

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

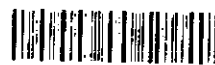
NO. 32

**CENTRE DE DEVELOPPEMENT DES ENERGIES RENOUVELABLES (CDER)
KINGDOM OF MOROCCO**

**MASTER PLAN STUDY
ON DECENTRALIZED RURAL ELECTRIFICATION
OF HAOUZ REGION
IN KINGDOM OF MOROCCO**

APPENDICES

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JANUARY 1998

**CHUO KAIHATSU CORPORATION
SANYU CONSULTANTS INC.**

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COMPONENT OF THE REPORTS

ENGLISH

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

FRENCH

RESUME

RESEARCH REPORT ON THE HISTORY OF THE

THE HISTORY OF THE

THE HISTORY OF THE

THE HISTORY OF THE

THE HISTORY OF THE

THE HISTORY OF THE

LIST OF APPENDICES

APPENDIX-1 Questionnaire Form

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

APPENDIX-2 Definition of Questionnaire Items for SPSS File

- 2-1 Definition of Questionnaire Items for Village Leaders
- 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

MASTER PLAN STUDY ON DECENTRALIZED RURAL ELECTRIFICATION OF HAOUZ REGION IN THE KINGDOM OF MOROCCO

QUESTIONNAIRE CHIEF OF VILLAGE

SECTION 0

0- Number of Questionnaire

1- Cercle..... Commune rurale..... Name of Douar..... Number of Douar

2- Name of chief of Douar..... Age of chief of Douar Title of chief of village (Cheikh, Mokadem.....):.....

3- Number and name of villages under the responsibility of chief of village (No) Douar

4- Name of interviewer..... Date of interview 96

5- Name of supervisor..... Date of supervising 96

6- Observations and comments: Interviewer.....

.....

Supervisor.....

.....

SECTION I

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 | Name of family | Number of houses | Name of family | Number of houses | 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

Questionnaire to the chief of village

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

| Type of utilization | agriculture | | fallow land | pasture | abundant | forest | TOTAL |
|---|-------------|---|-------------|---------|----------|--------|-------|
| | % | % | | | | | |
| National land | % | % | % | % | % | % | ha |
| 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 | | |
| | ha | ha | | | | % | % | % | % | % | | |
| 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 | XXXX | XXXX | |

Breeding (year of base 1995)

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

Forest production (year of base 1995).

| Production | Total production (X) | | Annual production / Total selling | | Marketed price (DH/unit) |
|-------------|----------------------|-------|-----------------------------------|----------------------|--------------------------|
| | large | small | Home-consumption (unit) | Total selling (unit) | |
| Fire 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)

| 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 Jamaá)
 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 | xxxxxxxxxxxxxxxxxxxx |
| Transport | | |
| mules or donkey | m | |
| children | m | |
| women | m | |
| necessary time | hours/day | |
| Quality | good, poor | good, poor |
| Turbidity | | xxxxxxxxxxxxxxxxxxxx |
| 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?



- Does the landslide happen?

yes (1)

no (2)

What kind of damage?

- Period of drought of the river (month)

from to

- Is it completely dry up?

yes (1)

no (2)

For what period? days/year

- Measures taken against drought :

for irrigation water
for drinking water

SECTION 10: Is it possible to convert the flow of irrigation water in order to produce electricity?

yes (1)

no (2)

SECTION 11: Traverse of canal

- How many villages are crossed by the main canal before reaching your village? (Number and name of villages).....



MASTER PLAN STUDY ON DECENTRALIZED RURAL ELECTRIFICATION OF HAOUZ REGION IN THE KINGDOM OF MOROCCO

QUESTIONNAIRE HOUSEHOLD

SECTION 0

0- Number of Questionnaire Commune rurale..... Name of Douar..... Number of Douar

1- Cercle.....

2- Name of the Head of Household..... Age of the Head of Household

3- Name of the Interviewer..... Date of Interview

| | | |
|----------------------|----------------------|----|
| <input type="text"/> | <input type="text"/> | 96 |
|----------------------|----------------------|----|

4- Name of Supervisor..... Date of Supervising

| | | |
|----------------------|----------------------|----|
| <input type="text"/> | <input type="text"/> | 96 |
|----------------------|----------------------|----|

5- Observations and comments: Interviewer.....
.....
.....

Supervisor.....
.....
.....
.....
.....
.....
.....
.....

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) | | | | | | | |
|-----|------------------|-----------|-----|--|--------------------|--|---------------------------|-------------|-----------------------|-------------------|---------------------------|--|--|
| | | | | | | Professional status | Working days in last year | Kind of job | Location and position | Status in the job | Working days in last year | | |
| 1 | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | |

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



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 aliment of water supply in the house, and distance 1. tap water 2. public hydrant or public well 3. spring 4. wells and water tank (Mefia in local) 5. river 6. water tank 7. water tank truck 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 |
| 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 | | 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 |
| green vegetables | ha | ha | | | t/ha | t | dh/kg |
| tomatoes | ha | ha | | | t/ha | t | dh/kg |
| potatoes | ha | ha | | | t/ha | t | dh/kg |
| others | ha | ha | | | t/ha | t | dh/kg |
| Fruits | | | | | | | |
| 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 | Egg (eggs) selling | Egg (eggs) home consumption | Meat | Milk | Eggs |
| cattle | | | | | | | | dh/kg | dh/lit | dh/egg |
| sheep | | | | | | | | dh/kg | dh/lit | dh/egg |
| goat | | | | | | | | dh/kg | dh/lit | dh/egg |
| chicken | | | | | | | | dh/kg | dh/lit | dh/egg |
| Mule/donkey | | | | | | | | dh/head | dh/lit | dh/egg |
| horse | | | | | | | | dh/head | dh/lit | dh/egg |
| camel | | | | | | | | dh/kg | dh/lit | dh/egg |
| others | | | | | | | | dh/kg | dh/lit | dh/egg |
| Total | | | | | | | | dh/head | dh/lit | dh/egg |



Questionnaire household

- Forest production (year of base 1995)

| Production | Annual production and selling | | | | Market price (dh/unit) |
|-------------|-------------------------------|--------|-------------------------|-------------------------|------------------------|
| | Production level (X) | | Home consumption (unit) | Total of selling (unit) | |
| | poor | medium | | | |
| fuel wood | | | kg | kg | dh/kg |
| charcoal | | | kg | kg | dh/kg |
| timber wood | | | kg | kg | dh/kg |
| others | | | kg | kg | dh/kg |
| Total | | | kg | 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? | | | | |
|--------------------------|-------------------------------|---|---|--|--|---|--|--|--|--------------|-------|--------|----------|
| | | | | | | | | | | Size Bottles | | season | kg/month |
| | | | | | | | | | | Small | Large | winter | other |
| 1. Yes 2. No | 1. Yes 2. No | | 1. cooking 2. baking bread 3. heating the room 4. fencing 5. Construction | 1. cutting of the trees 2. picking up of the withered trees 3. Uprooting of the roots 4. buying | 1. Head of household 2. Wife 3. Children 4. Member of household 5. Whole family 9. Others | 1. Private forest 2. Communal forest 3. Forest field 4. Field of the state 5. Others (to specify) | 1. whole 2. half of it 3. Few of it 4. none | | | | | | |

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

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

DH/Month

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

| 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 | | | | |
| | Traditional oven (Kancoun) | | | | |
| Heating | Brazier (iron) | | | | |
| | Fireplace (stone made) | | | | |
| | Traditional oven (Majmar) | | | | |
| | Others | | | | |

Questionnaire household

- Use of fuel

| 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 | liters | % | liters | dh/liter | dh |
| | liters | % | liters | dh/liter | dh |
| Oil | liters | % | liters | dh/liter | dh |
| | liters | % | liters | dh/liter | dh |
| Candle | candles | % | candles | dh/unit | dh |
| | candles | % | candles | dh/unit | dh |
| Total | | | | | 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.)

Monthly payment

| |
|----------|
| DH |
| 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 |
| | weir | | |
| Installed facilities | electric pump | | |
| | manual pump | | |
| | bucket | | |
| | canal | | |
| Canalization | pipeline (conduit) | | |
| | 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 | l time/ years | l 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-moroco\c-e-srvy\enquete\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 INZAIN 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

| | | | |
|-----|------------------------|--------------------------|---|
| 47 | LEMDINAT | 109 | CHOURIGE |
| 48 | TNIRT | 110 | MAKHFAMANE |
| 49 | ANERMI | 111 | TIZIFRITE |
| 50 | ANSMROU | 112 | LAMIHAMID |
| 51 | TALAT AIT IHLA | 113 | TARASTE |
| 52 | TOULKINE | 114 | ABADOU |
| 53 | ADGHOUSS | 115 | QURIZ |
| 54 | DOUZROU | 116 | TABANT IGH |
| 55 | AIT OUTMANE | 117 | ANSA |
| 56 | TAGADIRT | 118 | TIDSI |
| 57 | TIFIRT | 119 | AIT ATMANE |
| 58 | ANFRIOUNE | 120 | EZZAOUITE |
| 59 | AIT SMIL | 131 | EL BOUR |
| 60 | TIFRATINE | 132 | IMSKAR |
| 61 | AGUENZE | 251 | OULAD LAHJAR |
| 62 | IFIT BARAGHA | 252 | OUMNAS |
| 63 | AGADIR BARAGHA | 261 | AWIN MAZOUZ |
| 64 | BARAGHA | 262 | BOUCHIBA BON OMAR |
| 65 | ADAR BARAGHA | 831 | ANFEG |
| 66 | TADCHERT | 832 | AGUERSOUAK |
| 67 | TAMSOULT | 851 | OUMAST |
| 68 | DAR JAMAA AIT ALI | 852 | AIT ZITOUN |
| 69 | AGADIR AIT BRAHIM | 871 | ZAOUIT |
| 70 | IOURAGHAN | 872 | IZALAGHAN |
| 71 | IMIKI | | |
| 72 | IFIT AIT ALLA | AGECHEF | Age of the Village Leader 6 |
| 73 | BOUKHELF | | Format: F8 |
| 74 | ADDAR AIT ALLA | TITRECHE | Title of the Village Leader 7 |
| 75 | AIT ALI | | Format: F8 |
| 76 | AIT BOURD | | Value Label |
| 77 | AIT MBAREK | | 1 Elder Leader (Cheikh) |
| 78 | AGADIR AIT BOURD | | 2 Mokadem |
| 79 | AFELLA OUASSIF | | 3 Represident of Douar |
| 80 | AMEGHRAS | | 4 Elected Leader (Elu)of Douar |
| 81 | AFELLA IGHIL | | 5 Autres |
| 82 | IGHIL | | |
| 84 | AIT BOUZID | NBRDOUAR | Number of douars which are under responsibility of the Village Leader 8 |
| 86 | TAGADIRT-AIT BOUIMZGAN | | Format: F8 |
| 88 | TIGOUDER | | |
| 89 | AMEZI | | |
| 90 | AGOUNI | | |
| 91 | CHAABAT TARIK | | |
| 92 | IGHIL SDIDENE | | (Page: 2/7) |
| 93 | TIZI | <SECTION 1> | |
| 94 | AGHBALOU | NBHABTS | Population of the village 9 |
| 95 | AIT HSAIN | | Format: F8 |
| 96 | AIT BOUBKER | NBFOYER | Number of households 10 |
| 97 | TAZATOURT | | Format: F8 |
| 98 | TAMSOULTE | NBMOYPEF | Average size of one household 11 |
| 99 | TIZGUI | | Format: F8.2 |
| 100 | AIT TIRGHIT | | |
| 101 | TACHBIBT KABLI | | |
| 102 | TACHBIBT ECHATOUI | | |
| 103 | ASGOUNE | | |
| 104 | AIT AAMARA LOUED | | |
| 105 | IGOUDER | | |
| 106 | LAKAARNA | | |
| 107 | AIT AAMAR EL BOUR | | |
| 108 | TAYZELT | | |

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 (23 - 30) | 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 - 45) | 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 Nbrs of family names in the village 64

DATCREAT Date of creation of the village 65

Format: F8

- Special Events (Mousssem)

| Name of Mousssem | Place | Date | Duration (Days) |
|-----------------------|-----------------------|-----------------------|----------------------|
| Format: A15 (66 - 70) | Format: A15 (72 - 76) | Format: A15 (78 - 82) | Format: F8 (84 - 86) |
| MOUSSEM1 | LIEUMOUI | DAMOUISS1 | DUREMOUI |
| MOUSSEM2 | LIEUMOUI2 | DAMOUISS2 | |
| MOUSSEM3 | LIEUMOUI3 | DAMOUISS3 | |

(Page : 3/7)

- 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

Format: F8

<SECTION 2: Activity>

- 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) | SUPAGREI | SUPJACET | SUPPATEI | SUPANDET | SUPFORET | TOTSUPET |
| Communal Land | (102 - 107) | SUPAGRCO | SUPJACCO | SUPPATCO | SUPANDCO | 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 | | Surplus/ Shortage | Market Price |
|------------|------------|------------------------|----------------|---|------------------------|------------------------|---|--------------------------|
| | | Rain-fed (ha) | Irrigated (ha) | 1: good 2: fair 3: poor 9: not concern | Home consumption (%) | Sold (%) | 0: not concern 1: Excess 2: Shortage 3: purchasing | (Dh/kg) |
| | | 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 | RDIBLE | RATABLE | RATVDBLE | EXCMAQBL | PRIBLE |
| | Barley | ORGENI | ORGEI | RDIORGE | RATAORGE | RATVDORG | EXCMAQOR | PRIORGE |
| | Maize | MAISNI | MAISI | RDIMAIS | RATAMAI | RATVDMAS | EXCMAQMS | PRIMAI |
| | Others | AUTRGRNI | AUTRGRI | RDITGRAI | RATAGRA | RATVDAUG | EXCMAQAG | PRIAUTG |
| Legumes | Chick-peas | POISNI | POISI | RDIPDIS | RATAPOIS | RATVDPDIS | EXCMAQPC | PRIPOCH |
| | Lentils | LENTNI | LENTI | RDILENT | RATALENT | RATVDLEN | EXCMAQIN | PRILENT |
| | Beans | ILARNI | ILARI | RDILHAR | RATAHARI | RATVDHAR | EXCMAQHIC | PRIHARIC |
| | Others | LEGUNI | LEGUI | RDILEGU | RATAAUL | RATVDLEG | EXCMAQAL | - |
| Vegetables | Green Veg | LEVENI | LEVEI | RDILEVE | RATALV | RATVDLEV | EXCMAQLV | PRILEGV |
| | Tomatoes | TOMNI | TOMI | RDITOM | RATATOMA | RATVDTOM | EXCMAQIM | PRITOM |
| | Potatoes | PDINI | PDII | RDIPDI | RATAPMI | RATVDPIE | EXCMAQPT | PRIPIER |
| | Others | LENI | LEI | RDILE | RATAAULG | RATVDAUL | EXCMAQAV | PRIAUTL |
| Fruits | Olives | OLINI | OLII | RDIOI | RATAOLIV | RATVDOLV | EXCMAQOV | PRIOLIV |
| | Almonds | AMANI | AMAI | RDITAMA | RATAAMND | RATVDAMD | EXCMAQAD | PRIAMAND |
| | Apples | POMNI | POMI | RDIPOM | RATAPOMM | RATVDPOM | EXCMAQPM | PRIPOMME |
| | Oranges | ORANI | ORAI | RDITORA | RATAORNG | RATVDORN | EXCMAQOG | PRIORANG |
| Others | FRUNI | FRUII | RDIFRUI | RATAAUIF | RATVDAUF | EXCMAQAF | PRIAUIR | |
| Total | | TOTCUNI | TOTCUII | | | | | |

- Stock-raising (Base Year: 1995)

| Livestock | Numbers (heads) | Annual Consumption | | | | | | Market Price | | |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------|---------------------|-----------------------------|-----------------------------|-----------------------|------------------|
| | | Meat (heads) | | Milk (litres) | | Eggs (eggs) | | Meat (DI/kg) | Milk (DI/lit) | Eggs (DI/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 | NBBE F | NBBE FV | NBBE FVA | NBBE FLV | NBBE FLA | | PVBET | PI BET | | |
| Sheep | NBMOUT | NBMOUT V | NBMOUT VA | NBMOUT LV | NBMOUT LA | | PVMOUT | PLMOUT | | |
| Goat | NBCHVR | NBCHVR V | NBCHVR VA | NBCHVRL V | NBCHVRL A | | PVCHVVR | PLCHVR | | |
| Poultry | NBPOUL | NBPOUL V | NBPOUL VA | | | NBOEUFV | NBOEUF A | PVPOUL | POEUF | |
| Mule/Donkey | NBMUL | | | | | | | PVMUL (DI/head) | | |
| Horse | NBCHV L | | | | | | | PVCHV L (DI/head) | | |
| Camel | NBCHAM | NBCHAM V | NBCHAM VA | NBCHAM LV | NBCHAM LA | | PVCHAM | PLCHAM | | |
| Others | NBAU FET | NBAU FTV | NBAU FVA | NBAU FLV | NBAU FLA | | PVAU FRS | | | |
| Total | NBTOT FET | NBTOT FTV | NBTOT FVA | NBTOT FLV | NBTOT FLA | | | | | |

- Forestry Production (Base Year: 1995)

| | Annual Production (kg) | Market Price (DI/kg) | |
|-----------|---------------------------|---------------------------|-----------------------------|
| | Consumed | | Sold |
| | Format: F8 (290 - 294) | Format: F8 (295 - 299) | Format: F8.2 (300 - 303) |
| Fire wood | CONSBC | VENTBC | PRIBC |
| Charcoal | CONSCB | VENTCB | PRICB |
| Timber | CONSBCH | VENTBCH | PRIBCH |
| Others | CONSAUIB | VENTAUIB | PRIAUIB |
| Total | ICONSBOI | IVENTBOI | |

- 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 | NBIMEN | 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 |

- Equipment which necessitates electricity

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

Format: F8

Value Label

1 yes

2 no

- Environment concerned

ENVIR1 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

ELVXBET 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

2 heater and air-conditionor

NBINFIRM Number of nurses 339

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

- Other Public Facilities

| Facilities | Number of Facilities Format: F8 | Floor area (m ²) |
|----------------|------------------------------------|------------------------------|
| Mosques | NBMOSQUE | SURMOSQ |
| Public halls | NBMAISCO | SURMAISC |
| Cooperatives | NBCCOOPR | SURCCOOP |
| Warehouses | NBENTIRP | SURENIRP |
| Stores | NBBOUHQ | SURBOUHQ |
| Butcher's shop | NBBOUCHE | SURBOUCH |
| Others | NBAUFPB | SURAUFPB |

<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 (0: not concern 1: ear battery 2: dry-cell 3: generator 4: gass 5: petrol 6: others) |
|---------------------|------------------------------------|--------------------------------|--|
| | Format: F8 (360 - 364) | Format: F8 2 (365 - 369) | Format: F8 (370 - 374) |
| Lighting | NBMGECL | NBIIECL | SENRGECL |
| TV+Radio | NBMGLVRD | NBIIVRD | SENRG1VR |
| Refrigerator | NBMGRFFG | NBIIRFR | SENRGRFF |
| Air-conditionor | NBMGCLIM | NBIICLIM | SENRGCLI |
| Heating | NBMGCHF | NBIICHF | SENRGCHF |

<SECTION 4: Public Facilities>

- School

| Type of School | Number of Schools | Number of Students | Number of Classes |
|---|-----------------------|-----------------------|-----------------------|
| Format: F8 0: none 1: Keranic 2: Primary 3: Secondary | Format: F8 0: none | Format: F8 0: none | Format: F8 0: none |
| ECOLYPI | NBECOE1 | NBELEVE1 | NBELEVE1 |
| ECOLY2 | NBECOE2 | 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

(Page: 5/7)

Definition of Variables for Village Chief Questionnaire

(Page : 6/7)

<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 conditioner
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 - | SAEPPUI | 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 | SATEIPUI |
| Water Facilities | Weir | Format: F8 (394 - 395) | 1: yes 2: no | INSBAREP | INSBAREI |
| | Electric Pump | (396 - 397) | - ditto - | INSPIEP | INSPEIEI |
| | Manual Pump | (398 - 399) | - ditto - | INSPMAEP | INSPMAEI |
| | Bucket | (400 - 401) | - ditto - | INSSEAE | INSSEAEI |
| Canalization | Canal | Format: F8 (402 - 403) | 1: yes 2: no | CANALAEF | CANALEIR |
| | Pipeline (condit) | (404 - 405) | - ditto - | CANPIPEP | CANPIPEI |
| | Internal pipe | (406) | - ditto - | CANROBEP | - |
| Transport of Water | Mule or Donkey (m) | Format: F8 (407) | (407) | TRSMAEF | - |
| | Children (m) | (408) | (408) | TRSENEF | - |
| | Women (m) | (409) | (409) | TRSEMEF | - |
| | Time for transport (hrs/day) | Format: F8 2 (410) | (410) | TEMPSAEF | - |
| Water Quality | Quality | Format: F8 (411 - 412) | 1: good 2: poor | QUALIEF | QUALITEI |
| | Turbidity | (413) | 1: very good 2: good 3: fair 4: poor 5: bad | TURBIEF | - |
| 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 ??? | DEFMOISCP | DEFMOIS |

- 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

- 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

DEGLI2 438

DEGLI3 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

LUTSECHH 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\5-e-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 | 1 |
| | Format: F8 | |

| | | |
|---------------|-------------|---|
| CERCLE | Cercle | 2 |
| | Format: F8 | |
| | Value Label | |

- 1 ASNI
- 2 TAHANAOUT
- 3 AMIZMIZ
- 4 AIT OURIR

| | | |
|---------------|-----------------|---|
| COMRUR | Commune Rurales | 3 |
| | Format: F8 | |
| | Value Label | |

- 11 OUIRGANE
- 12 IMGDAL
- 13 TALAT N'YACOUB
- 14 IJOUKAK
- 15 IGHIL
- 16 AGHIBAR
- 17 ASNI
- 21 OURIKA
- 22 SETTIFADMA
- 23 OUKAIMDEN
- 24 TAMSLOHT
- 25 TAHANAOUT
- 31 ANOUGAL
- 32 AZGOUR
- 33 DAR JAMAA
- 34 AMEGHRASS
- 35 SIDI BADHAJ
- 41 AIT ADDEL
- 42 ABADOUR
- 43 ZERKTEN
- 44 TIGHDOUINE

| | | |
|--------------|------------------|---|
| NUMDO | Number of Douars | 4 |
| | Format: F8 | |

Value Label

- 1 TIZI OUSSEM
- 2 ID AISSA
- 3 TASSA OUIRGANE
- 4 IGREM
- 6 ALLA OUMZRI
- 7 ID SSIOR
- 8 AGHELLA
- 9 IKISS
- 10 AMSAKROU
- 11 ARG
- 12 TINERHOHRINE
- 15 IKISS
- 17 TACHEDDIRT
- 18 SQOUR
- 19 AMAGDOUR
- 20 TAMATERTE
- 21 ANFLI
- 22 TIMICHI
- 23 AGOONS
- 24 OULAD MANSOUR
- 27 DEL EL AIN
- 30 BEL ABBAS
- 32 DERB CHEM'S
- 33 SOUR TEDRARA
- 34 TLAT TEDRARA
- 35 IMIN TALA
- 36 ADDOUZ
- 37 AIN GHAD
- 38 INZAINI
- 39 IMI N'ISLY
- 40 DOU ANAMER
- 41 IGOUDEM
- 42 TOUG LKHEIF
- 43 AIT OUZKRI
- 44 AIT HMAO
- 45 TIZGUI
- 46 ADARDOUR
- 47 LEMDINAT
- 48 TNIRT
- 49 ANERMI
- 50 ANSMROU
- 51 TALAT AIT IHILA
- 52 TOULKINE
- 53 ADGHOUSS
- 54 DOUZROU
- 55 AIT OUTMANE
- 56 TAGADIRT
- 57 TIFIRT
- 58 ANFRIOUNE

Definition of Variables for Household Questionnaire

59 AIT SMIL
 60 TIFRATINE
 61 AGUENZE
 62 IFIF BARAGHA
 63 AGADIR BARAGHA
 65 ADAR BARAGHA
 66 TADCHERT
 67 TAMSOULT
 68 DAR JAMAA AIT ALI
 69 AGADIR AIT BRAHIM
 70 IOURAGHAN
 71 IMIKI
 72 IFIT AIT ALLA
 73 BOUKHELF
 74 ADDAR AIT ALI
 76 AIT BOURD
 77 AIT MBAREK
 78 AGADIR AIT BOURD
 79 AFFELA OUASSIF
 81 AFELLA IGHIL
 84 AIT BOUZID
 86 TAGADIRT AIT BOUIMZGAN
 88 TIGOUDER BEN SAID ZYOUBT
 89 AMEZI
 90 AGOUNI
 91 CHAABAT TARIK TALEI NIGHIAR
 92 IGHIL SDIDEN DRAA RKIK
 93 TIZI
 94 AGHBALOU
 95 AIT HSAIN
 96 AIT BOUBKER
 97 TAZATOURT
 98 TAMSOULT
 99 TIZGUI
 100 AIT TIRGHIT
 101 TACHBIBT KABLI
 102 TACHBIBT ECHATOUF
 103 ASGOUNE
 104 AIT AAMARA LOUED
 105 IGOUDER
 106 LAKAARNA
 107 AIT AAMARA EL BOUR
 109 CHOUIRIGE
 112 LAMHAMID
 113 TARASTE
 114 ABADOU
 115 OURIZ
 116 TABANT IGHI
 117 ANSA
 118 TIDSI
 119 AIT ATMANE
 120 EZZAOUITE
 131 EL BOUR
 132 IMSKAR
 251 OULAD LAHJAR
 252 OUMNAS
 261 AWIN MAZOUZ
 262 BOUCHHIA BEN OMAR
 831 ANFEG

832 AGUERSOUAK
 851 OUMAST
 852 AIT ZITOUN
 871 ZAOUIT
 872 IZALAGHAN DAR BRAHIMOUALI

AGECH AGE DU CHEF DE MENAGE 5
 Format: F8

AGEENQ AGE DE L'ENQUETE 6
 Format: F8

SEXENQ SEXE DE L'ENQUETE 7
 Format: F8
 Value Label
 1 MASCULIN
 2 FEMININ

(Page: 2/8)

<SECTION 1: Social and professional status of the members of the households>

AGE01 AGE DU MEMBRE DU MENAGE 8
 AGE02 AGE DU MEMBRE DU MENAGE 9
 AGE03 AGE DU MEMBRE DU MENAGE 10
 AGE04 AGE DU MEMBRE DU MENAGE 11
 AGE05 AGE DU MEMBRE DU MENAGE 12
 AGE06 AGE DU MEMBRE DU MENAGE 13
 AGE07 AGE DU MEMBRE DU MENAGE 14
 AGE08 AGE DU MEMBRE DU MENAGE 15
 AGE09 AGE DU MEMBRE DU MENAGE 16
 AGE10 AGE DU MEMBRE DU MENAGE 17
 AGE11 AGE DU MEMBRE DU MENAGE 18
 AGE12 AGE DU MEMBRE DU MENAGE 19
 AGE13 AGE DU MEMBRE DU MENAGE 20
 AGE14 AGE DU MEMBRE DU MENAGE 21
 AGE15 AGE DU MEMBRE DU MENAGE 22
 AGE16 AGE DU MEMBRE DU MENAGE 23
 AGE17 AGE DU MEMBRE DU MENAGE 24
 AGE18 AGE DU MEMBRE DU MENAGE 25
 AGE19 AGE DU MEMBRE DU MENAGE 26

Format: F8
 Missing Values: 0

SEXE01 SEXE DU MEMBRE DE MENAGE 27
 SEXE02 SEXE DU MEMBRE DE MENAGE 28
 SEXE03 SEXE DU MEMBRE DE MENAGE 29
 SEXE04 SEXE DU MEMBRE DE MENAGE 30
 SEXE05 SEXE DU MEMBRE DE MENAGE 31
 SEXE06 SEXE DU MEMBRE DE MENAGE 32
 SEXE07 SEXE DU MEMBRE DE MENAGE 33
 SEXE08 SEXE DU MEMBRE DE MENAGE 34
 SEXE09 SEXE DU MEMBRE DE MENAGE 35
 SEXE10 SEXE DU MEMBRE DE MENAGE 36
 SEXE11 SEXE DU MEMBRE DE MENAGE 37
 SEXE12 SEXE DU MEMBRE DE MENAGE 38
 SEXE13 SEXE DU MEMBRE DE MENAGE 39
 SEXE14 SEXE DU MEMBRE DE MENAGE 40

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

| | | |
|----------|------------------------------------|-----|
| NBJAGR13 | Nbr days for Agriculture in a year | 115 |
| NBJAGR14 | Nbr days for Agriculture in a year | 116 |
| NBJAGR15 | Nbr days for Agriculture in a year | 117 |
| NBJAGR16 | Nbr days for Agriculture in a year | 118 |
| NBJAGR17 | Nbr days for Agriculture in a year | 119 |
| NBJAGR18 | Nbr days for Agriculture in a year | 120 |
| NBJAGR19 | 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 Industries, 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

(Page: 3/8)

<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 cowshed, gardens, and courts (m²) 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/yeara) | 218 | SUPPAT Pasture land (ha) | 221 |
| Format: F8.2 | | Format: F10.2 | |
| <SECTION 4: Agricultural Production> | | Missing Values: .00 | |
| -Private Property (Base Year : 1995) | | SUPABAND Abandoned land (ha) | 222 |
| SUPCULT Cultivating land (ha) | 219 | Format: F10.2 | |
| Format: F10.2 | | Missing Values: .00 | |
| 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 | | | |
| Cereal grains | Wheat | SURBLE1 | SURBLE2 | PRODBLE | RATVDBLE | PRIBLE |
| | 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 | RATVPOCH | PRIPOCH |
| | Lentils | SURLENT1 | SURLENT2 | PRODLENT | RATVDLEN | PRILENT |
| | Beans | SURHARI | 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 | PRIO LIV |
| | Almonds | SURAMAD1 | SURAMAD2 | PRODAMAD | RATVDAMD | PRIAMAND |
| | Apples | SURPOM1 | SURPOM2 | PRODPOM | RATVDPOM | PRIPOMME |
| | Oranges | SURORNG1 | SURORNG2 | PRODORNG | RATVDORN | PRIORANG |
| | Others | SURAUFI1 | SURAUFI2 | 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) | | |
|---------------|--------------------------|--|--------------------------|--------------------------|--------------------------|--------------------|--------------------|---------------------------|---------------------------|---------------------|
| | | 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 | PIBET | - |
| Sheep | NBMOUT | NBMOUTV | NBMOUTVA | NBMOUTLV | NBMOUTLA | - | - | PVMOUT | PI MOUT | - |
| Goat | NBCHVR | NBCHVRV | NBCHVRVA | NBCHVRLV | NBCHVRLA | - | - | PVCHVR | PI CHVR | - |
| Poultry | NBPOUL | NBPOULV | NBPOULVA | - | - | NBOEUFV | NBOEUFA | PVPOUL | - | POEUF |
| Mule & Donkey | NBMUL | - | - | - | - | - | - | PVMUL (DH/head) | - | - |
| Horse | NBCHVL | - | - | - | - | - | - | PVCHVL (DH/head) | - | - |
| Camel | NBCHAM | NBCHAMV | NBCHAMVA | NBCHAMLV | NBCHAMLA | - | - | PVCHAM | PLCHAM | - |
| Others | NBAUHF | NBAUHFV | NBAUHFVA | NBAUHLV | NBAUHFLA | - | - | PVAUFRES | - | - |
| Total | NBTOHF | NBTOHFV | NBTOHFVA | NBTOHLV | NBTOHFLA | - | - | | | |

Definition of Variables for Household Questionnaire

(Page 5/8)

- Forest Production (Base Year: 1995)

| Production | Annual Production (kg) | | Market Price (Dh/kg) |
|-------------|-------------------------|-------------------------|---------------------------|
| | 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 372
Format: F8

ECRASJ Milling capacity (kg/day) 373
Format: F8.2

ENERGMIN Energy utilized for milling 374
Format: F8
Value Label
1 Electric generator
2 Petrol
3 Gass
4 Electricity

NBMEN Number of joinery 375
Format: F8

DIMMEN Size of joinery production (small, medium, large) 376
Format: F8

ENERGMEN Energy utilized for jinery 377
Format: F8
Value Label
1 electric generator
2 petrol
3 gass
4 electricity

NBPOT Number of pottery 378
Format: F8

DIMPOT Production scale of pottery 379
Format: F8
Missing Values: 0
Value Label
0 not concerned
1 small
2 medium
3 large

ENERGPOT Energy utilized for pottery 380
Format: F8
Value Label
Value Label
1 electric generator

- 2 petrol
- 3 gass
- 4 elctricity

<SECTION 5: Energy>

ELECTR Availability of electricity in the house 381
Format: F8
Value Label
1 yes
2 none

GAZUTIL Availability of gass in the house 382
Format: F8
Value Label
1 yes
2 none

BGAZPET Consumption of small gass bombes in a year 383
Format: F8

BGAZGD Consumption of small gass bombes in a year 384
Format: F8

UTIBOILG Utilization of wood in the house 385
Format: F8
Value Label
1 yes
2 none

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 390
Format: F8
Missing Values: 9
Value Label
1 yes
2 no
9 not concerned

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 394
Format: F8
Missing Values: 9
Value Label
1 yes
2 no
9 not concerned

RBCHEF Wood collected by the chief of household 395

Definition of Variables for Household Questionnaire

RBPEOUSE Wood collected by wife 396
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

QTBMHIV 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

(Page : 6/8)

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

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

Definition of Variables for Household Questionnaire

-Electric Appliances

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

Format: F8.2

Value Label

.00 not declared

| Appliances | Number of appliances Format: F8 422 - 427 | Utilization (hrs/day) Format: F8 428 - 433 | Energy for appliances Format: F8 434 - 439 |
|-----------------|---|--|--|
| Lamp | NBAECL | NBHJECL | SENRGECL |
| Television | NBATV | NBHJTV | SENRGIV |
| Radio | NBARAD | NBHJRAD | SENRGRAD |
| Air conditioner | NBACLIM | NBHJCLIM | SENRGCLI |
| Refrigerator | NBAREF | NBHJREF | SENRGRFF |
| Others | NBAAUTR | NBHJAUT | SENRGAUT |

<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

-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 | NBHJHEC | COMBLHEC | 1 oil |
| | Gass lamp | NBLGEC | NBHJGEC | COMBLGEC | 2 gass |
| | Candle | NBBOGMEC | NBHJBGEC | | 3 charcoal |
| Cooking | Electric oven | NBFECUIS | NBHJFECU | COMBFECU | 4 wood |
| | Gass oven | NBFGCUI | NBHJFGCU | COMBFGCU | |
| | Traditional oven (Kanou) | NBFTCUIS | NBHJFTCU | COMBFTCU | |
| Heating | Iron brazier | NBBRACHF | NBHJBRCH | COMBBRCH | |
| | Stone chimney | NBCHCHF | NBHJCHCH | COMBCHCH | |
| | Traditional oven (Majmar) | NBFTCHF | NBHJFTCH | COMBFTCH | |
| | Others | NBAUTCHF | NBHJAUCH | COMBAUCH | |

(Page 7/8)

- 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 | PUAGAZIO /lit | CTAGAZIO |
| Oil | QTCAPETR lit | PRACHPET | QTACHPEI lit | PUAPETRO /lit | CTAPETRO | |
| 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 | NADECLAI | NPHJJECL |
| Radio | NADRADIO | NPHJURAD |
| Television | NADTV | NPHJTV |
| Heating | NADCHAF | NPHJCHF |
| Air-conditioning | NADCLIMA | NPHJCLM |
| Others | NADAUTRE | NPHJJAUT |

<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

(Page 8/8)