




EIE-06-256 REEPRO

Intelligent Energy  Europe

Promotion of the Efficient Use of Renewable Energies in Developing Countries

Project communities' profile

**Brief description of Oudomxay, Xiengkhouang, Khammuane and
Saravanh provinces**

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Project Communities' profile

Description	Oudomxay Province	Xiengkhouang province	Khammuane province	Saravanh province
• Nature and resources				
• Geography	North-West of Northern part High land plateau Rugged mountains Subtropical climate	North-East of Central part High land plateau Rugged mountains Subtropical climate	Lower central part Large Flat plane in the west (along the Mekong river) Hot-humid Tropical climate	Upper Southern part Mostly low plane High mountains on the East Hot-humid Tropical climate
• Land area(km ²)	15,370	15,880	16,315	10,691
• Population				
• Population: total (female)	291,000 (168,000)	229,596 (113,944)	337,390 (171,825)	324,327 (165,508)
• Urban (%)	25%	21.1%	21.3%	8.6%
• Rural with road access	65%	61%	50.6%	75.8%
• Rural with no road access	10%	18%		15.6%
• Den- sity(National average=23.7)	18.5	14.5	20.7	30.3
• Infrastructure and Socio-economic condition				
• Total House- holds	35,886	36,140	61,505	53,013
• Urban	538	8,390	13,094	4,874
• Rural with road access	11,483	21,862	31,632	39,914
• Rural with no road access	23,685	5,888	16,779	8,225
• Household size (nat. aver 5.9)	6.2	6.4	5.5	6.1
• Average HH/village (na-	70	67	77	73

Description	Oudomxay Province	Xiengkhouang province	Khammuane province	Saravanh province
• tional-91)				
• Av. Area / village (nat.: 22), km ²	21	29	20	15
• Energy Resources	Hydropower Solar energy Biomass	Hydropower Some serve of Coal Good wind Solar energy Biomass	Hydropower Solar energy Biomass	Hydropower Solar energy Biomass
• Total village	490	541	803	724
• Villages with Road access	420	399	495	580
• Villages with Clean water supply	251	18	39	44
• Villages with Health centre	41	43	80	31
• With Complete primary school	471	143	271	130
• With Incomplete primary school	NA	256	320	378
• Population aged 10+, group by employment sphere				
• Employed in economic sphere	NA	59.5%	68.5%	73.1%
• Non-economic sphere	NA	38.9%	29.3%	26.2%
• Unemployed	NA	0.7%	0.6%	0.1%
• Not sure		0.9%	1.6%	0.5%
• Important Economic activities and possible income sources				
• Agriculture	Grain Husbandry, Vegetable, fruit	Husbandry (large live stock, Vegetable Crops (water and plantation rice,	Forestry Crop (mostly water rice) Husbandry	Crop (mostly water rice) Vegetable (High land

Description	Oudomxay Province	Xiengkhouang province	Khammuane province	Saravanh province
	Forestry	corn, etc) Subtropical fruit	Rubber, Oil Palm	Pakxong) Coffee, rubber, Husbandry
• Industry	Mining (iron) Cement factory	Mining (gold, iron, coal)	Large Hydropower plants Cement Mining Wood processing	Hydropower plant Wood processing
• Tourism	Hot water spring Eco tourism	Cultural tourism (Plane of Stone Jars- famous ancient relic) Eco tourism	Cultural tourism (long-history Bud- dhism relics) Eco tourism	Eco tourism
• Trading	North-West corridor (to China and Thailand)	North-Eat corridor (to Vietnam)	East-West corridor (Thai-Lao- Vietnam) North-South pass	East-West corridor (Thai-Lao-Vietnam) North-South pass
• Energy consumption				
• Electrification (National- 50.0%) ¹ (vil- lages)	24% EDL grid : 43 Small hydropower: 10 Diesel gen set: 3 PV: 19 Pico hydro: 44	55.6% EDL grid : 76 Small hydropower: 14 Diesel gen set: 1 PV: 10 Pico hydro: 237	59.3% EDL grid : 475 Small hydropower: 0 Diesel gen set: 0 PV: 1 Pico hydro: 0	44.8% EDL grid : 321 Small hydropower: 0 Diesel gen set: 0 PV: 0 Pico hydro: 0
• Electrification (National- 54.1%) (House- holds)	25% EDL grid : 7.380 Small hydropower: 721 Diesel gen set: 100 PV: 305 Pico hydro: 2768	34.3% EDL grid : 7.380 Small hydropower: 721 Diesel gen set: 100 PV: 305 Pico hydro: 2768	55.9% EDL grid : 34.332 Small hydropower: 0 Diesel gen set: 0 PV: 41 Pico hydro: 0	45.2% EDL grid : 23.026 Small hydropower: 0 Diesel gen set: 0 PV: 0 Pico hydro: 0
• Energy for cooking	Wood = 95.1% Charcoal = 4.0% Sawdust = 0%	Wood = 98.1% Charcoal = 0.1% Sawdust = 0%	Wood = 83.5% Charcoal = 12.4% Sawdust = 0%	Wood = 82.0% Charcoal = 15.0% Sawdust = 0.0%

¹ Electricity statistics year book 2006. DOE/MEM. 2007

Description	Oudomxay Province	Xiengkhouang province	Khammuane province	Saravanh province
	Electricity = 0.3% Oil = 0% Coal = 0% LPG = 0.1% Other = 0.1% Not sure = 0.4%	Electricity = 0.5% Oil = 0.3% Coal = 0% LPG = 0.1% Other = 0.1% Not sure = 0.8%	Electricity = 0.3% Oil = 0.1% Coal = 0.5% LPG = 0.1% Other = 0.1% Not sure = 3.0%	Electricity = 0.1% Oil = 0.0% Coal = 0.3% LPG = 0.1% Other = 0.1% Not sure = 2.4%
• Wood energy consumption	~100% for cooking	~100% for cooking		~100% for cooking
• Other energy sources	Imported Oil products Coal,	Imported Oil products Coal,	Imported Oil products	
• Status quo in RE application				
• Solar energy	SHS(VOPS, Sunlabob)	SHS (VOPS, Sunlabob) PV-Hydro-Genset hybrid (Sunlabob) Hot water supply (private households)	SHS (VOPS, Sunlabob)	
• Biomass	Firewood	Family biogas digesters (DLF/SNV-100 UNITS IN 2008) Improved Bucket stoves production, (TRI): targets 3000 stoves, 5 producer)	biogas project: cooperation with Ha Tinh province of Vietnam (no data)	
• Hydropower	Pico hydros, usually < 5 kW (private households)	Pico hydros, usually < 5 kW (private households) Micro hydro (VOPS, PDMEM) Micro Hydro-PV-Genset hybrid system (Sunlabob)	Largest hydropower plant (Namtheun 2-1034MW)	Small hydropower (Seset 1-45MW and Seset 2-80 MW)

1 The Targets on the map

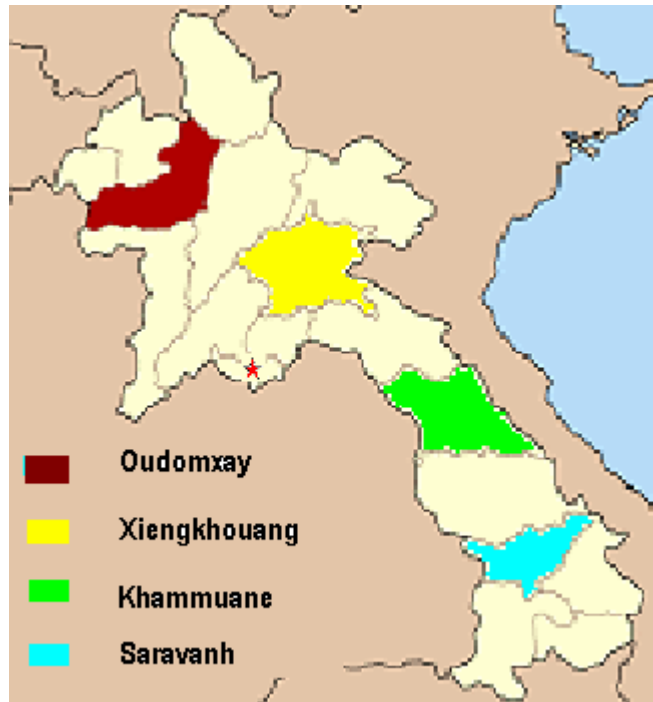


Figure 1 Location of the project communities

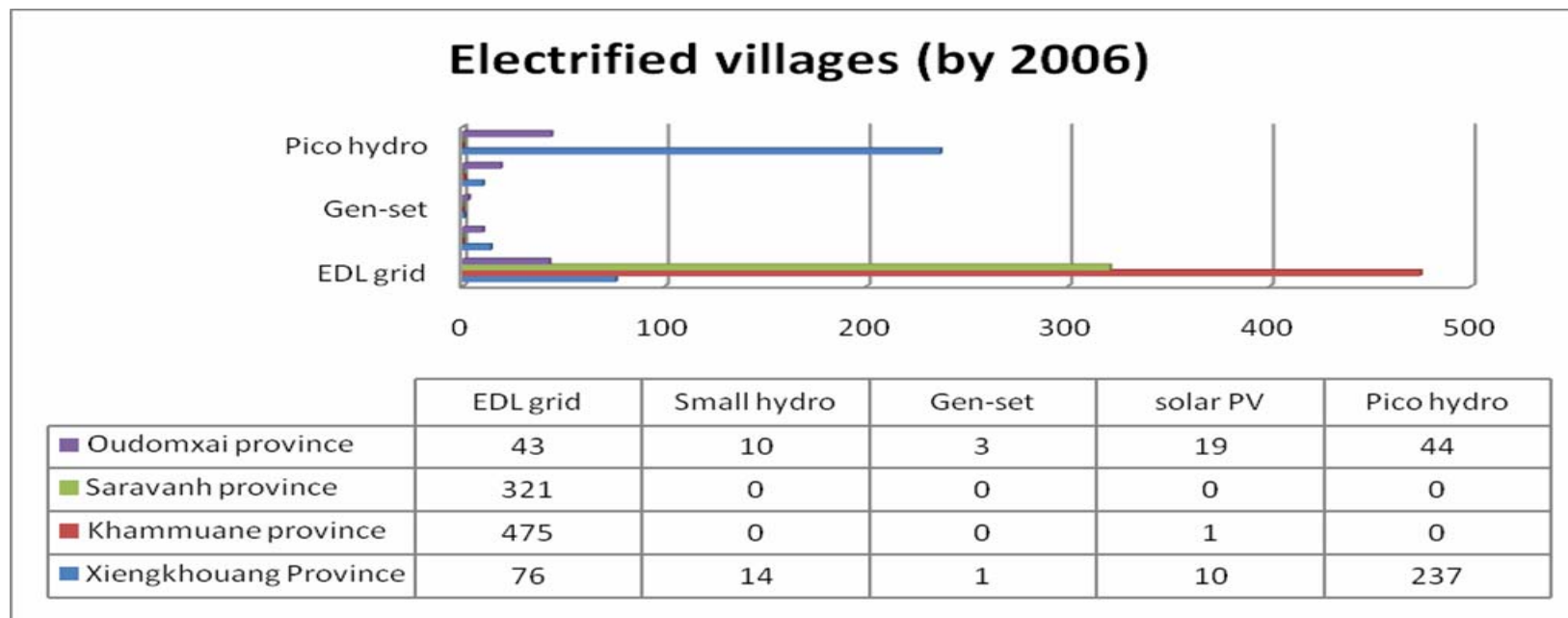


Figure 2 Electrified villages in project provinces (2006)

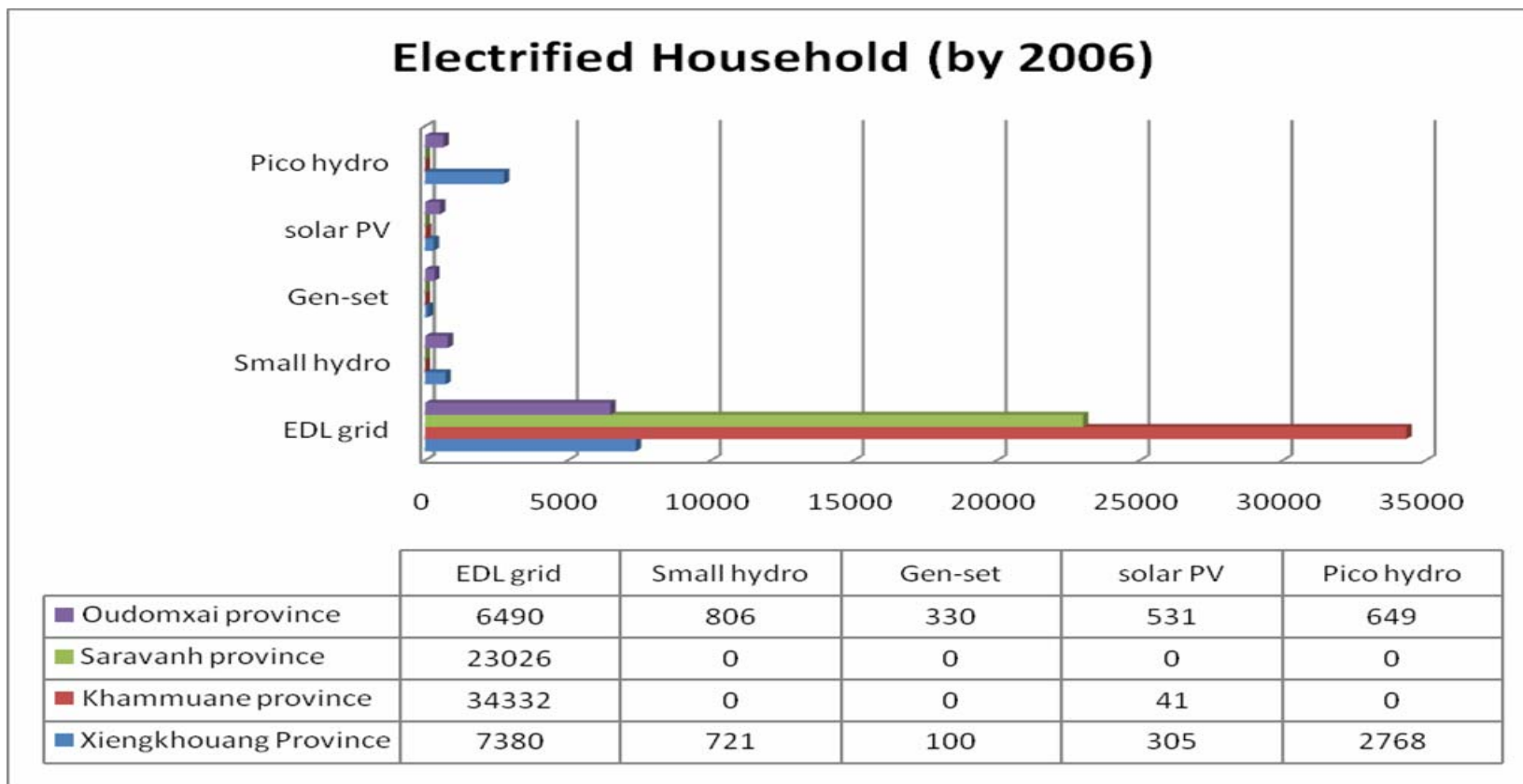


Figure 3 Electrified households (2006)

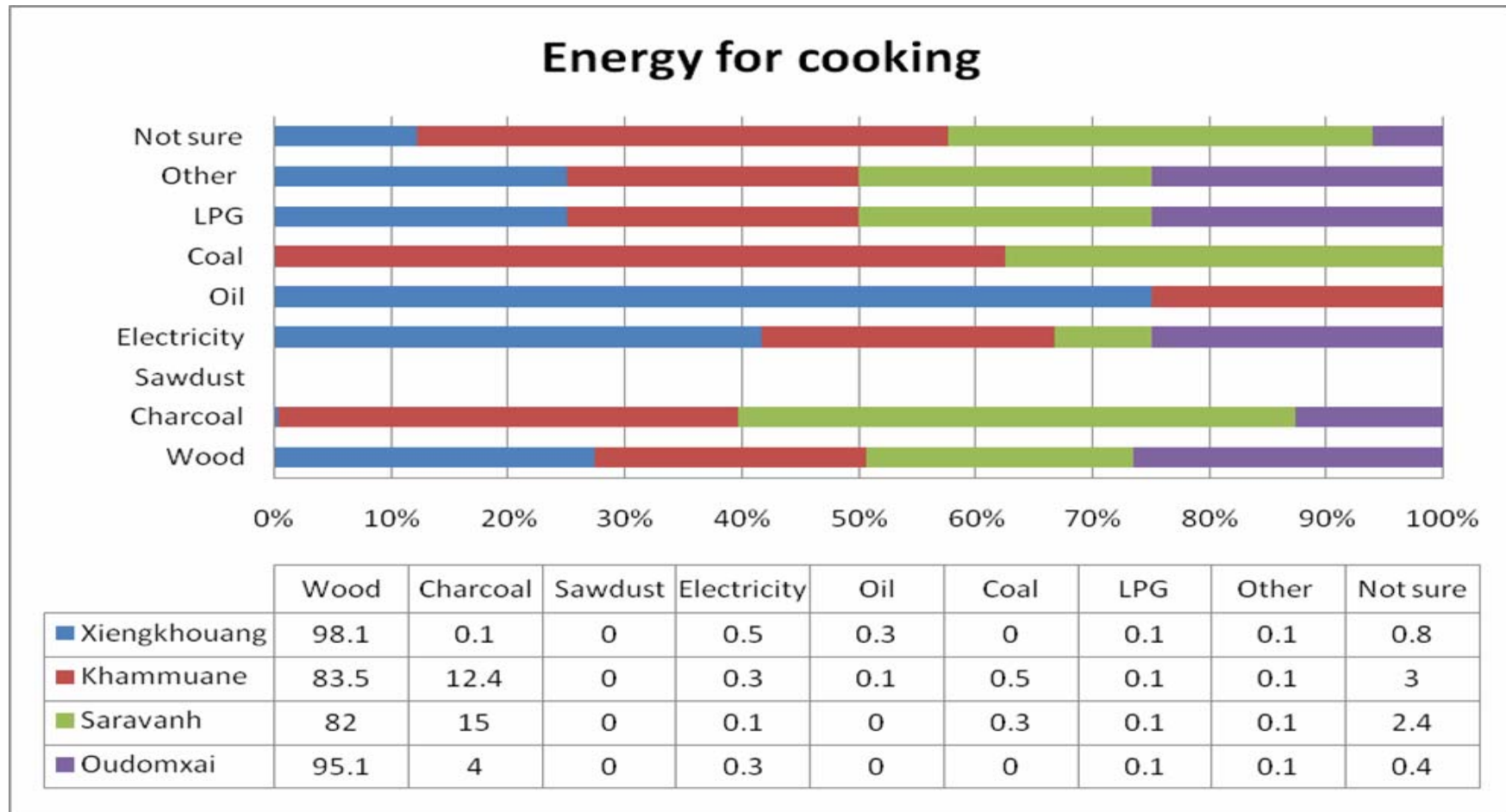


Figure 4 Energy for cooking

Reference

1. Population and Housing census year 2005. NSC. 2006
2. Electrification statistics year book 2006 Lao PDR. DOE/MEM. 2007