

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
مَنْ مَنَعَهُ

STUDY ON SUSTAINABILITY OF BIODIESEL PRODUCTION FROM JATROPHA IN PAKISTAN AND ITS PUBLIC AWARENESS



By

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ABSTRACT

This study examines the possibility to produce cost effective biodiesel through jatropha, an energy crop, and its promising effects on the prevailing energy crisis in Pakistan. It also investigates the level of awareness about biodiesel among various public groups in the country.

The consistent price hike of all fossil fuels is a perilous blow to the energy sector and the economy of a developing nation like Pakistan. For instance, a huge quantity of diesel alone, almost 8 million tons, is consumed in Pakistan annually; 4 million tons among them are imported, burdening the country's ever looming foreign reserves. Consequently, Pakistan may opt for alternate fuels such as biodiesel as one of possible solutions of this issue.

The province wise availability and suitability of various types of lands for jatropha cultivation and its current plantation status have thoroughly been explored. The research demonstrates that approximately 28, 899, 2000, 0 liters of biodiesel may annually be retrieved from jatropha cultivated on barren lands alone in Pakistan. Moreover, the cost of the biodiesel could be as low as Rs. 42 per liter, costing almost half than the petro diesel. Additionally, this biofuel may assist improving some of serious environmental issues of the country due to its environment friendly characteristics. In general, the production of biodiesel may assist in decreasing unemployment in the country.

The findings of this work also reveal that awareness level of the ordinary people on biodiesel and its applications is presently minimal and shallow. Therefore, a comprehensive national media campaign including internet, may be required to raise public knowledge towards using this alternate fuel.

TABLE OF CONTENTS

Chapt. No.	Title	Page No
	TABLE OF CONTENTS	i
	ACKNOWLEDGMENTS	ii
	LIST OF TABLES	iii
	LIST OF FIGURES/MAPS	vi
	LIST OF ABBERIVATIONS	v
	CHAPTER 1: INTRODUCTION	1
1.1	Global Need for Alternative Fuels.....	1
1.2	Current Energy Scenario of Pakistan.....	1
1.2.1	Overview of Energy Status.....	2
1.3	Sources of Bio Diesel Production.....	4
1.3.1	Botanical Description of Jatropha.	5
1.3.2	Ecology.....	5
1.3.3	Distribution.....	6
1.3.4	Plantation.....	6
1.3.5	Water requirements.....	6
1.3.6	Yield per hectare.....	7
1.3.7	Oil Production	7
1.3.8	Oil Extraction Process.....	7
1.3.9	Jatropha Seed Cake.....	8
1.3.10	Chemical Compositions of Jatropha Oil.....	8
1.4	Biodiesel Production Process from Jatropha Oil	10
1.5	Physical Properties of Biodiesel	11
1.5	Chemistry of Biodiesel Production	13
1.7	Production Methods of Bio diesel	13
1.8	Biodiesel Production Process	14
1.9	Engine Performance and Fuel Efficiency	15
1.9.1	Advantages of Bio-diesel	15
1.9.2	Disadvantages of Biodiesel	16

1.10	Environmental impacts	17
1.11	Socio-Economic and Environmental Benefits of Biodiesel	18
1.12	Life Cycle Analysis of Green House Gas Emissions of Diesel and Biodiesel	19
1.13	Global Biodiesel Production	20
1.14	Future Challenges and Promotion of Biodiesel	21
CHAPTER 2: LITERATURE REVIEW		22
2.1	Biodiesel History	22
2.2	Biodiesel.....	23
2.3	Feed stocks.....	24
2.4	Economics of Biodiesel	25
2.5	Environmental Impacts	26
CHAPTER 3: MATERIAL AND METHODS		28
3.1	Category A: Jatropha Cultivation and Biodiesel Production from It	28
3.2	Category B: Public Awareness Survey	29
CHAPTER 4: RESULTS AND DISCUSSION		31
4.1	Prospect of Jatropha Cultivation at Provincial Level	31
4.1.1	Punjab	31
4.2	Sindh	36
4.2.1	Past and Present Status of Jatropha Cultivation in Sindh.....	36
4.2.2	Potential Areas for Jatropha cultivation in Sindh.....	38
4.3	Baluchistan	41
4.3.1	Current Status of Jatropha Cultivation in Baluchistan.....	41
4.3.2	Potentials Area of Jatropha Cultivation in Baluchistan.....	42
4.4	Khyber Pakhtunkhwa	44
4.4.1	Current Status of Jatropha Cultivation in Khyber Pakhtunkhwa.....	44
4.4.2	Potential Area of Jatropha Cultivation in Khyber Pakhtunkhwa.....	44
4.5	Present Status of jatropha Cultivation at National Level	46
4.5.1	Potential area of jatropha cultivation at National Level	49
4.6	Cost benefits analysis of jatropha cultivation at national level	51

4.6.1	The Cost Parameters.....	52
4.6.2	Jatropha yield per hectare	52
4.6.3	Oil Production from Jatropha Seed per/ha.....	53
4.6.4	Economic value of Jatropha plant/seeds/kg.....	53
4.7	Comparison Analysis between Jatropha and Other Edible Oils Crops...	53
4.8	Employment Opportunities/Cost Profitability Analysis.....	54
4.9	Status of Pakistan in GHG Emissions.....	54
4.10	Public Awareness Survey (part 2)	55
4.11	Professionals Group	55
4.12	Students Group (Female and Male)	61
4.13	Media Group	68
4.14	General Public Groups.....	68
4.15	Overview of Awareness Levels Among All Public Groups	69
	CHAPTER 5: CONCLUSIONS & RECOMMENDATIONS.....	71-73
	REFERENCES.....	74-80
	APPENDIXES.....	81-85

LIST OF MAPS

MAP. NO.	TITLE	PAGE NO.
1	Potential Areas for Jatropha Cultivations in Punjab	35
2	Potential Areas for Jatropha Cultivation in Sindh	40
3	Potential Areas for Jatropha Cultivation in Baluchistan	43
4	Potential Areas for Jatropha Cultivation in Khyber Pakhtunkhwa	45

LIST OF ABBREVIATION

AEDB	Alternative Energy Development Board
CPA	Cost Profitability Analysis
ECC	Economic Coordination Committee
FJWU	Fatima Jinnah Women University
GHG	Green house gas
GOP	Govt of Pakistan
GOS	Govt of Sindh
Ha	Hectare
ICB	Islamabad College for Boys
JCL	Jatropha Curcas L
KPK	Khyber Puktun Khawa
Mha	Area in million hectares
MOTE	Million Tones oil equivalent
NUML	National University of Modern Languages
NUST	National University of Science and Technology
OGRA	Oil & Gas Regulatory Authority
OMCs	Oil Marketing Companies
PARC	Pakistan Agriculture Research Council
PCCC	Punjab College of Commerce
P SO	Pakistan State Oil
SDV	Sustainable Development Vision
WWF	World Wildlife Fund

LIST OF TABLES

Table No.	Title	Page No
1.1	Oil Species For Bio Diesel Production	4
1.2	Chemical Compositions Of Jatropha Oil	8
1.3	Physical Properties of Biodiesel	12
1.4	Socio-Economic And Environmental Benefits Of Biodiesel	18
1.5	Emissions (Gr/Kg) of Biodiesel And Diesel	19
4.1	Jatropha Plantation In Punjab	31
4.2	Land Cover/Land use classes of Punjab	32
4.3	Present Status of Jatropha Cultivation In Sindh	37
4.4	Jatropha Cultivation Districts Wise In Baluchistan	41
4.5	Land Use of Khyber Pakhtunkhwa	44
4.6	Present Status of Jatropha Cultivation In Pakistan (Province Wise)	46
4.7	Distribution of Agriculture Land At National Level And Potential For JCL	49
4.8	Cost Parameters of Biodiesel In Pakistan	52
4.9	Comparison Analysis Of Seed Production And Oil Contents Between Jatropha And Other Edible Oil Crops	54
4.11	Responses to Question.1(Professional Group)	55
4.12	Responses to Question.2	55
4.13	Responses to Question.3	56
4.14	Responses to Question.4	56
4.15	Responses to Question.5	57
4.16	Responses to Question.6	57
4.17	Responses to Question.7	58
4.18	Responses to Question.8	58
4.19	Responses to Question.9	59
4.20	Responses to Question.10	59
4.21	Responses to Question.11	60
4.22	Responses to Question.12	60
4.23	Responses to Question.13	60
4.24	Responses to Question.14	61
4.25	Responses to Question.1 (Student Group, Female/Male)	62
4.26	Responses to Question.2	62
4.27	Responses to Question.3	63
4.28	Responses to Question.4	63
4.29	Responses to Question.5	64
4.30	Responses to Question.6	64
4.31	Responses to Question.7	65
4.32	Responses to Question.8	65
4.33	Responses to Question.9	66
4.34	Responses to Question.10	66
4.35	Responses to Question.11	67
4.36	Responses to Question.12	67
4.37	Responses to Question.13	67
4.38	Responses to Question.14	68
4.39		

LIST OF FIGURES

FIG. NO.	TITLE	PAGE NO.
1.1	Energy Consumption by Sources	2
1.2	Jatropha Curcas L Plant	6
1.3	Jatropha Curcas L Plant	6
1.4	Crude Jatropha oil to Transesterified Jatropha oil	9
1.5	In Put and Out Put of the Jatropha Oil	10
1.6	Process input levels	13
1.7	Process output levels	13
1.8	Biodiesel Production Process	14
1.9	Global Biodiesel Production in world, 1991-2010	20
4.1	Potential Areas for Jatropha Cultivations in Punjab	35
4.2	Land Utilization Statistics of Sindh	38
4.3	Potential Areas for Jatropha Cultivation in Sindh	40
4.4	Land Utilization Statistics of Baluchistan (Mha)	42
4.5	Potential Areas for Jatropha Cultivation in Baluchistan	43
4.6	Potential Areas for Jatropha Cultivation in Khyber Pakhtunkhwa	45
4.7	Jatropha Nurseries at Memon Goth, Super Highway near Karachi	47
4.8	Jatropha Nurseries at Memon Goth, Super Highway near Karachi	47
4.9	PSO Jatropha Nursery and Model Farm at Pipri near Karachi and	47
4.10	PSO Jatropha Nursery and Model Farm at Pipri near Karachi and	47
4.11	Jatropha plants at Hamdard University, Karachi & Jatropha at Agricultural Institute, Umerkot	47
4.12	Jatropha plants at Hamdard University, Karachi & Jatropha at Agricultural Institute, Umerkot	47
4.13	Jatropha Plantation at (AZRI), Bahawalpur (PARC)	48
4.14	Jatropha plants at NARC, Islamabad	48
4.15	Provincial wise Composition of Arable and Un-reported Area	50
4.16	Number of Respondents	69