

APPENDIX-3
Electricity Inventory

Inventory concerned on Electric Aspects

No.	10	Douar	Tizi Oussem			
C.R.	11	Ourigane	Cercle	1	Asni	

Location

Latitude	N31	7	18°	Longitude	W7	58°	33°	Altitude	1,800	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	72	86
Population	444	537

Size of Residential Area

	Fragments	1
E-W	200	(m)
N-S	150	(m)

Access (km)

Pist	13.0	(km)
Path	3.5	(km)
Total	16.5	(km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
3	3	170	3	4	206	1	400
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
4	8	0	0	0	5	0	5	300

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	1.00	1.00	0.00	0.00	0.25	(/household)
Utilization	#DIV/0!	5.50	6.25	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	9.75	1.00	1.00	0.00	0.25	0.00	0.25	(/household)
Utilization	6.25	7.75	7.75	#DIV/0!	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	158.9	(DH/household)
Electricity	102.0	(DH/household)
Total	260.9	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	50.0	(/household)
Villagers	1,525	95.0	(/household)

Annual Income per Household

Agriculture	45,384	(DH/household)
Livestock	5,635	(DH/household)
Forestry	69	(DH/household)
Others	29,050	(DH/household)
Total	80,138	(DH/household)

Annual Expenditure per Household

28,800 (DH/household)

Annual Saving per Household

51,338 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (°) of Surrounding Mountains at

East	South	West
40	40	40

Distance from the Existing 22kV Power Line

10.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

700 (mm)

Inventory concerned on Electric Aspects

No.	20	Douar	Id Aissa			
C.R.	11	Ourgane	Cercle	1	Asni	

Location

Latitude	N31	8'	43"	Longitude	W7	58'	47"	Altitude	1,740	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	44	52
Population	180	218

Size of Residential Area

Fragments	1
E-W	250 (m)
N-S	200 (m)

Access (km)

Pist	13.0	(km)
Path	1.5	(km)
Total	14.5	(km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	2	84	2	2	102	1	250
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
4	8	2	6	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.17	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.00	6.80	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	7.83	1.17	1.17	0.00	0.50	0.00	0.00	(/household)
Utilization	3.17	6.00	6.67	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	137.8	(DfH/household)
Electricity	89.2	(DfH/household)
Total	226.9	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	2,000	200.0	(/household)
Villagers	1,125	62.5	(/household)

Annual Income per Household

Agriculture	55,151	(DfH/household)
Livestock	11,100	(DfH/household)
Forestry	0	(DfH/household)
Others	4,000	(DfH/household)
Total	70,251	(DfH/household)

Annual Expenditure per Household

15,123 (DfH/household)

Annual Saving per Household

55,127 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (o) of Surrounding Mountains at

Fast	South	West
40	40	40

Distance from the Existing 22kV Power Line

8.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

700 (mm)

Inventory concerned on Electric Aspects

No.	30	Douar	Fassa Ouirgane		
C.R.	11	Ouirgane	Cercle	1	Asni

Location

Latitude	N31	10'	66°	Longitude	W8	1'	50"	Altitude	1,190	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	55	65
Population	375	454

Size of Residential Area

Fragments	1
E-W	800 (m)
N-S	500 (m)

Access (km)

Pist	6.0	(km)
Path	0.0	(km)
Total	6.0	(km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	40	1	1	48	1	240
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	8	0	0	0	0	5	5	200

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.71	1.14	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.20	6.33	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.86	1.00	1.29	0.00	0.00	0.00	0.00	(/household)
Utilization	3.86	7.43	6.86	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	157.5	(DfH/household)
Electricity	130.3	(DfH/household)
Total	287.8	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	1,000	50.0	(/household)
Villagers	1,321	95.7	(/household)

Annual Income per Household

Agriculture	33,010	(DfH/household)
Livestock	4,826	(DfH/household)
Forestry	0	(DfH/household)
Others	6,857	(DfH/household)
Total	44,693	(DfH/household)

Annual Expenditure per Household

16,014 (DfH/household)

Annual Saving per Household

28,679 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		• South

Slope (o) of Surrounding Mountains at

East	South	West
48	45	21

Distance from the Existing 22kV Power Line

5.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		•

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	40	Douar	Igre			
C.R.	12	Imgdal		Cercle	1	Asni

Location

Latitude	N31° 4' 37"	Longitude	W8° 2' 50"	Altitude	1,750 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	27	32
Population	130	157

Size of Residential Area

Fragments	1
E-W	500 (m)
N-S	150 (m)

Access (km)

Pist	15.0 (km)
Path	0.5 (km)
Total	15.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	3	190	2	4	230	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	10	0	0	0	1	0	1	150

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.00	1.33	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	#DIV/0!	8.33	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	9.50	1.00	1.33	0.00	0.17	0.00	0.00	(/household)
Utilization	4.00	6.00	7.80	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	170.7	(DfH/household)
Electricity	102.0	(DfH/household)
Total	272.7	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	700	60.0	(/household)
Villagers	1,167	80.0	(/household)

Annual Income per Household

Agriculture	56,414	(DfH/household)
Livestock	15,753	(DfH/household)
Forestry	0	(DfH/household)
Others	1,000	(DfH/household)
Total	73,168	(DfH/household)

Annual Expenditure per Household

22,513 (DfH/household)

Annual Saving per Household

50,654 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
	*	North

Slope (o) of Surrounding Mountains at

East	South	West
50	40	40

Distance from the Existing 22kV Power Line

20.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	60	Douar	Alla Oumzri			
C.R.	13	Tataf N°Yacoub		Cercle	1	Asni

Location

Latitude	N30°	58'	49"	Longitude	W3°	9'	39"	Altitude	1,440 (m)
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Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	
Households	40	48	E-W	150 (m)		1.5	(km)
Population	280	339	N-S	150 (m)		2.0	(km)
						Total	3.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	1	100
First Aids		Public halls	Cooperatives		Warehouses		
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
2	40	0	0	0	3	0	3 150

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	6.00	0.50	0.50	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.67	8.33	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	7.83	1.00	1.00	0.00	0.00	0.00	0.00	(/household)
Utilization	4.17	6.33	6.50	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	103.9	(DH/household)
Electricity	77.0	(DH/household)
Total	180.9	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DI)	Monthly (DI)	
Leader	1,300	60.0	(/household)
Villagers	875	84.2	(/household)

Annual Income per Household

Agriculture	7,882	(DH/household)
Livestock	7,223	(DH/household)
Forestry	0	(DH/household)
Others	2,433	(DH/household)
Total	17,539	(DH/household)

Annual Expenditure per Household

11,825 (DH/household)

Annual Saving per Household

5,714 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	North

Slope (o) of Surrounding Mountains at

East	South	West
15	45	15

Distance from the Existing 22kV Power Line

3.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	70	Douar	Id Ssior			
C.R.	14	Ijoukak	Cercle	1	Asni	

Location

Latitude	N31	1	19°	Longitude	W8	5	33°	Altitude	1,650	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	66	78
Population	500	605

Size of Residential Area

Fragments	1
E-W	500 (m)
N-S	300 (m)

Access (km)

Pist	0.0	(km)
Path	6.0	(km)
Total	6.0	(km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	3	140	1	3	170	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd	Animal	Total	(kg/day)
3	60	0	0	1	0	0	1	100

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.38	1.25	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.33	6.63	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	10.75	1.00	1.38	0.00	0.25	0.00	0.13	(/household)
Utilization	5.38	6.63	6.50	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	140.2	(DfH/household)
Electricity	83.1	(DfH/household)
Total	223.3	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Df)	Monthly (Df)	
Leader	1,500	70.0	(/household)
Villagers	938	73.1	(/household)

Annual Income per Household

Agriculture	9,440	(DfH/household)
Livestock	13,298	(DfH/household)
Forestry	0	(DfH/household)
Others	495	(DfH/household)
Total	23,233	(DfH/household)

Annual Expenditure per Household

20,625 (DfH/household)

Annual Saving per Household

2,608 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		• South

Slope (o) of Surrounding Mountains at

East	South	West
37	28	18

Distance from the Existing 22kV Power Line

6.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	80	Douar	Aghella			
C.R.	15	Ighil	Cercle	I	Asni	

Location

Latitude	N31	0	15'	Longitude	W8	22	51'	Altitude	2,050	(m)
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Households and Population

		Yr 1996		Yr 2010		Size of Residential Area		Access (km)		
						Fragments	1	Pist	10.0	(km)
Households		64	76			E-W	600	Path	15.5	(km)
Population		394	477			N-S	250	Total	25.5	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	100	1	2	120	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	40	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	1.25	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.75	7.71	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	9.25	1.00	1.38	0.00	0.63	0.00	0.00	(/household)
Utilization	3.38	4.88	6.63	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	120.7	(DH/household)
Electricity	88.4	(DH/household)
Total	209.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	80.0	(/household)
Villagers	1,188	74.4	(/household)

Annual Income per Household

Agriculture	11,620	(DH/household)
Livestock	17,047	(DH/household)
Forestry	0	(DH/household)
Others	1,563	(DH/household)
Total	30,230	(DH/household)

Annual Expenditure per Household

13,200 (DH/household)

Annual Saving per Household

17,030 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* South

Slope (°) of Surrounding Mountains at

East	South	West
10	18	15

Distance from the Existing 22kV Power Line

20.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	90	Deuar	Ikiss			
C.R.	16	Aghbar		Cercle	1	Asni

Location

Latitude	N30	55°	55°	Longitude	W8	23	54°	Altitude	1,700	(m)
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Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	16.5 (km)
Households	68	81	E-W	1,000 (m)		Path	4.0 (km)
Population	389	471	N-S	900 (m)		Total	20.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	60	1	1	72	1	30
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	20	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.50	9.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	7.88	1.00	1.00	0.00	0.13	0.00	0.00	(/household)
Utilization	3.63	6.13	10.00	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	162.8	(DH/household)
Electricity	101.5	(DH/household)
Total	264.3	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)
Leader	2,000	100.0 (/household)
Villagers	1,313	53.1 (/household)

Annual Income per Household

Agriculture	8,691	(DH/household)
Livestock	8,485	(DH/household)
Forestry	0	(DH/household)
Others	4,313	(DH/household)
Total	21,489	(DH/household)

Annual Expenditure per Household

17,025 (DH/household)

Annual Saving per Household

4,464 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		•	West

Slope (°) of Surrounding Mountains at

East	South	West
40	17	40

Distance from the Existing 22kV Power Line

20.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		•

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	150	Douar	Ikiss			
C.R.	17	Asni		Cercle	1	Asni

Location

Latitude	N31° 10'	5°	Longitude	W7° 53'	28°	Altitude	1,850 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	65	77
Population	500	605

Size of Residential Area

Fragments	1
E-W	250 (m)
N-S	250 (m)

Access (km)

Pist	10.0 (km)
Path	5.0 (km)
Total	15.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	4	70	2	4	84	1	300
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
6	8	2	6	0	1	0	1	144

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	1.13	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.50	7.50	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.88	1.00	1.13	0.00	0.13	0.00	0.00	(/household)
Utilization	4.75	7.00	7.88	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	137.6	(DH/household)
Electricity	116.9	(DH/household)
Total	254.4	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	50.0	(/household)
Villagers	1,000	81.3	(/household)

Annual Income per Household

Agriculture	9,582	(DH/household)
Livestock	4,365	(DH/household)
Forestry	0	(DH/household)
Others	6,438	(DH/household)
Total	20,385	(DH/household)

Annual Expenditure per Household

12,128 (DH/household)

Annual Saving per Household

8,257 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* South

Slope (o) of Surrounding Mountains at

East	South	West
36	35	23

Distance from the Existing 22kV Power Line

8.8 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	110	Douar	Arg			
C.R.	17		Asni	Cercle	1	Asni

Location

Latitude	N31	11	17	Longitude	W7	55	19	Altitude	1,580(m)
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Households and Population

	Yr 1996	Yr 2010
Households	75	89
Population	1,020	1,234

Size of Residential Area

Fragments	4
E-W	400 (m)
N-S	1,000 (m)

Access (km)

Pist	10.0 (km)
Path	0.5 (km)
Total	10.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	92	1	2	112	1	400
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	20	0	0	0	2	0	2	224

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.67	1.22	0.00	0.00	0.33	(/household)
Utilization	#DIV/0!	5.67	7.00	#DIV/0!	#DIV/0!	5.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.56	1.00	1.67	0.00	0.33	0.00	0.11	(/household)
Utilization	5.22	7.22	7.89	#DIV/0!	24.00	#DIV/0!	5.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	134.7	(DfH/household)
Electricity	92.1	(DfH/household)
Total	226.8	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	1,500	100.0	(/household)
Villagers	1,056	77.2	(/household)

Annual Income per Household

Agriculture	30,189	(DfH/household)
Livestock	5,353	(DfH/household)
Forestry	0	(DfH/household)
Others	1,400	(DfH/household)
Total	36,942	(DfH/household)

Annual Expenditure per Household

14,400 (DfH/household)

Annual Saving per Household

22,542 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (o) of Surrounding Mountains at

East	South	West
20	30	42

Distance from the Existing 22kV Power Line

5.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	120	Douar	Tinerhouhrine			
C.R.	17	Asni		Cercle	1	Asni

Location

Latitude	N31	9'	30"	Longitude	W7	51'	15"	Altitude	2,000	(m)
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Households and Population

			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments	E-W	N-S	Dist	Total
Households	30	36	1	150	150	10.0	13.5
Population	250	302		(m)	(m)	(km)	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	70	1	2	84	1	200
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
3	8	1	6	0	2	0	2	320

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.75	1.50	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.67	7.50	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	10.00	1.00	1.50	0.00	0.00	0.00	0.00	(/household)
Utilization	3.75	6.00	7.75	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	135.4	(DfI/household)
Electricity	137.8	(DfI/household)
Total	273.2	(DfI/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfI)	Monthly (DfI)	
Leader	1,500	70.0	(/household)
Villagers	1,250	128.8	(/household)

Annual Income per Household

Agriculture	11,091	(DfI/household)
Livestock	9,445	(DfI/household)
Forestry	0	(DfI/household)
Others	2,500	(DfI/household)
Total	23,036	(DfI/household)

Annual Expenditure per Household

18,170 (DfI/household)

Annual Saving per Household

4,866 (DfI/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (o) of Surrounding Mountains at

East	South	West
10	30	42

Distance from the Existing 22kV Power Line

10.1 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	131	Douar	El Bour			
C.R.	17	Asni		Cercle	I	Asni

Location

Latitude	N31° 12'	28°	Longitude	W7° 56'	26°	Altitude	1,400 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	65	77
Population	510	617

Size of Residential Area

Fragments	1
E-W	300 (m)
N-S	300 (m)

Access (km)

Pist	3.0 (km)
Path	0.0 (km)
Total	3.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	4	120	2	4	146	0	0
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	10	0	0	0	1	0	1	150

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	1.00	0.63	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.86	8.20	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	7.38	1.00	1.00	0.00	0.00	0.00	0.00	(/household)
Utilization	4.00	6.63	7.38	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	116.1	(DfH/household)
Electricity	93.9	(DfH/household)
Total	210.0	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	2,000	75.0	(/household)
Villagers	1,313	69.4	(/household)

Annual Income per Household

Agriculture	14,534	(DfH/household)
Livestock	4,120	(DfH/household)
Forestry	0	(DfH/household)
Others	9,100	(DfH/household)
Total	27,754	(DfH/household)

Annual Expenditure per Household

14,625 (DfH/household)

Annual Saving per Household

13,126 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		*
		North

Slope (°) of Surrounding Mountains at

East	South	West
15	29	10

Distance from the Existing 22kV Power Line

2.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	132	Douar	Imskar		
C.R.	17	Asni	Cercle	I	Asni

Location									
Latitude	N31	12'	37"	Longitude	W7	56'	20"	Altitude	1,380(m)

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	3.0 (km)
Households	40	48	E-W	200 (m)		Path	1.0 (km)
Population	280	339	N-S	150 (m)		Total	4.0 (km)

Public Facilities							
Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	20	1	1	24	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries								
Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
0	0	0	0	0	1	0	1	80

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)							
	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.60	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.67	5.80	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future							
	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others
Nmbrs	7.40	1.00	1.00	0.00	0.00	0.00	0.00
Utilization	3.60	6.40	6.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Present Expense for Energy			Payable Investment and Monthly Expense for Electrification		
	Monthly Expense			Initial (Df)	Monthly (Df)
Fuel	82.1	(Df/household)	Leader	1,000	50.0
Electricity	77.4	(Df/household)	Villagers	1,300	65.0
Total	159.5	(Df/household)			

Annual Income per Household			Annual Expenditure per Household	
Agriculture	40,559	(Df/household)	17,030 (Df/household)	
Livestock	5,121	(Df/household)		
Forestry	0	(Df/household)		
Others	4,800	(Df/household)		
Total	50,479	(Df/household)		

<Geographical Conditions>			
Location			
on flat land	on hill	on slope	
		*	South

Distance from the Existing 22kV Power Line	2.0 (km)
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Topographical Condition of Rout when extending the existing power line.		
Flat	Slope	Steep
		*

Annual Mean Rainfall	600 (mm)
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Slope (o) of Surrounding Mountains at		
East	South	West
15	23	10

Inventory concerned on Electric Aspects

No.	150	Douar	Ikiss			
C.R.	17	Asni		Cercle	1	Asni

Location

Latitude	N31°	10'	5"	Longitude	W7°	53'	28"	Altitude	1,850	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	65	77
Population	500	605

Size of Residential Area

Fragments	1
E-W	250 (m)
N-S	250 (m)

Access (km)

Pist	10.0	(km)
Path	5.0	(km)
Total	15.0	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	4	70	2	4	84	1	300
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd	Animal	Total	(kg/day)
6	8	2	6	0	1	0	1	144

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	1.13	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.50	7.50	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.88	1.00	1.13	0.00	0.13	0.00	0.00	(/household)
Utilization	4.75	7.00	7.88	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	137.6	(DfH/household)
Electricity	116.9	(DfH/household)
Total	254.4	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Df)	Monthly (Df)	
Leader	1,500	50.0	(/household)
Villagers	1,000	81.3	(/household)

Annual Income per Household

Agriculture	9,582	(DfH/household)
Livestock	4,365	(DfH/household)
Forestry	0	(DfH/household)
Others	6,438	(DfH/household)
Total	20,385	(DfH/household)

Annual Expenditure per Household

12,128 (DfH/household)

Annual Saving per Household

8,257 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		*
		South

Slope (o) of Surrounding Mountains at

East	South	West
36	35	23

Distance from the Existing 22kV Power Line

8.8 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	170	Douar	Tacheddirt			
C.R.	17	Asni		Cercle	1	Asni

Location

Latitude	N31°	9'	30"	Longitude	W7°	50'	48"	Altitude	2,180(m)
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Households and Population

	Yr 1996	Yr 2010
Households	60	71
Population	360	436

Size of Residential Area

	Fragments	1
E-W	250	(m)
N-S	250	(m)

Access (km)

Pist	10.0	(km)
Path	2.0	(km)
Total	12.0	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	2	80	2	2	96	1	200
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
6	8	1	6	0	1	0	1 140

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.63	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.20	7.43	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.63	1.00	1.25	0.00	0.25	0.00	0.00	(/household)
Utilization	4.63	7.38	7.50	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	169.6	(Dh/household)
Electricity	119.5	(Dh/household)
Total	289.1	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	1,500	50.0	(/household)
Villagers	1,250	80.0	(/household)

Annual Income per Household

Agriculture	12,051	(Dh/household)
Livestock	9,975	(Dh/household)
Forestry	0	(Dh/household)
Others	4,125	(Dh/household)
Total	26,151	(Dh/household)

Annual Expenditure per Household

13,650	(Dh/household)
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Annual Saving per Household

12,501	(Dh/household)
--------	----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* South

Slope (o) of Surrounding Mountains at

East	South	West
10	30	10

Distance from the Existing 22kV Power Line

14.9	(km)
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Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

800	(mm)
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Inventory concerned on Electric Aspects

No.	180	Douar	Sqour		
C.R.	21	Ourika	Cercle	2	Tahanaout

Location

Latitude	N31° 20' 39"	Longitude	W7° 43' 32"	Altitude	1,200 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	45	53
Population	360	436

Size of Residential Area

Fragments	1
E-W	120 (m)
N-S	300 (m)

Access (km)

Pist	0.0 (km)
Path	5.0 (km)
Total	5.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	70	1	2	84	1	500
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd	Animal	Total	(kg/day)
2	20	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.78	0.89	0.00	0.00	0.11	(/household)
Utilization	#DIV/0!	4.86	6.75	#DIV/0!	#DIV/0!	4.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	7.89	1.33	1.22	0.00	0.89	0.00	0.00	(/household)
Utilization	5.11	7.11	7.67	#DIV/0!	24.00	#DIV/0!	4.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	100.8	(DH/household)
Electricity	88.3	(DH/household)
Total	189.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	50.0	(/household)
Villagers	1,222	95.6	(/household)

Annual Income per Household

Agriculture	12,705	(DH/household)
Livestock	5,753	(DH/household)
Forestry	0	(DH/household)
Others	7,156	(DH/household)
Total	25,614	(DH/household)

Annual Expenditure per Household

13,529 (DH/household)

Annual Saving per Household

12,085 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
	*	West

Slope (°) of Surrounding Mountains at

East	South	West
22	18	13

Distance from the Existing 22kV Power Line

4.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	190	Douar	Amagdour			
C.R.	21	Ourika		Cercle	2	Tahanaout

Location

Latitude	N31°	20'	58"	Longitude	W7°	43'	9"	Altitude	1,150 (m)
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Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	0.0 (km)
Households	22	26	E-W	900 (m)		Path	6.0 (km)
Population	150	181	N-S	900 (m)		Total	6.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	1	300
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Hour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
0	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.67	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.00	8.17	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	7.67	1.00	1.17	0.00	0.83	0.00	0.00	(/household)
Utilization	5.50	7.17	8.17	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy			Payable Investment and Monthly Expense for Electrification		
	Monthly Expense		Initial (DH)	Monthly (DH)	
Fuel	72.9 (DH/household)		Leader 1,000	75.0 (DH/household)	
Electricity	74.3 (DH/household)		Villagers 917	64.2 (DH/household)	
Total	147.2 (DH/household)				

Annual Income per Household		Annual Expenditure per Household	
Agriculture	5,249 (DH/household)		9,740 (DH/household)
Livestock	6,563 (DH/household)		
Forestry	0 (DH/household)		
Others	3,600 (DH/household)		
Total	15,412 (DH/household)		5,672 (DH/household)

<Geographical Conditions>

Location				Slope (o) of Surrounding Mountains at		
on flat land	on hill	on slope		East	South	West
		*	West	25	30	13

Distance from the Existing 22kV Power Line
 5.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall
 500 (mm)

Inventory concerned on Electric Aspects

No.	200	Douar	Tamaterte			
C.R.	22	Settifadma		Cercle	2	Tahanaout

Location

Latitude	N31	12	5°	Longitude	W7	42	43°	Altitude	1,800	(m)
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Households and Population			Size of Residential Area			Access (km)		
	Yr 1996	Yr 2010	Fragments			Pist		
Households	40	48	E-W	200	(m)	Path	2.5	(km)
Population	240	290	N-S	150	(m)	Total	2.5	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	2	80	2	2	96	1	200
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
0	0	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.25	0.75	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.00	7.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	4.38	0.50	1.25	0.00	0.00	0.00	0.00	(/household)
Utilization	4.29	4.50	7.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	55.1	(DH/household)
Electricity	62.5	(DH/household)
Total	117.6	(DH/household)

Annual Income per Household

Agriculture	3,275	(DH/household)
Livestock	6,518	(DH/household)
Forestry	0	(DH/household)
Others	6,975	(DH/household)
Total	16,768	(DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Distance from the Existing 22kV Power Line

5.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

700 (mm)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	750	20.0	(/household)
Villagers	606	57.5	(/household)

Annual Expenditure per Household

11,691 (DH/household)

Annual Saving per Household

5,077 (DH/household)

Slope (o) of Surrounding Mountains at

East	South	West
25	25	10

Inventory concerned on Electric Aspects

No.	210	Douar	Anfli			
C.R.	22	Settifadma		Cercle	2	Tahanaout

Location

Latitude	N31	12	14	Longitude	W7	44	30	Altitude	1,750 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	63	75
Population	378	457

Size of Residential Area

Fragments	
E-W	150 (m)
N-S	300 (m)

Access (km)

Pist	0.0 (km)
Path	8.0 (km)
Total	8.0 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	3	30	2	3	36	1	10
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
3	8	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.00	1.25	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	#DIV/0!	6.29	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.00	1.00	1.38	0.00	0.00	0.00	0.00	(/household)
Utilization	3.63	5.63	7.75	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	53.0	(DH/household)
Electricity	69.5	(DH/household)
Total	122.5	(D11/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	750	50.0	(/household)
Villagers	775	61.3	(/household)

Annual Income per Household

Agriculture	5,706	(DH/household)
Livestock	8,728	(DH/household)
Forestry	0	(DH/household)
Others	2,700	(DH/household)
Total	17,133	(DH/household)

Annual Expenditure per Household

12,091 (DH/household)

Annual Saving per Household

5,042 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	North

Slope (o) of Surrounding Mountains at

East	South	West
25	25	10

Distance from the Existing 22kV Power Line

8.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

700 (mm)

Inventory concerned on Electric Aspects

No.	220	Douar	Timichi			
C.R.	22	Settifadma		Cercle	2	Tahanaout

Location

Latitude	N31	11'	56'	Longitude	W7	46'	22'	Altitude	2,000	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	60	71
Population	370	448

Size of Residential Area

Fragments	1
E-W	600 (m)
N-S	400 (m)

Access (km)

Pist	0.0	(km)
Path	11.0	(km)
Total	11.0	(km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nbrs	Classes	(m ²)	Nbrs	Classes	(m ²)	Nbrs	(m ²)
2	4	136	2	4	164	1	200
First Aids		Public halls		Cooperatives		Warehouses	
Nbrs	(m ²)	Nbrs	(m ²)	Nbrs	(m ²)	Nbrs	(m ²)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nbrs	(m ²)	Nbrs	(m ²)	Diesel	Hyd.	Animal	Total	(kg/day)
2	10	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nbrs	0.00	0.14	0.86	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.00	6.17	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nbrs	10.00	0.86	1.86	0.00	0.14	0.14	0.14	(/household)
Utilization	4.14	6.83	6.14	#DIV/0!	24.00	0.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	83.5	(DfH/household)
Electricity	83.0	(DfH/household)
Total	171.5	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	1,000	60.0	(/household)
Villagers	1,143	64.3	(/household)

Annual Income per Household

Agriculture	6,286	(DfH/household)
Livestock	6,023	(DfH/household)
Forestry	0	(DfH/household)
Others	7,857	(DfH/household)
Total	20,166	(DfH/household)

Annual Expenditure per Household

10,200	(DfH/household)
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Annual Saving per Household

9,966	(DfH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	South

Slope (o) of Surrounding Mountains at

East	South	West
25	25	10

Distance from the Existing 22KV Power Line

8.6	(kna)
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Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

700	(mm)
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Inventory concerned on Electric Aspects

No.	230	Douar	Agouns			
C.R.	23	Oukaimeden		Cercle	2	Tahanaout

Location

Latitude	N31	11'	48"	Longitude	W7	48'	5"	Altitude	2,300	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	105	125
Population	630	762

Size of Residential Area

	Fragments	1
E-W	500	(m)
N-S	500	(m)

Access (km)

	Pist	0.0	(km)
Path	14.0	(km)	
Total	14.0	(km)	

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	2	110	2	2	134	1	400
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
0	0	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.00	1.00	0.00	0.00	0.00	(household)
Utilization	#DIV/0!	#DIV/0!	6.80	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.67	0.83	2.42	0.00	0.00	0.17	0.00	(household)
Utilization	3.92	6.30	7.00	#DIV/0!	#DIV/0!	3.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	80.5	(DH/household)
Electricity	75.2	(DH/household)
Total	155.6	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	750	50.0	(household)
Villagers	896	59.2	(household)

Annual Income per Household

Agriculture	2,150	(DH/household)
Livestock	7,430	(DH/household)
Forestry	0	(DH/household)
Others	708	(DH/household)
Total	10,288	(DH/household)

Annual Expenditure per Household

7,329 (DH/household)

Annual Saving per Household

2,959 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		West

Slope (o) of Surrounding Mountains at

East	South	West
10	25	25

Distance from the Existing 22kV Power Line

6.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

800 (mm)

Inventory concerned on Electric Aspects

No.	240	Douar	Oulad Mansour			
C.R.	24	Tamesloht		Cercle	2	Tahanaout

Location

Latitude	N31	29	8°	Longitude	W8	0'	42°	Altitude	630	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	70	83
Population	500	605

Size of Residential Area

	Fragments	1
E-W	300	(m)
N-S	500	(m)

Access (km)

Pist	4.5	(km)
Path	0.0	(km)
Total	4.5	(km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	2	80	2	2	96	1	300
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	10	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	0.75	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.25	4.33	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	5.38	0.88	0.88	0.00	0.38	0.00	0.00	(/household)
Utilization	3.50	5.71	6.67	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	126.1	(DH/household)
Electricity	91.5	(DH/household)
Total	217.6	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	50.0	(/household)
Villagers	1,000	53.8	(/household)

Annual Income per Household

Agriculture	8,616	(DH/household)
Livestock	6,903	(DH/household)
Forestry	0	(DH/household)
Others	6,375	(DH/household)
Total	21,898	(DH/household)

Annual Expenditure per Household

11,061 (DH/household)

Annual Saving per Household

10,837 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
•		

Slope (o) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

5.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
•		

Annual Mean Rainfall

200 (mm)

Inventory concerned on Electric Aspects

No.	251	Djouar	Oulad Lahjar		
C.R.	24	Tamesloht	Cercle	2	Tahanaout

Location

Latitude	N31° 23' 41"	Longitude	W8° 5' 9"	Altitude	700 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	100	119
Population	600	726

Size of Residential Area

	Fragments	1
E-W	700 (m)	
N-S	450 (m)	

Access (km)

	2.5 (km)
Pist	2.5 (km)
Path	0.0 (km)
Total	2.5 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	4	200	1	4	242	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
3	15	0	0	1	0	0	1	300

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.91	1.18	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.60	7.45	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.91	1.27	1.18	0.00	0.64	0.00	0.09	(/household)
Utilization	4.45	6.36	7.27	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	138.1	(DH/household)
Electricity	82.6	(DH/household)
Total	220.7	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	75.0	(/household)
Villagers	936	70.0	(/household)

Annual Income per Household

Agriculture	6,822	(DH/household)
Livestock	3,582	(DH/household)
Forestry	0	(DH/household)
Others	7,091	(DH/household)
Total	17,495	(DH/household)

Annual Expenditure per Household

11,235 (DH/household)

Annual Saving per Household

6,260 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

0.3 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

200 (mm)

Inventory concerned on Electric Aspects

No.	252	Douar	Oumnas			
C.R.	24	Tamesleht		Cercle	2	Tahanaout

Location						
Latitude	N31	25	16°	Longitude	W8	4' 33"
Altitude		700 (m)				

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments	1		Pist	0.5 (km)
Households	150	178	E-W	600 (m)		Path	0.0 (km)
Population	800	968	N-S	300 (m)		Total	0.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	3	600	1	13	726	1	200
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
1	100	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
4	20	0	0	1	0	0	1	300

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.82	1.12	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	7.57	8.07	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	7.65	1.00	1.41	0.00	0.29	0.00	0.00	(/household)
Utilization	5.24	8.76	8.06	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	174.4	(DH/household)
Electricity	135.7	(DH/household)
Total	310.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)
Leader	1,500	50.0 (/household)
Villagers	1,082	120.6 (/household)

Annual Income per Household

Agriculture	5,009	(DH/household)
Livestock	5,900	(DH/household)
Forestry	0	(DH/household)
Others	14,275	(DH/household)
Total	25,184	(DH/household)

Annual Expenditure per Household

16,191 (DH/household)

Annual Saving per Household

8,992 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (°) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

1.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

200 (mm)

Inventory concerned on Electric Aspects

No.	261	Douar	Awin Mazouz		
C.R.	24	Tamesloht	Cercle	2	Tahanaout

Location

Latitude	N31	32	0°	Longitude	W8	7	52°	Altitude	500 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	67	80
Population	420	508

Size of Residential Area

Fragments	3
E-W	300 (m)
N-S	600 (m)

Access (km)

Pist	0.3 (km)
Path	0.0 (km)
Total	0.3 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	40	1	1	48	1	150
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	10	1	10	1	0	0	1	160

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	1.50	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.00	6.75	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	9.25	1.00	1.50	0.00	0.38	0.00	0.63	(/household)
Utilization	4.00	6.88	8.13	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	118.9	(DfH/household)
Electricity	112.2	(DfH/household)
Total	231.1	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	2,000	100.0	(/household)
Villagers	1,125	68.1	(/household)

Annual Income per Household

Agriculture	8,656	(DfH/household)
Livestock	11,621	(DfH/household)
Forestry	0	(DfH/household)
Others	6,494	(DfH/household)
Total	26,770	(DfH/household)

Annual Expenditure per Household

21,162 (DfH/household)

Annual Saving per Household

5,609 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (°) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

6.3 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

200 (mm)

Inventory concerned on Electric Aspects

No.	262	Douar	Bouchiha Bon Omar			
C.R.	24	Tamesloht		Cerele	2	Tahanaout

Location

Latitude	N31	32	44	Longitude	W8	6	28	Altitude	500	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	66	78
Population	400	484

Size of Residential Area

Fragments	1
E-W	800 (m)
N-S	350 (m)

Access (km)

Pist	1.0	(km)
Path	0.0	(km)
Total	1.0	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	3	240	1	5	290	1	200
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
4	50	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.88	1.25	0.13	0.00	0.00	(/household)
Utilization	#DIV/0!	5.71	6.14	10.60	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.38	1.00	1.50	0.00	0.25	0.13	0.13	(/household)
Utilization	3.88	7.38	7.00	#DIV/0!	24.00	8.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	100.1	(DII/household)
Electricity	91.5	(DII/household)
Total	191.6	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	2,500	60.0	(/household)
Villagers	1,438	81.9	(/household)

Annual Income per Household

Agriculture	2,132	(DII/household)
Livestock	4,353	(DII/household)
Forestry	0	(DII/household)
Others	19,062	(DII/household)
Total	25,547	(DII/household)

Annual Expenditure per Household

15,993 (DII/household)

Annual Saving per Household

9,554 (DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

4.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

200 (mm)

Inventory concerned on Electric Aspects

No.	270	Douar	Dei El Ain			
C.R.	24	Tamesloht		Cercle	2	Tahanaout

Location

Latitude	N31	28'	53"	Longitude	W8	4'	30"	Altitude	580	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	110	131
Population	600	726

Size of Residential Area

Fragments	1
E-W	700 (m)
N-S	300 (m)

Access (km)

	0.5	(km)
Dist	0.5	(km)
Path	0.0	(km)
Total	0.5	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	8	400	1	9	484	1	200
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
4	70	0	0	1	0	0	1	960

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.67	1.17	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.13	8.92	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.25	1.08	1.17	0.00	0.50	0.00	0.00	(/household)
Utilization	5.75	7.42	9.50	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	146.8	(Dh/household)
Electricity	87.2	(Dh/household)
Total	234.0	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	1,500	70.0	(/household)
Villagers	1,088	75.8	(/household)

Annual Income per Household

Agriculture	21,627	(Dh/household)
Livestock	5,523	(Dh/household)
Forestry	0	(Dh/household)
Others	7,033	(Dh/household)
Total	34,183	(Dh/household)

Annual Expenditure per Household

12,950	(Dh/household)
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Annual Saving per Household

21,234	(Dh/household)
--------	----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

0.7	(km)
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Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

200	(mm)
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Inventory concerned on Electric Aspects

No.	300	Douar	Bel Abbas			
C.R.	25	Tahanaout		Cercle	2	Tahanaout

Location

Latitude	N31	27	21'	Longitude	W7	55'	9"	Altitude	660(m)
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Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	5.5 (km)
Households	140	166	E-W	1,000 (m)		Path	0.0 (km)
Population	900	1,089	N-S	1,000 (m)		Total	5.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	4	320	1	7	388	3	300
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
5	100	0	0	2	0	0	2	600

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.06	0.69	0.63	0.00	0.00	0.00	(/household)
Utilization	3.00	6.45	8.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	7.56	0.94	0.88	0.06	0.44	0.00	0.31	(/household)
Utilization	5.13	6.67	7.46	24.00	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	119.8	(DH/household)
Electricity	84.7	(DH/household)
Total	204.5	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DI)	Monthly (DI)	
Leader	1,500	60.0	(/household)
Villagers	1,109	71.6	(/household)

Annual Income per Household

Agriculture	9,952	(DH/household)
Livestock	13,367	(DH/household)
Forestry	0	(DH/household)
Others	5,175	(DH/household)
Total	28,494	(DH/household)

Annual Expenditure per Household

11,328 (DH/household)

Annual Saving per Household

17,166 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (°) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

4.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

300 (mm)

Inventory concerned on Electric Aspects

No.	320	Douar	Derb Chem's			
C.R.	25	Tahanaout		Cercle	2	Tahanaout

Location

Latitude	N31° 21' 48"	Longitude	W7° 57' 41"	Altitude	900 (m)
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Households and Population

		Yr 1996		Yr 2010		Size of Residential Area		Access (km)	
Households	60	60	71	Fragments	1	Pist	0.0	(km)	
Population	369	369	446	E-W	300 (m)	Path	0.0	(km)	
				N-S	400 (m)	Total	0.0	(km)	

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	3	160	1	3	194	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
2	30	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.86	1.71	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.60	8.71	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.71	1.43	1.71	0.00	0.57	0.00	0.00	(/household)
Utilization	5.14	7.00	7.71	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	102.9	(DfH/household)
Electricity	90.3	(DfH/household)
Total	193.2	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	1,500	70.0	(/household)
Villagers	1,143	80.0	(/household)

Annual Income per Household

Agriculture	2,712	(DfH/household)
Livestock	7,282	(DfH/household)
Forestry	0	(DfH/household)
Others	11,214	(DfH/household)
Total	21,208	(DfH/household)

Annual Expenditure per Household

12,000 (DfH/household)

Annual Saving per Household

9,208 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (o) of Surrounding Mountains at

East	South	West
0	10	0

Distance from the Existing 22kV Power Line

2.2 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

400 (mm)

Inventory concerned on Electric Aspects

No.	330	Douar	Sour Tadrara			
C.R.	25	Tahanaout		Cercle	2	Tahanaout

Location

Latitude	N31	21	2	Longitude	W7	53	21	Altitude	940	(m)
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Households and Population			Size of Residential Area		Access (km)	
	Yr 1996	Yr 2010	Fragments		Pist	
Households	110	131	E-W	600 (m)	Path	0.0 (km)
Population	677	819	N-S	300 (m)	Total	1.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	2	320	2	7	388	1	150
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
8	20	0	0	1	0	0	1	150

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.85	1.31	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.73	6.54	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.54	0.92	1.15	0.00	0.15	0.00	0.15	(/household)
Utilization	4.62	8.42	7.31	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	223.8	(DfH/household)
Electricity	128.0	(DfH/household)
Total	351.8	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	1,500	50.0	(/household)
Villagers	2,115	126.9	(/household)

Annual Income per Household

Agriculture	25,331	(DfH/household)
Livestock	6,781	(DfH/household)
Forestry	0	(DfH/household)
Others	28,338	(DfH/household)
Total	60,450	(DfH/household)

Annual Expenditure per Household

17,455 (DfH/household)

Annual Saving per Household

42,995 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	10	0

Distance from the Existing 22kV Power Line

2.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

400 (mm)

Inventory concerned on Electric Aspects

No.	340	Douar	Tlat Tadrara			
C.R.	25	Tahanaout		Cercle	2	Tahanaout

Location

Latitude	N31	20'	31"	Longitude	W7	54'	7"	Altitude	970	(m)
----------	-----	-----	-----	-----------	----	-----	----	----------	-----	-----

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	0.0 (km)
Households	80	95	E-W	800 (m)		Path	0.0 (km)
Population	490	593	N-S	400 (m)		Total	0.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	2	60	2	2	72	2	500
First Aids		Public halls	Cooperatives		Warehouses		
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
4	8	0	0	1	0	0	1 200

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.78	1.11	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.00	6.86	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	10.44	1.33	1.56	0.00	0.33	0.11	0.89	(/household)
Utilization	4.78	7.89	8.11	#DIV/0!	24.00	4.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	362.9	(DII/household)
Electricity	189.4	(DII/household)
Total	552.3	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	1,500	100.0	(/household)
Villagers	2,722	161.1	(/household)

Annual Income per Household

Agriculture	14,304	(DII/household)
Livestock	9,789	(DII/household)
Forestry	0	(DII/household)
Others	22,711	(DII/household)
Total	46,804	(DII/household)

Annual Expenditure per Household

20,184	(DII/household)
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Annual Saving per Household

26,619	(DII/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (o) of Surrounding Mountains at

East	South	West
0	10	0

Distance from the Existing 22kV Power Line

2.5	(km)
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Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

400	(mm)
-----	------

Inventory concerned on Electric Aspects

No.	350	Douar	Imin Tala			
C.R.	31	Anougal		Cercle	3	Amizmiz

Location

Latitude	N31	7'	52'	Longitude	W8	16'	8'	Altitude	1,480	(m)
----------	-----	----	-----	-----------	----	-----	----	----------	-------	-----

Households and Population

	Yr 1996	Yr 2010
Households	70	83
Population	460	557

Size of Residential Area

Fragments	1
E-W	500 (m)
N-S	500 (m)

Access (km)

Pist	12.5	(km)
Path	0.0	(km)
Total	12.5	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m ²)	Nmbrs	Classes	(m ²)	Nmbrs	(m ²)
0	0	0	0	0	0	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m ²)	Nmbrs	(m ²)	Nmbrs	(m ²)	Nmbrs	(m ²)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m ²)	Nmbrs	(m ²)	Diesel	Hyd.	Animal	Total	(kg/day)
5	100	1	15	0	4	0	4	1,900

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.33	1.25	0.00	0.00	0.42	(/household)
Utilization	#DIV/0!	4.00	6.17	#DIV/0!	#DIV/0!	5.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.83	1.00	1.58	0.00	0.33	0.00	0.00	(/household)
Utilization	4.17	6.42	7.25	#DIV/0!	24.00	#DIV/0!	5.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	121.2	(DII/household)
Electricity	117.8	(DII/household)
Total	239.1	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)
Leader	1,500	50.0 (/household)
Villagers	746	56.7 (/household)

Annual Income per Household

Agriculture	12,807	(DII/household)
Livestock	6,494	(DII/household)
Forestry	0	(DII/household)
Others	6,835	(DII/household)
Total	26,136	(DII/household)

Annual Expenditure per Household

13,259	(DII/household)
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Annual Saving per Household

12,877	(DII/household)
--------	-----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (o) of Surrounding Mountains at

East	South	West
26	9	22

Distance from the Existing 22kV Power Line

20.0	(km)
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Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500	(mm)
-----	------

Inventory concerned on Electric Aspects

No.	360	Douar	Addouz			
C.R.	31	Anougal		Cercle	3	Amizmiz

Location

Latitude	N31	7	42	Longitude	W8	16	3	Altitude	1,460 (m)
----------	-----	---	----	-----------	----	----	---	----------	-----------

Households and Population

	Yr 1996	Yr 2010
Households	50	59
Population	300	363

Size of Residential Area

	Fragments	1
E-W	400	(m)
N-S	400	(m)

Access (km)

	Pist	12.5	(km)
Path	0.5	(km)	
Total	13.0	(km)	

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	2	64	2	2	78	1	120
First Aids		Public halls	Cooperatives		Warehouses		
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
0	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	1.38	0.00	0.00	0.13	(/household)
Utilization	#DIV/0!	5.25	6.50	#DIV/0!	#DIV/0!	3.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.88	1.00	1.63	0.00	0.13	0.00	0.13	(/household)
Utilization	4.00	5.38	7.13	#DIV/0!	24.00	#DIV/0!	3.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	91.9	(DII/household)
Electricity	103.0	(DII/household)
Total	194.9	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	500	50.0	(/household)
Villagers	844	67.5	(/household)

Annual Income per Household

Agriculture	10,415	(DII/household)
Livestock	5,408	(DII/household)
Forestry	0	(DII/household)
Others	3,838	(DII/household)
Total	19,660	(DII/household)

Annual Expenditure per Household

10,474 (DII/household)

Annual Saving per Household

9,186 (DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (o) of Surrounding Mountains at

East	South	West
39	10	0

Distance from the Existing 22kV Power Line

20.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	370	Douar	Ain Ghad			
C.R.	31	Anougal		Cerele	3	Amizmiz

Location

Latitude	N31° 8' 18"	Longitude	W8° 15' 59"	Altitude	1,450 (m)
----------	-------------	-----------	-------------	----------	-----------

Households and Population			Size of Residential Area		Access (km)	
	Yr 1996	Yr 2010	Fragments	1	Pist	11.5 (km)
Households	43	51	E-W	300 (m)	Path	0.0 (km)
Population	206	249	N-S	200 (m)	Total	11.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	3	260	1	6	314	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
4	80	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.33	1.33	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	3.50	8.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	11.67	1.17	1.50	0.00	0.00	0.00	0.00	(/household)
Utilization	4.33	5.83	8.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	155.4	(DH/household)
Electricity	87.2	(DH/household)
Total	242.5	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	60.0	(/household)
Villagers	1,125	62.5	(/household)

Annual Income per Household

Agriculture	29,238	(DH/household)
Livestock	12,717	(DH/household)
Forestry	0	(DH/household)
Others	0	(DH/household)
Total	41,955	(DH/household)

Annual Expenditure per Household

17,343 (DH/household)

Annual Saving per Household

24,612 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (α) of Surrounding Mountains at

East	South	West
20	10	10

Distance from the Existing 22kV Power Line

20.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	380	Douar	Inzaine			
C.R.	31	Anougal		Cercle	3	Amizmiz

Location

Latitude	N31	8'	2'	Longitude	W8	15'	42'	Altitude	1,420 (m)
----------	-----	----	----	-----------	----	-----	-----	----------	-----------

Households and Population

	Yr 1996	Yr 2010
Households	70	83
Population	420	508

Size of Residential Area

	Fragments	1
E-W	250	(m)
N-S	400	(m)

Access (km)

	Pist	10.0	(km)
Path	0.0	(km)	
Total	10.0	(km)	

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	160	1	3	194	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
5	100	1	15	3	0	0	3	600

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.33	1.33	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.00	5.25	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.11	1.22	1.67	0.11	0.00	0.00	0.22	(/household)
Utilization	4.56	6.89	7.56	24.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	160.4	(DH/household)
Electricity	105.1	(DH/household)
Total	265.6	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	50.0	(/household)
Villagers	1,556	81.7	(/household)

Annual Income per Household

Agriculture	36,066	(DH/household)
Livestock	11,656	(DH/household)
Forestry	0	(DH/household)
Others	5,600	(DH/household)
Total	53,322	(DH/household)

Annual Expenditure per Household

20,735 (DH/household)

Annual Saving per Household

32,587 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (o) of Surrounding Mountains at

East	South	West
31	20	13

Distance from the Existing 22kV Power Line

20.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	390	Dour	Imi N'isly			
C.R.	31	Anougal		Cerele	3	Amizmiz

Location

Latitude	N31	9'	0"	Longitude	W8	15'	51"	Altitude	1,350	(m)
----------	-----	----	----	-----------	----	-----	-----	----------	-------	-----

Households and Population

	Yr 1996	Yr 2010
Households	86	102
Population	450	544

Size of Residential Area

Fragments	1
E-W	600 (m)
N-S	400 (m)

Access (km)

Pist	14.0	(km)
Path	0.0	(km)
Total	14.0	(km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	1	80	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
5	100	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.08	1.17	0.00	0.00	0.17	(/household)
Utilization	#DIV/0!	2.00	7.17	#DIV/0!	#DIV/0!	4.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.08	1.00	1.33	0.00	0.08	0.00	0.08	(/household)
Utilization	4.83	6.73	8.17	#DIV/0!	24.00	#DIV/0!	4.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	117.8	(DH/household)
Electricity	97.0	(DH/household)
Total	214.8	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	50.0	(/household)
Villagers	904	58.8	(/household)

Annual Income per Household

Agriculture	9,093	(DH/household)
Livestock	5,896	(DH/household)
Forestry	0	(DH/household)
Others	6,042	(DH/household)
Total	21,030	(DH/household)

Annual Expenditure per Household

10,784	(DH/household)
--------	----------------

Annual Saving per Household

10,246	(DH/household)
--------	----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (o) of Surrounding Mountains at

East	South	West
12	7	16

Distance from the Existing 22kV Power Line

9.0	(km)
-----	------

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500	(mm)
-----	------

Inventory concerned on Electric Aspects

No.	400	Douar	Dou Anamer			
C.R.	31	Anougal		Cercle	3	Amizmiz

Location

Latitude	N31	8'	41"	Longitude	W8	15'	28"	Altitude	1,320(m)
----------	-----	----	-----	-----------	----	-----	-----	----------	----------

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	
Households	35	42	E-W	200	(m)	Path	0.0 (km)
Population	220	266	N-S	200	(m)	Total	8.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	30	1	1	36	1	150
First Aids			Public halls			Warehouses	
Nmbrs	(m2)		Nmbrs	(m2)	Nmbrs	(m2)	
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
0	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	1.00	0.00	0.00	0.25	(/household)
Utilization	#DIV/0!	5.50	7.00	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others
Nmbrs	8.25	1.00	1.25	0.00	0.25	0.00	(/household)
Utilization	5.75	5.75	8.00	#DIV/0!	24.00	#DIV/0!	(hrs/day)

Present Expense for Energy			Payable Investment and Monthly Expense for Electrification		
	Monthly Expense		Initial (Dh)	Monthly (Dh)	
Fuel	147.2	(Dh/household)	Leader	1,000	50.0 (/household)
Electricity	112.3	(Dh/household)	Villagers	813	62.5 (/household)
Total	259.4	(Dh/household)			

Annual Income per Household		Annual Expenditure per Household	
Agriculture	17,348 (Dh/household)	12,000	(Dh/household)
Livestock	12,663 (Dh/household)		
Forestry	0 (Dh/household)		
Others	2,750 (Dh/household)	Annual Saving per Household	
Total	32,760 (Dh/household)	20,760	(Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (o) of Surrounding Mountains at

East	South	West
21	17	15

Distance from the Existing 22kV Power Line
9.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall
500 (mm)

Inventory concerned on Electric Aspects

No.	410	Douar	Igroundem			
C.R.	31	Ancugal	Cercle	3	Amizmiz	

Location

Latitude	N31	9'	32"	Longitude	W8	15'	15"	Altitude	1,350	(m)
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Households and Population

		Yr 1996		Yr 2010		Size of Residential Area		Access (km)	
Households		13	15	Fragments		1		Pist	7.0 (km)
Population		100	121	E-W		400 (m)		Path	0.0 (km)
				N-S		1,000 (m)		Total	7.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	1	80	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	15	0	0	2	0	0	2	150

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.33	2.33	0.00	0.00	0.67	(/household)
Utilization	#DIV/0!	4.00	8.67	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	10.33	1.33	2.00	0.00	1.00	0.00	0.33	(/household)
Utilization	4.67	4.00	6.67	#DIV/0!	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	161.2	(Dh/household)
Electricity	133.0	(Dh/household)
Total	294.2	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	1,500	50.0	(/household)
Villagers	1,250	80.0	(/household)

Annual Income per Household

Agriculture	39,213	(Dh/household)
Livestock	19,595	(Dh/household)
Forestry	0	(Dh/household)
Others	5,000	(Dh/household)
Total	63,808	(Dh/household)

Annual Expenditure per Household

20,932 (Dh/household)

Annual Saving per Household

42,876 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

Slope (o) of Surrounding Mountains at

East	South	West
17	27	10

Distance from the Existing 22kV Power Line

8.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	420	Douar	Toug Lkheif		
C.R.	31	Anougal	Cercle	3	Amizmiz

Location

Latitude	N31	9'	57"	Longitude	W8	15'	28"	Altitude	1,200	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	40	48
Population	250	302

Size of Residential Area

Fragments	1
E-W	200 (m)
N-S	200 (m)

Access (km)

Pist	4.5 (km)
Path	2.5 (km)
Total	7.0 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	2	80	2	2	96	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
0	0	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.40	1.40	0.00	0.00	0.40	(/household)
Utilization	#DIV/0!	6.50	8.25	#DIV/0!	#DIV/0!	1.50	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.00	1.20	1.80	0.00	0.00	0.00	0.40	(/household)
Utilization	5.00	6.60	8.40	#DIV/0!	#DIV/0!	#DIV/0!	1.50	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	121.8	(DH/household)
Electricity	103.4	(DH/household)
Total	225.2	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	50.0	(/household)
Villagers	870	79.0	(/household)

Annual Income per Household

Agriculture	25,308	(DH/household)
Livestock	10,512	(DH/household)
Forestry	0	(DH/household)
Others	2,700	(DH/household)
Total	38,520	(DH/household)

Annual Expenditure per Household

15,960 (DH/household)

Annual Saving per Household

22,560 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (°) of Surrounding Mountains at

East	South	West
27	27	27

Distance from the Existing 22kV Power Line

7.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	430	Douar	Ait Ouzkri			
C.R.	31	Anougal		Cercle	3	Amizmiz

Location

Latitude	N31	11°	14°	Longitude	W8	14°	56°	Altitude	1,400(m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	----------

Households and Population

	Yr 1996	Yr 2010
Households	40	48
Population	250	302

Size of Residential Area

Fragments	
E-W	250 (m)
N-S	150 (m)

Access (km)

Pist	3.0 (km)
Path	0.0 (km)
Total	3.0 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	40	1	1	48	1	50
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
0	0	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.60	0.80	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.00	4.33	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.20	1.00	1.20	0.00	0.00	0.00	0.20	(/household)
Utilization	4.40	6.40	6.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	77.9	(DfH/household)
Electricity	105.4	(DfH/household)
Total	183.3	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	10,000	1000.0	(/household)
Villagers	1,100	75.0	(/household)

Annual Income per Household

Agriculture	2,273	(DfH/household)
Livestock	7,160	(DfH/household)
Forestry	1,200	(DfH/household)
Others	10,140	(DfH/household)
Total	20,773	(DfH/household)

Annual Expenditure per Household

9,660 (DfH/household)

Annual Saving per Household

11,113 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (o) of Surrounding Mountains at

East	South	West
30	27	22

Distance from the Existing 22kV Power Line

4.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	440	Douar	Ait Hmad			
C.R.	31	Anougal		Cercle	3	Amizmiz

Location

Latitude	N31	10	25	Longitude	W8	14	45	Altitude	1,400 (m)
----------	-----	----	----	-----------	----	----	----	----------	-----------

Households and Population

	Yr 1996	Yr 2010
Households	50	59
Population	300	363

Size of Residential Area

	Fragments	
	1	
E-W	500	(m)
N-S	300	(m)

Access (km)

Pist	5.5	(km)
Path	0.0	(km)
Total	5.5	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	60	1	1	72	1	100
First Aids			Public halls			Warehouses	
Nmbrs	(m2)		Nmbrs	(m2)	Nmbrs	(m2)	
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
1	20	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.17	0.67	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.00	5.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.83	1.00	1.00	0.00	0.33	0.00	0.17	(/household)
Utilization	3.00	4.50	4.17	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	66.2	(DH/household)
Electricity	89.7	(DH/household)
Total	155.8	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	50.0	(/household)
Villagers	725	66.7	(/household)

Annual Income per Household

Agriculture	3,146	(DH/household)
Livestock	7,789	(DH/household)
Forestry	0	(DH/household)
Others	9,000	(DH/household)
Total	19,934	(DH/household)

Annual Expenditure per Household

8,800 (DH/household)

Annual Saving per Household

11,134 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

Slope (o) of Surrounding Mountains at

East	South	West
17	7	5

Distance from the Existing 22kV Power Line

6.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	450	Douar	Tizgui		
C.R.	31	Anougal		Cercle	3

Location					
Latitude	N31	10°	47'	Longitude	W8
					15°
				11"	Altitude
					1,180 (m)

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments	1		Pist	4.5 (km)
Households	60	71	E-W	800 (m)		Path	0.0 (km)
Population	250	302	N-S	1,000 (m)		Total	4.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	62	1	1	76	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	16	0	0	0	1	0	1	90

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.29	1.71	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.00	8.57	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	5.57	1.00	1.71	0.00	0.14	0.00	0.00	(/household)
Utilization	4.71	5.00	9.00	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	91.4	(DfH/household)
Electricity	101.7	(DfH/household)
Total	196.1	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	1,000	50.0	(/household)
Villagers	1,100	84.3	(/household)

Annual Income per Household

Agriculture	7,151	(DfH/household)
Livestock	6,789	(DfH/household)
Forestry	0	(DfH/household)
Others	6,143	(DfH/household)
Total	20,082	(DfH/household)

Annual Expenditure per Household

11,883 (DfH/household)

Annual Saving per Household

8,199 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	South

Slope (°) of Surrounding Mountains at

East	South	West
24	16	18

Distance from the Existing 22kV Power Line

5.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	460	Douar	Adardour		
C.R.	31	Anougal	Cercle	3	Amizmiz

Location

Latitude	N31	4'	31"	Longitude	W8	16'	50"	Altitude	1,800(m)
----------	-----	----	-----	-----------	----	-----	-----	----------	----------

Households and Population

	Yr 1996	Yr 2010
Households	160	190
Population	700	847

Size of Residential Area

Fragments	(m)
E-W	600
N-S	2,700

Access (km)

	(km)
Pist	20.0
Path	0.5
Total	20.5

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
6	6	210	6	6	254	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	15	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.32	1.21	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.60	7.28	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.21	1.00	1.42	0.00	0.05	0.00	0.11	(/household)
Utilization	4.79	5.39	7.47	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	92.7	(DH/household)
Electricity	117.2	(DH/household)
Total	209.9	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	50.0	(/household)
Villagers	789	61.8	(/household)

Annual Income per Household

Agriculture	22,444	(DH/household)
Livestock	10,717	(DH/household)
Forestry	0	(DH/household)
Others	5,489	(DH/household)
Total	38,651	(DH/household)

Annual Expenditure per Household

16,955 (DH/household)

Annual Saving per Household

21,696 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (o) of Surrounding Mountains at

Fast	South	West
27	22	23

Distance from the Existing 22kV Power Line

20.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	470	Douar	Lemdinat		
C.R.	32	Azgour	Cercle	3	Amizmiz

Location

Latitude	N31	6'	34"	Longitude	W8	22'	17"	Altitude	1,840	(m)
----------	-----	----	-----	-----------	----	-----	-----	----------	-------	-----

Households and Population

	Yr 1996	Yr 2010
Households	160	190
Population	985	1,192

Size of Residential Area

Fragments	1
E-W	500 (m)
N-S	400 (m)

Access (km)

Pist	0.0	(km)
Path	0.0	(km)
Total	0.0	(km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	5	120	2	5	146	1	200
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	1	40	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
4	10	0	0	0	2	0	2	240

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.65	1.45	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.77	7.45	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.95	1.05	1.65	0.00	0.35	0.05	0.35	(/household)
Utilization	4.15	5.63	7.70	#DIV/0!	24.00	0.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	331.7	(DH/household)
Electricity	137.9	(DH/household)
Total	469.6	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	800	60.0	(/household)
Villagers	1,150	78.3	(/household)

Annual Income per Household

Agriculture	60,880	(DH/household)
Livestock	8,785	(DH/household)
Forestry	0	(DH/household)
Others	18,897	(DH/household)
Total	88,562	(DH/household)

Annual Expenditure per Household

17,210 (DH/household)

Annual Saving per Household

71,352 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* South

Slope (o) of Surrounding Mountains at

East	South	West
10	10	17

Distance from the Existing 22kV Power Line

6.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	486	Douar	Tnirt		
C.R.	32	Azgor	Cercle	3	Amizmiz

Location

Latitude	N31°	6'	31'	Longitude	W8°	19'	13'	Altitude	1,750(m)
----------	------	----	-----	-----------	-----	-----	-----	----------	----------

Households and Population

	Yr 1996	Yr 2010
Households	230	273
Population	1,416	1,713

Size of Residential Area

Fragments	1
E-W	800 (m)
N-S	750 (m)

Access (km)

Pist	0.0 (km)
Path	4.0 (km)
Total	4.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	6	240	1	6	290	2	350
First Aids		Public halls	Cooperatives		Warehouses		
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
3	60	3	50	1	0	0	1 90

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.37	1.37	0.00	0.00	0.19	(/household)
Utilization	#DIV/0!	5.33	7.30	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.63	1.00	1.48	0.00	0.26	0.00	0.19	(/household)
Utilization	4.52	6.69	7.52	#DIV/0!	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	300.9	(DH/household)
Electricity	117.2	(DH/household)
Total	418.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,200	100.0	(/household)
Villagers	944	61.1	(/household)

Annual Income per Household

Agriculture	27,274	(DH/household)
Livestock	9,697	(DH/household)
Forestry	267	(DH/household)
Others	5,802	(DH/household)
Total	43,039	(DH/household)

Annual Expenditure per Household

16,582 (DH/household)

Annual Saving per Household

26,457 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* East

Slope (o) of Surrounding Mountains at

East	South	West
10	13	11

Distance from the Existing 22kV Power Line

4.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	490	Douar	Anermi		
C.R.	32	Azgour		Cercle	3 Amizmiz

Location

Latitude	N31	7'	15"	Longitude	W8	19'	5"	Altitude	1,700(m)
----------	-----	----	-----	-----------	----	-----	----	----------	----------

Households and Population

	Yr 1996	Yr 2010
Households	90	107
Population	540	653

Size of Residential Area

Fragments	1
E-W	500(m)
N-S	500(m)

Access (km)

Pist	0.0(km)
Path	2.5(km)
Total	2.5(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	240	1	5	290	3	400
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
3	50	0	0	1	0	0	1	100

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.64	0.91	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.86	6.90	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.09	1.18	1.45	0.00	0.27	0.09	0.09	(/household)
Utilization	5.00	6.82	9.27	#DIV/0!	24.00	0.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	134.7	(DH/household)
Electricity	92.5	(DH/household)
Total	227.3	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	120.0	(/household)
Villagers	1,164	78.6	(/household)

Annual Income per Household

Agriculture	36,848	(DH/household)
Livestock	10,323	(DH/household)
Forestry	636	(DH/household)
Others	3,327	(DH/household)
Total	51,135	(DH/household)

Annual Expenditure per Household

15,436 (DH/household)

Annual Saving per Household

35,699 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		*
		Fast

Slope (o) of Surrounding Mountains at

East	South	West
0	6	11

Distance from the Existing 22kV Power Line

2.5(km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500(mm)

Inventory concerned on Electric Aspects

No.	500	Douar	Ansnrou		
C.R.	32	Azgour		Cercle	3
Anizmiz					

Location

Latitude	N31	6'	45"	Longitude	W8	21'	46"	Altitude	1,780	(m)
----------	-----	----	-----	-----------	----	-----	-----	----------	-------	-----

Households and Population

	Yr 1996	Yr 2010
Households	160	190
Population	985	1,192

Size of Residential Area

Fragments	1
E-W	450 (m)
N-S	300 (m)

Access (km)

Pist	0.0	(km)
Path	3.5	(km)
Total	3.5	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	100	1	2	120	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
4	10	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.21	1.05	0.00	0.00	0.21	(/household)
Utilization	#DIV/0!	4.75	5.67	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	9.05	1.00	1.16	0.00	0.05	0.00	0.00	(/household)
Utilization	5.84	6.61	8.32	#DIV/0!	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	139.0	(DII/household)
Electricity	100.9	(DII/household)
Total	240.0	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	1,000	35.0	(/household)
Villagers	997	73.2	(/household)

Annual Income per Household

Agriculture	34,598	(DII/household)
Livestock	10,726	(DII/household)
Forestry	0	(DII/household)
Others	2,621	(DII/household)
Total	47,945	(DII/household)

Annual Expenditure per Household

15,382 (DII/household)

Annual Saving per Household

32,563 (DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (°) of Surrounding Mountains at

East	South	West
10	20	23

Distance from the Existing 22kV Power Line

8.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	510	Douar	Talat Ait Itha		
C.R.	32	Argour	Cercle	3	Amizmiz

Location										
Latitude	N31	6'	0"	Longitude	W8	20'	59"	Altitude	1,760	(m)

Households and Population			Size of Residential Area			Access (km)		
	Yr 1996	Yr 2010	Fragments	1		Pist	0.0 (km)	
Households	70	83	E-W	500 (m)		Path	0.0 (km)	
Population	210	254	N-S	450 (m)		Total	0.0 (km)	

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	20	0	0	0	1	0	1	100

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.10	0.80	1.30	0.00	0.00	0.00	(/household)
Utilization	5.00	4.86	9.60	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	7.30	1.10	1.30	0.10	0.00	0.00	0.60	(/household)
Utilization	4.30	7.50	8.50	24.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	178.1	(DII/household)
Electricity	103.6	(DII/household)
Total	281.7	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	1,500	70.0	(/household)
Villagers	1,150	67.0	(/household)

Annual Income per Household

Agriculture	51,219	(DII/household)
Livestock	26,299	(DII/household)
Forestry	0	(DII/household)
Others	2,850	(DII/household)
Total	80,368	(DII/household)

Annual Expenditure per Household

24,860 (DII/household)

Annual Saving per Household

55,508 (DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (o) of Surrounding Mountains at

East	South	West
0	16	11

Distance from the Existing 22kV Power Line

5.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	520	Douar	Toufkine		
C.R.	32	Azgour	Cercle	3	Amizmiz

Location

Latitude	N31	9'	52"	Longitude	W8	19'	52"	Altitude	1,710	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	190	226
Population	1,400	1,694

Size of Residential Area

Fragments	1
E-W	600 (m)
N-S	350 (m)

Access (km)

Pist	0.0	(km)
Path	0.0	(km)
Total	0.0	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	4	140	1	4	170	2	400
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
10	200	2	30	2	0	0	2	400

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.27	1.27	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.67	6.32	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.86	0.91	1.36	0.00	0.14	0.00	0.27	(/household)
Utilization	4.68	6.89	7.32	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	161.0	(DH/household)
Electricity	85.0	(DH/household)
Total	246.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,200	100.0	(/household)
Villagers	980	52.5	(/household)

Annual Income per Household

Agriculture	8,127	(DH/household)
Livestock	11,360	(DH/household)
Forestry	0	(DH/household)
Others	4,255	(DH/household)
Total	23,742	(DH/household)

Annual Expenditure per Household

10,970	(DH/household)
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Annual Saving per Household

12,772	(DH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	North

Slope (o) of Surrounding Mountains at

East	South	West
0	18	9

Distance from the Existing 22kV Power Line

3.0	(km)
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Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500	(mm)
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Inventory concerned on Electric Aspects

No.	530	Douar	Adghouss		
C.R.	32	Azgour	Cercle	3	Antizmiz

Location

Latitude	N31	11'	12"	Longitude	W8	19'	18"	Altitude	1,770	(m)
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Households and Population

		Yr 1996		Yr 2010		Size of Residential Area		Access (km)	
Households		50		59		Fragments	1	Pist	2.0
Population		200		242		E-W	150 (m)	Path	3.5
						N-S	150 (m)	Total	5.5

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	2	98	2	2	118	1	80
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	10	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.67	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.25	6.20	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.00	0.83	1.50	0.00	0.00	0.00	0.00	(/household)
Utilization	5.00	6.60	6.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	119.3	(DH/household)
Electricity	129.2	(DH/household)
Total	248.5	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	25.0	(/household)
Villagers	917	60.0	(/household)

Annual Income per Household

Agriculture	8,091	(DH/household)
Livestock	10,020	(DH/household)
Forestry	0	(DH/household)
Others	3,067	(DH/household)
Total	21,178	(DH/household)

Annual Expenditure per Household

9,629 (DH/household)

Annual Saving per Household

11,549 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		North

Slope (o) of Surrounding Mountains at

East	South	West
0	10	5

Distance from the Existing 22kV Power Line

6.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	540	Douar	Douzrou			
C.R.	32		Azgour	Cercle	3	Amizmiz

Location

Latitude	N31	9	45°	Longitude	W8	23	12°	Altitude	1,820	(m)
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Households and Population			Size of Residential Area			Access (km)		
	Yr 1996	Yr 2010	Fragments	1		Pist	2.5	(km)
Households	220	261	E-W	350	(m)	Path	1.5	(km)
Population	1,500	1,815	N-S	200	(m)	Total	4.0	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	80	1	2	96	1	120
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
6	10	0	0	2	0	0	2	1,050

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.32	1.00	0.00	0.00	0.04	(/household)
Utilization	#DIV/0!	5.13	6.26	#DIV/0!	#DIV/0!	6.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.64	1.00	1.16	0.09	0.20	0.00	0.08	(/household)
Utilization	4.24	6.43	7.56	#DIV/0!	24.00	#DIV/0!	6.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	229.6	(DH/household)
Electricity	90.8	(DH/household)
Total	320.4	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	700	40.0	(/household)
Villagers	976	67.4	(/household)

Annual Income per Household

Agriculture	6,742	(DH/household)
Livestock	10,267	(DH/household)
Forestry	0	(DH/household)
Others	6,440	(DH/household)
Total	23,449	(DH/household)

Annual Expenditure per Household

12,902 (DH/household)

Annual Saving per Household

10,546 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (°) of Surrounding Mountains at

East	South	West
35	10	0

Distance from the Existing 22kV Power Line

8.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	550	Douar	Ait Outmane		
C.R.	32	Azgour		Cerele	3 Amizmiz

Location									
Latitude	N31	9'	23"	Longitude	W8	23'	40"	Altitude	1,450 (m)

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments	1		Pist	2.5 (km)
Households	150	178	E-W	1,750 (m)		Path	0.0 (km)
Population	600	726	N-S	1,100 (m)		Total	2.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	136	1	3	164	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
5	10	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.56	1.50	0.00	0.00	0.17	(/household)
Utilization	#DIV/0!	4.60	5.94	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	9.44	1.11	1.67	0.00	0.44	0.00	0.22	(/household)
Utilization	3.78	6.61	6.28	#DIV/0!	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	139.3	(DH/household)
Electricity	113.0	(DH/household)
Total	252.3	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)
Leader	1,000	50.0 (/household)
Villagers	828	68.3 (/household)

Annual Income per Household

Agriculture	9,783	(DH/household)
Livestock	8,129	(DH/household)
Forestry	0	(DH/household)
Others	7,006	(DH/household)
Total	24,918	(DH/household)

Annual Expenditure per Household

17,365 (DH/household)

Annual Saving per Household

7,552 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

Slope (o) of Surrounding Mountains at

East	South	West
24	14	17

Distance from the Existing 22kV Power Line

9.6 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	560	Douar	Tagadirt		
C.R.	32	Azgour	Cercle	3	Amizmiz

Location

Latitude	N31	11'	9'	Longitude	W8	23'	54'	Altitude	1,610	(m)
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Households and Population

			Size of Residential Area			Access (km)		
	Yr 1996	Yr 2010	Fragments	E-W	N-S	Pist	Path	Total
Households	50	59	1	150	150	2.5	4.5	7.0
Population	140	169		(m)	(m)	(km)	(km)	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
0	0	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.25	1.25	0.50	0.00	0.25	(/household)
Utilization	#DIV/0!	5.00	7.00	10.00	#DIV/0!	1.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.50	0.75	1.00	0.00	0.25	0.00	0.50	(/household)
Utilization	3.25	7.00	7.00	#DIV/0!	24.00	#DIV/0!	1.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	135.3	(Dh/household)
Electricity	119.3	(Dh/household)
Total	254.6	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	900	70.0	(/household)
Villagers	675	50.0	(/household)

Annual Income per Household

Agriculture	3,429	(Dh/household)
Livestock	8,120	(Dh/household)
Forestry	0	(Dh/household)
Others	1,450	(Dh/household)
Total	12,999	(Dh/household)

Annual Expenditure per Household

21,000	(Dh/household)
--------	----------------

Annual Saving per Household

-8,001	(Dh/household)
--------	----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope	West
*			

Slope (o) of Surrounding Mountains at

East	South	West
10	18	0

Distance from the Existing 22kV Power Line

20.0	(km)
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Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

500	(mm)
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Inventory concerned on Electric Aspects

No.	570	Douar	Tifirt		
C.R.	32	Azgour	Cercle	3	Amizmiz

Location

Latitude	N31	10'	43'	Longitude	W8	24'	28'	Altitude	1,580	(m)
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Households and Population

			Size of Residential Area			Access (km)		
	Yr 1996	Yr 2010	Fragments	1		Pist	2.5	(km)
Households	90	107	E-W	600	(m)	Path	3.5	(km)
Population	150	181	N-S	400	(m)	Total	6.0	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	3	84	2	3	102	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	10	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.55	1.18	0.00	0.00	0.27	(/household)
Utilization	#DIV/0!	6.17	6.80	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.91	1.00	1.27	0.00	0.18	0.00	0.27	(/household)
Utilization	5.18	7.09	8.91	#DIV/0!	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	126.5	(DH/household)
Electricity	80.5	(DH/household)
Total	207.0	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	500	30.0	(/household)
Villagers	659	44.1	(/household)

Annual Income per Household

Agriculture	6,079	(DH/household)
Livestock	7,851	(DH/household)
Forestry	0	(DH/household)
Others	5,620	(DH/household)
Total	19,550	(DH/household)

Annual Expenditure per Household

11,047 (DH/household)

Annual Saving per Household

8,503 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (o) of Surrounding Mountains at

East	South	West
16	18	0

Distance from the Existing 22kV Power Line

20.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	580	Douar	Anfrioune		
C.R.	32	Azgour		Cercle	3
Anizmiz					

Location

Latitude	N31	11'	25"	Longitude	W8	22'	17"	Altitude	1,720	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	60	71
Population	120	145

Size of Residential Area

Fragments	
E-W	300 (m)
N-S	450 (m)

Access (km)

Pist	2.5 (km)
Path	7.0 (km)
Total	9.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	60	1	1	72	1	80
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	10	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.43	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	3.33	4.17	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	4.43	0.71	0.86	0.00	0.14	0.00	0.00	(/household)
Utilization	3.86	5.00	5.40	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	79.0	(Dh/household)
Electricity	66.2	(Dh/household)
Total	145.2	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	500	35.0	(/household)
Villagers	557	39.3	(/household)

Annual Income per Household

Agriculture	3,626	(Dh/household)
Livestock	8,096	(Dh/household)
Forestry	0	(Dh/household)
Others	2,349	(Dh/household)
Total	14,070	(Dh/household)

Annual Expenditure per Household

10,349 (Dh/household)

Annual Saving per Household

3,722 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	East
		*	

Slope (o) of Surrounding Mountains at

East	South	West
0	18	7

Distance from the Existing 22kV Power Line

8.0 (km)

Topographical Condition of Rout when extending the existing power line.

flat	Slope	Steep
	*	

Annual Mean Rainfall

500 (mm)

Inventory concerned on Electric Aspects

No.	590	Douar	Ait Smil		
C.R.	33	Dar Jamaa	Cercle	3	Amizmiz

Location

Latitude	N31	14'	5"	Longitude	W8	21'	3"	Altitude	1,040 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	150	178
Population	1,400	1,694

Size of Residential Area

Fragments	1
E-W	700 (m)
N-S	700 (m)

Access (km)

Pist	1.0 (km)
Path	1.5 (km)
Total	2.5 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	6	150	2	6	182	1	200
First Aids		Public halls	Cooperatives		Warehouses		
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	2	100	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
7	50	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.76	1.29	0.00	0.00	0.10	(/household)
Utilization	#DIV/0!	4.73	7.12	#DIV/0!	#DIV/0!	1.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.05	1.19	1.48	0.05	0.29	0.05	0.14	(/household)
Utilization	4.43	5.42	7.05	20.00	24.00	3.00	1.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	178.7	(Dh/household)
Electricity	94.3	(Dh/household)
Total	273.0	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	1,000	50.0	(/household)
Villagers	776	76.9	(/household)

Annual Income per Household

Agriculture	5,029	(Dh/household)
Livestock	9,939	(Dh/household)
Forestry	0	(Dh/household)
Others	5,499	(Dh/household)
Total	20,467	(Dh/household)

Annual Expenditure per Household

10,234 (Dh/household)

Annual Saving per Household

10,233 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
	*	North

Slope (o) of Surrounding Mountains at

East	South	West
0	25	0

Distance from the Existing 22kV Power Line

4.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

400 (mm)

Inventory concerned on Electric Aspects

No.	600	Douar	Tifratine			
C.R.	33	Dar Jamaa		Cerele	3	Amizmiz

Location

Latitude	N31	17	14	Longitude	W8	20	46	Altitude	810 (m)
----------	-----	----	----	-----------	----	----	----	----------	---------

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	3.6 (km)
Households	80	95	E-W	3,000	(m)	Path	0.0 (km)
Population	600	726	N-S	2,000	(m)	Total	3.6 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	100	1	2	120	1	200
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
3	9	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.58	0.83	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	3.71	5.44	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.17	1.00	1.42	0.08	0.17	0.00	0.25	(/household)
Utilization	3.75	5.45	7.08	24.00	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	124.3	(DH/household)
Electricity	107.8	(DH/household)
Total	232.0	(DH/household)

Annual Income per Household

Agriculture	2,881	(DH/household)
Livestock	15,520	(DH/household)
Forestry	0	(DH/household)
Others	4,042	(DH/household)
Total	22,443	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	100.0	(/household)
Villagers	763	54.6	(/household)

Annual Expenditure per Household

12,571 (DH/household)

Annual Saving per Household

9,872 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (°) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

7.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

300 (mm)

Inventory concerned on Electric Aspects

No.	610	Douar	Aguenze			
C.R.	33	Dar Jamaa	Cercle	3	Amizmiz	

Location

Latitude	N31	17	14	Longitude	W8	22	3	Altitude	820	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	20	24
Population	200	242

Size of Residential Area

Fragments	1
E-W	300 (m)
N-S	250 (m)

Access (km)

Pist	3.7 (km)
Path	0.0 (km)
Total	3.7 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	30	1	1	36	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
0	0	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.63	1.13	0.00	0.00	0.13	(/household)
Utilization	#DIV/0!	4.25	7.00	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	8.63	1.13	1.50	0.00	0.13	0.00	0.13	(/household)
Utilization	4.13	6.00	7.25	#DIV/0!	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	153.8	(DH/household)
Electricity	99.1	(DH/household)
Total	252.9	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	15.0	(/household)
Villagers	938	65.0	(/household)

Annual Income per Household

Agriculture	4,168	(DH/household)
Livestock	16,915	(DH/household)
Forestry	0	(DH/household)
Others	6,650	(DH/household)
Total	27,732	(DH/household)

Annual Expenditure per Household

15,473 (DH/household)

Annual Saving per Household

12,260 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

8.5 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

300 (mm)

Inventory concerned on Electric Aspects

No.	626	Douar	Ifit Baragha		
C.R.	33	Dar Jamaa		Cercle	3

Location

Latitude	N31	15'	57"	Longitude	W8	20'	57"	Altitude	850 (m)
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Households and Population			Size of Residential Area		Access (km)	
	Yr 1996	Yr 2010	Fragments		Pist	
Households	35	42	E-W	1,150 (m)	Path	0.3 (km)
Population	250	302	N-S	1,150 (m)	Total	2.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
1	20	0	0	1	0	0	1 800

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	1.00	1.20	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.20	5.40	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	5.80	1.00	1.20	0.00	0.40	0.00	0.40	(/household)
Utilization	4.40	8.40	6.80	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	224.6	(DII/household)
Electricity	94.8	(DII/household)
Total	319.4	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	3,000	180.0	(/household)
Villagers	950	67.0	(/household)

Annual Income per Household

Agriculture	7,675	(DII/household)
Livestock	28,095	(DII/household)
Forestry	0	(DII/household)
Others	1,000	(DII/household)
Total	36,770	(DII/household)

Annual Expenditure per Household

22,600	(DII/household)
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Annual Saving per Household

14,170	(DII/household)
--------	-----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

5.5	(km)
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Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

300	(mm)
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Inventory concerned on Electric Aspects

No.	630	Douar	Agadir Baragha		
C.R.	33	Dar Jamaa	Cercle	3	Amizmiz

Location

Latitude	N31°	14'	11"	Longitude	W8°	20'	28"	Altitude	1,070 (m)
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Households and Population

			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	
Households	40	48	E-W	400 (m)		Path	0.0 (km)
Population	300	363	N-S	800 (m)		Total	2.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	70	1	2	84	1	30
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
0	0	0	0	0	0	0	0

Electric Articles held by Villagers at Present (only operated by electricity of battery, dry-cell, & generator)

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.63	1.50	0.00	0.00	0.38	(/household)
Utilization	#DIV/0!	5.20	5.75	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.75	0.88	1.25	0.13	0.38	0.00	0.50	(/household)
Utilization	3.75	5.33	7.25	24.00	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	166.8	(DH/household)
Electricity	105.9	(DH/household)
Total	272.6	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	500	250.0	(/household)
Villagers	650	53.8	(/household)

Annual Income per Household

Agriculture	6,681	(DH/household)
Livestock	10,955	(DH/household)
Forestry	0	(DH/household)
Others	7,038	(DH/household)
Total	24,673	(DH/household)

Annual Expenditure per Household

13,913 (DH/household)

Annual Saving per Household

10,761 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	25	0

Distance from the Existing 22kV Power Line

3.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

400 (mm)