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ENERGY PLANNING AND MANAGEMENT IN SWAT DISTRICT, PAKISTAN

A CASE STUDY

Aslam Khan

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CONTENTS

	Page
INTRODUCTION	1
Background	1
Objectives of the Study	1
Methodology	1
<i>Database Generation</i>	1
Organisation of the Report	3
Major Features of Charbagh Union Council	3
<i>Population and Human Settlement</i>	3
<i>Economy</i>	5
<i>Communication and Transportation</i>	5
<i>Energy Sources for Domestic Use</i>	5
ENERGY RESOURCES IN SWAT DISTRICT	6
Biomass Energy	6
Consumption of Firewood and Sources of Supply	7
Fuelwood Supply	9
Other Biomass	9
ELECTRICITY CONSUMPTION AND SUPPLY	10
Grid System	10
Decentralised System	10
FOSSIL FUEL	12
Kerosene	12
Mineral coal	12
Petrol/Diesel	12
Liquified Petroleum Gas (LPG)	12
ENERGY DEMAND AND SUPPLY UNDER DIFFERENT SCENARIOS	13
Demand Projections	13
<i>Sectoral Growth Rates</i>	14
Electricity Demand	14
LPG Demand	15
Kerosene Demand	15
Animal Dung Demand	15
Fuelwood Demand	15

Charcoal and Coal Briquettes	15
Crop Residues, Saw Dust, and Bagasse	
Demand for Petrol Diesel	15
Energy Use in Important Industries	16
Supply Projections	16
<i>Electricity</i>	16
<i>Other Sources</i>	16
Balancing Demand and Supply Under Different Scenarios	16
COMMUNITY PARTICIPATION IN ENERGY PLANNING	17
Soliciting Participation and Identification of Felt Needs	17
ENERGY PLANNING AND MANAGEMENT FOR DISTRICT DEVELOPMENT	18
Energy Institutions	18
<i>Government Institutions</i>	18
<i>Private Commercial Organisations</i>	20
<i>International Organisations</i>	20
Energy Planning Within the Overall Planning Framework	20
Crucial Aspects of Energy Planning	21
<i>Strengthening of Local Institutions for Energy Development</i>	21
<i>Promotion of Community Participation</i>	21
<i>Extension and Training</i>	23
Institutional Coordination and Energy Development Strategy	24
SUMMARY AND CONCLUSIONS	24
ANNEXES	26
REFERENCES	37

LIST OF ABBREVIATIONS

Union Council	=	The lowest tier of local government in the district
Bokhara	=	Local stove
District Council	=	A tier above the union council in the local government

Energy Content and Conversion Factors

	Natural Units	kcal (‘000)	TCE	TOE	Others
<u>Non-commercial</u>					
Fuelwood	ton	4,000	0.57	0.39	1.43 m ³
	m ³	2,800	0.40	0.27	700 kg
Dried Dungcake	ton	2,600	0.37	0.25	--
Agricultural Residues	ton	3,000	0.43	0.29	--
<u>Commercial Fuels</u>					
Diesel	kl	9,080	1.29	0.88	0.826 ton
	ton	10,960	1.57	1.07	1,210 litre
Light Diesel Oil	kl	9,350	1.34	0.91	0.853 ton
	ton	10,960	1.57	1.07	1,172 litre
Petrol	kl	8,000	1.14	0.78	0.709 ton
	ton	11,290	1.61	1.10	1,411 litre
Kerosene	kl	8,660	1.24	0.84	0.778 ton
	ton	11,130	1.59	1.08	1,285 litre
Liquefied Petroleum Gas	ton	11,760	1.68	1.14	--
Coal	ton	6,000	0.86	0.59	--
Electricity	MWh	860	0.12286	0.08357	--
				6	
<u>Other Conversion Factors</u>					
1 TCE			1.00	0.68027	
1 TOE			1.47	2	
				1.00	

Heat Content of Different Fuel Types

1 kg wood	=	15 Megajoules (MJ)
1 kg coal	=	26.5 MJ
1 litre of kerosene	=	43.6 MJ
1 kWh of electricity	=	3.57 MJ