

Inventory concerned on Electric Aspects

No.	650	Douar	Adar Baragha			
C.R.	33	Dar Jamaa		Cercle	3	Amizmiz

Location

Latitude	N31	13'	1"	Longitude	W8	20'	22"	Altitude	1,070	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	11	13
Population	60	73

Size of Residential Area

	Fragments	(m)
E-W	1	500
N-S	1	250

Access (km)

	(km)
Pist	2.5
Path	1.5
Total	4.0

Public Facilities

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

Commerce & Industries

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

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

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	1.25	0.00	0.00	0.50	(/household)
Utilization	#DIV/0!	5.00	5.25	#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	6.25	1.00	1.25	0.00	0.00	0.00	0.00	(/household)
Utilization	5.25	5.50	4.50	#DIV/0!	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	180.0	(Dh/household)
Electricity	104.5	(Dh/household)
Total	284.5	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	10,000	1000.0	(/household)
Villagers	1,125	52.5	(/household)

Annual Income per Household

Agriculture	8,618	(Dh/household)
Livestock	14,744	(Dh/household)
Forestry	0	(Dh/household)
Others	0	(Dh/household)
Total	23,362	(Dh/household)

Annual Expenditure per Household

14,483 (Dh/household)

Annual Saving per Household

8,879 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	25	0

Distance from the Existing 22kV Power Line

5.5 (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.	660	Douar	Tadchert			
C.R.	33	Dar Jamaa		Cercle	3	Amizmiz

Location

Latitude	N31	14'	Longitude	W8	20'	12"	Altitude	1,100	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	30	36
Population	200	242

Size of Residential Area

	Fragments	1
E-W	600	(m)
N-S	400	(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)
0	0	0	0	0	0	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)
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	0.50	0.75	0.00	0.00	0.50	(household)
Utilization	#DIV/0!	5.50	6.67	#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	5.25	0.75	0.75	0.00	0.00	0.00	0.25	(household)
Utilization	6.25	7.33	8.67	#DIV/0!	#DIV/0!	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	81.7	(DH/household)
Electricity	85.5	(DH/household)
Total	167.2	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	15,000	1000.0	(household)
Villagers	675	45.0	(household)

Annual Income per Household

Agriculture	1,800	(DH/household)
Livestock	6,426	(DH/household)
Forestry	0	(DH/household)
Others	1,438	(DH/household)
Total	9,664	(DH/household)

Annual Expenditure per Household

6,767 (DH/household)

Annual Saving per Household

2,897 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	35	0

Distance from the Existing 22kV Power Line

4.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
*		

Annual Mean Rainfall

400 (mm)

Inventory concerned on Electric Aspects

No.	670	Douar	Tamsoult		
C.R.	33	Dar Jamaa	Cercle	3	Amizmiz

Location

Latitude	N31	14'	3"	Longitude	W8	20'	25"	Altitude	960	(m)
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Households and Population

	Yr 1996		Yr 2010		Size of Residential Area			Access (km)	
	Nmbrs	(m2)	Nmbrs	(m2)	Fragments	(m)	(m)	Pist	(km)
Households	5	6			1	500	500	2.5	(km)
Population	37	45						0.0	(km)
								2.5	(km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	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)
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	1.00	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.00	4.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.00	1.00	1.00	0.00	0.00	0.00	0.00	(/household)
Utilization	3.00	6.00	6.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	125.5	(DII/household)
Electricity	190.0	(DII/household)
Total	315.5	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	4,500	240.0	(/household)
Villagers	1,500	100.0	(/household)

Annual Income per Household

Agriculture	9,160	(DII/household)
Livestock	6,060	(DII/household)
Forestry	0	(DII/household)
Others	9,000	(DII/household)
Total	24,220	(DII/household)

Annual Expenditure per Household

18,000 (DII/household)

Annual Saving per Household

6,220 (DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	30	0

Distance from the Existing 22kV Power Line

3.5 (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.	680	Douar	Dar Jamaa Ait Ali		
C.R.	33		Dar Jamaa	Cercle	3

Location

Latitude	N31	14'	58"	Longitude	W8	22'	59"	Altitude	970 (m)
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Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	1.0 (km)
Households	60	71	E-W	400 (m)		Path	0.0 (km)
Population	220	266	N-S	300 (m)		Total	1.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	7	260	1	7	314	1	400
First Aids			Public halls		Cooperatives		Warehouses
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
1	225	1	340	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
2	50	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	1.00	1.17	0.00	0.00	0.67	(/household)
Utilization	#DIV/0!	3.60	4.83	#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	5.50	1.00	1.00	0.00	0.17	0.00	0.00	(/household)
Utilization	3.83	6.50	5.67	#DIV/0!	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	146.0	(DH/household)
Electricity	107.0	(DH/household)
Total	253.0	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	40.0	(/household)
Villagers	1,458	64.2	(/household)

Annual Income per Household

Agriculture	4,122	(DH/household)
Livestock	5,463	(DH/household)
Forestry	0	(DH/household)
Others	2,367	(DH/household)
Total	11,952	(DH/household)

Annual Expenditure per Household

10,823 (DH/household)

Annual Saving per Household

1,129 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	20	0

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

300 (mm)

Inventory concerned on Electric Aspects

No.	690	Douar	Agadir Ait Brahim		
C.R.	33		Dar Jamaa	Cercle	3

Location

Latitude	N31	14	49°	Longitude	W8	22°	49°	Altitude	980 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	28	33
Population	120	145

Size of Residential Area

	Fragments	1
E-W	500 (m)	
N-S	300 (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)
0	0	0	0	0	0	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	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	0.75	1.25	1.50	0.00	0.00	0.00	(/household)
Utilization	5.00	2.50	4.50	#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	4.25	1.25	1.75	0.00	0.25	0.00	0.00	(/household)
Utilization	3.00	3.50	7.50	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	128.9	(DH/household)
Electricity	118.3	(DH/household)
Total	247.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	270	50.0	(/household)
Villagers	875	58.8	(/household)

Annual Income per Household

Agriculture	2,628	(DH/household)
Livestock	6,093	(DH/household)
Forestry	0	(DH/household)
Others	2,250	(DH/household)
Total	10,971	(DH/household)

Annual Expenditure per Household

11,525 (DH/household)

Annual Saving per Household

-554 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	20	0

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

300 (mm)

Inventory concerned on Electric Aspects

No.	700	Douar	Iouraghan		
C.R.	33		Dar Jamaa	Cercle	3
					Amizmiz

Location

Latitude	N31	14°	39°	Longitude	W8	23°	6°	Altitude	950(m)
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Households and Population

	Yr 1996	Yr 2010
Households	18	21
Population	80	97

Size of Residential Area

	Fragments	
	1	
E-W	300	(m)
N-S	200	(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)
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
0	0	0	0	0	0	0	0
							(kg/day)

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	2.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	3.50	6.67	#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	1.67	0.00	0.67	0.00	0.67	(/household)
Utilization	5.33	6.67	9.00	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	144.5	(DH/household)
Electricity	143.0	(DH/household)
Total	287.5	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	100.0	(/household)
Villagers	667	38.3	(/household)

Annual Income per Household

Agriculture	4,011	(DH/household)
Livestock	9,560	(DH/household)
Forestry	0	(DH/household)
Others	667	(DH/household)
Total	14,237	(DH/household)

Annual Expenditure per Household

8,637 (DH/household)

Annual Saving per Household

5,600 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	20	0

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

300 (mm)

Inventory concerned on Electric Aspects

No.	710	Douar	Imiki		
C.R.	33	Dar Jamaa	Cercle	3	Amizmiz

Location

Latitude	N31	15'	21'	Longitude	W8	23'	43'	Altitude	880 (m)
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Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	
Households	50	59	E-W	400 (m)		Path	0.0 (km)
Population	500	605	N-S	300 (m)		Total	0.7 (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	153	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	10	0	0	1	0	0	1	112

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	1.29	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.57	5.14	#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	5.71	1.14	1.14	0.00	0.57	0.00	0.29	(/household)
Utilization	4.29	7.29	7.00	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	152.6	(DII/household)
Electricity	130.3	(DII/household)
Total	282.9	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	1,000	500.0	(/household)
Villagers	832	64.3	(/household)

Annual Income per Household

Agriculture	12,508	(DII/household)
Livestock	11,364	(DII/household)
Forestry	0	(DII/household)
Others	7,957	(DII/household)
Total	31,829	(DII/household)

Annual Expenditure per Household

12,214 (DII/household)

Annual Saving per Household

19,615 (DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	14	0

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

300 (mm)

Inventory concerned on Electric Aspects

No.	720	Ouar	Ifit Ait Alla		
C.R.	33	Dar Jarana	Cercle	3	Amizmiz

Location

Latitude	N31	15°	25°	Longitude	W8	24°	16°	Altitude	900 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	22	26
Population	200	242

Size of Residential Area

Fragments	1
E-W	1,000 (m)
N-S	500 (m)

Access (km)

	1.2 (km)
Pist	1.2 (km)
Path	0.0 (km)
Total	1.2 (km)

Public

Facilities

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

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	15	0	0	0	0	3	3	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	0.33	0.67	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.00	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	6.33	0.67	1.00	0.33	0.00	0.00	0.00	(/household)
Utilization	5.00	7.50	10.67	24.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	106.9	(DH/household)
Electricity	66.0	(DH/household)
Total	172.9	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	100.0	(/household)
Villagers	867	73.3	(/household)

Annual Income per Household

Agriculture	8,817	(DH/household)
Livestock	14,303	(DH/household)
Forestry	0	(DH/household)
Others	2,000	(DH/household)
Total	25,119	(DH/household)

Annual Expenditure per Household

12,800	(DH/household)
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Annual Saving per Household

12,319	(DH/household)
--------	----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (°) of Surrounding Mountains at

East	South	West
0	14	0

Distance from the Existing 22kV Power Line

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

Flat	Slope	Steep
*		

Annual Mean Rainfall

300	(mm)
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Inventory concerned on Electric Aspects

No.	730	Douar	Boukhelf		
C.R.	33	Dar Jamaa		Cercle	3

Location

Latitude	N31	14'	40"	Longitude	W8	23'	57"	Altitude	950 (m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	---------

Households and Population

	Yr 1996	Yr 2010
Households	85	101
Population	425	514

Size of Residential Area

	Fragments	1
E-W	1,000	(m)
N-S	500	(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	2	120	1	3	146	2	400
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total
4	100	0	0	0	0	3	3
				(kg/day)			
				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	0.20	0.53	1.13	0.00	0.00	0.07	(/household)
Utilization	4.00	5.00	6.07	#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	6.00	1.00	1.40	0.13	0.20	0.00	0.13	(/household)
Utilization	3.80	5.77	5.47	12.00	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	176.9	(DII/household)
Electricity	96.8	(DII/household)
Total	273.7	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	1,500	120.0	(/household)
Villagers	577	46.7	(/household)

Annual Income per Household

Agriculture	4,379	(DII/household)
Livestock	3,325	(DII/household)
Forestry	0	(DII/household)
Others	18,407	(DII/household)
Total	26,110	(DII/household)

Annual Expenditure per Household

9,763 (DII/household)

Annual Saving per Household

16,343 (DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	20	0

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

300 (mm)

Inventory concerned on Electric Aspects

No.	740	Douar	Addar Ait Ali			
C.R.	33	Dar Jamaa		Cerete	3	Amizmiz

Location

Latitude	N31	14	26"	Longitude	W8	23	27"	Altitude	1,030	(m)
----------	-----	----	-----	-----------	----	----	-----	----------	-------	-----

Households and Population

	Yr 1996	Yr 2010
Households	22	26
Population	150	181

Size of Residential Area

Fragments	1
E-W	400 (m)
N-S	300 (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	1	30	1	1	36	1	16
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	1	48	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	4	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	1.67	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	3.00	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	4.00	1.00	1.67	0.00	0.00	0.00	0.67	(/household)
Utilization	3.67	5.00	4.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	218.7	(Dh/household)
Electricity	90.0	(Dh/household)
Total	308.7	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	10,000	800.0	(/household)
Villagers	600	60.0	(/household)

Annual Income per Household

Agriculture	6,335	(Dh/household)
Livestock	6,888	(Dh/household)
Forestry	0	(Dh/household)
Others	3,133	(Dh/household)
Total	16,356	(Dh/household)

Annual Expenditure per Household

8,000 (Dh/household)

Annual Saving per Household

8,356 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (o) of Surrounding Mountains at

East	South	West
0	20	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.	760	Douar	Ait Bourd			
C.R.	33	Dar Jamaa		Cercle	3	Amizmiz

Location

Latitude	N31	13'	35"	Longitude	W8	22'	5"	Altitude	1,040	(m)
----------	-----	-----	-----	-----------	----	-----	----	----------	-------	-----

Households and Population			Size of Residential Area			Access (km)		
	Yr 1996	Yr 2010	Fragments	1		Pist	3.5	(km)
Households	100	119	E-W	1,000	(m)	Path	0.0	(km)
Population	700	847	N-S	400	(m)	Total	3.5	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	4	80	1	4	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)
4	80	0	0	3	0	0	3	450

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	1.09	0.00	0.00	0.09	(/household)
Utilization	#DIV/0!	5.67	4.67	#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	5.64	0.91	1.27	0.00	0.27	0.00	0.09	(/household)
Utilization	5.27	6.11	5.64	#DIV/0!	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	104.0	(DH/household)
Electricity	91.0	(DH/household)
Total	195.0	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,700	85.0	(/household)
Villagers	668	44.1	(/household)

Annual Income per Household

Agriculture	5,201	(DH/household)
Livestock	8,096	(DH/household)
Forestry	655	(DH/household)
Others	6,840	(DH/household)
Total	20,792	(DH/household)

Annual Expenditure per Household

16,040 (DH/household)

Annual Saving per Household

4,752 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (°) of Surrounding Mountains at

East	South	West
20	25	28

Distance from the Existing 22kV Power Line

10.0 (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.	770	Douar	Ait M'Barek		
C.R.	33	Dar Jamaa	Cercle	3	Amizmiz

Location

Latitude	N31°	13'	42"	Longitude	W8°	21'	56"	Altitude	1,060	(m)
----------	------	-----	-----	-----------	-----	-----	-----	----------	-------	-----

Households and Population

		Yr 1996	Yr 2010	Size of Residential Area		Access (km)	
Households		30	36	Fragments	1	Pist	3.5 (km)
Population		120	145	E-W	300 (m)	Path	0.4 (km)
				N-S	200 (m)	Total	3.9 (km)

Public Facilities

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

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	15	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	0.40	0.80	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	8.59	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	8.20	1.40	1.60	0.20	0.00	0.00	0.00	(/household)
Utilization	3.80	8.00	5.46	24.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	223.2	(DH/household)
Electricity	83.2	(DH/household)
Total	306.4	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,300	200.0	(/household)
Villagers	1,200	73.0	(/household)

Annual Income per Household

Agriculture	4,155	(DH/household)
Livestock	8,963	(DH/household)
Forestry	0	(DH/household)
Others	16,550	(DH/household)
Total	29,668	(DH/household)

Annual Expenditure per Household

12,762 (DH/household)

Annual Saving per Household

16,906 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (°) of Surrounding Mountains at

East	South	West
0	25	0

Distance from the Existing 22kV Power Line

9.5 (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.	780	Douar	Agadir Ait Bourd		
C.R.	33	Dar Jamaa	Cerele	3	Amizmiz

Location

Latitude	N31	13'	14"	Longitude	W8	22'	31"	Altitude	1,190	(m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	-------	-----

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	(km)
Households	60	71	E-W	500	(m)	Path	1.5
Population	400	484	N-S	300	(m)	Total	5.0
							(km)

Public Facilities

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

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
1	16	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!	7.33	#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	8.00	0.50	1.00	0.00	0.25	0.00	0.00	(/household)
Utilization	4.25	5.00	6.25	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy			Payable Investment and Monthly Expense for Electrification		
	Monthly Expense		Initial (DH)	Monthly (DH)	
Fuel	115.4	(DH/household)	Leader	1,000	100.0 (/household)
Electricity	70.4	(DH/household)	Villagers	738	48.8 (/household)
Total	185.8	(DH/household)			

Annual Income per Household		Annual Expenditure per Household	
Agriculture	5,109 (DH/household)		10,800 (DH/household)
Livestock	3,710 (DH/household)		
Forestry	0 (DH/household)		
Others	9,375 (DH/household)		Annual Saving per Household
Total	18,194 (DH/household)		7,394 (DH/household)

<Geographical Conditions>

Location			Slope (o) of Surrounding Mountains at		
on flat land	on hill	on slope	East	South	West
		* East	20	30	20

Distance from the Existing 22kV Power Line
 11.0 (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.	790	Douar	Afella Ouassif		
C.R.	33	Dar Jamaa	Cercle	3	Amizmiz

Location

Latitude	N31	13	10"	Longitude	W8	22	8"	Altitude	1,110	(m)
----------	-----	----	-----	-----------	----	----	----	----------	-------	-----

Households and Population

	Yr 1996	Yr 2010
Households	25	30
Population	120	145

Size of Residential Area

Fragments	1
E-W	700 (m)
N-S	400 (m)

Access (km)

Pist	3.5	(km)
Path	0.9	(km)
Total	4.4	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	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)
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	1.25	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	#DIV/0!	7.67	#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	6.25	0.50	1.00	0.00	0.25	0.00	0.25	(/household)
Utilization	3.50	8.00	6.50	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	134.9	(DIH/household)
Electricity	73.0	(DIH/household)
Total	207.9	(DIH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DIH)	Monthly (DIH)	
Leader	1,000	75.0	(/household)
Villagers	438	31.3	(/household)

Annual Income per Household

Agriculture	3,704	(DIH/household)
Livestock	5,613	(DIH/household)
Forestry	0	(DIH/household)
Others	600	(DIH/household)
Total	9,917	(DIH/household)

Annual Expenditure per Household

5,731 (DIH/household)

Annual Saving per Household

4,186 (DIH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (°) of Surrounding Mountains at

East	South	West
28	37	28

Distance from the Existing 22kV Power Line

10.7 (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.	810	Douar	Afella Ighil			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31	12'	14"	Longitude	W8	10'	49"	Altitude	1,033	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	10	12
Population	70	85

Size of Residential Area

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

Access (km)

Pist	1.5 (km)
Path	0.5 (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		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	1.00	1.67	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.00	3.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Electric Articles desired by Villagers in Future

	Lights	TV Set	Radio	Air Con.	Refrige.	Heater	Others	
Nmbrs	6.67	1.00	1.67	0.00	0.00	0.00	0.00	(/household)
Utilization	5.00	4.67	5.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	68.6	(DH/household)
Electricity	83.7	(DH/household)
Total	152.3	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	2,000	70.0	(/household)
Villagers	933	40.0	(/household)

Annual Income per Household

Agriculture	28,796	(DH/household)
Livestock	4,106	(DH/household)
Forestry	550	(DH/household)
Others	0	(DH/household)
Total	33,452	(DH/household)

Annual Expenditure per Household

3,751 (DH/household)

Annual Saving per Household

29,701 (DH/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

1.0 (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.	831	Douar	Anfeg			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31	12'	5"	Longitude	W8	11'	1"	Altitude	1,020	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	15	18
Population	95	115

Size of Residential Area

Fragments	1
E-W	150 (m)
N-S	200 (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)
0	0	0	0	0	0	1	20
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!	6.50	12.67	#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	7.00	1.00	1.33	0.00	0.33	0.00	0.00	(/household)
Utilization	5.00	8.00	14.00	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	81.4	(DH/household)
Electricity	46.7	(DH/household)
Total	128.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	500	50.0	(/household)
Villagers	1,000	116.7	(/household)

Annual Income per Household

Agriculture	3,477	(DH/household)
Livestock	8,473	(DH/household)
Forestry	0	(DH/household)
Others	455	(DH/household)
Total	12,405	(DH/household)

Annual Expenditure per Household

8,167 (DH/household)

Annual Saving per Household

4,238 (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

1.2 (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.	832	Douar	Aguersouak			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31	12	32	Longitude	W8	10	25	Altitude	970	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	20	24
Population	100	121

Size of Residential Area

Fragments	1
E-W	200 (m)
N-S	100 (m)

Access (km)

Pist	0.0	(km)
Path	0.4	(km)
Total	0.4	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	3	50	1	3	60	1	110
First Aids		Public halls	Cooperatives		Warehouses		
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

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

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

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.60	1.40	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.00	9.20	#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	2.80	0.40	1.00	0.00	0.00	0.00	0.00	(/household)
Utilization	5.33	7.00	12.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	51.0	(Dh/household)
Electricity	49.8	(Dh/household)
Total	100.8	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	500	100.0	(/household)
Villagers	360	59.0	(/household)

Annual Income per Household

Agriculture	7,334	(Dh/household)
Livestock	7,784	(Dh/household)
Forestry	0	(Dh/household)
Others	400	(Dh/household)
Total	15,518	(Dh/household)

Annual Expenditure per Household

8,680 (Dh/household)

Annual Saving per Household

6,838 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
	*	

Slope (o) of Surrounding Mountains at

East	South	West
0	8	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

400 (mm)

Inventory concerned on Electric Aspects

No.	840	Douar	Ait Bouzid			
C.R.	34	Ameghrass	Cercle	3	Amizmiz	

Location

Latitude	N31°	13'	33"	Longitude	W8°	10'	13"	Altitude	950 (m)
----------	------	-----	-----	-----------	-----	-----	-----	----------	---------

Households and Population

	Yr 1996	Yr 2010
Households	119	141
Population	733	887

Size of Residential Area

Fragments	1
E-W	200 (m)
N-S	250 (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)
1	2	100	1	2	120	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)
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	0.57	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.25	5.57	#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	6.00	1.00	1.00	0.00	0.00	0.00	0.00	(/household)
Utilization	3.57	5.00	5.86	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	134.5	(DH/household)
Electricity	44.7	(DH/household)
Total	179.2	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	3,000	100.0	(/household)
Villagers	871	82.9	(/household)

Annual Income per Household

Agriculture	16,243	(DH/household)
Livestock	5,654	(DH/household)
Forestry	0	(DH/household)
Others	4,471	(DH/household)
Total	26,368	(DH/household)

Annual Expenditure per Household

15,443 (DH/household)

Annual Saving per Household

10,925 (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

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.	851	Douar	Oumast			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31°	13'	31"	Longitude	W8°	10'	36"	Altitude	940 (m)
----------	------	-----	-----	-----------	-----	-----	-----	----------	---------

Households and Population

	Yr 1996	Yr 2010
Households	35	42
Population	180	218

Size of Residential Area

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

Access (km)

Pist	1.2 (km)
Path	0.0 (km)
Total	1.2 (km)

Public

Facilities

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

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd	Animal	Total	(kg/day)
0	0	0	0	0	0	0	0	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	1.29	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.08	6.71	#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	8.14	1.14	1.29	0.00	0.14	0.00	0.00	(/household)
Utilization	4.29	6.00	6.00	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	127.7	(DH/household)
Electricity	73.6	(DH/household)
Total	201.3	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	2,500	75.0	(/household)
Villagers	714	48.6	(/household)

Annual Income per Household

Agriculture	3,055	(DH/household)
Livestock	5,400	(DH/household)
Forestry	0	(DH/household)
Others	1,543	(DH/household)
Total	9,998	(DH/household)

Annual Expenditure per Household

7,197	(DH/household)
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Annual Saving per Household

2,801	(DH/household)
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<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

1.8	(km)
-----	------

Topographical Condition of Reut when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

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

Inventory concerned on Electric Aspects

No.	852	Douar	Ait Zitoun			
C.R	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31	13	13°	Longitude	W8	10	28°	Altitude	1,000	(m)
----------	-----	----	-----	-----------	----	----	-----	----------	-------	-----

Households and Population

	Yr 1996	Yr 2010
Households	35	42
Population	180	218

Size of Residential Area

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

Access (km)

Pist	0.8 (km)
Path	0.0 (km)
Total	0.8 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	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		Four 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	1.33	1.00	0.00	0.00	0.33	(/household)
Utilization	#DIV/0!	9.33	8.67	#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	7.67	1.33	1.00	0.00	0.00	0.00	0.00	(/household)
Utilization	4.33	6.67	4.67	#DIV/0!	#DIV/0!	#DIV/0!	1.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	238.4	(DfH/household)
Electricity	80.0	(DfH/household)
Total	318.4	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	1,000	50.0	(/household)
Villagers	1,000	60.0	(/household)

Annual Income per Household

Agriculture	7,040	(DfH/household)
Livestock	16,180	(DfH/household)
Forestry	0	(DfH/household)
Others	0	(DfH/household)
Total	23,220	(DfH/household)

Annual Expenditure per Household

7,200 (DfH/household)

Annual Saving per Household

16,020 (DfH/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

1.5 (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.	860	Douar	Tagadirt (Ait Bouimzgan)		
C.R.	34	Ameghrass	Cercle	3	Amizmiz

Location

Latitude	N31	14	0"	Longitude	W8	8	25"	Altitude	1,150 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	28	33
Population	137	166

Size of Residential Area

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

Access (km)

Pist	2.8 (km)
Path	2.2 (km)
Total	5.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	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)
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	1.00	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.33	3.33	#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	6.33	0.67	1.00	0.00	0.00	0.00	0.00	(/household)
Utilization	4.33	6.00	8.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	107.8	(DII/household)
Electricity	73.3	(DII/household)
Total	181.1	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Lcader	1,000	50.0	(/household)
Villagers	700	55.0	(/household)

Annual Income per Household

Agriculture	19,164	(DII/household)
Livestock	9,479	(DII/household)
Forestry	0	(DII/household)
Others	4,000	(DII/household)
Total	32,643	(DII/household)

Annual Expenditure per Household

12,867	(DII/household)
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Annual Saving per Household

19,776	(DII/household)
--------	-----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* North

Slope (o) of Surrounding Mountains at

East	South	West
0	20	0

Distance from the Existing 22kV Power Line

7.1 (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.	871	Douar	Zaouit			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31	11'	42"	Longitude	W8	11'	48"	Altitude	1,160(m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	----------

Households and Population

	Yr 1996	Yr 2010
Households	9	11
Population	60	73

Size of Residential Area

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

Access (km)

Pist	2.8 (km)
Path	2.0 (km)
Total	4.8 (km)

Public

Facilities

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

Commerce & Industries

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

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

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	1.00	1.00	0.00	0.00	0.00	(household)
Utilization	#DIV/0!	3.50	5.50	#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	5.50	1.00	1.00	0.00	0.50	0.00	0.00	(household)
Utilization	0.00	3.00	3.00	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	151.3	(Dh/household)
Electricity	208.0	(Dh/household)
Total	359.3	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	2,000	500.0	(household)
Villagers	450	125.0	(household)

Annual Income per Household

Agriculture	3,989	(Dh/household)
Livestock	6,770	(Dh/household)
Forestry	0	(Dh/household)
Others	0	(Dh/household)
Total	10,759	(Dh/household)

Annual Expenditure per Household

12,300 (Dh/household)

Annual Saving per Household

-1,541 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	North

Slope (o) of Surrounding Mountains at

East	South	West
0	20	0

Distance from the Existing 22kV Power Line

3.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
	*	

Annual Mean Rainfall

400 (mm)

Inventory concerned on Electric Aspects

No.	872	Douar	Izalaghan (Dar Brahim Ou Ali)		
C.R.	34	Ameghrass	Cercle	3	Amizmiz

Location										
Latitude	N31	12'	44'	Longitude	W8	12'	24'	Altitude	1,020	(m)

Households and Population			Size of Residential Area			Access (km)		
	Yr 1996	Yr 2010	Fragments	1		Pist	1.3 (km)	
Households	12	14	E-W	250 (m)		Path	0.0 (km)	
Population	62	75	N-S	200 (m)		Total	1.3 (km)	

Public Facilities

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

Commerce & Industries

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

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

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	1.50	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	3.50	8.25	#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	5.75	1.00	1.50	0.25	0.00	0.00	0.00 (household)
Utilization	3.75	5.50	9.50	24.00	#DIV/0!	#DIV/0!	#DIV/0! (hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	151.0	(DH/household)
Electricity	52.0	(DH/household)
Total	203.0	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)
Leader	10,000	975.0 (household)
Villagers	1,500	87.5 (household)

Annual Income per Household

Agriculture	5,230	(DH/household)
Livestock	7,757	(DH/household)
Forestry	0	(DH/household)
Others	1,450	(DH/household)
Total	14,437	(DH/household)

Annual Expenditure per Household

8,638 (DH/household)

Annual Saving per Household

5,750 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (°) of Surrounding Mountains at

East	South	West
0	12	0

Distance from the Existing 22kV Power Line

3.2 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Sleep
	*	

Annual Mean Rainfall

400 (mm)

Inventory concerned on Electric Aspects

No.	880	Douar	Tigouder (Ben said, Zyoubi)			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31°	11'	22"	Longitude	W8°	11'	25"	Altitude	1,240 (m)
----------	------	-----	-----	-----------	-----	-----	-----	----------	-----------

Households and Population

	Yr 1996	Yr 2010
Households	24	29
Population	130	157

Size of Residential Area

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

Access (km)

Pist	2.8 (km)
Path	2.5 (km)
Total	5.3 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m ²)	Nmbrs	Classes	(m ²)	Nmbrs	(m ²)
2	6	274	2	6	332	0	0
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m ²)	Nmbrs	(m ²)	Nmbrs	(m ²)	Nmbrs	(m ²)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m ²)	Nmbrs	(m ²)	Diesel	Hyd.	Animal	Total	(kg/day)
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	1.20	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	#DIV/0!	3.40	#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	5.60	0.60	1.20	0.00	0.20	0.00	0.00	(/household)
Utilization	3.60	4.67	5.20	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	150.4	(DfH/household)
Electricity	83.4	(DfH/household)
Total	233.8	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DfH)	Monthly (DfH)	
Leader	500	30.0	(/household)
Villagers	570	36.0	(/household)

Annual Income per Household

Agriculture	1,807	(DfH/household)
Livestock	7,852	(DfH/household)
Forestry	0	(DfH/household)
Others	200	(DfH/household)
Total	9,859	(DfH/household)

Annual Expenditure per Household

7,117 (DfH/household)

Annual Saving per Household

2,742 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	North

Slope (°) of Surrounding Mountains at

East	South	West
0	20	0

Distance from the Existing 22kV Power Line

4.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Steepe	Steep
	*	

Annual Mean Rainfall

400 (mm)

Inventory concerned on Electric Aspects

No.	890	Douar	Amezi			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31	11'	53"	Longitude	W8	12'	19"	Altitude	1,180	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	36	43
Population	181	219

Size of Residential Area

	Fragments	(m)
E-W	500	(m)
N-S	200	(m)

Access (km)

	(km)
Pist	2.8
Path	0.5
Total	3.3

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	4	240	1	5	290	1	150
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
0	0	0	0	1	0	0	1	1,000

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

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	(/household)
Nmbrs	0.00	0.71	1.57	0.00	0.00	0.00	
Utilization	#DIV/0!	4.50	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	(/household)
Nmbrs	6.71	1.14	1.29	0.00	0.14	0.00	0.29	
Utilization	4.29	6.86	6.43	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	(Dh/household)
Fuel	108.6	
Electricity	88.6	
Total	197.2	

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	(/household)
Leader	3,000	200.0	
Villagers	1,343	61.4	

Annual Income per Household

Agriculture	2,776	(Dh/household)
Livestock	3,120	
Forestry	0	
Others	6,986	
Total	12,881	

Annual Expenditure per Household

10,080 (Dh/household)

Annual Saving per Household

2,801 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	North

Slope (°) of Surrounding Mountains at

East	South	West
0	20	0

Distance from the Existing 22kV Power Line

0.6 (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.	900	Douar	Agouni			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31°	12'	11"	Longitude	W8°	12'	7"	Altitude	1,100(m)
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Households and Population

	Yr 1996	Yr 2010	Size of Residential Area			Access (km)	
			Fragments	1		Pist	2.8(km)
Households	30	36	E-W	100(m)		Path	0.0(km)
Population	172	208	N-S	300(m)		Total	2.8(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	3	30	1	3	36	1	60
First Aids		Public hails		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

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

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

	Lights	TV Set	Radio	Air Con.	Refrige.	Others	
Nmbrs	0.00	0.50	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.67	5.67	#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	5.50	0.67	1.17	0.00	0.00	0.00	0.17	(/household)
Utilization	5.67	6.50	6.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	212.7	(DH/household)
Electricity	75.0	(DH/household)
Total	287.7	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DI)	Monthly (DI)	
Leader	6,000	720.0	(/household)
Villagers	592	31.7	(/household)

Annual Income per Household

Agriculture	1,813	(DH/household)
Livestock	2,247	(DH/household)
Forestry	0	(DH/household)
Others	4,113	(DH/household)
Total	8,173	(DH/household)

Annual Expenditure per Household

4,814 (DH/household)

Annual Saving per Household

3,359 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	North

Slope (o) of Surrounding Mountains at

East	South	West
0	15	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.	910	Douar	Chaabat Tarik (Talet N'Tghharast)		
C.R.	34	Ameghrass	Cercle	3	Amizmiz

Location

Latitude	N31	15'	7"	Longitude	W8	9'	41"	Altitude	830(m)
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Households and Population

		Yr 1996		Yr 2010		Size of Residential Area		Access (km)	
Households		53		63		Fragments	1	Pist	5.0(km)
Population		254		307		E-W	250(m)	Path	0.0(km)
						N-S	300(m)	Total	5.0(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	60	1	1	72	2	400
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	1	100	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	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	6.00	0.83	1.33	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.60	10.40	#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	6.33	1.17	1.67	0.17	0.00	0.00	0.17	(/household)
Utilization	4.83	5.67	12.67	24.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	142.2	(Dh/household)
Electricity	92.1	(Dh/household)
Total	234.3	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	7,500	500.0	(/household)
Villagers	833	65.8	(/household)

Annual Income per Household

Agriculture	4,054	(Dh/household)
Livestock	5,797	(Dh/household)
Forestry	0	(Dh/household)
Others	3,640	(Dh/household)
Total	13,491	(Dh/household)

Annual Expenditure per Household

12,442 (Dh/household)

Annual Saving per Household

1,049 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (o) of Surrounding Mountains at

Fast	South	West
0	0	0

Distance from the Existing 22kV Power Line

5.3 (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.	920	Douar	Ighil Sâidene (Draa Rkik)			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31	14'	16"	Longitude	W8	10'	1"	Altitude	900	(m)
----------	-----	-----	-----	-----------	----	-----	----	----------	-----	-----

Households and Population

	Yr 1996	Yr 2010
Households	14	17
Population	54	65

Size of Residential Area

Fragments	1
E-W	300 (m)
N-S	500 (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)
0	0	0	0	0	0	1	80
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
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!	5.50	3.00	#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	4.33	1.00	1.00	0.00	0.00	0.00	0.00	(/household)
Utilization	7.33	4.67	1.67	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	195.4	(Dh/household)
Electricity	78.7	(Dh/household)
Total	274.1	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	8,000	400.0	(/household)
Villagers	1,167	70.0	(/household)

Annual Income per Household

Agriculture	1,068	(Dh/household)
Livestock	5,793	(Dh/household)
Forestry	0	(Dh/household)
Others	2,333	(Dh/household)
Total	9,195	(Dh/household)

Annual Expenditure per Household

4,317 (Dh/household)

Annual Saving per Household

4,878 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (°) of Surrounding Mountains at

Fast	South	West
0	0	0

Distance from the Existing 22kV Power Line

3.5 (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.	930	Douar	Tizi			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31°	13'	33"	Longitude	W8°	10'	13"	Altitude	930	(m)
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Households and Population

	Yr 1996	Yr 2010	Size of Residential Area			Access (km)		
Households	59	70	Fragments	1		Pist	2.2	(km)
Population	284	344	E-W	500	(m)	Path	0.0	(km)
			N-S	500	(m)	Total	2.2	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	50	1	1	60	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)
1	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	0.50	1.17	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.00	7.40	#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	7.00	1.00	1.17	0.17	0.33	0.17	0.17	(/household)
Utilization	4.50	7.83	9.50	5.00	24.00	4.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	159.6	(DIH/household)
Electricity	84.2	(DIH/household)
Total	243.8	(DIH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DI)	Monthly (DI)	
Leader	1,500	50.0	(/household)
Villagers	875	63.3	(/household)

Annual Income per Household

Agriculture	7,170	(DIH/household)
Livestock	6,740	(DIH/household)
Forestry	0	(DIH/household)
Others	450	(DIH/household)
Total	14,360	(DIH/household)

Annual Expenditure per Household

10,676 (DIH/household)

Annual Saving per Household

3,683 (DIH/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

3.0 (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.	940	Douar	Aghbalou			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31	13	53	Longitude	W8	9	1	Altitude	850	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	90	107
Population	472	571

Size of Residential Area

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

Access (km)

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

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	4	120	2	4	146	1	225
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	18	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	0.44	0.78	0.89	0.00	0.00	0.11	(/household)
Utilization	5.00	4.57	9.29	#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	7.78	1.00	1.33	0.00	0.11	0.00	0.44	(/household)
Utilization	4.11	4.89	8.00	#DIV/0!	24.00	#DIV/0!	3.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	82.4	(DH/household)
Electricity	52.8	(DH/household)
Total	135.2	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	10,000	200.0	(/household)
Villagers	1,322	62.8	(/household)

Annual Income per Household

Agriculture	6,317	(DH/household)
Livestock	7,405	(DH/household)
Forestry	0	(DH/household)
Others	3,933	(DH/household)
Total	17,655	(DH/household)

Annual Expenditure per Household

7,212 (DH/household)

Annual Saving per Household

10,443 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	South

Slope (o) of Surrounding Mountains at

East	South	West
0	0	0

Distance from the Existing 22kV Power Line

4.6 (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.	950	Douar	Ait Hsain			
C.R.	34	Ameghrass		Cercle	3	Amizmiz

Location

Latitude	N31°	12'	21"	Longitude	W8°	9'	9"	Altitude	1,080 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	13	15
Population	75	91

Size of Residential Area

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

Access (km)

Pist	2.5 (km)
Path	0.3 (km)
Total	2.8 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	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)
1	4	0	0	1	0	0	1	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	0.67	1.67	0.00	0.00	1.00	(/household)
Utilization	#DIV/0!	5.00	6.33	#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	6.67	1.00	1.67	0.33	0.60	0.00	0.33	(/household)
Utilization	3.33	5.67	6.00	24.00	#DIV/0!	#DIV/0!	1.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	103.6	(Dh/household)
Electricity	106.7	(Dh/household)
Total	210.3	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	1,000	900.0	(/household)
Villagers	2,500	60.0	(/household)

Annual Income per Household

Agriculture	13,089	(Dh/household)
Livestock	8,453	(Dh/household)
Forestry	0	(Dh/household)
Others	189	(Dh/household)
Total	21,723	(Dh/household)

Annual Expenditure per Household

9,047 (Dh/household)

Annual Saving per Household

12,676 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (°) of Surrounding Mountains at

East	South	West
40	25	15

Distance from the Existing 22kV Power Line

3.4 (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.	960	Douar	Ait Boubker		
C.R.	34	Ameghrass		Cercle	3
Amizmiz					

Location

Latitude	N31	12'	11"	Longitude	W8	9'	24"	Altitude	1,160	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	14	17
Population	80	97

Size of Residential Area

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

Access (km)

	Pist	2.5	(km)
Path	1.2	(km)	
Total	3.7	(km)	

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	76	1	2	92	1	150
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
0	0	0	0	1	0	0	1	540

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	3.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	2.00	5.67	#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	9.67	1.67	2.33	0.33	0.33	0.00	0.00	(/household)
Utilization	3.67	5.67	6.33	2.00	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	93.1	(DH/household)
Electricity	105.0	(DH/household)
Total	198.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	100.0	(/household)
Villagers	583	76.7	(/household)

Annual Income per Household

Agriculture	5,656	(DH/household)
Livestock	10,820	(DH/household)
Forestry	0	(DH/household)
Others	6,000	(DH/household)
Total	22,476	(DH/household)

Annual Expenditure per Household

12,717 (DH/household)

Annual Saving per Household

9,759 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		*
		East

Slope (o) of Surrounding Mountains at

East	South	West
15	25	40

Distance from the Existing 22kV Power Line

3.9 (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.	970	Douar	Tazatourt			
C.R	34	Ameghrass		Cerele	3	Amizmiz

Location

Latitude	N31	12'	26"	Longitude	W8	8'	8"	Altitude	1,050	(m)
----------	-----	-----	-----	-----------	----	----	----	----------	-------	-----

Households and Population

		Yr 1996		Yr 2010		Size of Residential Area		Access (km)		
Households		33		39		Fragments	1	Pist	2.5	(km)
Population		152		184		E-W	200	Path	2.5	(km)
						N-S	300	Total	5.0	(km)

Public Facilities

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

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	12	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	1.33	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	3.67	4.50	#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	8.67	1.00	1.33	0.00	0.00	0.00	0.00	(/household)
Utilization	4.17	4.17	3.83	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	338.8	(DH/household)
Electricity	56.8	(DH/household)
Total	395.6	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	2,700	250.0	(/household)
Villagers	1,033	75.0	(/household)

Annual Income per Household

Agriculture	5,180	(DH/household)
Livestock	7,197	(DH/household)
Forestry	0	(DH/household)
Others	6,628	(DH/household)
Total	19,005	(DH/household)

Annual Expenditure per Household

11,050 (DH/household)

Annual Saving per Household

7,955 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		North

Slope (°) of Surrounding Mountains at

East	South	West
20	20	0

Distance from the Existing 22KV Power Line

4.7 (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.	980	Douar	Tamsoulte		
C.R.	34	Ameghrass	Cercle	3	Amizmiz

Location

Latitude	N31°	12'	34"	Longitude	W8°	9'	18"	Altitude	1,050 (m)
----------	------	-----	-----	-----------	-----	----	-----	----------	-----------

Households and Population

	Yr 1996	Yr 2010
Households	33	39
Population	320	387

Size of Residential Area

Fragments	
E-W	200 (m)
N-S	200 (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	1	76	1	2	92	1	200
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	1	40	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
1	6	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	0.00	0.50	1.00	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.00	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	5.67	0.83	1.67	0.00	0.00	0.00	0.00	(/household)
Utilization	3.33	4.20	6.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	51.7	(DH/household)
Electricity	56.0	(DH/household)
Total	107.7	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	100.0	(/household)
Villagers	300	54.2	(/household)

Annual Income per Household

Agriculture	2,987	(DH/household)
Livestock	4,593	(DH/household)
Forestry	0	(DH/household)
Others	667	(DH/household)
Total	8,247	(DH/household)

Annual Expenditure per Household

4,967 (DH/household)

Annual Saving per Household

3,280 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
	*	

Slope (o) of Surrounding Mountains at

East	South	West
0	20	0

Distance from the Existing 22kV Power Line

2.9 (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.	999	Douar	Tizgui			
C.R.	34	Ameghrass		Cercle	3	Amizniz

Location

Latitude	N31	11'	10"	Longitude	W8	10'	42"	Altitude	1,220 (m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	-----------

Households and Population			Size of Residential Area		Access (kms)	
	Yr 1996	Yr 2010	Fragments		Pist	1.5 (km)
Households	50	59	E-W	300 (m)	Path	1.7 (km)
Population	360	436	N-S	250 (m)	Total	3.2 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	70	1	2	84	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
1	16	0	0	0	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	1.20	0.00	0.00	0.20	(/household)
Utilization	#DIV/0!	#DIV/0!	5.80	#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	4.40	0.60	1.20	0.00	0.20	0.00	0.00	(/household)
Utilization	4.40	4.00	7.00	#DIV/0!	24.00	#DIV/0!	1.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	57.5	(DH/household)
Electricity	72.3	(DH/household)
Total	129.8	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	80.0	(/household)
Villagers	1,510	43.0	(/household)

Annual Income per Household

Agriculture	13,927	(DH/household)
Livestock	8,548	(DH/household)
Forestry	0	(DH/household)
Others	0	(DH/household)
Total	22,475	(DH/household)

Annual Expenditure per Household

11,120 (DH/household)

Annual Saving per Household

11,355 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

Slope (o) of Surrounding Mountains at

East	South	West
25	31	17

Distance from the Existing 22kV Power Line

3.1 (km)

Topographical Condition of Rout when extending the existing power line.

Hat	Slope	Steep
	*	

Annual Mean Rainfall

400 (mm)

Inventory concerned on Electric Aspects

No.	1000	Douar	Ait Tirghit			
C.R.	34	Ameghrass	Cercle	3	Amizmiz	

Location

Latitude	N31° 10'	39°	Longitude	W8° 11'	37°	Altitude	1,480 (m)
----------	----------	-----	-----------	---------	-----	----------	-----------

Households and Population

	Yr 1996	Yr 2010
Households	50	59
Population	600	726

Size of Residential Area

Fragments	1
E-W	400 (m)
N-S	600 (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	2	104	1	2	126	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!	4.50	5.26	#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	5.83	1.00	1.17	0.00	0.17	0.00	0.00	(/household)
Utilization	3.50	4.83	3.83	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	87.3	(DH/household)
Electricity	85.0	(DH/household)
Total	172.3	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	100	15.0	(/household)
Villagers	317	37.5	(/household)

Annual Income per Household

Agriculture	17,990	(DH/household)
Livestock	6,742	(DH/household)
Forestry	0	(DH/household)
Others	3,083	(DH/household)
Total	27,815	(DH/household)

Annual Expenditure per Household

17,250 (DH/household)

Annual Saving per Household

10,565 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (°) of Surrounding Mountains at

East	South	West
11	20	18

Distance from the Existing 22kV Power Line

4.9 (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.	1010	Douar	Tachbibt Kabli			
C.R.	35	Sidi Badhaj		Cercle	3	Amizmiz

Location

Latitude	N31	15'	48"	Longitude	W8	12'	11"	Altitude	850(m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	--------

Households and Population

	Yr 1996		Yr 2010		Size of Residential Area		Access (km)	
	Nmbrs	Population	Fragments	(m2)	E-W	N-S	Pist	Total
Households	30	220	1	500	500	1,000	2.5	3.0
Population	36	266					0.5	

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	2	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	30	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	0.83	1.42	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.40	7.42	#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	7.25	1.08	1.58	0.00	0.17	0.00	0.00	(/household)
Utilization	4.92	5.55	7.00	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	176.9	(DH/household)
Electricity	96.9	(DH/household)
Total	273.8	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	60.0	(/household)
Villagers	1,017	66.7	(/household)

Annual Income per Household

Agriculture	18,482	(DH/household)
Livestock	6,699	(DH/household)
Forestry	0	(DH/household)
Others	1,225	(DH/household)
Total	26,406	(DH/household)

Annual Expenditure per Household

10,346 (DH/household)

Annual Saving per Household

16,060 (DH/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

3.0 (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.	1020	Douar	Tachbibt Echadou			
C R	35	Sidi Badhaj		Cercle	3	Amizmiz

Location

Latitude	N31	16'	6"	Longitude	W8	12'	11"	Altitude	850 (m)
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Households and Population

		Size of Residential Area		Access (km)		
	Yr 1996	Yr 2010	Fragments		Pist	2.5 (km)
Households	30	36	E-W	500 (m)	Path	0.0 (km)
Population	150	181	N-S	1,500 (m)	Total	2.5 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	5	140	1	5	170	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	30	0	0	0	1	0	1	120

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	0.83	1.00	0.17	0.00	0.00	(/household)
Utilization	#DIV/0!	5.00	9.80	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	7.83	1.00	1.17	0.17	0.50	0.00	0.17	(/household)
Utilization	5.17	6.50	9.33	24.00	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	285.8	(DH/household)
Electricity	96.7	(DH/household)
Total	382.5	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	50.0	(/household)
Villagers	1,658	95.0	(/household)

Annual Income per Household

Agriculture	23,731	(DH/household)
Livestock	6,673	(DH/household)
Forestry	0	(DH/household)
Others	5,167	(DH/household)
Total	35,571	(DH/household)

Annual Expenditure per Household

12,400 (DH/household)

Annual Saving per Household

23,171 (DH/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

2.5 (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.	1030	Douar	Asgoune			
C.R.	35		Sidi Badhaj	Cercle	3	Amizmiz

Location

Latitude	N31	16'	49"	Longitude	W8	11'	15"	Altitude	820 (m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	---------

Households and Population

	Yr 1996	Yr 2010
Households	30	36
Population	270	327

Size of Residential Area

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

Access (km)

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

Public

Facilities

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

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	8	0	0	1	0	0	1	170

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	1.29	0.00	0.00	0.00	(household)
Utilization	#DIV/0!	5.00	5.43	#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	6.71	1.00	2.14	0.00	0.14	0.14	0.00	(household)
Utilization	4.50	6.29	6.86	#DIV/0!	24.00	0.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	171.8	(Dh/household)
Electricity	127.6	(Dh/household)
Total	299.4	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	1,000	65.0	(household)
Villagers	1,821	62.9	(household)

Annual Income per Household

Agriculture	6,350	(Dh/household)
Livestock	12,540	(Dh/household)
Forestry	0	(Dh/household)
Others	22,729	(Dh/household)
Total	41,619	(Dh/household)

Annual Expenditure per Household

13,624 (Dh/household)

Annual Saving per Household

27,994 (Dh/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

3.5 (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.	1040	Douar	Ait Aamara Loued			
C.R.	35	Sidi Badhaj		Cercle	3	Amizmiz

Location

Latitude	N31	17	27	Longitude	W8	9	55	Altitude	750	(m)
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Households and Population

	Yr 1996	Yr 2010
Households	80	95
Population	420	508

Size of Residential Area

Fragments	3
E-W	1,000 (m)
N-S	600 (m)

Access (km)

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

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	6	240	1	6	290	2	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	6	0	0	0	5	0	5 158

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	6.38	#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	9.89	1.00	1.33	0.00	0.11	0.00	0.33	(/household)
Utilization	4.00	8.89	7.56	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	147.5	(DH/household)
Electricity	90.3	(DH/household)
Total	237.9	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DI)	Monthly (DH)	
Leader	650	60.0	(/household)
Villagers	856	61.1	(/household)

Annual Income per Household

Agriculture	19,763	(DH/household)
Livestock	11,791	(DH/household)
Forestry	0	(DH/household)
Others	3,050	(DH/household)
Total	34,604	(DH/household)

Annual Expenditure per Household

17,989 (DH/household)

Annual Saving per Household

16,615 (DH/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

4.5 (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.	1050	Douar	Igdoujer		
C.R.	35	Sidi Badhaj	Cercle	3	Amizmiz

Location										
Latitude	N31	17	32	Longitude	W8	13	8	Altitude	835	(m)

Households and Population			Size of Residential Area			Access (km)		
	Yr 1996	Yr 2010	Fragments	1		Pist	0.3	(km)
Households	120	143	E-W	1,000	(m)	Path	0.0	(km)
Population	680	823	N-S	500	(m)	Total	0.3	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	3	140	2	3	170	1	120
First Aids			Public halls			Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
1	94	1	175	1	45	0	0

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
2	10	0	0	3	0	0	3

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	0.54	1.38	0.00	0.00	0.23	(/household)
Utilization	#DIV/0!	6.86	6.83	#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	8.85	1.00	1.54	0.08	0.38	0.08	0.38	(/household)
Utilization	3.85	7.46	6.62	2.00	24.00	2.00	1.50	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	200.1	(DH/household)
Electricity	100.5	(DH/household)
Total	300.6	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	2,500	50.0	(/household)
Villagers	981	67.7	(/household)

Annual Income per Household

Agriculture	17,686	(DH/household)
Livestock	15,301	(DH/household)
Forestry	0	(DH/household)
Others	13,505	(DH/household)
Total	46,492	(DH/household)

Annual Expenditure per Household

17,646 (DH/household)

Annual Saving per Household

28,845 (DH/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

0.5 (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.	1066	Douar	Lakaarna			
C R.	35	Sidi Badhaj		Cercle	3	Amizmiz

Location

Latitude	N31	14	47	Longitude	W8	16	9	Altitude	930	(m)
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Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	3.0 (km)
Households	30	36	E-W	300 (m)		Path	0.0 (km)
Population	185	224	N-S	1,300 (m)		Total	3.0 (km)

Public Facilities

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

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
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	1.00	1.00	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	8.00	1.00	1.50	0.00	0.50	0.00	0.00	(/household)
Utilization	3.75	7.00	6.50	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	213.8	(DII/household)
Electricity	140.0	(DII/household)
Total	353.8	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	1,375	105.0	(/household)
Villagers	1,250	102.5	(/household)

Annual Income per Household

Agriculture	16,842	(DII/household)
Livestock	4,512	(DII/household)
Forestry	0	(DII/household)
Others	21,650	(DII/household)
Total	43,005	(DII/household)

Annual Expenditure per Household

22,410 (DII/household)

Annual Saving per Household

20,594 (DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (o) of Surrounding Mountains at

East	South	West
0	15	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

400 (mm)

Inventory concerned on Electric Aspects

No.	1070	Douar	Ait Amar El Bour			
C.R.	35	Sidi Badhaj		Cercle	3	Anizmiz

Location

Latitude	N31	166'	29'	Longitude	W8	13'	24'	Altitude	860	(m)
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Households and Population

	Yr 1996		Yr 2010		Size of Residential Area			Access (km)		
	Nmbrs	Population	Fragments	(m2)	E-W	(m)	N-S	(m)	Total	(km)
Households	70	83	1	1,000	0	0	0	0	1.0	(km)
Population	492	595		2,000					0.0	(km)
									1.0	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	7	400	1	9	484	3	300
First Aids		Public halls	Cooperatives		Warehouses		
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	1	100	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
3	60	1	20	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	1.70	0.00	0.00	0.10	(/household)
Utilization	#DIV/0!	5.00	7.70	#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	10.00	1.10	1.80	0.00	0.50	0.00	0.10	(/household)
Utilization	4.90	5.90	7.90	#DIV/0!	24.00	#DIV/0!	2.00	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	216.8	(DII/household)
Electricity	116.6	(DII/household)
Total	333.4	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	1,500	50.0	(/household)
Villagers	1,645	130.0	(/household)

Annual Income per Household

Agriculture	5,192	(DII/household)
Livestock	9,936	(DII/household)
Forestry	0	(DII/household)
Others	19,670	(DII/household)
Total	34,798	(DII/household)

Annual Expenditure per Household

17,400 (DII/household)

Annual Saving per Household

17,398 (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

0.4 (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.	1090	Douar	Chourige			
C R.	35	Sidi Badhaj		Cercle	3	Amizmiz

Location

Latitude	N31	21	35	Longitude	W8	10	47	Altitude	720	(m)
----------	-----	----	----	-----------	----	----	----	----------	-----	-----

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments	2		Pist	1.2 (km)
Households	120	143	E-W	900 (m)		Path	0.0 (km)
Population	800	968	N-S	600 (m)		Total	1.2 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	60	1	2	72	1	100
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	1	100	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
2	30	2	30	0	0	1	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	0.77	0.92	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.50	8.91	#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	6.77	1.08	1.00	0.08	0.23	0.00	0.54	(/household)
Utilization	5.85	7.33	9.50	24.00	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	190.1	(DH/household)
Electricity	81.9	(DH/household)
Total	272.1	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	60.0	(/household)
Villagers	1,531	53.5	(/household)

Annual Income per Household

Agriculture	12,098	(DH/household)
Livestock	7,992	(DH/household)
Forestry	0	(DH/household)
Others	6,446	(DH/household)
Total	26,536	(DH/household)

Annual Expenditure per Household

12,492 (DH/household)

Annual Saving per Household

14,044 (DH/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

1.4 (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.	1120	Douar	Lamhamid			
C.R.	35	Sidi Badhaj		Cercle	3	Amizmiz

Location

Latitude	N31	15	55°	Longitude	W8	14	11°	Altitude	870	(m)
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Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	
Households	30	36	E-W	600	(m)	Path	0.0
Population	150	181	N-S	800	(m)	Total	0.6
							(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	3	300
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
0	0	0	0	1	100	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
0	0	0	0	1	0	0	1	167

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	0.20	1.20	1.80	0.00	0.00	0.00	(/household)
Utilization	8.00	6.20	8.50	#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	10.20	1.20	2.20	0.00	0.80	0.40	0.80	(/household)
Utilization	4.60	6.20	8.80	#DIV/0!	24.00	0.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	272.9	(Dh/household)
Electricity	134.2	(Dh/household)
Total	407.1	(Dh/household)

Annual Income per Household

Agriculture	15,715	(Dh/household)
Livestock	30,450	(Dh/household)
Forestry	0	(Dh/household)
Others	55,730	(Dh/household)
Total	101,895	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	1,500	100.0	(/household)
Villagers	2,600	122.0	(/household)

Annual Expenditure per Household

27,480 (Dh/household)

Annual Saving per Household

74,415 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
*		

Slope (°) of Surrounding Mountains at

East	South	West
0	10	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

400 (mm)

Inventory concerned on Electric Aspects

No.	1131	Douar	Tarast			
C.R.	41	Ait Aadel		Cercle	4	Ait Ourir

Location

Latitude	N31°	33'	44"	Longitude	W7°	12'	22"	Altitude	1,210 (m)
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Households and Population

	Yr 1996	Yr 2010
Households	45	53
Population	417	505

Size of Residential Area

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

Access (km)

Pist	28.0	(km)
Path	0.0	(km)
Total	28.0	(km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	3	100	1	3	120	2	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	2	30	0	3	0	3
				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	0.50	1.54	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.82	6.82	#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	9.75	1.21	1.75	0.00	0.33	0.00	0.04	(/household)
Utilization	5.67	6.33	7.21	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	99.6	(Dh/household)
Electricity	92.9	(Dh/household)
Total	192.5	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	1,500	50.0	(/household)
Villagers	1,396	87.7	(/household)

Annual Income per Household

Agriculture	14,322	(Dh/household)
Livestock	8,945	(Dh/household)
Forestry	0	(Dh/household)
Others	4,271	(Dh/household)
Total	27,537	(Dh/household)

Annual Expenditure per Household

14,470 (Dh/household)

Annual Saving per Household

13,067 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	North

Slope (o) of Surrounding Mountains at

East	South	West
6	8	9

Distance from the Existing 22kV Power Line

17.0 (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.	1132	Douar	Assaka			
C.R.	41	Ait Aadel		Cercle	4	Ait Ourir

Location

Latitude	N31	32'	25'	Longitude	W7	12'	53'	Altitude	1,200 (m)
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Households and Population

			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Dist	(km)
Households	45	53	1	E-W	700 (m)	Path	3.5 (km)
Population	387	468	N-S	500 (m)	Total	31.5 (km)	

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
0	0	0	0	0	0	1	140
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	50	0	0	0	3	0	3	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	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(/household)
Utilization	#DIV/0!	#DIV/0!	#DIV/0!	#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	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(/household)
Utilization	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	0.0	(DfH/household)
Electricity	#DIV/0!	(DfH/household)
Total	#DIV/0!	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Df)	Monthly (Df)	
Leader	#DIV/0!	#DIV/0!	(/household)
Villagers	#DIV/0!	#DIV/0!	(/household)

Annual Income per Household

Agriculture	#DIV/0!	(DfH/household)
Livestock	#DIV/0!	(DfH/household)
Forestry	#DIV/0!	(DfH/household)
Others	#DIV/0!	(DfH/household)
Total	#DIV/0!	(DfH/household)

Annual Expenditure per Household

#DIV/0!	(DfH/household)
---------	-----------------

Annual Saving per Household

#DIV/0!	(DfH/household)
---------	-----------------

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	South

Slope (o) of Surrounding Mountains at

East	South	West
22	12	22

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.	1140	Douar	Abadou		
C.R.	42	Abadou	Cercle	4	Ait Ourir

Location

Latitude	N31	34	56°	Longitude	W7	18	42°	Altitude	1,110(m)
----------	-----	----	-----	-----------	----	----	-----	----------	----------

Households and Population

	Yr 1996	Yr 2010
Households	110	131
Population	800	968

Size of Residential Area

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

Access (km)

Pist	17.0 (km)
Path	0.0 (km)
Total	17.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	7	340	2	7	412	2	300
First Aids			Public halls			Warehouses	
Nmbrs	(m2)		Nmbrs	(m2)	Nmbrs	(m2)	
1	500		1	300	0	0	24

Commerce & Industries

Stores		Butchers		Flour mills			
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total (kg/day)
0	0	4	24	3	0	0	3 165

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	0.70	1.26	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.03	7.02	#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	7.23	1.09	1.40	0.00	0.32	0.02	0.15	(/household)
Utilization	4.47	6.25	7.25	#DIV/0!	24.00	6.00	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	130.4	(DH/household)
Electricity	94.5	(DH/household)
Total	225.0	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,000	100.0	(/household)
Villagers	885	59.0	(/household)

Annual Income per Household

Agriculture	4,261	(DH/household)
Livestock	4,785	(DH/household)
Forestry	0	(DH/household)
Others	10,100	(DH/household)
Total	19,146	(DH/household)

Annual Expenditure per Household

12,245	(DH/household)
--------	----------------

Annual Saving per Household

6,902	(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
10	5	0

Distance from the Existing 22kV Power Line

10.0	(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.	1150	Douar	Quriz			
C.R.	43		Zerkten	Cercle	4	Ait Ouris

Location

Latitude	N31	22	32	Longitude	W7	24	16	Altitude	1,550 (m)
----------	-----	----	----	-----------	----	----	----	----------	-----------

Households and Population

	Yr 1996	Yr 2010
Households	22	26
Population	280	339

Size of Residential Area

	Fragments	1
E-W	300	(m)
N-S	100	(m)

Access (km)

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

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	120	1	3	146	1	360
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	0.75	1.25	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	4.00	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	7.00	1.00	1.50	0.00	0.00	0.00	0.00	(/household)
Utilization	4.00	6.25	8.00	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	117.0	(Dh/household)
Electricity	80.3	(Dh/household)
Total	197.3	(Dh/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Dh)	Monthly (Dh)	
Leader	1,000	50.0	(/household)
Villagers	938	57.5	(/household)

Annual Income per Household

Agriculture	10,894	(Dh/household)
Livestock	9,100	(Dh/household)
Forestry	0	(Dh/household)
Others	9,750	(Dh/household)
Total	29,744	(Dh/household)

Annual Expenditure per Household

17,349 (Dh/household)

Annual Saving per Household

12,395 (Dh/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	South

Slope (o) of Surrounding Mountains at

East	South	West
12	12	14

Distance from the Existing 22kV Power Line

0.2 (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.	1160	Douar	Tabant Ighi		
C.R.	43	Zerkten	Cercle	4	Ait Ourir

Location

Latitude	N31	28	0'	Longitude	W7	19	28'	Altitude	1,500	(m)
----------	-----	----	----	-----------	----	----	-----	----------	-------	-----

Households and Population

	Yr 1996	Yr 2010
Households	287	341
Population	1,767	2,138

Size of Residential Area

	18
Fragments	18
E-W	6,500 (m)
N-S	3,000 (m)

Access (km)

Pist	13.5	(km)
Path	0.0	(km)
Total	13.5	(km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
2	3	428	2	9	518	4	80
First Aids		Public halls		Cooperatives		Warehouses	
Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)	Nmbrs	(m2)
1	20	0	0	0	0	0	0

Commerce & Industries

Stores		Butchers		Flour mills				
Nmbrs	(m2)	Nmbrs	(m2)	Diesel	Hyd.	Animal	Total	(kg/day)
6	8	0	0	0	4	0	4	20

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	0.22	1.34	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.14	5.20	#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	8.25	0.97	1.44	0.00	0.06	0.00	0.28	(/household)
Utilization	3.78	7.13	6.31	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	91.1	(DII/household)
Electricity	86.5	(DII/household)
Total	177.7	(DII/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DII)	Monthly (DII)	
Leader	1,000	50.0	(/household)
Villagers	967	67.2	(/household)

Annual Income per Household

Agriculture	4,075	(DII/household)
Livestock	12,234	(DII/household)
Forestry	550	(DII/household)
Others	4,948	(DII/household)
Total	21,807	(DII/household)

Annual Expenditure per Household

15,045 (DII/household)

Annual Saving per Household

6,761 (DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	West

Slope (o) of Surrounding Mountains at

East	South	West
23	13	5

Distance from the Existing 22kV Power Line

8.0 (km)

Topographical Condition of Rout when extending the existing power line.

Flat	Slope	Steep
		*

Annual Mean Rainfall

600 (mm)

Inventory concerned on Electric Aspects

No.	1170	Douar	Ansa			
C.R.	44	Tighdouine		Cercle	4	Ait Ourir

Location

Latitude	N31	24'	14"	Longitude	W7	28'	55"	Altitude	1,880 (m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	-----------

Households and Population

	Yr 1996		Yr 2010		Size of Residential Area		Access (km)	
	Nmbrs	(m2)	Nmbrs	(m2)	Fragments	(m)	Dist	(km)
Households	59		70		1	300	0.0	
Population	300		363		E-W	800	11.0	
					N-S		11.0	

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	2	140	1	3	170	2	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	60	0	0	0	1	0	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	0.17	1.17	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.00	7.33	#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	11.50	0.83	1.50	0.00	0.33	0.00	0.00	(/household)
Utilization	5.17	6.20	7.17	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	89.7	(DH/household)
Electricity	88.2	(DH/household)
Total	177.8	(DH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (DH)	Monthly (DH)	
Leader	1,500	70.0	(/household)
Villagers	1,292	93.3	(/household)

Annual Income per Household

Agriculture	9,807	(DH/household)
Livestock	12,403	(DH/household)
Forestry	0	(DH/household)
Others	700	(DH/household)
Total	22,910	(DH/household)

Annual Expenditure per Household

13,167 (DH/household)

Annual Saving per Household

9,744 (DH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		+	West

Slope (o) of Surrounding Mountains at

East	South	West
24	17	24

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

700 (mm)

Inventory concerned on Electric Aspects

No.	1180	Douar	Tidsi		
C.R.	41	Tighdouine	Cercle	4	Ait Ourir

Location

Latitude	N31	20'	33"	Longitude	W7	26'	29"	Altitude	1,750	(m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	-------	-----

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	
Households	40	48	E-W	300	(m)	Path	0.5
Population	316	382	N-S	800	(m)	Total	7.5
							(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)
3	50	0	0	0	3	0	3	250

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	0.20	1.80	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	6.00	7.20	#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	9.00	1.00	1.80	0.20	0.00	0.00	0.00	(/household)
Utilization	5.00	5.60	6.40	24.00	#DIV/0!	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	124.8	(DfH/household)
Electricity	76.2	(DfH/household)
Total	201.0	(DfH/household)

Payable Investment and Monthly Expense for Electrification

	Initial (Df)	Monthly (Df)	
Leader	1,500	60.0	(/household)
Villagers	1,200	72.0	(/household)

Annual Income per Household

Agriculture	15,046	(DfH/household)
Livestock	39,200	(DfH/household)
Forestry	0	(DfH/household)
Others	8,400	(DfH/household)
Total	62,646	(DfH/household)

Annual Expenditure per Household

20,760 (DfH/household)

Annual Saving per Household

41,886 (DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	East

Slope (o) of Surrounding Mountains at

East	South	West
17	31	25

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

800 (mm)

Inventory concerned on Electric Aspects

No.	1190	Douar	Ait Atmane			
C.R.	44	Tighdouine		Cercle	4	Ait Ourir

Location

Latitude	N31	24'	16"	Longitude	W7	28'	55"	Altitude	1,550	(m)
----------	-----	-----	-----	-----------	----	-----	-----	----------	-------	-----

Households and Population			Size of Residential Area			Access (km)	
	Yr 1996	Yr 2010	Fragments			Pist	(km)
Households	104	124	E-W	500 (m)		Path	4.0 (km)
Population	900	1,089	N-S	200 (m)		Total	8.0 (km)

Public Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	6	300	1	6	362	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)
6	120	2	30	0	0	1	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	1.36	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	5.14	7.30	#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	9.09	1.09	1.55	0.09	0.45	0.00	0.27	(/household)
Utilization	5.45	6.55	8.09	24.00	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	152.7	(DII/household)
Electricity	102.4	(DII/household)
Total	255.0	(DII/household)

Annual Income per Household

Agriculture	17,339	(DII/household)
Livestock	8,213	(DII/household)
Forestry	0	(DII/household)
Others	6,136	(DII/household)
Total	31,688	(DII/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope
		* West

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	1,500	70.0	(/household)
Villagers	1,118	86.8	(/household)

Annual Expenditure per Household

16,591 (DII/household)

Annual Saving per Household

15,097 (DII/household)

Slope (o) of Surrounding Mountains at

East	South	West
20	12	0

Inventory concerned on Electric Aspects

No.	1200	Douar	Ezzaouite				
C.R.	44	Tighdouine			Cercle	4	Ait Ourir

Location

Latitude	N31°	21'	24"	Longitude	W7°	31'	55"	Altitude	1,690(m)
----------	------	-----	-----	-----------	-----	-----	-----	----------	----------

Households and Population

		Yr 1996	Yr 2010	Size of Residential Area		Access (km)	
				Fragments	1	Pist	0.0 (km)
Households		16	19	E-W	200 (m)	Path	18.0 (km)
Population		121	146	N-S	400 (m)	Total	18.0 (km)

Public

Facilities

Schools (1996)			Schools (2010)			Mosques	
Nmbrs	Classes	(m2)	Nmbrs	Classes	(m2)	Nmbrs	(m2)
1	1	60	1	1	72	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)
3	50	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	1.50	0.00	0.00	0.00	(/household)
Utilization	#DIV/0!	#DIV/0!	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	9.50	0.83	1.50	0.00	0.17	0.00	0.17	(/household)
Utilization	4.67	6.00	7.33	#DIV/0!	24.00	#DIV/0!	#DIV/0!	(hrs/day)

Present Expense for Energy

	Monthly Expense	
Fuel	112.1	(DfH/household)
Electricity	74.7	(DfH/household)
Total	186.8	(DfH/household)

Annual Income per Household

Agriculture	10,731	(DfH/household)
Livestock	9,745	(DfH/household)
Forestry	0	(DfH/household)
Others	0	(DfH/household)
Total	20,476	(DfH/household)

<Geographical Conditions>

Location

on flat land	on hill	on slope	
		*	North

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 (Df)	Monthly (Df)	
Leader	1,500	70.0	(/household)
Villagers	833	77.5	(/household)

Annual Expenditure per Household

10,413 (DfH/household)

Annual Saving per Household

10,064 (DfH/household)

Slope (o) of Surrounding Mountains at

East	South	West
45	45	20