

APPENDIX-3
Electricity Inventory

Inventory concerned on Electric Aspects

No.	10	Douar	Tizi Oussema					
C.R.	11	Ouirgane	Cercle	I	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	Fragments	1		Pist	13.0	(km)
Households	72	86	E-W	200	(m)	Path	3.5	(km)
Population	444	537	N-S	150	(m)	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)

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)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

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)

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

28,800 (DH/household)

Annual Saving per Household

51,338 (DH/household)

Slope (°) of Surrounding Mountains at

East	South	West
40	40	40

Inventory concerned on Electric Aspects

No.	20	Douar	Id Aissa			
C.R.	11	Ouirgane		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	(DH/household)
Electricity	89.2	(DH/household)
Total	226.9	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

15,123 (DH/household)

Annual Saving per Household

55,127 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

Slope (o) of Surrounding Mountains at

East	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	Tassa Ouirgane			
C.R.	11	Ouirgane	Cercle	I	Asni	

Location

Latitude	N31° 10' 66"	Longitude	W3° 1' 50"	Altitude	1,190 (m)
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Households and Population

	Yr 1996	Yr 2010	Fragments	1	Pist	6.0 (km)
Households	55	65	E-W	800 (m)	Path	0.0 (km)
Population	375	454	N-S	500 (m)	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	
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	(/household)
Utilization	3.86	7.43	6.86	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

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

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

16,014 (DII/household)

Annual Saving per Household

28,679 (DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		South

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

690 (mm)

Slope (o) of Surrounding Mountains at

East	South	West
48	45	21

Inventory concerned on Electric Aspects

No.	40	Douar	Igre					
C.R.	12		Imgdal	Cerele	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	Size of Residential Area	Access (km)
			Fragments	1
Households	27	32	E-W	500 (m)
Population	130	157	N-S	150 (m)
			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	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0
Warehouses			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	(DH/household)
Electricity	102.0	(DH/household)
Total	272.7	(DH/household)

Annual Income per Household

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

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* North

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)

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

22,513 (DH/household)

Annual Saving per Household

50,654 (DH/household)

Slope (o) of Surrounding Mountains at

East	South	West
50	40	40

Inventory concerned on Electric Aspects

No.	60	Dovar	Aila Oumzri			
C.R.	13	Tafat N'Yacoub	Cercle	1	Asni	

Location

Latitude	N30° 58' 49"	Longitude	W8° 9' 39"	Altitude	1,440 (m)
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Households and Population

	Yr 1996	Yr 2010	Fragments	1	Access (km)
Households	40	48	E-W	150 (m)	Pist 1.5 (km)
Population	280	339	N-S	150 (m)	Path 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	0.00	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	(/household)
Utilization	4.17	6.33	6.50	#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 (DH)	Monthly (DH)	
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)
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Annual Saving per Household

5,714	(DH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope
		* North

Slope (°) 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	Cerele	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	Size of Residential Area		Access (km)	
			Fragments	1	Pist	0.0 (km)
Households	66	78	E-W	500 (m)	Path	6.0 (km)
Population	500	605	N-S	300 (m)	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			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	(DH/household)
Electricity	83.1	(DH/household)
Total	223.3	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

20,625	(DH/household)
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Annual Saving per Household

2,608	(DH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope
		* South

Slope (°) of Surrounding Mountains at

East	South	West
37	28	18

Distance from the Existing 22kV Power Line

6.0	(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.	80	Douar	Aghella			
C.R.	15	Ighil	Cercle	1	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
Households	64	76	E-W	600 (m)
Population	394	477	N-S	250 (m)
			Pist	10.0 (km)
			Path	15.5 (km)
			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	
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)

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)

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

13,200	(DH/household)
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Annual Saving per Household

17,030	(DH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope
		• South

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

600	(mm)
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Slope (°) of Surrounding Mountains at

East	South	West
10	18	15

Inventory concerned on Electric Aspects

No.	90	Douar	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

	Yr 1996	Yr 2010
Households	68	81
Population	389	471

Size of Residential Area

Fragments	1
E-W	1,000 (m)
N-S	900 (m)

Access (km)

Pist	16.5	(km)
Path	4.0	(km)
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			Warehouses	
Nmbrs	(m2)		Nmbrs	(m2)		Nmbrs	(m2)
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)
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Annual Saving per Household

4,464	(DH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

Slope (o) of Surrounding Mountains at

East	South	West
40	17	40

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

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)
----------	----------	----	-----------	---------	-----	----------	-----------

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	I	Asni	

Location

Latitude	N31° 11' 17"	Longitude	W7° 55' 19"	Altitude	1,580 (m)
----------	--------------	-----------	-------------	----------	-----------

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	(DH/household)
Electricity	92.1	(DH/household)
Total	226.8	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

14,400	(DH/household)
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Annual Saving per Household

22,542	(DH/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)
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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)
----------	-----	----	-----	-----------	----	-----	-----	----------	-----------

Households and Population

	Yr 1996	Yr 2010	Fragments	1		Pist	10.0 (km)
Households	30	36	E-W	150 (m)		Path	3.5 (km)
Population	250	302	N-S	150 (m)		Total	13.5 (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	(/household)
Utilization	3.75	6.00	7.75	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

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

Annual Income per Household

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

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

18,170	(DH/household)
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Annual Saving per Household

4,866	(DH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

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)

Slope (o) of Surrounding Mountains at

East	South	West
10	30	42

Inventory concerned on Electric Aspects

No.	131	Douar	El Bour			
C.R.	17	Asni	Cercle	1	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	(DH/household)
Electricity	93.9	(DH/household)
Total	210.0	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

Agriculture	14,531	(DH/household)
Livestock	4,120	(DH/household)
Forestry	0	(DH/household)
Others	9,100	(DH/household)
Total	27,751	(DH/household)

Annual Expenditure per Household

14,625	(DH/household)
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Annual Saving per Household

13,126	(DH/household)
--------	----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* North

Slope (o) 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	1	Asni

Location

Latitude	N31	12	37	Longitude	W7	56	26	Altitude	1,380	(m)
----------	-----	----	----	-----------	----	----	----	----------	-------	-----

Households and Population

	Yr 1996	Yr 2010	Fragments	1		Access (km)			
Households	40	48	E-W	200	(m)	Pist	3.0	(km)	
Population	280	339	N-S	150	(m)	Path	1.0	(km)	
						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	
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	(/household)
Utilization	3.60	6.40	6.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	82.1	(DH/household)
Electricity	77.4	(DH/household)
Total	159.5	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	50.0	(/household)
Villagers	1,300	65.0	(/household)

Annual Income per Household

Agriculture	40,559	(DH/household)
Livestock	5,121	(DH/household)
Forestry	0	(DH/household)
Others	4,800	(DH/household)
Total	50,479	(DH/household)

Annual Expenditure per Household

	17,080	(DH/household)
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Annual Saving per Household

	33,399	(DH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope
		• South

Slope (°) of Surrounding Mountains at

East	South	West
15	23	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.	150	Douar	Ikiss			
C.R.	17	Asni		Cerele	1	Asni

Location

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

Households and Population

	Yr 1996	Yr 2010
Households	65	77
Population	560	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)
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Annual Saving per Household

8,257	(Dh/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope
		* South

Slope (°) 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)
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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)

Annual Saving per Household

12,501 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* South

Slope (°) of Surrounding Mountains at

East	South	West
10	30	10

Distance from the Existing 22kV Power Line

14.9 (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.	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)
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Annual Saving per Household

12,085	(DH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (o) of Surrounding Mountains at

East	South	West
22	18	13

Distance from the Existing 22kV Power Line

4.5	(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.	190	Douar	Amagdour			
C.R.	21	Ourika		Cercle	2	Tahanaout

Location						
Latitude	N31	20'	58"	Longitude	W7	43' 9"
				Altitude	1,150 (m)	

Households and Population			Size of Residential Area		Access (km)	
	Yr 1996	Yr 2010	Fragments	1	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		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	0.67	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

	Monthly Expense	
Fuel	72.9	(DII/household)
Electricity	74.3	(DII/household)
Total	147.2	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	1,000	75.0	(/household)
Villagers	917	64.2	(/household)

Annual Income per Household

Agriculture	5,249	(DII/household)
Livestock	6,563	(DII/household)
Forestry	0	(DII/household)
Others	3,600	(DII/household)
Total	15,412	(DII/household)

Annual Expenditure per Household

9,740	(DII/household)
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Annual Saving per Household

5,672	(DII/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (o) of Surrounding Mountains at

East	South	West
25	30	13

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

500	(mm)
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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

	Yr 1996	Yr 2010	Size of Residential Area		Access (km)	
			Fragments	1	Pist	0.0 (km)
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	
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)

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

11,691	(DH/household)
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Annual Saving per Household

5,077	(DH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

Slope (o) of Surrounding Mountains at

East	South	West
25	25	10

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)

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	1
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	(DH/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	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	4	136	2	4	164	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)
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	0.14	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	
Nmbrs	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	(DII/household)
Electricity	88.0	(DII/household)
Total	171.5	(DII/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

10,200 (DII/household)

Annual Saving per Household

9,966 (DII/household)

<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 (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.	230	Douar	Agouns			
C.R.	23	Oukaimeden	Cercle	2	Tahanaout	

Location						
Latitude	N31	11'	48"	Longitude	W7	48' 5"

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments	1		Pist	0.0 (km)
Households	105	125	E-W	500 (m)		Path	14.0 (km)
Population	630	762	N-S	500 (m)		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			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	6,908	(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	Douar	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)

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)
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Households and Population

	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	Tamesleht	Cercle	2	Tahanaout	

Location						
Latitude	N31	32	0"	Longitude	W8	7 52"
Altitude	500 (m)					
Households and Population			Size of Residential Area			Access (km)
	Yr 1996	Yr 2010	Fragments	3		Pist 0.3 (km)
Households	67	80	E-W	300 (m)		Path 0.0 (km)
Population	420	508	N-S	600 (m)		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			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	(DII/household)
Electricity	112.2	(DII/household)
Total	231.1	(DII/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

21,162 (DII/household)

Annual Saving per Household

5,609 (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

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 Ben Omar			
C.R.	24	Tamesloht	Cercle	2	Tahanaout	

Location

Latitude	N31	32	41"	Longitude	W8	6	28"	Altitude	500	(m)
----------	-----	----	-----	-----------	----	---	-----	----------	-----	-----

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	10.00	#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)
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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)
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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	Del 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			Size of Residential Area		Access (km)	
	Yr 1996	Yr 2010	Fragments	1	Pist	0.5 (km)
Households	110	131	E-W	700 (m)	Path	0.0 (km)
Population	600	726	N-S	300 (m)	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	34,184	(DH/household)

Annual Expenditure per Household

12,950 (DH/household)

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)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

200 (mm)

Inventory concerned on Electric Aspects

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

Location

Latitude	N31	27	21	Longitude	W7	55	9	Altitude	660	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	140	166
Population	900	1,089

Size of Residential Area

Fragments	3
E-W	1,000 (m)
N-S	1,000 (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	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 (DH)	Monthly (DH)	
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)
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Annual Saving per Household

17,166	(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

4.0	(km)
-----	------

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.	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)	
			Fragments	1	Pist	0.0 (km)
Households	60	71	E-W	300 (m)	Path	0.0 (km)
Population	369	446	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	(DH/household)
Electricity	90.3	(DH/household)
Total	193.2	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

12,000 (DH/household)

Annual Saving per Household

9,208 (DH/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

	Yr 1996	Yr 2010
Households	110	131
Population	677	819

Size of Residential Area

Fragments	1
E-W	600 (m)
N-S	300 (m)

Access (km)

Pist	1.5 (km)
Path	0.0 (km)
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	
Nmbrs	(m2)		Nmbrs	(m2)		Nmbrs	(m2)
0	0	0	0	0	0	0	0
						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)
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	(DII/household)
Electricity	128.0	(DII/household)
Total	351.8	(DII/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

17,455 (DII/household)

Annual Saving per Household

42,995 (DII/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	Haf Tedrara				
C.R.	25	Tahanaout		Cercle	2	Tahanaout	

Location

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

Households and Population

	Yr 1996	Yr 2010		Size of Residential Area			Access (km)
				Fragments	1		Pist
Households	80	95		E-W	800 (m)		Path
Population	490	593		N-S	400 (m)		Total
							0.0 (km)
							0.0 (km)
							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	
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	(DH/household)
Electricity	189.4	(DH/household)
Total	552.3	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

	Annual Expenditure	
	20,184	(DH/household)

Annual Saving per Household

	Annual Saving	
	26,619	(DH/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

2.5 (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.	350	Douar	Imin Tala			
C.R.	31	Anougal	Cercle	3	Amizmiz	

Location

Latitude	N31°	7'	52"	Longitude	W8°	16'	8"	Altitude	1,480	(m)
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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	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	1	100
First Aids			Public halls			Cooperatives	
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	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	(DH/household)
Electricity	117.8	(DH/household)
Total	239.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

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

12,877	(DH/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)
------	------

Topographical Condition of Rout when extending the existing power line.

Flat	Stepe	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			Size of Residential Area		Access (km)	
	Yr 1996	Yr 2010	Fragments	1	Pist	12.5 (km)
Households	50	59	E-W	400 (m)	Path	0.5 (km)
Population	300	363	N-S	400 (m)	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	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			Payable Investment and Monthly Expense for Electrification		
	Monthly Expense			Initial (DH)	Monthly (DH)
Fuel	91.9	(DH/household)	Leader	500	50.0 (/household)
Electricity	103.0	(DH/household)	Villagers	844	67.5 (/household)
Total	194.9	(DH/household)			

Annual Income per Household			Annual Expenditure per Household	
Agriculture	10,415	(DH/household)	10,474 (DH/household)	
Livestock	5,408	(DH/household)		
Forestry	0	(DH/household)		
Others	3,838	(DH/household)	Annual Saving per Household	
Total	19,660	(DH/household)	9,186 (DH/household)	

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

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)

Slope (o) of Surrounding Mountains at

East	South	West
39	10	0

Inventory concerned on Electric Aspects

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

Location

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

Households and Population

	Yr 1996	Yr 2010
Households	43	51
Population	206	249

Size of Residential Area

Fragments	1
E-W	300 (m)
N-S	200 (m)

Access (km)

Pist	11.5 (km)
Path	0.0 (km)
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	(DII/household)
Electricity	87.2	(DII/household)
Total	242.5	(DII/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

17,343	(DII/household)
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Annual Saving per Household

24,612	(DII/household)
--------	-----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope
		• East

Slope (o) 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	Douar	Imi N'isly			
C.R.	31	Anougal		Cercle	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	(DII/household)
Electricity	97.0	(DII/household)
Total	214.8	(DII/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

10,784 (DII/household)

Annual Saving per Household

10,246 (DII/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	1		Pist	8.5	(km)
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)	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	0.50	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	0.00	(/household)
Utilization	5.75	5.75	8.00	#DIV/0!	24.00	#DIV/0!	2.00	(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

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)

Slope (o) of Surrounding Mountains at

East	South	West
21	17	15

Inventory concerned on Electric Aspects

No.	410	Douar	Igoundem			
C.R.	31	Anougal		Cercle	3	Aniizmiz

Location

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

	Yr 1996	Yr 2010
Households	13	15
Population	100	121

Size of Residential Area

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

Access (km)

Pist	7.0	(km)
Path	0.0	(km)
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			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)
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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 Ikheif			
C.R.	31	Anougal	Cercle	3	Amizmitz	

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 (o) 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	1,100 (m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	-----------

Households and Population

	Yr 1996	Yr 2010
Households	40	48
Population	250	302

Size of Residential Area

Fragments	1
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	(DH/household)
Electricity	105.4	(DH/household)
Total	183.3	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

9,660	(DH/household)
-------	----------------

Annual Saving per Household

11,113	(DH/household)
--------	----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (°) 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			Size of Residential Area		Access (km)	
	Yr 1996	Yr 2010	Fragments	1	Pist	5.5 (km)
Households	50	59	E-W	500 (m)	Path	0.0 (km)
Population	300	363	N-S	300 (m)	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

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	0.17	0.67	0.00	0.00	0.00
Utilization	#DIV/0!	4.00	5.00	#DIV/0!	#DIV/0!	#DIV/0!

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
Utilization	3.00	4.50	4.17	#DIV/0!	24.00	#DIV/0!	#DIV/0!

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	9,600 (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	Amizmiz	

Location

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

Households and Population

	Yr 1996	Yr 2010	Size of Residential Area		Access (km)	
			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			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	(/household)
Utilization	4.71	5.00	9.00	#DIV/0!	24.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	94.4	(DH/household)
Electricity	101.7	(DH/household)
Total	196.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

	11,883 (DH/household)

Annual Saving per Household

	8,199 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* South

Slope (o) 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	Fragments	4		Pist	20.0 (km)
Households	160	190	E-W	600 (m)		Path	0.5 (km)
Population	700	847	N-S	2,700 (m)		Total	20.5 (km)

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			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

	Annual Expenditure 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)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* East

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)

Slope (°) of Surrounding Mountains at

East	South	West
27	22	23

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)
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Households and Population

	Yr 1996	Yr 2010	Size of Residential Area		Access (km)	
			Fragments	1		
Households	160	190	E-W	500 (m)		Pist 0.0 (km)
Population	985	1,192	N-S	400 (m)		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			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)

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)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* South

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)

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

17,210 (DH/household)

Annual Saving per Household

71,352 (DH/household)

Slope (°) of Surrounding Mountains at

East	South	West
10	10	17

Inventory concerned on Electric Aspects

No.	480	Douar	Thirt			
C.R.	32	Azgour		Cercle	3	Amizmiz

Location

Latitude	N31° 6' 31"	Longitude	W8° 19' 13"	Altitude	1,750 (m)
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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
Utilization	#DIV/0!	5.33	7.30	#DIV/0!	#DIV/0!	2.00

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
Utilization	4.52	6.69	7.52	#DIV/0!	24.00	#DIV/0!	2.00

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)
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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	(Df/household)
Electricity	92.5	(Df/household)
Total	227.3	(Df/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

15,436 (Df/household)

Annual Saving per Household

35,699 (Df/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* East

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	Ansmrou			
C.R.	32		Argour	Cercle	3	Amizmiz

Location

Latitude	N31° 6' 45"	Longitude	W8° 21' 46"	Altitude	1,780 (m)
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Households and Population

	Yr 1996	Yr 2010	Size of Residential Area	Access (km)
			Fragments	Pist
Households	160	190	E-W	Path
Population	985	1,192	N-S	Total

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	
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	(Dh/household)
Electricity	100.9	(Dh/household)
Total	240.0	(Dh/household)

Annual Income per Household

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

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* East

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)

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

15,382 (Dh/household)

Annual Saving per Household

32,563 (Dh/household)

Slope (o) of Surrounding Mountains at

East	South	West
10	20	23

Inventory concerned on Electric Aspects

No.	510	Douar	Talat Ait Ihla			
C.R.	32	Azgour	Cercle	3	Amizmiz	

Location

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

	Yr 1996	Yr 2010
Households	70	83
Population	210	254

Size of Residential Area

Fragments	1
E-W	500 (m)
N-S	450 (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)
0	0	0	0	0	0	1	100
First Aids			Public halls			Warehouses	
Nmbrs	(m2)		Nmbrs	(m2)		Nmbrs	(m2)
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	(DH/household)
Electricity	103.6	(DH/household)
Total	281.7	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

24,860 (DH/household)

Annual Saving per Household

55,508 (DH/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	Toulkine			
C.R.	32	Argour		Cercle	3	Amizmiz

Location

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

Households and Population

	Yr 1996	Yr 2010	Fragments	1	Pist	0.0 (km)
Households	190	226	E-W	600 (m)	Path	0.0 (km)
Population	1,400	1,694	N-S	350 (m)	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	
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)

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)

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

10,970 (DH/household)

Annual Saving per Household

12,772 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* North

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

506 (mm)

Slope (o) of Surrounding Mountains at

East	South	West
0	18	9

Inventory concerned on Electric Aspects

No.	530	Douar	Adghouss				
C.R.	32	Argour	Cercle	3	Amizmiz		

Location

Latitude	N31	11'	12'	Longitude	W8	19'	18'	Altitude	1,770	(m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	-------	-----

Households and Population

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

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			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	(DII/household)
Electricity	129.2	(DII/household)
Total	248.5	(DII/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

9,629	(DII/household)
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Annual Saving per Household

11,549	(DII/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	10	5

Distance from the Existing 22kV Power Line

6.0	(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.	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

	Yr 1996	Yr 2010
Households	220	261
Population	1,500	1,815

Size of Residential Area

Fragments	1
E-W	350 (m)
N-S	200 (m)

Access (km)

Pist	2.5 (km)
Path	1.5 (km)
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			Warehouses	
Nmbrs	(m2)		Nmbrs	(m2)		Nmbrs	(m2)
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
Utilization	#DIV/0!	5.13	6.26	#DIV/0!	#DIV/0!	6.00

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others
Nmbrs	6.64	1.00	1.16	0.00	0.20	0.00	0.03
Utilization	4.24	6.43	7.56	#DIV/0!	24.00	#DIV/0!	6.00

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		Cercle	3	Amizmiz	

Location

Latitude	N31° 9' 23"		Longitude	W8° 23' 40"		Altitude	1,450 (m)
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Households and Population

	Yr 1996	Yr 2010	Size of Residential Area		Access (km)	
			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	
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
Utilization	3.78	6.61	6.28	#DIV/0!	24.00	#DIV/0!	2.00

Present Expense for Energy

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

Annual Income per Household

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

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

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)

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

17,365 (DII/household)

Annual Saving per Household

7,552 (DII/household)

Slope (o) of Surrounding Mountains at

East	South	West
24	14	17

Inventory concerned on Electric Aspects

No.	560	Douar	Tagadint			
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

	Yr 1996	Yr 2010	Fragments	1		Pist	2.5 (km)
Households	50	59	E-W	150 (m)		Path	4.5 (km)
Population	140	169	N-S	150 (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	
Nmbrs	(m2)		Nmbrs	(m2)		Nmbrs	(m2)
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	0.25	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	(DII/household)
Electricity	119.3	(DII/household)
Total	254.6	(DII/household)

Annual Income per Household

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

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

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)

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

21,000 (DII/household)

Annual Saving per Household

-8,001 (DII/household)

Slope (o) of Surrounding Mountains at

East	South	West
10	18	0

Inventory concerned on Electric Aspects

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

Location

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

	Yr 1996	Yr 2010
Households	90	107
Population	150	181

Size of Residential Area

Fragments	1
E-W	600 (m)
N-S	460 (m)

Access (km)

Pist	2.5	(km)
Path	3.5	(km)
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 (°) 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		Argeour	Cercle	3	Amizmiz		

Location

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

	Yr 1996	Yr 2010	Fragments	1		Pist	2.5	(km)
Households	60	71	E-W	300	(m)	Path	7.0	(km)
Population	120	145	N-S	450	(m)	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	
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	(DII/household)
Electricity	66.2	(DII/household)
Total	145.2	(DII/household)

Annual Income per Household

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

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* East

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)

Payable Investment and Monthly Expense for Electrification

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

Annual Expenditure per Household

10,349(DII/household)

Annual Saving per Household

3,722(DII/household)

Slope (o) of Surrounding Mountains at

East	South	West
0	18	7

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	0.60	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)
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Annual Saving per Household

10,233	(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	25	0

Distance from the Existing 22kV Power Line

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

Flat	Slope	Steep
*		

Annual Mean Rainfall

400	(mm)
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Inventory concerned on Electric Aspects

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

Location

Latitude	N31	17	14°	Longitude	W8	20	46°	Altitude	810 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	80	95
Population	600	726

Size of Residential Area

Fragments	1
E-W	3,000 (m)
N-S	2,000 (m)

Access (km)

Pist	3.6 (km)
Path	0.0 (km)
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	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)

Payable Investment and Monthly Expense for Electrification

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

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.	620	Douar	Ifit Baragha			
C.R.	33		Dar Jamaa	Cercle	3	Amizmiz

Location

Latitude	N31° 15' 57"	Longitude	W8° 20' 57"	Altitude	850 (m)
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Households and Population

	Yr 1996	Yr 2010	Fragments	1	Access (km)	
Households	35	42	E-W	1,150 (m)	Pist	1.7 (km)
Population	250	302	N-S	1,150 (m)	Path	0.3 (km)
					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	
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	(DH/household)
Electricity	94.8	(DH/household)
Total	319.4	(DH/household)

Payable Investment and Monthly Expense for Electrification

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

Annual Income per Household

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

Annual Expenditure per Household

	22,600 (DH/household)

Annual Saving per Household

	14,170 (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

	5.5 (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.	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

	Yr 1996	Yr 2010
Households	40	48
Population	300	363

Size of Residential Area

Fragments	1
E-W	400 (m)
N-S	800 (m)

Access (km)

Pist	2.0 (km)
Path	0.0 (km)
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			Warehouses	
Nmbrs	(m2)		Nmbrs	(m2)		Nmbrs	(m2)
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	1.50	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)
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Annual Saving per Household

10,761	(DH/household)
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<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (°) of Surrounding Mountains at

East	South	West
0	25	0

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

400	(mm)
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