

国際協力事業団 (JICA)

モロッコ王国

再生可能エネルギー開発センター (CDER)

モロッコ王国
ハウズ地方分散電化計画調査
付録

平成10年1月

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報告書の構成

和 文

第1巻	電化マスタープラン調査
第2巻	マイクロ水力発電プレ・フィージビリティ調査
付 録	インベントリー
要 約	

英 文

VOLUME-I	MASTER PLAN STUDY ON ELECTRIFICATION PLAN
VOLUME -II	PRE-FEASIBILITY STUDY ON MICRO-HYDROPOWER GENERATION
APPENDICES	INVENTORY
SUMMARY	

仏 文

RESUME

付録リスト

APPENDIX-1 Questionnaire Form

- 1-1 Questionnaire Form for Village Leaders
- 1-2 Questionnaire Form for Heads of Village Household

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- 2-2 Definition of Questionnaire Items for Village Household

APPENDIX-3 Electricity Inventory

APPENDIX-4 Socio-economic·Environmental Inventory

APPENDIX-5 Electrical Aspect Inventory

APPENDIX-1
Questionnaire Form



SECTION 1

Name and No. of Douars Number of habitants Number of households Average number of persons per house

Composition of houses by age and sex (in %).

Section of ages	Masculine	Femine	TOTAL
0 - 15 years	%	%	%
15 - 65 years	%	%	%
More than 65	%	%	%
TOTAL	%	%	100 %

Managing and management of village.

Name of organization	Role	Number of adherents

Relationship between Douars

Human relationship	Name of city or village
Toward which other villages or cities, the people used to make their shopping?	
From where the commodities are transported for the village people?	
Migration:	
Place of origin of the people of your village?	
Place of destination of the people of your village?	
In which other villages or cities do the people of your village work?	

Number of families living in the village having the same name?

Name of family	Number of houses						

History of the village (date of creation)

Special events (Moussem: annual festival)

Name of Moussem	Place	period (date)	Duration (in days)

SECTION 2 Activity

Distribution of households according to the type of activities (chief of household)

Activity	Agricultural activities					Other activities			
	agriculture	Breeding	agriculture and breeding	Part-time agriculture	Forestry	public	services/commerce	small industries	abroad and others
Number of households									

Surface area of the agricultural lands (ha) year of base: 1995

National land	Type of utilization						TOTAL
	agriculture	fallow land	pasture	abundant	forest	TOTAL	
Private land : Communal land (communal use)	%	%	%	%	%	ha	
Private land (personal use)	%	%	%	%	%	ha	
TOTAL	%	%	%	%	%	ha	

Agricultural production (annual average)

Crops	Surface area (ha)		Yield (X)			Ratio of agricultural consumption (in %)			Excess/lack (X) (last year)			Marketed price (DH/unit)
	non irrigated	irrigated	good	fair	poor	home consumption	sold	Excess	Lack	Purchased		
Cereals												
Wheat	ha	ha				%	%					DH/kg
Barley	ha	ha				%	%					DH/kg
Maize	ha	ha				%	%					DH/kg
Others	ha	ha				%	%					DH/kg
Legumes												
Chick-peas	ha	ha				%	%					DH/kg
Lentils	ha	ha				%	%					DH/kg
Beans	ha	ha				%	%					DH/kg
Others	ha	ha				%	%					DH/kg
Vegetables												
Green vegetables	ha	ha				%	%					DH/kg
Tomatoes	ha	ha				%	%					DH/kg
Potatoes	ha	ha				%	%					DH/kg
Others	ha	ha				%	%					DH/kg
Fruits												
Olives	ha	ha				%	%					DH/kg
almonds	ha	ha				%	%					DH/kg
Apples	ha	ha				%	%					DH/kg
Oranges	ha	ha				%	%					DH/kg
Others	ha	ha				%	%					DH/kg
TOTAL	ha	ha	XXXX	XXXX	XXXXX	%	%	XXXX	XXXX	XXXXX	XXXXX	DH/kg

Questionnaire to the chief of village

Breeding (year of base 1995)

	Number of heads	Annual consumption (in number)				Marketed price (DH/unit)									
		Meat		Milk		Eggs		Meat		Milk		Eggs			
		Sold	Home-consumption	Sold	Home-consumption	Sold	Home-consumption	Sold	Home-consumption	DH/kg	DH/lit	DH/kg	DH/lit		
Cattle						xxxxx	xxxxx	xxxxx	xxxxx	DH/kg	DH/lit	DH/kg	DH/lit	xxxxx	xxxxx
Sheep						xxxxx	xxxxx	xxxxx	xxxxx	DH/kg	DH/lit	DH/kg	DH/lit	xxxxx	xxxxx
Goat						xxxxx	xxxxx	xxxxx	xxxxx	DH/kg	DH/lit	DH/kg	DH/lit	xxxxx	xxxxx
Poultry						xxxxx	xxxxxxx	xxxxx	xxxxxxx	DH/kg	DH/head	DH/kg	DH/head	xxxxx	DH/egg
Mule/donkey						xxxxx	xxxxxxx	xxxxx	xxxxxxx	DH/head	DH/head	DH/head	DH/head	xxxxx	xxxxx
Horse						xxxxx	xxxxxxx	xxxxx	xxxxxxx	DH/head	DH/head	DH/head	DH/head	xxxxx	xxxxx
Camel						xxxxx	xxxxxxx	xxxxx	xxxxxxx	DH/kg	DH/kg	DH/kg	DH/kg	xxxxx	xxxxx
Others															
Total															

Forest production (year of base 1995).

Production	Annual production / Total selling						Marketed price (DH/unit)
	Total production (X)		Home-consumption		Total selling		
	large	fair	small	(unit)	(unit)	(unit)	
Fire wood						kg	DH/kg
Charcoal						kg	DH/kg
Timber wood						kg	DH/kg
Others						kg	DH/kg
Total						kg	DH/kg

Other industries (year of base 1995)

Other industries	Number	Production	Energy used
Flour milling		kg/day	
Carpentry		large/fair/small	
Pottery		large/fair/small	

SECTION 3: Future implementation of electricity

- Equipment which need electricity / lighting heating cooking refrigerator TV + radio air-conditioner other equipment
- Are you aware of the facts that the excessive cutting trees and the over grazing of animals cause the distraction of forests and the soil erosion, and the loss of cultivation land? yes (1) no (2)
- Do you think that the excessive cutting of trees is frequent in your village? yes (1) no (2) If yes, in which measures? very heavy fair no problem
- Do you think that the over grazing is frequent in your village? yes (1) no (2) If yes, in which measures? very heavy fair no problem
- Which fuel do you prefer to replace fuel wood? Gas yes (1) no (2) Electricity yes (1) no (2)

SECTION 4. Public facilities

- Schools
 type number of schools number of students number of rooms
 type number of schools number of students number of rooms

- First-aid hospitals
 number surface (m²) Equipment which need electricity (number and type) number of nurses

- Mosques
 number of mosques surface (m²)

- Public halls (Dar El Jamaâ)
 number surface (m²)

- Cooperatives
 number of cooperatives surface (m²)

- Ware house
 number and type surface (m²)

- Stores
 number and type surface (m²)

- Butcher's shop
 number surface (m²)

- Others
 type surface (m²)

SECTION 5 - Allocation of expenditures of households (particularly those relating to the energy)

Classification of sources of energy in order to priority (frequency of use)
 Fire wood Battery Charcoal Oil Gas Candles

SECTION 6 : Degree of diffusion of the electric devices and source of the electricity of those devices

Type of electric device	Number of households using them (%)	Hours using them	Source of energy for device
Lights	%	hrs/day	
TV + Radio	%	hrs/day	
Refrigerator	%	hrs/day	
Air-conditioner	%	hrs/day	
Heating	%	hrs/day	

SECTION 7 : Wishes concerning the use of electricity

for light (1) for light + radio + TV (2) for radio + TV (3) for other usage (to specify) (4)

Proportion of households wishing electricity (%) %

SECTION 8: Capacity of households for expense to the electricity

Initial investment/household (cabling and fixing in the house) DH

Monthly expenditure for electricity/household DH/month

SECTION 9 Hydrological information on water source

Source of water (name)	Drinking water (X)	Irrigation water (X)
River		
Spring		
Wells		
River	yes, no	yes, no
Spring	yes, no	yes, no
Wells	yes, no	yes, no
Weir		
Electric pump		
Manual pump		
Bucket		
Canal		
Pipeline (conduit)		
Internal tap	yes, no	xxxxxxxxxxxxxxxxxxxxxxxx
Transport		
mules or donkey		m
children		m
women		m
necessary time		hours/day
Quality	good, poor	good, poor
Turbidity		xxxxxxxxxxxxxxxxxxxxxxxx
Drought	yes, no	yes, no
Frequency	1 time/ years	1 time/ years
Critical month	from to	from to

- River conditions
Flood period (month) :

from to Are there any damages? yes (1) no (2)

If yes, what kind of damage?

QUESTIONNAIRE household
SECTION 1 : Socio-demographic and occupational characteristics of the member of the household

Name and No. of village Name of the interviewed Age Sex (male 1/female 2)

Identification of family member

No.	Name and Surname	Age (yrs)	Sex	Family relation to the head of household (family connection)	Level of education	Occupational activities of last year (in 1995)			
						agriculture (including breeding and civiculture)	Other activities than agriculture	Working days in last year	Working days in last year
					Professional status	Kind of job	Location and position	Status in the job	
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									

- SEX**
 1. Male
 2. Female
- FAMILY CONNECTION**
 1. Head
 2. Wife
 3. Elders child
 4. Sister-in-law
 5. Small child
 6. Father, mother of head
 7. Brother, sister of head
 8. Other children of parents
 9. Other adult parents
 10. Non-family connection
- EDUCATION**
 1. Non-education
 2. Koranic school
 3. Primary school
 4. Secondary, 1st cycle
 5. Secondary, 2nd cycle
 6. High school
 7. Vocational training
 8. Literacy centers
 9. Unconcerned (child < 6years)
 0. Undeclared
- OCCUPATIONAL STATUS**
 1. Regular
 2. Temporary
 3. Seasonal
 9. Unconcerned
- KIND OF JOB**
 1. Craftsmanship
 2. Commerce, services, tourism, transports
 3. Industries, mines
 4. Administration
 5. Constructions, buildings
 8. Non-employ
 9. Unconcerned
 0. Undeclared
- LOCATION AND POSITION**
 1. Same village
 2. Other village
 3. Small city
 4. Large city
 5. Casablanca/Rabat
 6. Marrakech
 7. Abroad
 9. Unconcerned
 0. Undeclared
- STATUS IN THE JOB**
 1. Independent with local
 2. Independent w/o local
 3. Work at home
 4. Employer
 5. Associated
 6. Salaried
 7. Familial help
 8. Apprentice
 9. Unconcerned

Questionnaire household

SECTION 2: Accommodation and housing

Is the household composed of one house or several houses? 1. one 2. several	Type of construction of the main house? 1. firm house 2. rammed-clay house 3. fragile house/barraque 4. shed, cowshed house 5. local traditional house 9. others	Number of persons who live in the main house?	Number of rooms in the main house?	Mode of occupation 1. owner 2. tenant 3. free occupier of the house 4. service house or company house 9. others	Surface area of the main house including cowshed, garden, greenery and court (m ²)	Type of alimment of water supply in the house, and distance 1. tap water 2. public hydrant or public well 3. spring 4. wells and water tank (Metfa in local) 5. river 6. water tank 7. water tank track 9. others (m)
---	--	---	------------------------------------	--	--	--

SECTION 3: FAMILY INCOME

Source of family income	Annual income	Monthly income
Agriculture	dh/year	dh/month
Breeding	dh/year	dh/month
Forest production	dh/year	dh/month
Other sources (to specify)	dh/year	dh/month
	dh/year	dh/month
TOTAL	dh/year	dh/month

Monthly expenditure

Saving/year

dh
dh

**SECTION 4 : Agricultural Production
- Private farm land (year of base 1995)**

Type of farm land	Area of farm land (ha)
Cultivated land	ha
Fallow land	ha
Pasture land	ha
Abandoned land	ha
Total	ha

- Agricultural production (year of base 1995)

Crops	Surface area (ha)		Cultivation period (to specify the month)		Production		Sold ratio (%)	Market price(dh/unit)
	Non irrigated	Irrigated	sowing	harvesting	ton/ha	ton		
Cereals	wheat	ha	ha		t/ha	t	%	dh/kg
	barley	ha	ha		t/ha	t	%	dh/kg
	maize	ha	ha		t/ha	t	%	dh/kg
	others	ha	ha		t/ha	t	%	dh/kg
Legumes	chick peas	ha	ha		t/ha	t	%	dh/kg
	lentils	ha	ha		t/ha	t	%	dh/kg
	beans	ha	ha		t/ha	t	%	dh/kg
Vegetables	green vegetables	ha	ha		t/ha	t	%	dh/kg
	tomatoes	ha	ha		t/ha	t	%	dh/kg
Fruits	potatoes	ha	ha		t/ha	t	%	dh/kg
	others	ha	ha		t/ha	t	%	dh/kg
	olives	ha	ha		t/ha	t	%	dh/kg
	almond	ha	ha		t/ha	t	%	dh/kg
	apples	ha	ha		t/ha	t	%	dh/kg
	oranges	ha	ha		t/ha	t	%	dh/kg
	others	ha	ha		t/ha	t	%	dh/kg
Total	ha	ha			t/ha	t	%	dh/kg

- Livestock production (year of base 1995)

Livestock	Breeding (heads)	Annual production				Market price (dh/unit)		
		Meat (heads) selling	Meat (heads) home consumption	Milk (liters) selling	Milk (liters) home consumption	Meat	Milk	
cattle				xxxxx	xxxxx	dh/kg	dh/lit	xxxxx
sheep				xxxxx	xxxxx	dh/kg	dh/lit	xxxxx
goat				xxxxx	xxxxx	dh/kg	dh/lit	xxxxx
chicken				xxxxx	xxxxx	dh/kg	dh/egg	xxxxx
Mule/donkey	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	dh/head	xxxxx	xxxxx
horse	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	dh/head	xxxxx	xxxxx
camel				xxxxx	xxxxx	dh/kg	dh/lit	xxxxx
others						dh/head		
Total								

Questionnaire household

- Forest production (year of base 1995)

Production	Annual production and selling			Market price (dh/unit)
	Production level (X)		Total of selling (unit)	
	poor	medium	high	
fuel wood			kg	dh/kg
charcoal			kg	dh/kg
timber wood			kg	dh/kg
others			kg	dh/kg
Total			kg	

- Other industries (year of base 1995)

Industries	Number	Crushing (kg/day)	used energy
Flour milling			
Other industries	Number	Dimension (small/average/big)	used energy
Joinery			
Pottery			

SECTION 5: Energy

Do you have electricity?	Do you use gas in your house?	How many bottles of gas do you use in a year? (Small and large bottles)	Do you use wood in your house?	Do you use wood for	How do you get wood?	Who pick up wood?	Where do you pick up wood?	How much of wood do you use for cooking and heating in a month? (In winter and other season)	How much do you buy in wood consumption?
1. Yes 2. No	1. Yes 2. No								
		Size Small Large	Bottles					season winter other	

(Note) Small bottle: 3.5 kg, 6.5 liters Large bottle: 12 kg, 26 liters

Questionnaire household

Do you use charcoal? 1. Yes 2. No	Do you use charcoal for: 1. Cooking 2. Heating water 3. Other uses	How do you get charcoal? 1. home production 2. shop in the village 3. Street peddler 4. Coalman (producer)	How many kgs of charcoal do you use in a month? (in winter, other season)	Do you use oil-lamp? 1. Yes 2. No	How many liters of oil do you use in a month?	Do you use crop residuals and animal manure as fuel? 1. Yes 2. No
			season winter other		lit/month	
			kg/month			

- Household electric appliances
Expenditure for the presently own electric appliances in your household:

DH/Month

Uses	Number of appliances	Hours in use (hrs/day)	Source of energy
Lighting			
T.V.			
Radio			
Air conditioning			
Refrigerator			
Others			

- Source of energy:
1. Car battery
 2. Dry cell
 3. Electric generator
 4. Gas
 5. Oil
 6. Others (to specify)

- Equipment for lighting, cooking and heating

Uses	Item	Number of Articles	Period of use (to specify months)	Hours of use (hrs/day)	Fuel
Lighting	Oil lamp				(1. Oil, 2. Gas, 3. Charcoal, 4. Wood)
	Gas lamp				
	Candle	/month			xxxxxxxxxxxxxxxx
Cooking	Electric oven				
	Gas oven				
Heating	Traditional oven (Kanoun)				
	Brazier (iron)				
	Fireplace (stone made)				
	Traditional oven (Majmar)				
	Others				

Questionnaire household

Fuel		Annual Consumption	Purchased ratio	Purchased quantity	Unit price (dh)	Total cost of purchase
Wood		kg	%	kg	dh/kg	dh
Charcoal		kg	%	kg	dh/kg	dh
Gas	for lighting	liters	%	liters	dh/liter	dh
	for fuel equipment	liters	%	liters	dh/liter	dh
	total	liters	%	liters	dh/liter	dh
Oil		liters	%	liters	dh/liter	dh
Candle		candles	%	candles	dh/unit	dh
Total		xxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx	dh

SECTION 6: Your intention on electrification

For those who desire to use electricity (taking into consideration the cost of purchase, the cost of the operation and maintenance of the electric installations during the interview)

Intention of electric utilization for:	Number of desired units	Utilization hours (hrs/day)
lighting		hrs/day
radio		hrs/day
T.V.		hrs/day
heating		hrs/day
air conditioning		hrs/day
Others (to specify)		hrs/day

SECTION 7: Your capacity to bear the cost for electrification

Initial investment (electric installation in the house.)	DH
Monthly payment	DH/Month

SECTION 8: Hydrologic data on water source

		Drinking water	Irrigation water
Source of water (name)	river		
	spring		
	well		
Degree of satisfaction on availability and distribution of water	river	yes, no	yes, no
	spring	yes, no	yes, no
	well	yes, no	yes, no
Installed facilities	weir		
	electric pump		
	manual pump		
	bucket		
	canal		
	pipeline (conduit)		
Canalization	internal tap	yes, no	xxxxxxxxxxxxxxxxxxxxxxxx
	transport		
	mules or donkey	m	
	children	m	
	women	m	
necessary time	hours/day		
Quality of water	quality	good, poor	good, poor
	turbidity		xxxxxxxxxxxxxxxxxxxxxxxx
Water shortage	drought	yes, no	yes, no
	frequency	1 time/ years	1 time/ years
	critical month	from to	from to

APPENDIX-2
Definition of Questionnaire Items
for SPSS File



2-1 Definition of Questionnaire Items for Village Leaders

Definition of Variables for Questionnaire to the Village Leaders

-- SYSFILE INFO --

File c:\z-morocols-e-srvylenquet\data-chn.sav
 Created: 20 Sep 96 10:58:21 - 408 variables and 113 cases
 File Type: SPSS Data File
 N of Cases: 113
 Total # of Defined Variable Elements: 455
 Data Are Not Weighted
 Data Are Compressed
 File Contains Case Data
 Variable Information:

Name	Position (Page: 1/7)	Format: F8 Value Label
<SECTION 0>		
NUMQUES Number of Questionnaire Format: F8	1	1 TIZI OUSSEM 2 ID AISSA 3 TASSA OUIRGANE 4 IGREM 5 TIZGUI 6 ALLA OUMZRI
CERCLE Cercle Format: F8 Value Label	2	7 ID SSIOR 8 AGHELLA 9 IKISS 10 AMSAKROU 11 ARG 12 TINERHOHRINE 14 TAMGHIST 15 IKKIS
COMRURAL Commune Rurale Format: F8 Value Label	3	16 OUASKRA 17 TACHEDDIRT 18 SQOUR 19 AMAGDOUR 20 TAMATERTE 21 ANFLI 22 TIMICHI 23 AGOUNS 24 OULAD MANSOUR 27 DEL EL AIN 28 TILOUNA 29 EL MARA 30 BEL ABBAS 31 AZIB SKOUM 32 DERB CHEM'S 33 SOUR TEDRARA 34 TLAT TEDRARA 35 IMIN TALA 36 ADDOUZ 37 AIN GHAD 38 INZAINÉ 39 IMI N'ISLY 40 DOU ANAMER 41 IGOUNDEM 42 TOUG LKHEIF
NUMDOUA Number of Douars Format: F8	4	43 AIT OUZKRI 44 AIT HMAD 45 TIZGUI
NOMDOUA Name of Douars	5	46 ADARDOUR

Definition of Variables for Village Chief Questionnaire

- Composition of Population by Age and Sex

Range of Ages	Male (%)	Female (%)	Total (%)
	Format: F8 2 (12 - 22)		
0-15 years	HOMME1	FEMME1	POPUL1
15-65 years	HOMME2	FEMME2	POPUL2
65+ years	HOMME3	FEMME3	POPUL3
Total	TOTHOMME	TOTFEMME	-

- Managing in the Village (Cooperative)

COOPERAT Number of cooperatives 23
Format: F8

- Relationship among villages

Human Relationships	Format & Data No.	Name of cities and villages			
Towns and cities for shopping	Format: A15 (24 - 39)	COURSE1	COURSE2	COURSE3	COURSE4
Towns and cities where commodities come from	Format: A15 (32 - 38)	PROVEN1	PROVEN2	PROVEN3	PROVEN4
Migration (origin of village people)	Format: A15 (40 - 46)	APPART1	APPART2	APPART3	APPART4
Migration (destination of village people)	Format: A15 (48 - 54)	DESTINA1	DESTINA2	DESTINA3	DESTINA4
Towns and cities where the people goes to work	Format: A15 (56 - 62)	TRAVAIL1	TRAVAIL2	TRAVAIL3	TRAVAIL4

NBFAMIL Numbs of family names in the village 64

DATCREAT Date of creation of the village 65

Format: F8

- Distribution of Households by Activities

Agricultural Activities

AGRI agriculture 87

ELEVAGE Stock-raising 88

AGRIELE Agriculture and Stock-raising 89

AGRIMI Part-time Agriculture 90

FORET Forestry 91

Other than Agricultural Activities

PUBLIC Public Services 92

SERCOM Commerce 93

INDUSTR Small-scale industry 94

ETRGAUTR Abroad or others 95

- Special Events (Moussem)

Name of Moussem	Place	Date	Duration (days)
Format: A15 (66 - 70)	Format: A15 (72 - 76)	Format: A15 (78 - 82)	Format: F8 (84 - 86)
MOUSSEM1	LIEUMOU1	DAMOOUSS1	DUREMOU1
MOUSSEM2	LIEUMOU2	DAMOOUSS2	
MOUSSEM3	LIEUMOU3	DAMOOUSS3	

(Page : 3/7)

<SECTION 2: Activity>

Format: F8

- Agricultural Land (Base Year: 1995)

Type of Utilization	Cultivated Land (%)	Fallow Land (%)	Pasture Land (%)	Abandoned Land (%)	Forest (%)	Total (ha)
	Format: F8	Format: F8	Format: F8	Format: F8	Format: F8	Format: F8
State Land (96 - 101)	SUPAGRET	SUPJACET	SUPPATE1	SUPANDET	SUPFORET	TOTSUPET
Communal Land (102 - 107)	SUPAGRCO	SUPJACCO	SUPPATCO	SUPANXCO	SUPFORCO	TOTSUPCO
Private Land (108 - 113)	SUPAGRPE	SUPJACPE	SUPPATPE	SUPABDPE	SUPFORPE	TOTSUPPE
Total (114 - 119)	TOTAGRI	TOTJACH	TOTPAT	TOTAB	TOTFORET	TOTSUPER

- Agricultural Production

Crops	Cultivated Land		Yield	Ratio of	Sold (%)	Surplus/ Shortage	Market Price (DIA/kg)	
	Rain-fed (ha)	Irrigated (ha)	1: good 2: fair 3: poor 9: not concern	Home consumption (%)		0: not concern 1: Excess 2: Shortage 3: purchasing		
	Format: F8 (120 - 155)		Format: F8 (156 - 172)	Format: F8 (173 - 189)	Format: F8 (190 - 206)	Format: F8 (207 - 223)	Format: F8.2 (224 - 239)	
Cereals	Wheat	BLENI	BLEI	RDITBLE	RATABLE	RATVDBLE	EXCMAQBL	PRIUBLE
	Barley	ORGENI	ORGEI	RDTORGE	RATAORGE	RATVDORG	EXCMAQOR	PRIORGE
	Maize	MAISNI	MAISI	RDITMAIS	RATAMAIS	RATVDMAS	EXCMAQMS	PRIMAIS
	Others	AUTRGRNI	AUTRGRNI	RDITGRAI	RATAGRA	RATVDAUG	EXCMAQAG	PRIAUTG
Legumes	Chick-peas	POISNI	POISI	RDITPOIS	RATAPOIS	RATVDPOC	EXCMAQPC	PRIPOCII
	Lentils	LENTNI	LENTI	RDTILENT	RATALENT	RATVDLEN	EXCMAQLN	PRILENT
	Beans	HARNI	HARI	RDITHAR	RATAHARI	RATVDHAR	EXCMAQHC	PRIHARIC
Vegetables	Others	LEGUNI	LEGUI	RDITLEGU	RATAAUII	RATVDLEF	EXCMAQAL	
	Green Veg.	LEVENI	LEVEI	RDITLEVE	RATALV	RATVDLEV	EXCMAQLV	PRILEXIV
	Tomatoes	TOMNI	TOMI	RDTITOM	RATATOMA	RATVDTOM	EXCMAQIM	PRIATOM
	Potatoes	PIDINI	PIDI	RDITPID	RATAPMI	RATVDPIE	EXCMAQPT	PRIPIER
Fruits	Others	LENI	LEI	RDITLE	RATAAULG	RATVDAUL	EXCMAQAV	PRIAUII
	Olives	OLINI	OLII	RDITOLI	RATAOLIV	RATVDOLV	EXCMAQOV	PRIOLIV
	Almonds	AMANI	AMAI	RDTITAMA	RATAAMND	RATVDAMD	EXCMAQAD	PRIAMAND
	Apples	POMNI	POMI	RDITPOM	RATAPOMM	RATVDPOM	EXCMAQPM	PRIPOMME
	Oranges	ORANI	ORAI	RDITORA	RATAORNG	RATVDORN	EXCMAQOG	PRIORANG
Total	FRUNI	FRUII	RDITFRUI	RATAAUIF	RATVDAUF	EXCMAQAF	PRIAUTFR	

- Stock-raising (Base Year: 1995)

Livestock	Numbers		Annual Consumption				Market Price			
	(heads)	Meat (heads)		Milk (litres)		Eggs (eggs)		Meat (DIL/kg)	Milk (DIL/ltr)	Eggs (DIL/egg)
		Sold	Consumed	Sold	Consumed	Sold	Consumed			
	Format: F8 (240 - 248)	Format: F8 (249 - 255)	Format: F8 (256 - 262)	Format: F8 (263 - 268)	Format: F8 (269 - 274)	Format: F8 (275)	Format: F8 (276)	Format: F8 2 (277 - 284)	Format: F8 2 (285 - 288)	Format: F8 2 (289)
Cattle	NBBET	NBBETV	NBBETVA	NBBETLV	NBBETLA			PVBET	PLBET	
Sheep	NBMOUT	NBMOUTV	NBMOUTVA	NBMOUTLV	NBMOUTLA			PVMOUT	PLMOUT	
Goat	NBCHVR	NBCHVRV	NBCHVRVA	NBCHVRLV	NBCHVEVA			PVCHVR	PLCHVR	
Poultry	NBPOUL	NBPOULV	NBPOULVA			NBOEUFV	NBOEUFVA	PVPOUL		POEUF
Mule/Donkey	NBMUL							PVMUL (DIL/head)		
Horse	NBCHVLA							PVCHVLA (DIL/head)		
Camel	NBCHAM	NBCHAMV	NBCHAMVA	NBCHAMLV	NBCHAMLA			PVCHAM	PLCHAM	
Others	NBAUTET	NBAUTETV	NBAUTETVA	NBAUTETLV	NBAUTETLA			PVAUTETS		
Total	NBTOIET	NBTOIETV	NBTOIETVA	NBTOIETLV	NBTOIETLA					

- Forestry Production (Base Year: 1995)

	Annual Production (kg)		Market Price (DIL/kg)
	Consumed	Sold	
	Format: F8 (290 - 294)	Format: F8 (295 - 299)	Format: F8 2 (300 - 303)
Fire wood	CONSB	VENIBC	PRIBC
Charcoal	CONSBCH	VENIBCH	PRIBCH
Timber	CONSAUTB	VENTAUTB	PRIAUTB
Others			
Total	TCONSB	IVENIB	PRIAUTB

- Other Industries (Base Year: 1995)

Industry	Numbers (households)	Capacity	Energy
	Format: F8	Format: F8	Format: F8
Flour mill	NBMINOT	ECRASJ (kg/day)	ENERGMIN 0: not concern 1: generator 2: petrol 3: gass 4: electricity 5: hydro-power 6: mule/donkey
Joinery	NBMEJ	DIMMEN 0: not concern 1: small 2: medium 3: large	ENERGMEN 0: not concern 1: generator 2: petrol 3: gass 4: electricity 5: animal
Pottery	NBPOT	DIMPOT 0: not concern 1: small 2: medium 3: large	ENERGPOT 0: not concern 1: generator 2: petrol 3: gass 4: electricity 5: man-power

- Equipmet which necessitates electricity

ELECECLG Lighting	313
ELECCHAF Heating	314
ELECCUIS Cooking	315
ELECREFR Refrigerator	316
ELECTVRD TV + Radio	317
ELECCLIM Air conditioner	318
ELECAUEQ Others	319

Format: F8
Value Label

1 yes

2 no

- Environment concerned

ENVIRI Are you aware of the facts that over-cutting of trees and over-grazing of animals lead to the erosion of soil and to the loss of cultivation lands? 320

Format: F8

Value Label

1 yes

2 no

COUPARBR Over-cutting of trees in the area

321

Format: F8

Value Label

1 yes

2 no

MESURCA Degree of over-cutting

322

Format: F8

Value Label

0 not concerned

1 very heavy

<SECTION 3: Future Electrification>

Definition of Variables for Village Chief Questionnaire

- 2 fair
- 3 none

ELVEXBET Over-grazing in the Area 323
 Format: F8
 Value Label
 1 yes
 2 no

MESUREB Degree of over-grazing 324
 Format: F8
 Value Label
 0 not concerned
 1 very heavy
 2 fair
 3 none

COMBGAZ Gass as an alternative energy of firewood 325

COMBELEC Electricity as an alternative energy of firewood 326

- Format: F8
 Value Label
 1 yes
 2 no

(Page: 5/7)

<SECTION 4: Public Facilities>

- School

Type of School	Number of Schools	Number of Students	Number of Classes
Format: F8	Format: F8	Format: F8	Format: F8
0: none 1: Koranic 2: Primary 3: Secondary	0: none	0: none	0: none
ECOLYTP1	NBECOLE1	NBELEVE1	NBELEVE1
ECOLYTP2	NBECOLE2	NBELEVE2	NBELEVE2

- First-aids (Dispensaries)

NBDISPEN Number of First-aids 335
 Format: F8
 Value Label
 0 none

SURFDISP Floor area of First-aid 336
 Format: F8
 Missing Values: 0
 Value Label
 0 not concerned

DISEQEL1 Electric equipment 337

DISEQEL2 Electric equipment 338
 Format: F8
 Missing Values: 0
 Value Label
 0 not concerned
 1 refrigerator

- 2 heater and air-conditioner

NBINFIRM Number of nurses 339
 Format: F8
 Missing Values: 0
 Value Label
 0 not concerned

- Other Public Facilities

Facilities	Number of Facilities	Floor area (m ²)
	Format: F8	
Mosques	NBMOSQUE	SURMOSQ
Public halls	NBMAISCO	SURMAISC
Cooperatives	NBCCOOPER	SURCCOOP
Warehouses	NBENTREP	SURENTRP
Stores	NBBOUTIQ	SURBOUTQ
Butcher's shop	NBBOUCHI	SURBOUCH
Others	NBAUTIFB	SURAUTIFB

<SECTION 5: Expenditure on Energy>

- Energy Sources in order of Priority in Frequency of Use

- CLBCHAUF** Wood for heating 354
- CLBATTER** Battery 355
- CLCHARBO** Charcoal 356
- CLPETROL** Pertol 357
- CLGAZ** Gass 358
- CLBOUGIE** Candles 359

- Format: F8
 Missing Values: 0
 Value Label
 0 not concerned

<SECTION 6 : Degree of diffusion of the electric appliances and source of energy

Electric Appliances	Number of Households utilizing (%)	Hours of Utilization (hrs/day)	Sources of Energy
	Format: F8 (360 - 364)	Format: F8.2 (365 - 369)	Format: F8 (370 - 374) 0: not concern 1: car battery 2: dry-cell 3: generator 4: gass 5: petrol 6: others
Lighting	NBMGECL	NBIUECL	SENRGECI
TV+Radio	NBMGTVRD	NBIUTVRD	SENRGTVR
Refrigerator	NBMGREFG	NBIURFR	SENRGREF
Air-conditioner	NBMGCLIM	NBIJCLIM	SENRGCLI
Heating	NBMGCHF	NBIJCHF	SENRGCHF

Definition of Variables for Village Chief Questionnaire

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<SECTION 7: Intention on Utilization of Electricity>

- Desired Appliances

LUMIERE	for Light	375
LUMTVRAD	for Light+Radio+TV	376
TVRADIO	for Radio+TV	377
Format: F8		
Value Label		
1 yes		
2 no		

AUTUSAG	for other appliances	378
Format: F8		
Value Label		
2 none		
11 Video-Refrigerator		
12 Flour mill		

13	Video - Frizer- Air conditionor
14	Flour mill - Frizer
15	Flour mill - Pump
16	Pump
17	Refrigerator
18	Video

- Proportion of Households wishing Electricity

PRMENEIC	(%)	379
Format: F8		

<SECTION 8: Payable Capacity of Household for Electrification>

INVEST	Initial Investment (DH)	380
TAXEMOIS	Monthly Payment (DH/month)	381
Format: F8.2		

<SECTION 9: Hydrological Data on Water Sources>

Survey Items		Format and Variable No.	Value and Labels	Drinking Water	Irrigation Water
Water Sources	River	Format: F8 (382 - 383)	1: yes 2: no	SAEPRIV	SEIRRIV
	Spring	(384 - 385)	- ditto -	SAEPSOUR	SEIRRSOU
	Well	(386 - 387)	- ditto -	SAEPPUII	SEIRRPUI
Degree of Satisfaction on Availability and Distribution of Water	River	Format: F8 (388 - 389)	1: yes 2: no	SATEPRIV	SATEIRIV
	Spring	(390 - 391)	- ditto -	SATEPSOU	SATEISOU
	Well	(392 - 393)	- ditto -	SATEPPUI	SATEIPII
Water Facilities	Weir	Format: F8 (394 - 395)	1: yes 2: no	INSBAREP	INSBAREI
	Electric Pump	(396 - 397)	- ditto -	INSPEIEP	INSPEIEI
	Manual Pump	(398 - 399)	- ditto -	INSPMAEP	INSPMAEI
	Bucket	(400 - 401)	- ditto -	INSSEAEF	INSSEAEI
Canalization	Canal	Format: F8 (402 - 403)	1: yes 2: no	CANALAEF	CANALEIR
	Pipeline (conduit)	(404 - 405)	- ditto -	CANPIPEP	CANPIPEI
	Internal pipe	(406)	- ditto -	CANROBEP	-
Transport of Water	Mule or Donkey	(m)	Format: F8 (407)	IRSMAFP	-
	Children	(m)	(408)	IRSENFEP	-
	Women	(m)	(409)	IRSFEMEP	-
	Time for Transport	(hrs./day)	Format: F8.2 (410)	IFMPSAFP	-
Water Quality	Quality	Format: F8 (411 - 412)	1: good 2: poor	QUALITEP	QUALIEI
	Turbidity	(413)	1: very good 2: good 3: fair 4: poor 5: bad	TURBIDEP	-
Water Shortage	Drought	Format: F8 (414 - 416)	1: yes 2: no	DEFSECEP	DEFSECEI
	Frequency	(417 - 418)	once in ??? years	DEFREQEP	DEFREQEI
	Critical Month	Format: A15 (418 - 420)	from ???? to ????	DFMOISCP	DFMOIS

- Flood

MOISINON	Flood period of river (month: ??? to ???)	422
Format: A15		

DEGATS	Type of damage of flood	433
Format: A15		

DEGINOND	Damages by flood	424
Format: F8		
Value Label		
1 yes		
2 none		

(Page: 7/7)		
- Landslide		
GLISSEM	Occurrence of Landslide	435
Format: F8		
Value Label		
1 yes		
2 none		

TYPDEGI1	Type of Flood Damage	425
TYPDEGI2		427
TYPDEGI3		429
TYPDEGI4		431
Format: A15		

DEGLI1	Type of damages of landslide	436
DEGLIS2		438
DEGLIS3		440

Definition of Variables for Village Chief Questionnaire

Format: A15

- Drought of River

MOISECHR Period of drought of river (month
from ??? to ???) 442

Format: A15

SECHENTI Zero-flow discharge 444

Format: F8

Value Label

1 yes

2 no

NBJSECH Zero-flow (days/year) 445

Format: F8

LUTSECHI Measures to drought (irrigation water) 446

LUTSECHP Measures to drought (drinking water) 450

Format: A25

<SECTION 10: Water for Hydro-Power
Generation>

DEBIELEC Possibility of conversion of water from
irrigation to electric generation 454

Format: F8

Value Label

1 yes

2 none

<SECTION 11: Traverse of Irrigation Canal>

NBDRCAN Number of villages in upstream before
irrigation canal arriving to the village 455

Format: F8

2-2 Definition of Questionnaire Items for Village Household

Definition of Variables for Questionnaire to the Chief of Household

-- SYSDATA INFORMATION --

File c:\z-moroco\c-srvy\enquete\data-mng.sav

Created: 20 Sep 96 11.03:57 - 553 variables and 992 cases

File Type: SPSS Data File

Number of Cases: 992

Total # of Defined Variable Elements: 553

Data Are Not Weighted

Data Are Compressed

File Contains Case Data

Variable Information:

Name		Position (Page: 1/8)	
<SECTION 0: General Information>			
NUMQUE	Number of questionnaire Format: F8	1	1 TIZI OUSSEM
CERCLE	Cercle Format: F8 Value Label	2	2 ID AISSA
	1 ASNI		3 TASSA OUIRGANE
	2 TAHANAOUT		4 IGREM
	3 AMIZMIZ		6 ALLA OUMZRI
	4 AIT OURIR		7 ID SSIOR
COMRUR	Commune Rurales Format: F8 Value Label	3	8 AGHELLA
	11 OUIRGANE		9 IKISS
	12 IMGDAL		10 AMSAKROU
	13 TALAT N'YACOUB		11 ARG
	14 HOUKAK		12 TINERHOUHRJNE
	15 IGHIL		15 IKKISS
	16 AGHBAR		17 TACHEDDIRT
	17 ASNI		18 SQOUR
	21 OURIKA		19 AMAGDOUR
	22 SETTIFADMA		20 TAMATERTE
	23 OUKAIMDEN		21 ANFLI
	24 TAMSLOHT		22 TIMICHI
	25 TAHANAOUT		23 AGOONS
	31 ANOUGAL		24 OULAD MANSOUR
	32 AZGOUR		27 DEL EL AIN
	33 DAR JAMAA		30 BEL ABBAS
	34 AMEGHRASS		32 DERB CHEM'S
	35 SIDI BADHAJ		33 SOUR TEDRARA
	41 AIT ADDEL		34 TLAT TEDRARA
	42 ABADOUR		35 IMIN TALA
	43 ZERKTEN		36 ADDOUZ
	44 TIGHDOUINE		37 AIN GHAD
NUMDO	Number of Douars Format: F8 Value Label	4	38 INZAIN
			39 IMI N'ISLY
			40 DOU ANAMER
			41 IGOUEM
			42 TOUG LKHEIF
			43 AIT OUZKRI
			44 AIT HMAD
			45 TIZGUI
			46 ADARDOUR
			47 LEMDINAT
			48 TNIRT
			49 ANERMI
			50 ANSMROU
			51 TALAT AIT IHLA
			52 TOULKINE
			53 ADGHOUSS
			54 DOUZROU
			55 AIT OUTMANE
			56 TAGADIRT
			57 TIFIRT
			58 ANFRIOUNE

Definition of Variables for Household Questionnaire

SEXE15	SEXE DU MEMBRE DE MENAGE	41
SEXE16	SEXE DU MEMBRE DE MENAGE	42
SEXE17	SEXE DU MEMBRE DE MENAGE	43
SEXE18	SEXE DU MEMBRE DE MENAGE	44
SEXE19	SEXE DU MEMBRE DE MENAGE	45

Format: F8

Missing Values: 0

Value Label

- 1 Masculin
- 2 FEMININ

PARENT01	Family relation	46
PARENT02	Family relation	47
PARENT03	Family relation	48
PARENT04	Family relation	49
PARENT05	Family relation	50
PARENT06	Family relation	51
PARENT07	Family relation	52
PARENT08	Family relation	53
PARENT09	Family relation	54
PARENT10	Family relation	55
PARENT11	Family relation	56
PARENT12	Family relation	57
PARENT13	Family relation	58
PARENT14	Family relation	59
PARENT15	Family relation	60
PARENT16	Family relation	61
PARENT17	Family relation	62
PARENT18	Family relation	63
PARENT19	Family relation	64

Format: F8

Missing Values: 0

Value Label

- 1 CHEF
- 2 EPOUSE CHEF
- 3 ENFANT CHEF
- 4 BELLE FILLE GENDRE
- 5 PETIT ENFANT
- 6 PERE MERE CHEF
- 7 FRERE SOEUR CHEF
- 8 AUTRES ENFANTS DU PARENT
- 9 AUTRES PARENTS ADULTES
- 10 AUCUN LIEN

PARENT01	Family relation	65
PARENT02	Family relation	66
PARENT03	Family relation	67
PARENT04	Family relation	68
PARENT05	Family relation	69
PARENT06	Family relation	70
PARENT07	Family relation	71
PARENT08	Family relation	72
PARENT09	Family relation	73
PARENT10	Family relation	74
PARENT11	Family relation	75
PARENT12	Family relation	76
PARENT13	Family relation	77
PARENT14	Family relation	78

PARENT15	Family relation	79
PARENT16	Family relation	80
PARENT17	Family relation	81
PARENT18	Family relation	82
PARENT19	Family relation	83

Format: F8

Missing Values: 0

Value Label

- 0 M NON DECLAR2
- 1 SANS INSTRUCTION
- 2 ECOLE CORANIQUE
- 3 PRIMAIRE
- 4 SECONDAIRE, CYCLE1
- 5 SECONDAIRE, CYCLE2
- 6 SUPERIEUR
- 7 FORMATION PROFESSIONNELLE
- 8 CENTRE D'ALPHABETISATION
- 9 NON CONCERNE(enf<6ans)

STAGRI01	Status in the Agriculture	84
STAGRI02	Status in the Agriculture	85
STAGRI03	Status in the Agriculture	86
STAGRI04	Status in the Agriculture	87
STAGRI05	Status in the Agriculture	88
STAGRI06	Status in the Agriculture	89
STAGRI07	Status in the Agriculture	90
STAGRI08	Status in the Agriculture	91
STAGRI09	Status in the Agriculture	92
STAGRI10	Status in the Agriculture	93
STAGRI11	Status in the Agriculture	94
STAGRI12	Status in the Agriculture	95
STAGRI13	Status in the Agriculture	96
STAGRI14	Status in the Agriculture	97
STAGRI15	Status in the Agriculture	98
STAGRI16	Status in the Agriculture	99
STAGRI17	Status in the Agriculture	100
STAGRI18	Status in the Agriculture	101
STAGRI19	Status in the Agriculture	102

Format: F8

Missing Values: 0, 9

Value Label

- 1 REGULIER
- 2 TEMPORAIRE
- 3 SAISONNIER
- 9 M NON CONCERNE

NBJAGR01	Nbr days for Agriculture in a year	103
NBJAGR02	Nbr days for Agriculture in a year	104
NBJAGR03	Nbr days for Agriculture in a year	105
NBJAGR04	Nbr days for Agriculture in a year	106
NBJAGR05	Nbr days for Agriculture in a year	107
NBJAGR06	Nbr days for Agriculture in a year	108
NBJAGR07	Nbr days for Agriculture in a year	109
NBJAGR08	Nbr days for Agriculture in a year	110
NBJAGR09	Nbr days for Agriculture in a year	111
NBJAGR10	Nbr days for Agriculture in a year	112
NBJAGR11	Nbr days for Agriculture in a year	113
NBJAGR12	Nbr days for Agriculture in a year	114

Definition of Variables for Household Questionnaire

NBJAGRI3	Nbr days for Agriculture in a year	115
NBJAGRI4	Nbr days for Agriculture in a year	116
NBJAGRI5	Nbr days for Agriculture in a year	117
NBJAGRI6	Nbr days for Agriculture in a year	118
NBJAGRI7	Nbr days for Agriculture in a year	119
NBJAGRI8	Nbr days for Agriculture in a year	120
NBJAGRI9	Nbr days for Agriculture in a year	121

Format: F8
Missing Values: 0

TRAV01	Type of Work other than Agriculture	122
TRAV02	Type of Work other than Agriculture	123
TRAV03	Type of Work other than Agriculture	124
TRAV04	Type of Work other than Agriculture	125
TRAV05	Type of Work other than Agriculture	126
TRAV06	Type of Work other than Agriculture	127
TRAV07	Type of Work other than Agriculture	128
TRAV08	Type of Work other than Agriculture	129
TRAV09	Type of Work other than Agriculture	130
TRAV10	Type of Work other than Agriculture	131
TRAV11	Type of Work other than Agriculture	132
TRAV12	Type of Work other than Agriculture	133
TRAV13	Type of Work other than Agriculture	134
TRAV14	Type of Work other than Agriculture	135
TRAV15	Type of Work other than Agriculture	136
TRAV16	Type of Work other than Agriculture	137
TRAV17	Type of Work other than Agriculture	138
TRAV18	Type of Work other than Agriculture	139
TRAV19	Type of Work other than Agriculture	140

Format: F8
Missing Values: 0, 8, 9

Value	Label
0	Missing (not declared)
1	Craftmanship
2	Commerce, Service, Tourism, Transport
3	Indsrries, Mines
4	Administration
5	Construction
8	Missing (none specific jobs)
9	Missing (not concerned)

LOCAL01	Location of the Work other than Agriculture	141
LOCAL02		142
LOCAL03		143
LOCAL04		144
LOCAL05		145
LOCAL06		146
LOCAL07		147
LOCAL08		148
LOCAL09		149
LOCAL10		150
LOCAL11		151
LOCAL12		152
LOCAL13		153
LOCAL14		154
LOCAL15		155
LOCAL16		156

LOCAL17		157
LOCAL18		158
LOCAL19		159

Format: F8
Missing Values: 8
Value Label

0	Missing (not declared)
1	within the same village
2	in other villages
3	in small towns
4	in large towns
5	Casablanca, Rabat
6	Marrakech
7	Abroad
9	Missing (not concerned)

STTRAV01	Status in the Job of work other than agriculture	160
STTRAV02		161
STTRAV03		162
STTRAV04		163
STTRAV05		164
STTRAV06		165
STTRAV07		166
STTRAV08		167
STTRAV09		168
STTRAV10		169
STTRAV11		170
STTRAV12		171
STTRAV13		172
STTRAV14		173
STTRAV15		174
STTRAV16		175
STTRAV17		176
STTRAV18		177
STTRAV19		178

Format: F8
Missing Values: 0, 9

Value	Label
1	Independent with locality
2	Independent without locality
3	Work at home
4	Employer
5	Associated
6	Salaried
7	Familial help
8	Apprentice
9	Unconcerned

NBTRAV01	Nbr of work days other than agriculture in a year	179
NBTRAV02		180
NBTRAV03		181
NBTRAV04		182
NBTRAV05		183
NBTRAV06		184
NBTRAV07		185
NBTRAV08		186

Definition of Variables for Household Questionnaire

NBTRAV09	187
NBTRAV10	188
NBTRAV11	189
NBTRAV12	190
NBTRAV13	191
NBTRAV14	192
NBTRAV15	193
NBTRAV16	194
NBTRAV17	195
NBTRAV18	196
NBTRAV19	197
Format: F8	
Missing Values: 0	

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<SECTION 2: Accomodation and Housing>

NBLOG	Number of buildings occupying by your family	198
Format: F8		
Value	Label	
1	One building	
2	More than one building	

TYPECONT	Type of construction of main building	199
Format: F8		
Missing Values: 6 through 8		
Value	Label	
1	Permanent firm house	
2	Rammed-clay house	
3	Temporary house/ barracks	
4	Shed, cowshed house	
5	Government staff house	
9	Others	

NBPERS	Number of persons in the main house	200
Format: F8		

NBPIECE	Number of rooms in the main house	201
Format: F8		

OCCUPAT	Mode of occupation of house	202
Format: F8		
Missing Values: 5 through 8		
Value	Label	
1	Owner of house	
2	Tenant	
3	Freely occupying	
4	Houses for jobs	
9	Others	

SUPERFIC	Area of the main house including cowhed, gardens, and courts (m ²)	203
Format: F8		

TYPEAEP	Type of water supply in the house	204
Format: F8		

Missing Values: 8		
Value	Label	
1	Pipe water system	
2	Public water system (by commune rurale)	
3	Springs	
4	Wells or water tanks	
5	River water	
6	Portable steel tank (one week capacity)	
7	Tank car (public use)	
9	Others	

DISTAEP	Hauling distance of water (m)	205
Format: F8		

<SECTION 3: Family Income>

REVAGRAN	Agricultural income (DH/year)	206
Format: F10.2		

REVELVAN	Livestock income (DH/year)	207
Format: F10.2		

REVFORAN	Forest production income (DH/yr)	208
Format: F10.2		

REVAUANI	Ohter incomes (DH/year)	209
REVAUAN2	Ohter incomes (DH/year)	210
REVAUAN3	Ohter incomes (DH/year)	211
REVAUAN4	Ohter incomes (DH/year)	212
REVAUAN5	Ohter incomes (DH/year)	213
Format: F10.2		

REVTOTAN	Total annual income of the family (DH/year)	214
Format: F8.2		
Missing Values: .00		
Value	Label	
.00 M	non declare	

REVTOTMO	Total monthly income of the family (DH/month)= RRVTOTAN/12	215
Format: F8.2		
Missing Values: .00		

CONSMENS	Monthly consumption of the family (DH/month)	216
Format: F8.2		
Missing Values: .00		
Value	Label	
.00 M	not declared	

CONSANU	Annual consumption of the family (DH/year)	217
Format: F8.2		
Value	Label	
.00	not declared	

EPARGNAN	Annual saving of the family	
----------	-----------------------------	--

Definition of Variables for Household Questionnaire

(DH/year)	218		
Format: F8.2		SUPPAT Pasture land (ha)	221
		Format: F10.2	
		Missing Values: .00	
<SECTION 4: Agricultural Production>			
-Private Property (Base Year : 1995)		SUPABAND Abandoned land (ha)	222
SUPCULT Cultivating land (ha)	219	Format: F10.2	
Format: F10.2		Missing Values: .00	
		SUPERFTO Total land (ha)	223
SUPJACH Fallow land (ha)	220	Format: F8.2	
Format: F10.2		Missing Values: .00	
Missing Values: .00			
-Agricultural Production (Base Year : 1995)			

Crops		Cultivated Area (ha)		Total Production (t)	Sold ratio (%)	Market price (DH/kg)
		Non-irrigated Format: F8.2 224 - 240	Irrigated Format: F8.2 241 - 257	Format: F8.2 258 - 274	Format: F8.2 275 - 291	Format: F8.2 292 - 307
Cereal	Wheat	SURBLE1	SURBLE2	PRODBLE	RATVDBLE	PRIBLE
grains	Barley	SURORG1	SURORG2	PRODORG	RATVDORG	PRIORGE
	maize	SURMAS1	SURMAS2	PRODMAS	RATVDMAS	PRIMAS
	Other cereals	SURAUTG1	SURAUTG2	PRODAUTG	RATVDAUG	PRIAUTG
Legumes	Chick-peas	SURPOCH1	SURPOCH2	PRODPOCH	RATVDPOC	PRIPOCH
	Lentils	SURLENT1	SURLENT2	PRODLENT	RATVDLEN	PRILENT
	Beans	SURHAR1	SURHAR2	PRODHAR	RATVDHAR	PRIHARIC
Vegetables	Green vegetables	SURLEGV1	SURLEGV2	PRODLEV	RATVDLEV	PRILEGV
	Tomatoes	SURTOM1	SURTOM2	PRODTOM	RATVDTOM	PRITOM
	Potatoes	SURPTER1	SURPTER2	PRODPTER	RATVDPTE	PRIPTER
	Others	SURAUTL1	SURAUTL2	PRODAUTL	RATVDAUL	PRIAUTL
Fruits	Olives	SUROLIV1	SUROLIV2	PRODOLIV	RATVDOLV	PRIOLIV
	Almonds	SURAMAD1	SURAMAD2	PRODAMAD	RATVDAMD	PRIAMAND
	Apples	SURPOM1	SURPOM2	PRODPOM	RATVDPOM	PRIPOMME
	Oranges	SURORNG1	SURORNG2	PRODORNG	RATVDORN	PRIORANG
	Others	SURAUTF1	SURAUTF2	PRODAUTR	RATVDAUF	PRIAUTFR
Total		SURTOTA1	SURTOTA2	PRODTOTA	RATVDTOT	

- Livestock Production (Base Year: 1995)

Livestock	Number of Heads	Annual Selling and Consumption (heads)						Market Price (DH) (Missing value: 0.00)		
		Meat		Milk (litre)		Eggs (eggs)		Meat (kg)	Milk (lit)	Eggs (egg)
		Sold	Consumed	Sold	Consumed	Sold	Consumed			
	Format: F8 308 - 316	Format: F8 317 - 323	Format: F8 324 - 330	Format: F8 331 - 336	Format: F8 337 - 342	Format: F8 343	Format: F8 344	Format: F8.2 345 - 352	Format: F8.2 353 - 357	Format: F8.2 358
Cattle	NBBET	NBBETV	NBBETVA	NBBETLV	NBBETLA	-	-	PVBET	PLBET	-
Sheep	NBMOUT	NBMOUTV	NBMOUTVA	NBMOUTLV	NBMOUTLA	-	-	PVMOUT	PLMOUT	-
Goat	NBCHVR	NBCHVRV	NBCHVRVA	NBCHVRLV	NBCHVRLA	-	-	PVCHVR	PLCHVR	-
Poultry	NBPOUL	NBPOULV	NBPOULVA	-	-	NBOEUFV	NBOEUFA	PVPOUL	-	POEUF
Mule & Donkey	NBMUL	-	-	-	-	-	-	PVMUL (DH/head)	-	-
Horse	NBCHEVL	-	-	-	-	-	-	PVCHVL (DH/head)	-	-
Camel	NBCHAM	NBCHAMV	NBCHAMVA	NBCHAMLV	NBCHAMLA	-	-	PVCHAM	PLCHAM	-
Others	NBAUTET	NBAUTIV	NBAUTIVA	NBAUTLV	NBAUTLA	-	-	PVAUTRES	-	-
Total	NBTOTET	NBTOTETV	NBTOTETVA	NBTOTETLV	NBTOTETLA	-	-			

Definition of Variables for Household Questionnaire

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- Forest Production (Base Year : 1995)

Production	Annual Production (kg)		Market Price (D/1kg)
	Consumed	Sold	
	Format: F8 358 - 362	Format: F8 363 - 367	Format: F8 2 368 - 371
Fire wood	CONSBC	VENTBC	PRIBC
Charcoal	CONSCB	VENTCB	PRICB
Timber wood	CONSBCH	VENTBCH	PRIBCH
Others	CONSAUTB	VENTAUTB	PRIAUTB
Total	ICONSBOI	IVENIBOI	-

- Other Industries (Base Year: 1995)

NBMINOT Number of flour mills Format: F8	372
ECRASJ Milling capacity (kg/day) Format: F8.2	373
ENERGMIN Energy utilized for milling Format: F8 Value Label 1 Electric generator 2 Petrol 3 Gass 4 Electricity	374
NBMEN Number of joinery Format: F8	375
DIMMEN Size of joinery production (small, medium, large) Format: F8	376
ENERGMEN Energy utilized for jinery Format: F8 Value Label 1 electric generator 2 petrol 3 gass 4 electricity	377
NBPOT Number of pottery Format: F8	378
DIMPOT Production scale of pottery Format: F8 Missing Values: 0 Value Label 0 not concerned 1 small 2 medium 3 large	379
ENERGPOT Energy utilized for pottery Format: F8 Value Label Value Label 1 electric generator	380

- 2 petrol
- 3 gass
- 4 elctricity

<SECTION 5: Energy>

ELECTR Availability of electricity in the house Format: F8 Value Label 1 yes 2 none	381
GAZUTH Availability of gass in the house Format: F8 Value Label 1 yes 2 none	382
BGAZPET Consumption of small gass bombes in a year Format: F8	383
BGAZGD Consumption of small gass bombes in a year Format: F8	384
UTIBOILG Utilization of wood in the house Format: F8 Value Label 1 yes 2 none	385
BOISCUIS Wood utilized for cooking	386
BOISFOUR Wood utilized for baking bread	387
BOISCHAU Wood utilized for heating room	388
BOISCLOT Wood utilized for fencing animals	389
BOISCONS Wood utilized for construction Format: F8 Missing Values: 9 Value Label 1 yes 2 no 9 not concerned	390
MPBCARBR Wood collected by cutting trees	391
MPBRAMAS Wood collected from dead tree	392
MPBABROU Wood collected by uprooting from ground	393
MPBACHAT Wood bought from a salesman Format: F8 Missing Values: 9 Value Label 1 yes 2 no 9 not concerned	394
RBCHEF Wood collected by the chief of household	395

Definition of Variables for Household Questionnaire

RBEPOUSE	Wood collected by wife	396	9	not concerned
RBENF	Wood collected by children	397		
RBMEMBRE	Wood collected by member of household	398		
RBAUTRE	Wood collected by other members	399		
	Format: F8			
	Missing Values: 9			
	Value Label			
	1	yes		
	2	no		
	9	not concerned		
LRBPPRIV	Wood collected from private land	400		
LRBDCOLL	Wood collected from communal land	401		
LRBFORET	Wood collected from forests	402		
LRBDETAT	Wood collected from state land	403		
LRBAUTRE	Wood collected from other land	404		
	Format: F8			
	Missing Values: 9			
	Value Label			
	1	yes		
	2	no		
	9	not concerned		
QTBMIIV	Consumption quantity of wood in winter (kg/month)	405		
QTBMAS	Consumption quantity of wood in other season (kg/month)	406		
	Format: F8			
ACHBOIS	Purchasing rate of above quantity of wood	407		
	Format: F8			
	Missing Values: 9			
	Value Label			
	1	all		
	2	half		
	3	few		
	4	none		
	9	not concerned		
MPCHBOAP	Charcoal produced by themselves	412		
MPCHBOCV	Charcoal purchased from a salesman in the village	413		
MPCHBOMA	Charcoal purchased from street pedlar	414		
MPCHBOCH	Charcoal purchased from a producer	415		
	Format: F8			
	Missing Values: 9			
	Value Label			
	1	yes		
	2	no		
	9	not concerned		
QTCHBOMH	Consumption quantity of charcoal in winter (kg/month)	416		
QTCHBOAS	Consumption quantity in other season (kg/month)	417		
	Format: F8			
PETRLAMP	Utilization of oil lamp	418		
	Format: F8			
	Value Label			
	1	yes		
	2	no		
QTLPETM	Consumption of oil in a month (litre)	419		
	Format: F8			
RESVEGAC	Utilization of residuals of crop and animals as fuel	420		
	Format: F8			
	Value Label			
	1	yes		
	2	none		
CHARBOIS	Utilization of charcoal	408		
	Format: F8			
	Value Label			
	1	yes		
	2	no		
UCHBOCUS	Charcoal for cooking	409		
UCHBOCHF	Charcoal for heating water	410		
UCHBOAUT	Charcoal for other purposes	411		
	Format: F8			
	Missing Values: 9			
	Value Label			
	1	yes		
	2	no		

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Definition of Variables for Household Questionnaire

-Electric Appliances

COUTELEC Cost of electricity for electric appliances (DH/month) 421

Format: F8.2

Value Label

.00 not declared

<Energy for appliances>

Format: F8

Missing Values: 9

Value Label

- 1 car battery
- 2 dry-cell
- 3 electric generator
- 4 gass
- 5 petrol
- 6 others
- 9 not concerned

Appliances	Number of appliances Format: F8 422 - 427	Utilization (hrs/day) Format: F8 428 - 433	Energy for appliances Format: F8 434 - 439
Lamp	NBAECL	NBJECL	SENRECL
Television	NBATV	NBJTV	SENRTV
Radio	NBARAD	NBJRAD	SENRRAD
Air conditioner	NBACLIM	NBJCLIM	SENRCCLIM
Refrigerator	NBAREF	NBJREF	SENRRREF
Others	NBAAUIR	NBJAUIR	SENRAUIR

-Equipment for lighting, cooking and heating

Purposes	Equipment	Number of equipment	Utilization (hrs/day)	Fuels	
		Format: F8 440 - 449	Format: F8.2 450 - 459	Format: F8 460 - 468	Fuels
Lighting	Oil lamp	NBLHEC	NBJLHEC	COMBLHEC	1 oil
	Gass lamp	NBLGEC	NBJLGEC	COMBLGEC	2 gass
	Candle	NBBOGMEC	NBJBOGMEC		3 charcoal
Cooking	Electric oven	NBFECUIS	NBJFECUIS	COMBFECUIS	4 wood
	Gass oven	NBFGCUIIS	NBJFGCUIIS	COMBFGCUIIS	
	Traditional oven (Kanoun)	NBFTCUIIS	NBJFTCUIIS	COMBFTCUIIS	
Heating	Iron brazier	NBBRACHF	NBJBRACHF	COMBBRACHF	
	Stone chimney	NBCHCHF	NBJCHCHF	COMBCHCHF	
	Traditional oven (Majmar)	NBFTCHF	NBJFTCHF	COMBFTCHF	
	Others	NBAUTCHF	NBJAUTCHF	COMBAUTCHF	

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- Utilization of Fuels

Fuels	Annual consumption	Purchased Ratio (%)	Quantity purchased	Price (DH)	Total Cost (DH)	
	Format: F8 469 - 475	Format: F8.2 476 - 482	Format: F8, F8.1, F8.2 483 - 489	Format: F8.2 490 - 496	Format: F8.2 497 - 503	
Wood	QTCABOIS kg	PRACHB	QTACHBO kg	PUABOIS /kg	CTABOIS	
Charcoal	QTCACB kg	PRACHCB	QTACHCB kg	PUACHARB /kg	CTACHARB	
Gass	for lighting	QTCAGZEC lit	PRACHGEC	QTACHGEC lit	PUAGAZEC /lit	CTAGAZEC
	for fuel equipment	QTCAGZEQ lit	PRACHGEQ	QTACHGEQ lit	PUAGAZEQ /lit	CTAGAZEQ
	Total	QTCATOTC lit	PRACHGTO	QTACHGTO lit	PUAGAZTO /lit	CTAGAZTO
Oil	QTCAPETR lit	PRACHPET	QTACHPET lit	PUAPEIRO /lit	CTAPEIRO	
Candle	QTCABOUG Nbr	PRACHBOG	QTACHBOG Nbr	PUABOUG /Nbr	CTABOUGI	
Total						

<SECTION 6: Intention and Utilization of Electricity>

Intention on utilization of electricity for	Number of desired articles Format: F8 504 - 509	Utilization (hrs/day) Format: F8 510 - 515
Lighting	NADCLAI	NPIUJECL
Radio	NADRADIO	NPIUJRAD
Television	NADIV	NPIUJTV
Heating	NADCHAF	NPIUJCHF
Air-conditioning	NADCLIMA	NPIUJCLIM
Others	NADAUTRE	NPIUJAUIR

<SECTION 7 : Payable Cost for Electricity>

INVEST Payable initial cost (DH) 516
Format: F8.2

TAXEMOIS Payable monthly cost (DH/month) 517
Format: F8.2

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