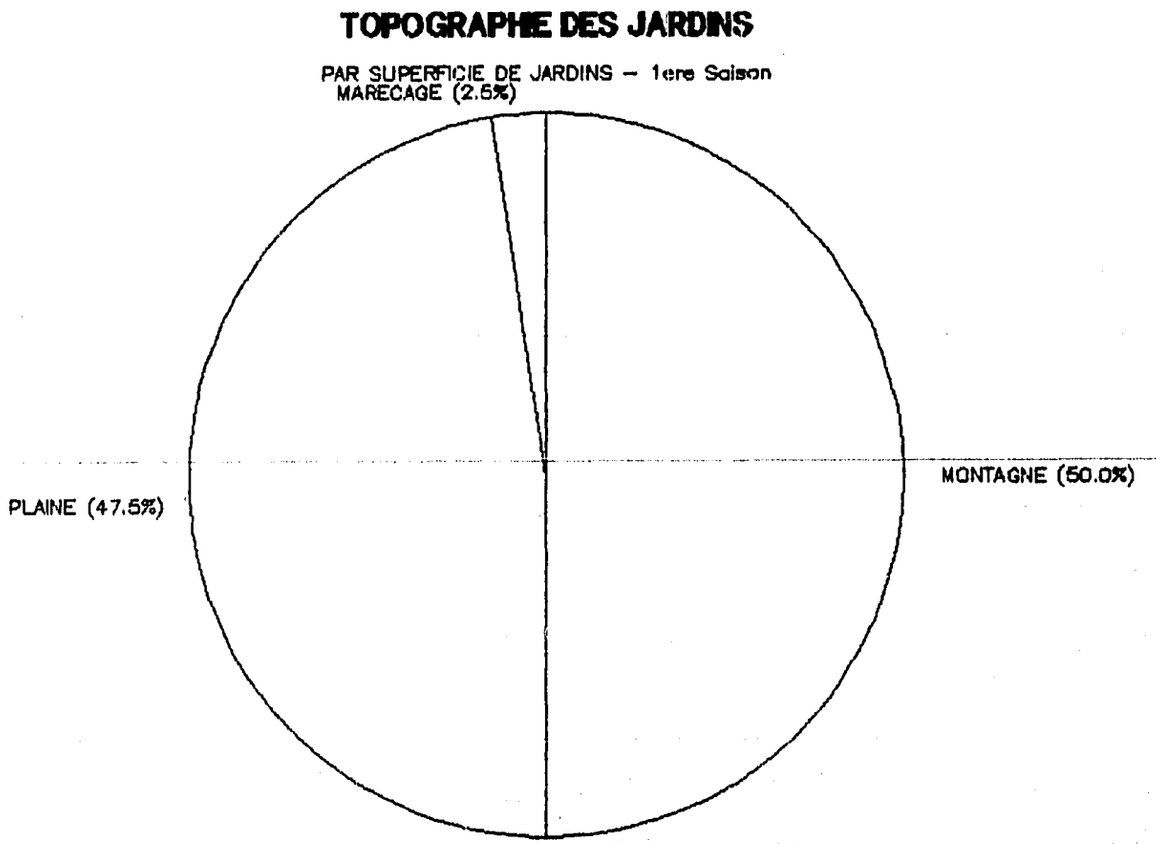


Figure 6



Animal Estimates. Tableau 2.0 presents animal number estimates for selected animals for the two agricultural seasons. CV information for estimates for the two seasons is also presented. For the second survey, an estimate of the disappearance or loss to the household from all causes (disparu) that occurred over the period of last six months preceeding the date of the survey is presented. A sex and age breakdown and estimate of animals "recu en gardiennage" (expressed as a percentage of the total estimate) is provided for selected animals. An estimate of the percentage of total agricultural households on which the different types of animals are found is also presented for the second survey (and presented graphically in Figure 8).

As indicated in the table and illustrated in the following Figure 7, the estimates for most animals for the two seasons are relatively close. Generally, the changes in animal numbers reported for the two seasons are not significant. The outstanding exceptions to this rule are fowl and swine. Fowl numbers are apparently extremely volatile, with over 100% of the reported current total estimate "disappearing" during the previous six months. The high percentage change in estimates of fowl numbers between seasons may be partially explained by the inclusion of an explicit poussin (chicks) category in the second survey. Farmers may not have fully reported this relatively unimportant category during the pilot survey.

As anticipated, the estimate for swine numbers increased dramatically over the pilot estimate reflecting the progress of the swine repopulation effort and the effects of associated economic factors during the approximate seven to eight month period between surveys.

Figure 9 allows for interesting comparisons and contrasts of causes of disappearance for selected animals. The figure may be interpreted as in the following example. Tableau 2 indicates that some 892,000 fowl were lost or disappeared during the six months prior to the survey. These reported disappearances occurred from the estimated 54.09% of total agricultural households who raise fowl (approximately 60,580 households). Figure 6 indicates that of those households, 82% reported losses of fowl due to disease, 40% due to accident, 11% due to theft, 4% of the households gave fowl as gifts, 6% sold fowl, 7% consumed fowl and 27% of households reported other causes for disappearance. In general, disease and accidents represented the major causes cited by households for the disappearance of all animals during the preceding six months. The "other" category, which would include repayments from gardiennage arrangements, also figures as an important cause of disappearance.

Graphic illustrations of selected information follow the tables.

TABLEAU 2.0: ESTIMATION DU NOMBRE D'ANIMAUX - DEPARTEMENT DU SUD
DEUX SAISONS AGRICOLES

	PILOTE (2eme Saison, 1985)		2EME ENQUETE (1ere Saison, 1986)	
	Estimation	CV	Estimation	CV
VOLAILLES	584000	0.11	870000	0.11
DISPARUES	n.a.	n.a.	892000	0.09
Pourcentage:				
COQ	n.a.	n.a.	18.19	0.12
POULE	n.a.	n.a.	35.19	0.09
POUSSIN	n.a.	n.a.	46.49	0.13
EN GARDIENNAGE	9.00	n.a.	3.15	0.18
MENAGES AGRICOLES QUI PRATIQUE L'ELEVAGE	n.a.	n.a.	54.09	0.06
BOVINS	122100	0.12	133900	0.09
DISPARUS	n.a.	n.a.	41700	0.13
Pourcentage:				
VEAU	n.a.	n.a.	18.49	0.09
TAUREAU	n.a.	n.a.	27.04	0.15
VACHE	n.a.	n.a.	53.37	0.08
EN GARDIENNAGE	30.00	n.a.	20.59	0.08
MENAGES AGRICOLES QUI PRATIQUE L'ELEVAGE	n.a.	n.a.	38.55	0.06
CAPRINS	235600	0.12	217900	0.10
DISPARUS	n.a.	n.a.	181300	0.09
Pourcentage:				
CHEVREAUX	n.a.	n.a.	18.95	0.14
CABRIS	n.a.	n.a.	28.39	0.12
CHEVRES	n.a.	n.a.	51.56	0.08
EN GARDIENNAGE	17.00	n.a.	13.49	0.08
MENAGES AGRICOLES QUI PRATIQUE L'ELEVAGE	n.a.	n.a.	37.93	0.07
OVINS	72500	0.16	78600	0.13
DISPARUS	n.a.	n.a.	53100	0.11
Pourcentage:				
AGNEAUX	n.a.	n.a.	17.67	0.26
MOUTONS	n.a.	n.a.	25.87	0.18
BREBIS	n.a.	n.a.	55.04	0.10
EN GARDIENNAGE	22.00	n.a.	15.91	0.14
MENAGES AGRICOLES QUI PRATIQUE L'ELEVAGE	n.a.	n.a.	16.08	0.10
PORCS	3300	0.22	18600	0.18
DISPARUS	n.a.	n.a.	4100	0.22
Pourcentage:				
PORCELETS	n.a.	n.a.	19.14	0.20
PORCS	n.a.	n.a.	27.55	0.18
TRUIES	n.a.	n.a.	53.31	0.18
EN GARDIENNAGE	10.00	n.a.	22.09	0.26
MENAGES AGRICOLES QUI PRATIQUE L'ELEVAGE	n.a.	n.a.	2.99	0.17

TABLEAU 2.0 (SUITE)

	PILOTE (2eme Saison, 1985)		2EME ENQUETE (1ere Saison, 1986)	
	Estimation	CV	Estimation	CV
ANES	31200	0.16	22900	0.14
Pourcentage de Menages Agricole qui Pratique L'elevage	n.a.	n.a.	13.74	0.13
MULETS	16200	0.13	10400	0.09
Pourcentage de Menages Agricole qui Pratique L'elevage	n.a.	n.a.	6.18	0.09
CHEVAUX	19800	0.14	14500	0.10
Pourcentage de Menages Agricole qui Pratique L'elevage	n.a.	n.a.	8.35	0.11
LAPINS	10600	0.27	14700	0.18

Figure 7

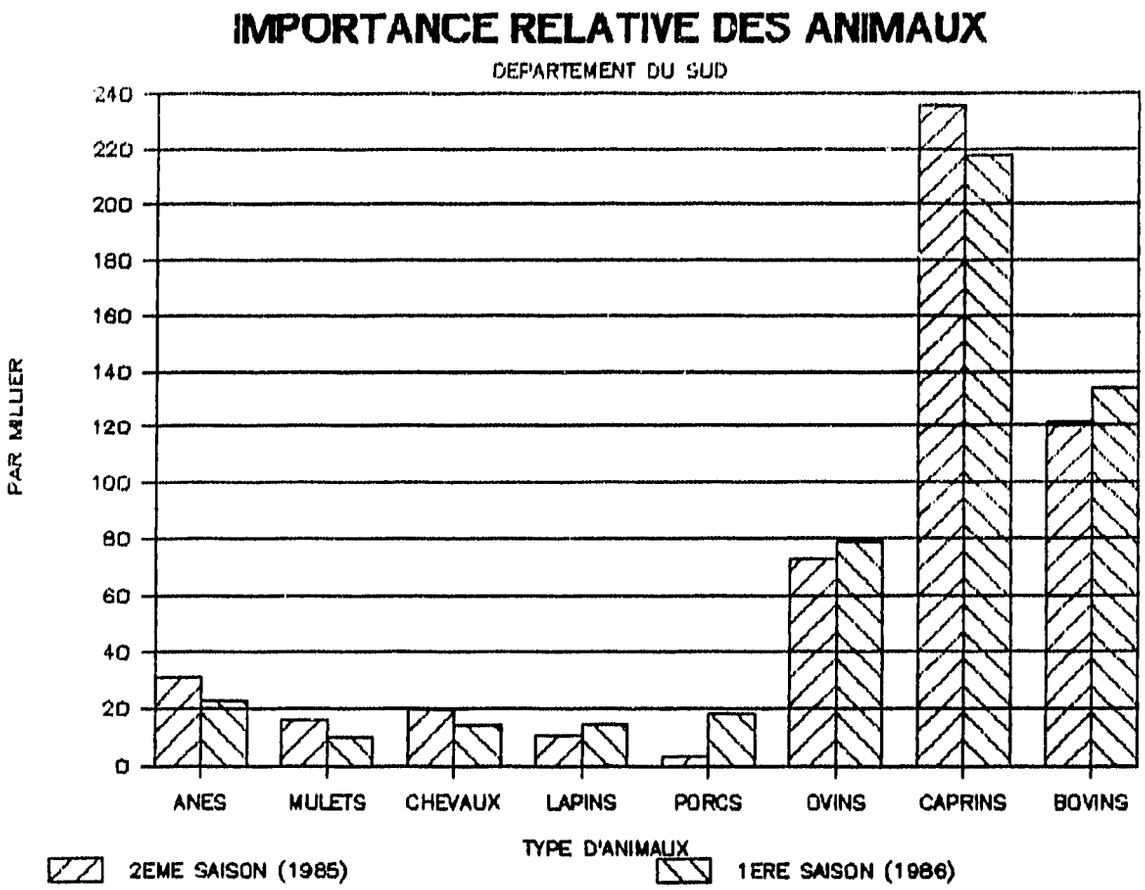


Figure 8

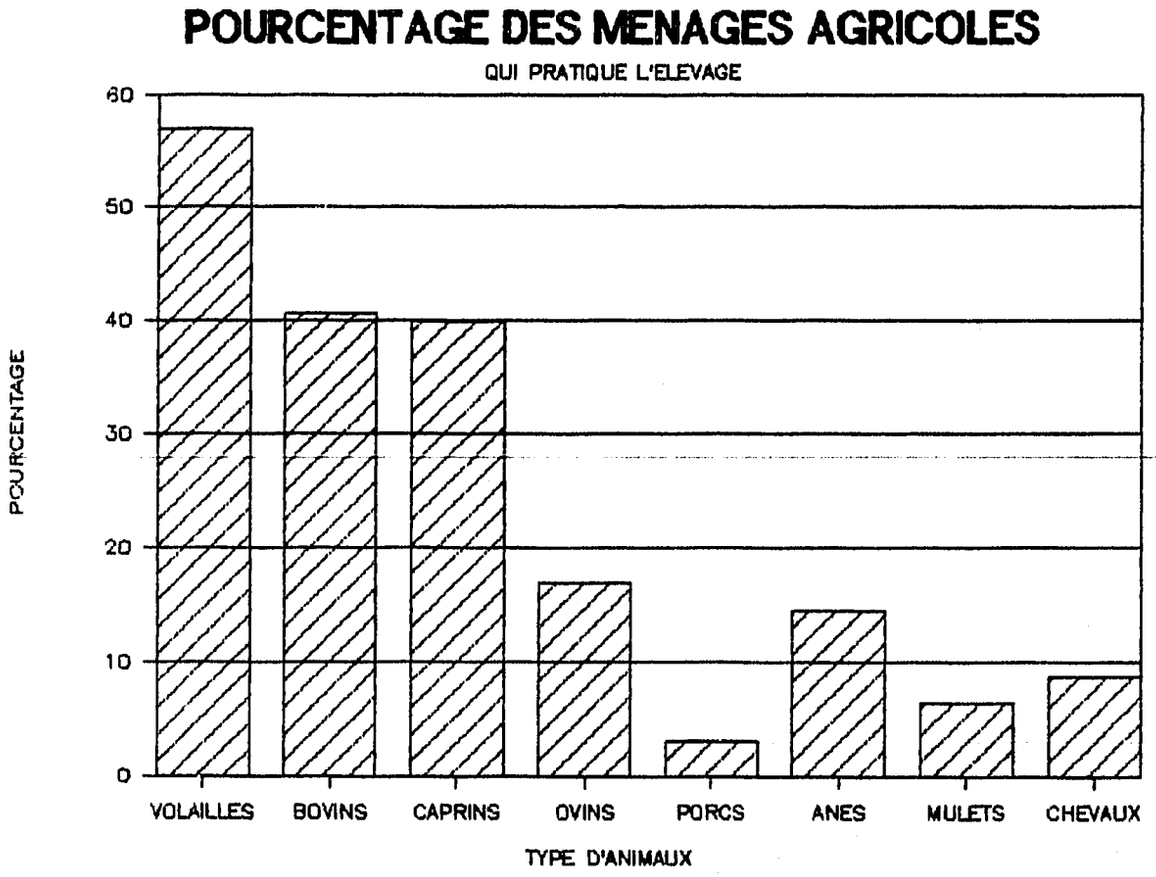
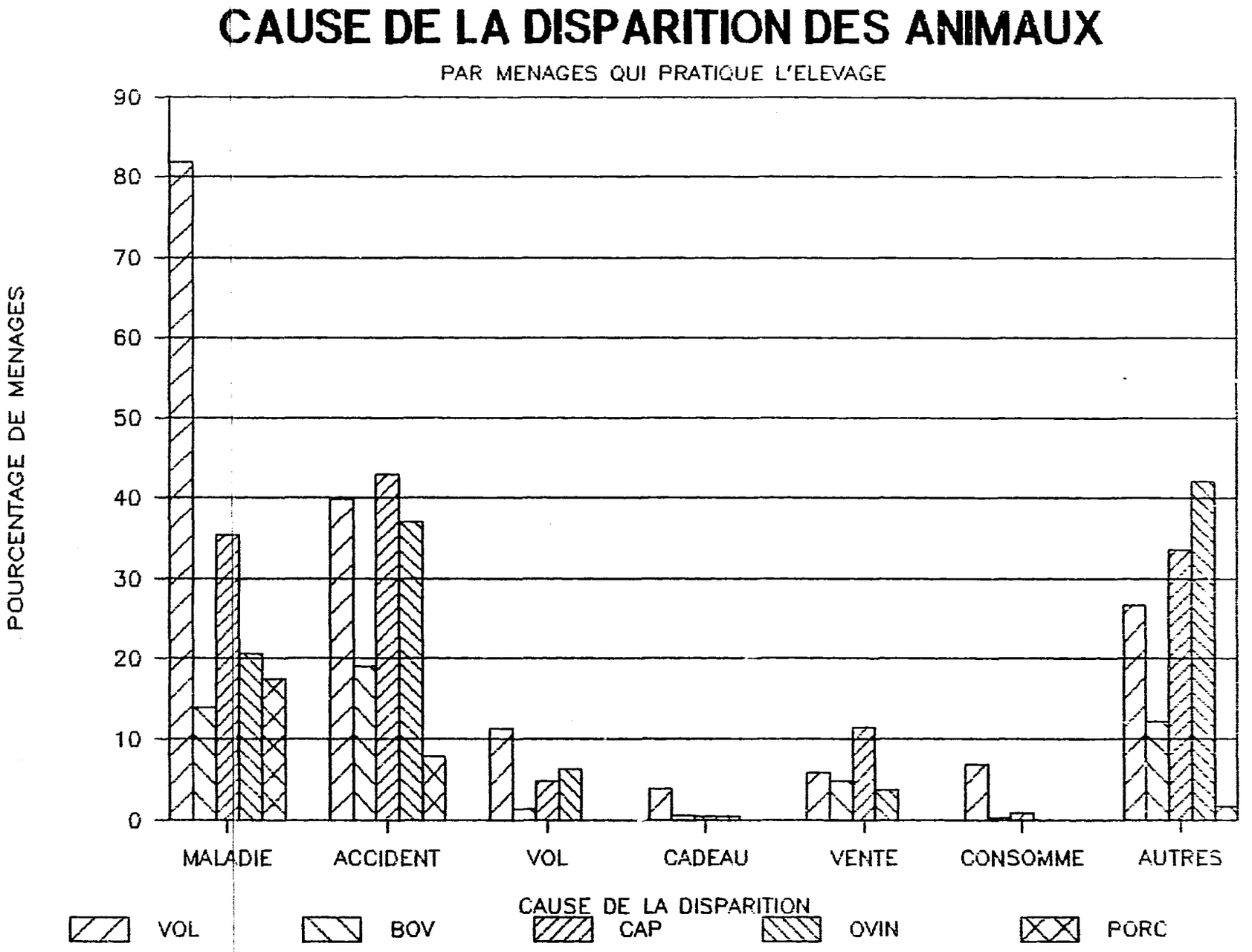


Figure 9


CAUSE DE LA DISPARITION DES ANIMAUX
PAR MENAGES QUI PRATIQUE L'ELEVAGE
POURCENTAGE DE MENAGES
90
80
70
60
50
40
30
20
10
0
MALADIE
ACCIDENT
VOL
CADEAU
VENTE
CONSOMME
AUTRES
CAUSE DE LA DISPARITION
VOL
BOV
CAP
OVIN
PORC

Estimates of Tree Numbers. Tableau 3.0 presents information on numbers of selected tree types for the two agricultural seasons. CV information and percentages of total tree areas found in association are also presented.

In general, the differences reported between seasons are not significant. More time and information is required before any trends can be identified. Tree estimates appear to be volatile. Absolute differences between estimates tend to be very high due to the large numbers involved and, perhaps, to the off-setting effects of discontinuous large-scale tree planting projects and the continuous harvest of trees for firewood, charcoal, etc.. Estimates of current usage of charcoal and firewood including vegetable matter used as a source of energy, is presented in Figure 10. The preferences of agricultural households for different tree species for firewood and charcoal are presented in section three of this report.

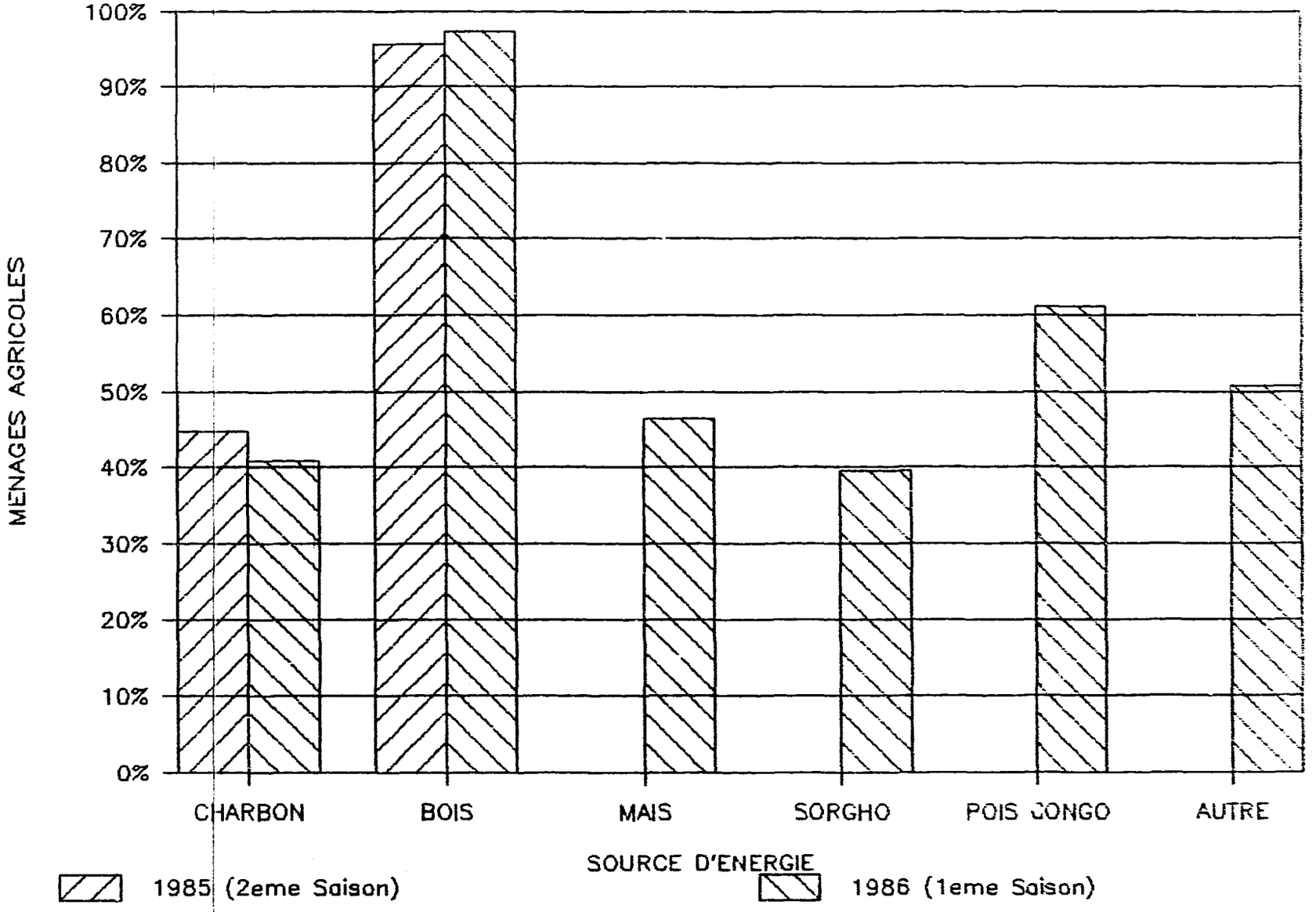
TABLEAU 3.01 NOMBRE D'ARBRES RELEVE POUR LES DEUX SAISONS AGRICOLES

	PILOTE (2eme Saison, 1985)		2EME ENQUETE (1ere Saison, 1986)		
	TOTAL	CV	TOTAL	CV	POURCENTAGE EN ASSOCIATION
AGRUME	547000	0.26	439000	0.18	85.71
MANGUIER	626000	0.11	554000	0.09	100.00
COCOTIER	513000	0.13	701000	0.13	90.65
ARBRE A PAIN	125000	0.10	90000	0.14	100.00
ARBRE VERITABLE	462000	0.10	530000	0.21	95.65
AVOCATIER	561000	0.11	364000	0.09	100.00
CACAOYERS	126000	0.20	170000	0.17	100.00
BANANIER	8766000	0.22	7758000	0.13	78.35
FIGUIER	1438000	0.28	1853000	0.12	95.56
CAFEIER	13694000	0.33	9210000	0.16	80.73

Figure 10

UTILISATION DES SOURCES D'ENERGIE

POUR LA CUISINE



Farm Number Estimates by Size Categories. Tableau 4.0 and Figure 11 present a breakdown of farm numbers by size category for the two agricultural seasons. CV information for the second survey is also presented. Although the total estimate of the number of agricultural families for the two seasons is very close, the farm size distribution of the second survey is skewed more toward the small landholding class. Again, further information is eeded to assess the validity of this change.

Distribution of Land Tenure. Tableau 4.1 and Figures 12 and 13 present the breakdown of land tenure classifications by number and area of gardens for the two agricultural seasons. CV information for the second survey is also presented. The total estimates for areas and numbers of gardens for the two seasons are relatively close with the second survey reporting more area and gardens. The distributions of tenure classes by area and number of gardens are also very similar except for the owner and sharecrop categories. A relative shift of 10% from the sharecrop category to the proprieter category is reported for the second survey. Since the second survey occurred after the fall of the Duvalier regime, an interesting hypothesis is that this reported change stems from a perceived change in the Haitian peasants relationship to the land brought on by the revolution.

TABLEAU 4.0: ESTIMATION DES SUPERFICIES CULTIVEES PAR LES MENAGES AGRICOLES PAR CATEGORIE

SUPERFICIE EN HECTARE PAR CATEGORIE	PILOTE (2eme Saison, 1985) NOMBRE DE MENAGES	POUR-CENTAGE	2EME ENQUETE (1ere Saison, 1986) NOMBRE DE MENAGES	POUR-CENTAGE	CV
0.0-0.64	44500	38.69	53000	47.19	0.12
0.65-1.28	32900	28.64	30200	26.95	0.10
1.29-2.57	24800	21.61	18700	16.66	0.08
2.58-6.45	11500	10.01	8800	7.81	0.12
>6.45	1200	1.05	1600	1.44	0.17
TOTAL	114900		112200		n.a.

TABLEAU 4.1: ESTIMATION DU MODE DE TENURE DANS LE DEPARTEMENT DU SUD - POUR LES DEUX SAISONS AGICOLES

	PILOTE (2eme Saison Agricole, 1985)	2EME ENQUETE (1ere Saison Agricole, 1986)
SUPERFICIE TOTALE DES JARDINS	122000	150000
NOMBRE TOTAL DE JARDINS	238000	241000

MODE DE TENURE (POURCENTAGE)

	SUPERFICIE	NOMBRE	SUPERFICIE	CV	NOMBRE	CV
PROPRIETE	48.52	42.47	57.22	0.10	55.25	0.12
METAYAGE	25.89	28.58	14.84	0.12	18.09	0.09
LOUE DE PARTICULIER	7.38	6.06	7.73	0.17	8.36	0.16
LOUE DE L'ETAT	2.02	3.33	3.00	0.34	2.32	0.32
SANS TITRE	0.99	0.80	3.06	0.30	2.39	0.26
HERITAGE	14.42	18.41	13.53	0.14	12.93	0.10
AUTRE	0.77	0.36	0.62	0.26	0.67	0.21

Figure 11

DISTRIBUTION DES TERRES

PAR CATEGORIE DE SUPERFICIE PAR SAISON

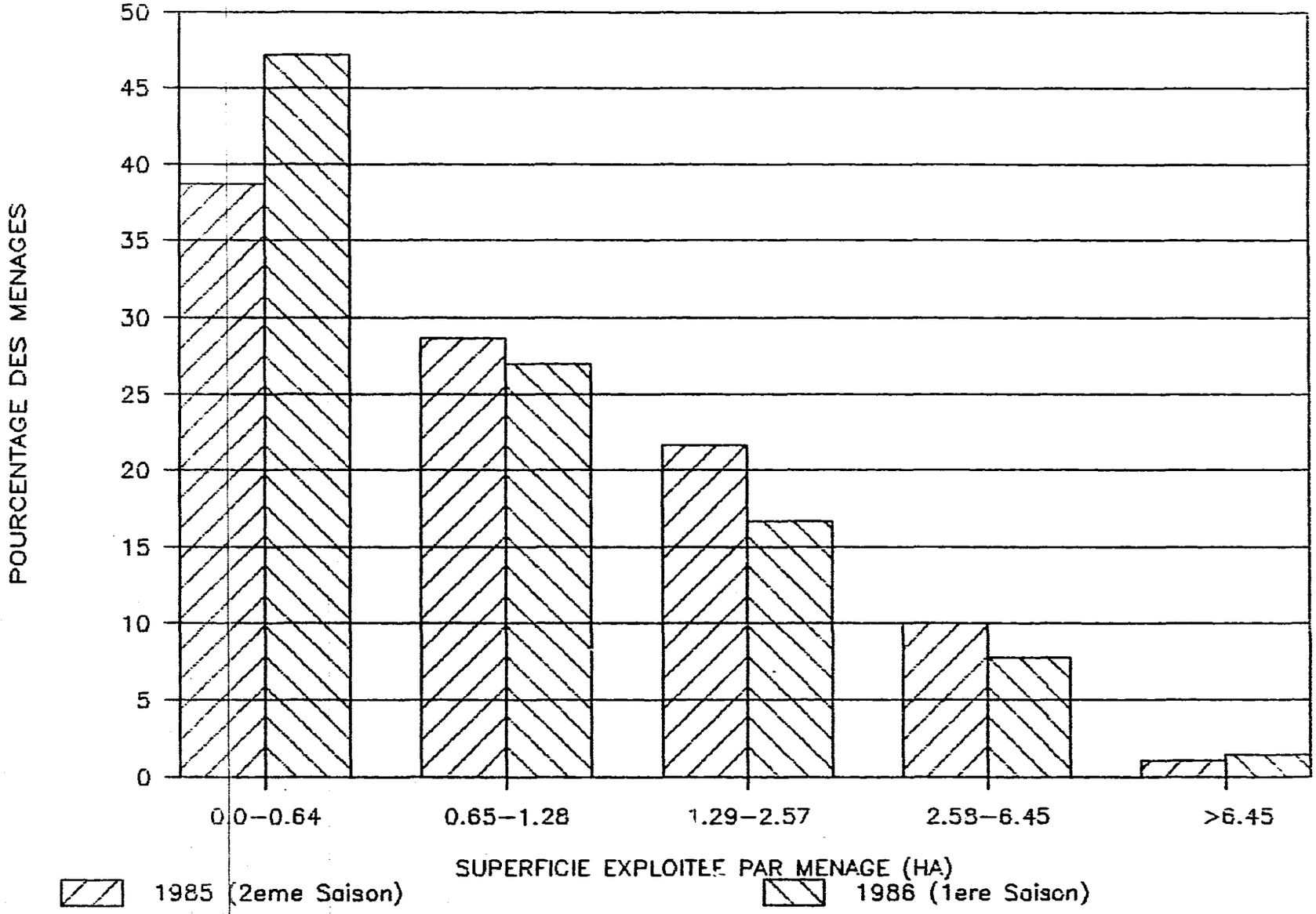


Figure 12

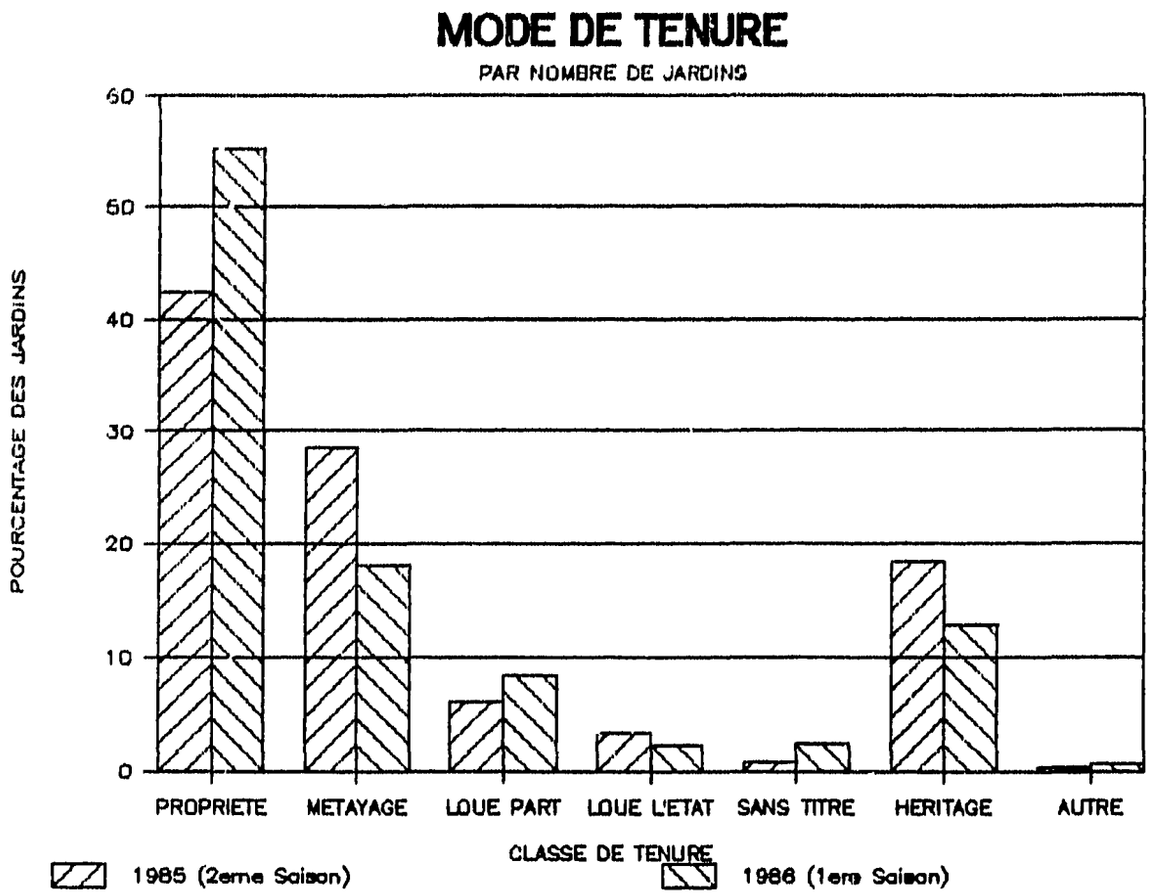
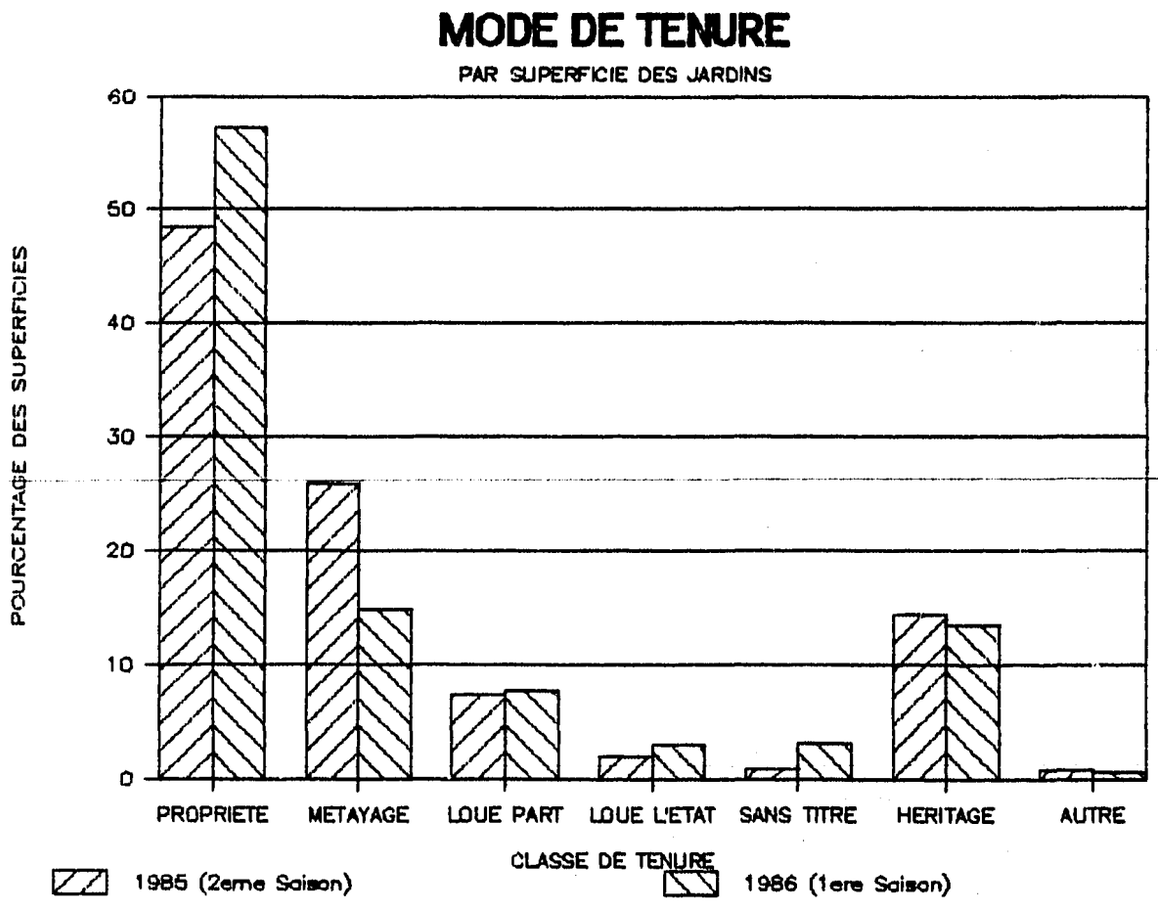


Figure 13



II. DESCRIPTIVE STATISTICS OF THE FARM POPULATION

Tableaus 5.0 to 5.2 present general and specific information concerning agricultural households in the Departement du Sud during the first agricultural season. Tableau 5.0 presents global information concerning the agricultural households. Tableau 5.1 presents detailed information on the chefs de menage. Characteristics of other members of the agricultural households (not chefs de menage) are presented in Tableau 5.2.

TABLEAU 5.0 CARACTERISTIQUES GLOBALES DE MENAGES AGRICOLES

Nombre de Menages Estimé	112200
Nombre de Membres par Menage	4.75
Membres de sexe Masculin	2.43
Membres de sexe Feminin	2.32
Pourcentage d'Adultes (> 14 ans)	59.90
Pourcentage d'Enfants (=< 14 ans)	40.10
Source de Credit Pour Les Menages Agricoles	
Aucune	75.70
Banque	1.63
Caisse Populaire	.78
Individu	23.26
Pourcentage de Menages Agricoles qui Posseéde une Citerne	0.94

TABLEAU 5.1: CARACTERISTIQUES DES CHEFS DES MENAGES AGRICOLES

CARACTERISTIQUE		CV
Age moyen	48.69	0.08
Pourcentage age de moins de 25 ans	1.49	0.13
Pourcentage entre 25 - 35 ans	18.14	0.08
Pourcentage entre 36 - 50 ans	39.94	0.09
Pourcentage age de plus de 50 ans	40.43	0.09
Pourcentage sexe Feminin	24.20	0.10
Pourcentage qui peut lire/ecrire	32.87	0.12
Niveau d'Etude (Pourcentage)		
Aucune Formation	63.40	0.09
Alphabetisation	7.63	0.14
Primaire	25.11	0.12
Secondaire	3.65	0.20
Ecole Normale/Prof./Universitaire	0.21	0.30
Occupations PRINCIPALES (Pourcentage)		
Cultivateur	85.85	0.08
Ecolier	0.25	0.19
Ouvrier d'Usine	0.18	0.22
Artisan	1.32	0.19
Commercant	4.18	0.17
Professionnel	1.72	0.23
Ouvrier Agricole	0.23	0.40
Elevage	1.22	0.28
Autre	0.14	0.38
RIEN	4.90	0.19
Occupations SECONDAIRES (Pourcentage)		
Cultivateur	7.38	0.13
Ecolier	0.30	0.26
Ouvrier d'Usine	0.92	0.20
Artisan	1.43	0.18
Commercant	2.06	0.16
Professionnel	3.42	0.12
Ouvrier Agricole	0.71	0.42
Elevage	38.42	0.08
Autre	2.38	0.27
Rien	42.98	0.15
Pourcentage qui Exploite une Parcelle	89.81	0.08
Pourcentage qui travaille avec un Groupement	33.66	0.13
Pourcentage membres d'un Groupement	21.50	0.09
Pourcentage de Salariee	12.58	0.10

TABLEAU 5.1 (SUITE)

Pourcentage d'animaux sous le Controle des Chefs de menage

	Proprieto	CV	Gardiennage	CV
Volaille	85.20	0.12	75.55	0.18
Bovins	86.41	0.09	82.66	0.08
Caprins	83.14	0.10	78.81	0.07
Ovins	81.34	0.13	78.52	0.13
Porcins	84.12	0.17	89.44	0.28
Anes	89.04	0.14		
Mulets	88.13	0.10		
Chevaux	93.29	0.10		

TABLEAU 5.2: CARACTERISTIQUES DES AUTRES MEMBRES
DU MENAGES AGRICOLES

CARACTERISTIQUE		CV
Pourcentage Age de 5 ans et moins	19.74	0.09
Pourcentage Age entre 6 et 14 ans	31.06	
Pourcentage age de plus de 14 ans	49.20	0.09
Pourcentage de sexe Masculin	44.63	0.09
Pourcentage de sexe Feminin	55.37	0.09
Occupations des les Autres Membres des Menages Agricoles (>5 ans)		
Occupations PRINCIPALES (Pourcentage)		
Cultivateur	17.33	0.08
Ecolier	46.87	0.09
Ouvrier d'Usine	2.35	0.19
Artisan	4.38	0.12
Commercant	16.06	0.11
Professionnel	5.02	0.14
Ouvrier Agricole	7.54	0.12
Elevage/Autre/RIEN	0.45	0.10
Niveau d'Etude des Adultes (>14 ans - Pourcentage)		
Aucune Formation	51.22	0.09
Alphabetisation	6.01	0.14
Primaire	33.60	0.11
Secondaire	11.97	0.15
Ecole Normale	0.40	0.22
Professionelle/Technique/Universitaire	0.03	0.45
Pourcentage qui Exploite une Parcelle	13.16	0.10
Pourcentage qui travaille avec un Groupement	6.93	0.13
Pourcentage membres d'un Groupement	3.28	0.11
Pourcentage qui travaille pour un Salaire	4.27	0.14

Pourcentage d'Animaux sous le Controle des
Autres Membres des Menages Agricoles

	Propriete	CV	Gardiennage	CV
Volailles	14.80	0.12	24.49	0.24
Bovins	13.40	0.09	17.35	0.12
Caprins	16.83	0.11	21.02	0.15
Ovins	18.75	0.17	19.99	0.24
Porcins	15.86	0.26	10.56	0.33
Anes	10.35	0.18		
Mulets	10.19	0.17		
Chevaux	6.45	0.17		

III. PREFERENCES FOR FUELWOOD AND CHARCOAL

Although the principal mandate of the national agricultural survey is to provide recurrent, seasonal information on basic agricultural activities, the established survey frame may also be used occasionally to gather information on related areas of specific interest. The information reported below was obtained in response to a request from personnel connected to the Division of Natural Resources of the Ministry of Agriculture. Previously, the survey has been used to gather information on the number and frequency of unique crop associations (see ADS-II Report #22, "Resultats de L'Enquete Pilote Agricole Dans Le Departement du Sud: Deuxieme Saison Agricole, 1985").

Tableau 6.0 and 6.1 presents the results of an open-ended question asking each family to give their preferences for tree species used for firewood and for charcoal. The tables give the total number of responses for first, second, third, and fourth preferences, as well as the total responses for the Departement du Sud. The tree species are listed in decending order according to their total responses over all preferences.

There are many factors which may have influenced the responses including the availability, traditional use, and desirability for multi-purpose species. This latter is evident in the preferences for fruit trees (e.g. mango, orange, abricot, goyave, etc.) and agricultural crop species identified as wood (e.g. corn, sorghum, pois congo, and sugar cane). Responses may also have been influenced somewhat by misunderstanding the question and responding with those species that are actually used, not necessarily preferred.

The tables indicate that a large number of species are preferred for both fuelwood and charcoal. Apparently, most species can be used for both charcoal and fuelwood. Mango and campeche are by far the most preferred in both categories. Exotic species being used in reforestation and agroforestry projects (e.g. leucaena, eucalyptus, neem) appear to be gaining some acceptance.

Note : we acknowledge the assistance of R. Jeudy and F. Felix of the Faculty of Agricluture at Damien, and M. Ashley and J. Grossneck of the University of Maine for helping with the identification of the scientific nomenclature and interpretation of the results. Additional references used for the species names include;

M. Jenkins - Trees of Haiti
M. Ashley - Agroforestry in Haiti

TABLEAU 6.0 : PREFERENCE POUR LES ESPECES DE BOIS DE CHAUFFE
INDIQUEES PAR LES MENAGES AGRICOLES

NOM POPULAIRE	NOM SCIENTIFIQUE	1ERE	2EME	3EME	4EME	GRAND TOTAL	POURCENTAGE TOTAL
MANGUIER	Mangifera indica L.	16260	18110	13240	4470	52080	18.19%
CAMPECHE	Haematoxxylon campechianum L.	26450	10310	3920	1860	42540	14.86%
SUCRIN	Inga vera Wild.	8380	7290	4230	2490	22390	7.82%
AVOCAT	Persea americana Mill	2930	8530	5480	4600	21540	7.52%
BAYAONDE	Prosopis julifora (SW.) P.DC.	7410	7090	3370	1410	19280	6.73%
ORANGE	Citrus auratium L.	1580	2480	2670	2710	9440	3.30%
ABRICOT	Mammea americana L.	750	2610	2140	3180	8680	3.03%
VERITABLE	Artocarpus altilis Fosberg	2480	1750	1920	2040	8190	2.86%
COMA	Sideroxylon foetidisimum Jacq.	4770	860	1350	590	7570	2.64%
BOIS D'ORMES	Guazuma ulmifolia Lam.	1660	2670	2300	780	7410	2.59%
GOYAVE	Psidium guajava L.	2320	2080	1500	1100	7000	2.44%
MOMBIN	Spondias mombin L.	680	590	2180	2620	6070	2.12%
CASSE	Cassia fistula L.	1740	2460	1330	530	6060	2.12%
LEUCENA (DELIN)	Leucaena glauca (L.) Benth	780	2050	1550	1620	6000	2.10%
BOIS PELÉ	Columbrina ferruginosa Brong.	410	1680	1770	1210	5070	1.77%
BOIS BLANC	Phyllostylon brasiliense Cap	800	1620	860	1030	4310	1.51%
GAIAC	Guaiacum officinale LP	810	750	730	850	3140	1.10%
NIVRE	Tephrosia toxicaria (SW.) Pers.	580	1060	810	580	3030	1.06%
CAIMITE	Chrysophyllum cainito L.	400	810	1160	640	3010	1.05%
BOIS MAIS	Zea mays	1220	340	510	800	2870	1.00%
ACACIA	Acacia lutea (Mill) Britt	980	780	420	210	2390	0.83%
ACAJOU	Swietenia mahogani Jacq.	1020	610	430	160	2220	0.78%
COCOTIER	Cocos nucifera L.	460	460	690	400	2010	0.70%
SAPOTILLE	Archras sapota	230	570	410	800	2010	0.70%
CHENE	Catalpa longissima (Jacq.)	110	800	900	120	1930	0.67%
BOIS CAFE	Coffea arabica L.	200	570	730	400	1900	0.66%
BOIS CABRIT	Cassia emarginata L.	410	870	580	0	1860	0.65%
EUCALYPTUS	Eucalyptus camaldulensis	120	230	460	1040	1850	0.65%
QUENEPE	Meloccucus bijugatus	220	640	360	260	1480	0.52%
BOIS PETIT-MIL	Sorghum bicolor	110	580	290	460	1440	0.50%
BOIS ROUGE	Guarea guidonia (L.) Sleummer	170	1220	0	0	1390	0.49%
TI-BOIS	Schaefferia frutescens	0	330	500	450	1280	0.45%
NEEM	Azadirachta indica A. Juss.	60	440	350	410	1260	0.44%
MOMBIN BATARD	Thrichilia hirta L.	240	290	570	120	1220	0.43%
FREINE	Simaruba glauca DC	110	350	230	450	1140	0.40%
BOIS DE FER	Krugeodendron ferreum (Vhal)	50	560	100	280	990	0.35%
MABI	Columbrina reclinata	60	350	350	170	930	0.32%
ARBRE_PAIN	Artocarpus incisa L.	60	220	160	470	910	0.32%
CAFE MARRON	Boureria succulenta Jacq.	70	280	260	280	890	0.31%
CANNE A SUCRE	Saccharum officinalis L.	220	220	330	110	880	0.31%
CITRON	Citrus aurantifolia Swingle	120	350	290	60	820	0.29%
BOIS PIQUANT	Casearia aculeata	580	230	0	0	810	0.28%
CALEBASSE	Crescentia cujete L.	170	400	170	0	740	0.26%
CHANDELLE	Amyris balsamifera L.	0	290	410	0	700	0.24%
BOIS COQ	Sloanea domingensis Urb.	350	230	0	0	580	0.20%

TABLEAU 6.0 (SUITE)

NOM POPULAIRE	NOM SCIENTIFIQUE	1ERE	2EME	3EME	4EME	GRAND TOTAL	POURCENTAGE TOTAL
AMANDE	Terminalia catappa L.	290	170	60	0	520	0.18%
CACHIMAN	Annona squamosa	60	60	170	120	410	0.14%
THATHA	Albizia lebbeck Benth	70	60	100	140	370	0.13%
BOIS PANGNOL	Comocladia domingensis Britt.	70	60	60	180	370	0.13%
TAVERNEAU	Lysiloma latisiliqua (L.)	0	120	120	120	360	0.13%
PINNE	Fagara elephantipis (Maef.)	60	230	0	60	350	0.12%
TI-FEUILLE	Eugenia foetida	110	90	80	20	300	0.10%
GOMIER	Bursera simaruba Sarg.	60	60	60	120	300	0.10%
SUPE	--- ND ---	60	230	0	0	290	0.10%
MAPOU	Ceiba pentandra L.	220	60	0	0	280	0.10%
CEDRE	Cedrela odorata L.	100	0	160	0	260	0.09%
SAVONETTE	Sapindus saponaria	0	0	120	120	240	0.08%
CADACHE	Harrisia ditaricatus	60	120	0	0	180	0.06%
PALMACRISTIE	Ricinus communis L.	0	60	60	60	180	0.06%
GALGAL	Reynosia uncinata	0	170	0	0	170	0.06%
TAMARIN	Tamatindus indica L.	160	0	0	0	160	0.06%
BOIS SEC	--- ND ---	60	0	60	0	120	0.04%
DAMARI	Calophyllum brasilense	0	0	0	120	120	0.04%
LIANN	Chamissoa altisima	0	120	0	0	120	0.04%
BOIS	--- ND ---	0	120	0	0	120	0.04%
LATANIER	Coccothrinax gracilis	0	0	120	0	120	0.04%
CHADEQUE	Citrus grandis Merr.	0	110	0	0	110	0.04%
BOIS POIS CONGO	Cajanus cajan (L.) Mill.	60	0	50	0	110	0.04%
COTELETTE	Drypetes lateriflora	50	0	60	0	110	0.04%
CADIANON	--- ND ---	60	0	50	0	110	0.04%
CAJOU	Anacardium occidentale L.	10	10	0	70	90	0.03%
TETE FRINE	--- ND ---	0	0	0	60	60	0.02%
BOIS PIN	Pinus occidentalis Sw.	50	0	0	10	60	0.02%
GRIS GRIS	Vitex umbrosa Sw.	0	0	60	0	60	0.02%
JEAN JULE	--- ND ---	0	0	60	0	60	0.02%
BOIS COEUR	Thouinia racemosa	0	60	0	0	60	0.02%
LAURIER	Ocotea leucoxylon (SW)	0	60	0	0	60	0.02%
POUPEE	Cordia nitida	60	0	0	0	60	0.02%
BOIS JAUNE	Chlorophora tinctoria Sw.	0	0	0	60	60	0.02%
CASSE MANCHETTE	Ziziphus rhodoxylan Urb.	0	0	60	0	60	0.02%
TIPINGI	--- ND ---	0	50	0	0	50	0.02%
CIROUELLE	Spondias purpurea L.	50	0	0	0	50	0.02%
CANDELABE	Euphorbia lactea Haw.	10	0	0	0	10	0.00%

TABLEAU 4.1 : PREFERENCE POUR LES ESPECES DE BOIS DE CHARBON
INDIQUEES PAR LES MENAGES AGRICOLES

NOM POPULAIRE	NOM SCIENTIFIQUE	1ERE	2EME	3EME	4EME	GRAND TOTAL	POURCENTAGE TOTAL
CAMPECHE	Haematoxylon campechianum L.	23500	9720	5050	200	38470	20.68%
MANGUIER	Mangifera indica L.	9230	12640	5840	3190	30900	16.61%
ABRICOT	Mammea americana L.	3490	3370	2990	2490	12340	6.63%
BAYAONDE	Prosopis juliflora (SW). P.DC.	4460	4190	2580	830	12060	6.48%
GAIAC	Guaiacum officinale L.	5310	1600	1870	1900	10680	5.74%
LEUCENA (DELIN)	Leucaena glauca (L.) Benth	2900	2960	1820	1340	9020	4.85%
GOYAVE	Psidium guajava L.	670	670	1470	3060	5870	3.16%
ORANGE	Citrus auratium L.	370	1760	1770	1850	5750	3.09%
CASSE	Cassia fistula L.	1640	1560	1280	1210	5690	3.06%
CHENE	Catalpa longissima (Jacq.)	2250	2140	810	60	5260	2.83%
QUENEPE	Meloccocus bigugatus	1110	2460	1150	520	5240	2.82%
SUCRIN	Inga vera Wild	690	790	1540	1520	4540	2.44%
ACAJOU	Swietenia mahogani Jacq.	1500	1560	850	490	4400	2.37%
AVOCAT	Persea americana Mill	730	1090	1450	920	4190	2.25%
BOIS PELE	Columbrina ferruginosa Brong.	480	670	1530	430	3110	1.67%
CAIMITE	Chrysophyllum cainito L.	240	780	1040	610	2670	1.44%
BOIS DE FER	Krugeodendron ferreum (Vhal) Urb.	280	1080	620	410	2390	1.28%
EUCALYPTUS	Eucalyptus camaldulensis	180	550	670	730	2130	1.15%
NIVRE	Tephrosia toxicaria (SW.) Pers.	180	610	920	430	2140	1.15%
BOIS D'ORMES	Guazuma ulmifolia Lam.	310	910	590	300	2110	1.13%
COMA	Sideroxylon foetidisimum Jacq.	450	720	390	440	2000	1.08%
CALEBASSE	Crescentia cujete L.	50	60	0	1900	2010	1.08%
SAPOTILLE	Achras sapota L.	310	120	610	730	1770	0.95%
MABI	Columbrina reclinata	240	860	370	240	1710	0.92%
ACACIA	Acacia lutea (Mill) Britton	510	300	440	60	1310	0.70%
TAVERNEAU	Lysiloma latisiliqua (L.) Berth.	60	670	430	0	1160	0.62%
NEEM	Azadirachta indica A. Juss.	60	600	310	180	1150	0.62%
BOIS BLANC	Phyllostylon brasiliense Capanema	60	390	280	0	730	0.39%
TI-BOIS	Schaefferia frutescens	0	0	500	60	560	0.30%
FRENE	Simaruba glauca DC	60	180	180	60	480	0.26%
BOIS CABRIT	Cassia emarginata L.	60	170	240	0	470	0.25%
MOMBIN BATARD	Thrichilia hirta L.	0	120	180	60	360	0.19%
CAFE MARRON	Boureria succulenta Jacq.	30	60	110	150	350	0.19%
CITRON	Citrus aurantifolia Swingle	60	60	60	60	240	0.13%
VERITABLE	Artocarpus altilis Fosberg	0	0	180	60	240	0.13%
TI-FEUILLE	Eugenia foetida	50	150	0	30	230	0.12%
MOMBIN	Spondias mombin L.	120	60	0	0	180	0.10%
DALMARIE	Calophyllum brasilense	0	60	60	60	180	0.10%
BOIS PANGNOL	Comocladia domingensis Britt.	120	0	10	10	140	0.08%
QUINQUINA	--- ND ---	50	100	0	0	150	0.08%
CHADEQUE	Citrus grandis osbeck	0	120	0	0	120	0.06%
JEAN JULE	--- ND ---	0	60	60	0	120	0.06%
PINNE	Fagara elephantipis (Maef.)	0	0	60	60	120	0.06%
GALGAL	Reynosia uncinata	0	60	60	0	120	0.06%
GOMIER	Bursera simaruba Sarg	120	0	0	0	120	0.06%
CEDRE	Cedrela odorata L.	50	0	0	60	110	0.06%
TAMARIN	Tamarindus indica L.	0	100	0	0	100	0.05%

TABLEAU 6.1 (SUITE)

NOM POPULAIRE	NOM SCIENTIFIQUE	1ERE	2EME	3EME	4EME	GRAND TOTAL	POURCENTA TOTAL
GRIS GRIS	Vitex umbrosa Sw.	0	0	60	0	60	0.03%
SUPE	--- ND ---	0	60	0	0	60	0.03%
CAYA	--- ND ---	0	60	0	0	60	0.03%
POMME ROUGE	Pitus malus	0	60	0	0	60	0.03%
BOIS JAUNE	Chlorophora tinctoria Sw.	0	0	0	60	60	0.03%
BOIS	--- ND ---	0	60	0	0	60	0.03%
COTELLE	Drypetes lateriflora	0	0	60	0	60	0.03%
SAVONETTE	Sapindus saponaria	0	0	60	0	60	0.03%
CHANDELLE	Amyris balsamifera L.	60	0	0	0	60	0.03%
MERISE	--- ND ---	0	60	0	0	60	0.03%
BOIS PIN	Pinus occidentalis Sw.	60	0	0	0	60	0.03%
BOIS ROUGE	Guarea guidonia (L.) Sleummer	0	0	0	60	60	0.03%
BAMBOU	Bambusa vulgaris Schrad.	0	0	50	0	50	0.03%
BOIS CAFE	Coffea arabica L.	0	50	0	0	50	0.03%
TIATIA	Albizia lebbeck Benth	0	0	0	0	0	0.00%