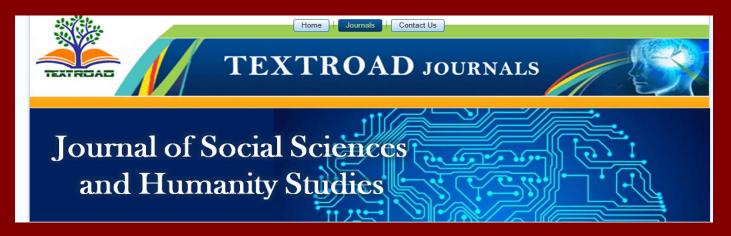
Journal of Social Sciences and Humanity Studies (JSSHS)



An International Peer-reviewed journal

Number of issues per year: 6

ISSN: 2356-8801 (Print)

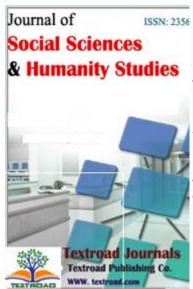
ISSN: 2356-8852 (Online)

TEXTROAD JOURNALS

Journal of Social Sciences and Humanity Studies

J. Soc. Sci. Hum. Stud. 2018., Vol. 4 No. 6: pp. 1-13, Year 2018

Journal of Social Sciences and Humanity Studies (JSSHS) Bimonthly Publication



Scope

Number of issues per year: 6 ISSN: 2356-8801 (Print) ISSN: 2356-8852 (Online)

Journal of Social Sciences and Humanity Studies (JSSHS) is a peer reviewed, open access international scientific journal dedicated for publication of high quality original research articles as well as review articles in the all areas of Journal of Social Sciences and Humanity Studies.

Journal of Social Sciences and Humanity Studies (JSSHS) is devoted to the rapid publication of original and significant research in...

Acrobatics	Anthropology	Archeology	
Arts	Business studies	Criminology	
Communication studies	Corporate governance	Cross cultural studies	
Demography	Development studies	Economics	
Education	Environmental Studies	Ethics	
Geography	Government	History	
Industrial relations	Information science	International relations	
Journalism	Law	Library science	
Linguistics	Literature	Management	
Market Research	Marriage and family life	Media studies	
Methodology	Neuroscience	Paralegal	
Performing arts (Comedy, Dance, Magic, Music, Opera, Film, Juggling, Marching Arts, Brass Bands, Theatre, Visual Arts, Drawing, Painting)	Philosophy	Political science	
Population Studies	Psychology	Public administration	
Religious studies	Social welfare	Sociology	
Trade	Visual arts	Women studies	

Editorial Board

Editor -in-Chief

William Ebomovi

Ph.D., Professor, Department of Health Studies, College of Health Sciences, Chicago State University, **USA.** E-mail: editor@textroad.com

Associate Editors

Prof. Dr. Emine Sonal

Assistant Professor Doctor, Girne American University, Faculty of Humanities, Head of English Language and Literature, Kyrenia / CYPRUS

Prof. Dr. Sarwoko Mangkoedihardjo

Professor, Professional Engineer of Indonesian Society of Sanitary and Environmental Engineers, Indonesia

Saeid Chekani Azar

PhD of Veterinary Physiology; Faculty of Veterinary, Department of Physiology, Ataturk University, Erzurum 25010, Turkey.

Dr. Ravi Kant

Assistant Professor, M.A. (Economics) M.Ed., NET & Ph.D. in Education, Bihar, India.

Dr. Sandra Pacios Pujado

University of Pennsylvania, Philadelphia, PA, USA.

Vishal Patil, PhD

Materials Research Laboratory, University of California, Santa Barbara, CA, USA.

Dr. YUBAO CUI

Associate Professor, Department of Laboratory Medicine, Yancheng Health Vocational & Technical College, Jiangsu Province, P. R. China

Chulho Kim

Ph.D., Associate Professor, Department of Advertising & amp; amp; PR, College of Social Science, Cheongju University, **South Korea**

Raja S Payyavula

Research Associate, Bio Science Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Dr. Zhihong Song

The Ames Laboratory of US DOE, 2238 MBB Iowa State University, IA 54411 USA.

Prof. Dr. Valdenir José Belinelo

Department of Health Sciences and Postgraduate Program in Tropical Agriculture, Federal University of Espirito Santo (UFES, São Mateus, ES, **Brazil**

Dr. Chandrasekar Raman

Research Associate, Department of Biochemistry & Molecular Biophysics, Biotechnology Core Facility, 238, Burt Hall, Kansas State University, Manhattan 66506, KS, **USA**.

Mr. Jiban Shrestha

Scientist (Plant Breeding and Genetics), Nepal Agricultural Research Council, National Maize Research Program, Rampur, Chitwan, **Nepal**

Dr. Nadeem Javaid

Ph.D. (University of Paris-Est, France), Assistant Professor, Center for Advanced Studies in Telecommunications (CAST), COMSATS Institute of IT, Islamabad, **Pakistan**

Dr. Syamkumar Siv Pillai

Program Manager-National Clean Plant Network - Fruit Trees, Washington State University, USA

Dr. Hala Ahmed Hafez Kandil

Professor Researcher, National Research Centre, Plant Nutrition Dept. El-Bhouth St. Dokki, Giza, Egypt.

Prof. Dr. Aziza Sharaby

Pests and Plant Protection Department, National Research Center, Cairo, Egypt

Prof. Dr. Sanaa T. El-Sayed

Ex Head of Biochemistry Department, Professor of Biochemistry, Genetic Engineering &Biotechnology Division, National Research Centre, **Egypt**

Dr. Pratap V. Naikwade

M.Sc., Ph.D. Head, Department. of Botany, ASP College, Devrukh. Maharashtra, India.

Dr. Tarig Osman Khider

Associate Professor, University of Bahri-Sudan, College of Applied and Industrial Sciences, Department of Pulp and Paper Technology, **Sudan**

Dr. Hayman Z. Metwally

Associate Professor of Space Science cairo University Egypt and Vice Dean of Quality Assurance and Development Hayel University **KSA**.

Dr. Nawfal Jebbor

Department of Physics, Moulay Ismail University, Meknes, Morocco.

Dr. Eng. Ahmed Kadhim Hussein

Assistant Professor, Department of Mechanical Engineering, College of Engineering, University of Babylon, Republic of Iraq.

Prof. Dr. Abd El Fady Beshara Morcos

Ass. Prof. of Relativistic Astrophysics and Cosmology, National Research In stitute of Astronomy and Geophysics, Egypt.

Zohre Bahrami

Shahid Beheshti University of Medical Sciences, Tehran, Iran. Researcher and Methodology Adviser.

Dr. Ayhan Kapusuzoglu

Department of Banking and Finance, Yildirim Beyazit University, Turkey.

Dr. Charalambos Tsekeris

Department of Psychology, Panteion University of Social and Political Sciences, Athens, Greece.

Dr. Mahdi Zowghi

Industrial and System Engineering, Management and Soft Computing, London Business and engineering School, **United Kingdom.**

Dr. Tomislav Jurendic

Bioquanta Ltd. for Research and Development, Koprivnica, Croatia

Dr. Hanna Bolibok-Bragoszewska

Warsaw University of Life Sciences, Poland.

Dr. Alaa Abdelwahed Abdelbary

Prof. of Computational and Applied Mathematics, Arab Academy for Science and Technology & Maritime Transport, Egypt.

Dr. N R Birasal

Associate Professor, Zoology Department, KLE Society's G H College, HAVERI – 581 110, Karnataka state, India.

Dr. Nawab Ali Khan

Professor of Human Resource Management, College of Business Administration, Salman Bin Abdulaziz University, Post Box:165, Al Kharj - 11942 **Kingdom of Saudi Arabia**

Editors

Jasem Manouchehri

Instructor in Sport Management, College of Physical Education and Sport Sciences, Islamic Azad University, Central Tehran Branch, Tehran, Iran

Prof. Dr. Tarek Ahmed Shokeir

Professor and Consultant, Department of Obstetrics & Gynaecology, Fertility Care Unit, Mansoura University Teaching Hospitals, Mansoura Faculty of Medicine, **Egypt**

Leila Falahati

Department of Resource Management and Consumer Studies, Faculty of Human Ecology, University Putra Malaysia.

Dr. Ali Elnaeim Musa

University of Bahri, Sudan College of Applied and Industrial Sciences, Sudan

Prof. Dr. Magda M.A. Sabbour

Professor, Department of Pests and Plant Protection-National Research Centre, Cairo, Egypt.

Dr. Basharia Abd Rub Alrasoul Abd Allah Yousef

Deputy Dean at Faculty of Engineering, University of Bahri, Khartoum, Sudan

Dr. Jinu John

Associate Professor (Biotechnology), Jinu Bhavan, Chepra (P. O), Kottarakara, Kollam (Dist.), Kerala – 691520; India.

Dr. Sunil Kumai

Assistant Professor, Department of Mathematics, National Institute of Technology, Jamshedpur, 831014, Jharkhand, India

Zairi Ismael Rizman

Senior Lecturer, Faculty of Electrical Engineering, Universiti Teknologi MARA (UiTM) (Terengganu) Malaysia

Muhammad Attique Khan Shahid,

Associate Professor of Physics, Department of Physics, GC University, Faisalabad. **Pakistan**. PNRA certified Health Physicist, RPO, RSO Atomic and Nuclear Physics Lab

Dr. Vuda Sreenivasarao

Department of Computer and Information Technology, Defence University College, Deberzeit, Ethiopia

Dr. Mohdammed Israil

Post Doctoral Fellow, University Sains Malaysia, Pulau Penang, Malaysia.

Dr. S. Ravichandran

Assistant Professor, Department of Physics, Sathyabama University, India

Dr. Sukumar Senthil Kumar

School of Mathematical Sciences, Universiti Sains Malaysia, Malaysia.

Seifedine Kadry

American University of the Middle East, Kuwait.

Dr. Ho Soon Min

Senior Lecturer, Faculty of Applied Sciences, INTI International University, Persiaran Perdana BBN, Putra Nilai, Negeri Sembilan, **Malaysia**.

Dr. Ezzat Molouk Kenawy

Economic Department, Faculty of Commerce, Kafr El-Sheikh University, Egypt.

Dr. Farooq Ahmad Gujar

Centre for Advanced Studies in Pure and Applied Mathematics, Bahauddin Zakariya University, Multan, 60800, **Pakistan**. & Head of Institution / Principal / Associate Professor of Mathematics.

Dr. Seshadri Sekhar. Tirumala

Principal, Chirala Engineering College, India.

Dr. Tarek Y. El-Hariri

Associated Professor, Egyptian Petroleum Research Institute, Exploration Department, Egypt.

Dr Mamode Khan Naushad

Department of Economics and Statistics, Faculty of social studies and humanities, University of Mauritius, Mauritius.

Dhahri Amel

Research professor, Research Unit: Materials, Energy and Renewable Energies (MEER)-Science Faculty of Gafsa, Tunisia.

Dr. Muhammad Waqas Anwar

COMSATS Institute of Information Technology, University Road, 22060, Abbottabad, Pakistan.

Prof. Dr. Abdul-Kareem J.Al-Bermany

Advance Polymer Laboratory, Physics Department/College of Science/Babylon University, Iraq.

Dr. Syed Zulfigar Ali Shah

Chairman Higher Studies and Research, Faculty of Management Sciences, International Islamic University Islamabad, **Pakistan**.

Saima Anis Mustafa

Assistant Professor in COMSATS Institute of Information Technology, University Road, Abbottabad, Pakistan

Dr.K.V.L.N.ACHARYULU

Faculty of Science, Department of Mathematics, Bapatla Engineering college, Bapatla, India.

Maryam Ahmadian

Post Doctoral Fellow, Department of Social and Development Sciences, Faculty of Human Ecology, Universiti Putra, UPM Serdang, Selangor, **Malaysia**.

Abdel Baset Hasoneh,

PhD, Associate professor of Marketing, Head of marketing Department Al Isra University - Amman, Jordan

Muhamad Fazil bin Ahmad

Asst. Prof. Universiti Sultan Zainal Abidin, Terengganu, Malaysia.

Shaukat Amer

CPA, Assistant Professor, Department of Management Sciences, COMSATS Institute of Information Technology, Attock, **Pakistan**.

Naveed Ahmed

Assistant Professor, Department of business administration, Indus International Institute, 2-Km, Jampur Road, Dera Ghazi Khan, **Pakistan**

Rab Nawaz Lodhi

PhD (ABD), Management Sciences (Bahria University Islamabad), Lecturer: Department of Management Sciences, COMSATS Institute of Information Technology, Sahiwal, **Pakistan**. International Licensed Trainer - NVivo Qualitative Research: QSR International Limited Australia

Dr. Majid Sharifi Rad

Department of Range and Watershed Management, Faculty of Natural Resources, University of Zabol

Dr. Muhammad Naeem

LECTURER, Department of Information Technology, Hazara University, Mansehra.

Dr. Sohrab Mirsaeidi

Centre of Electrical Energy Systems (CEES), Faculty of Electrical Engineering (FKE), Universiti Teknologi Malaysia (UTM), 81310 Skudai, Johor, **Malaysia**

Farhan Altaee

Ministry of Science and Technology, Iraq-Baghdad

Dr. Hafiz Abdul Wahab

Assistant Professor of Mathematics, Department of Mathematics, Hazara University Mansehra Pakistan

Table of Contents, December 2018

Muhammad Faisal, Xia Chunping, Shoaib Akhtar, Muhammad Haseeb Raza, Azka Rehman, Zulqarnain Mushtaq, Muhammad Arslan Ajmal, Ashique Hussain

Assessing the Factors Affecting the Yield of Dark Sun Cured Rustica Tobacco. A Case Study of Rajanpur, Punjab

J. Soc. Sci. Hum. Stud. 2018 4(6): 1-6. [Abstract] [Full Text PDF]

Emine Sonal

The New Gilead Society in the city of "Gilead" Depicted in the Novel "The Handmaid's Tale" by Margaret Atwood

J. Soc. Sci. Hum. Stud. 2018 4(6): 7-13. [Abstract] [Full Text PDF]



© 2018, TextRoad Publication

ISSN 2356-8852

Journal of Social Sciences and

Humanity Studies

www.textroad.com

Assessing the Factors Affecting the Yield of Dark Sun Cured Rustica Tobacco. A Case Study of Rajanpur, Punjab

Muhammad Faisal¹, Xia Chunping^{*1}, Shoaib Akhtar², Muhammad Haseeb Raza¹, Azka Rehman¹, Zulqarnain Mushtaq³, Muhammad Arslan Ajmal⁴, Ashique Hussain⁵

¹PhD Scholar, College of Economics and Management, Huazhong Agricultural University, Wuhan 430070, Hubei Province, P.R. China

1*Professor, College of Economics and Management, Huazhong Agricultural University, Wuhan 430070, Hubei Province, P.R. China.

²Assistant Professor, Department of Economics, University of Punjab, Lahore 54590, Punjab Province, Pakistan.

³PhD Scholar, School of economics and finance, Xian Jiaotong University. No.28, Xianning west road, Xian, Shaanxi, 710049, P.R China

⁴Department of Economics, Government College University, Faisalabad, 38000, Pakistan ⁵School of Economics and Management, Beijing Forestry University, Haidian District, Beijing 100083, P.R. China

Received: July 16, 2018 Accepted: October 11, 2018

ABSTRACT

Tobacco crop is highly labor intensive and contributes a considerable part to the economy of Pakistan. Present study was designed to explore the cost, revenue and modeling of revenue with different inputs regarding the factors affecting the Tobacco productivity in Punjab. Multistage random sampling was selected for the collection of primary data. The regression results of tobacco growers showed a positive impact on revenue due to education, growing experience, land preparation cost, fertilizer cost and irrigation cost. The value of R² was 0.594. According to BCR, medium farmer received Rs. 1.22 by investing rupee one in this activity followed by large (Rs. 1.18) and small (Rs. 1.07) farmers. There is dire need to fulfill the coordination gap of agriculture researchers and extension department to guide the farmers about the efficient utilization of agriculture resources.

KEYWORDS: Smokeless tobacco, benefit cost ratio, Cobb-Douglas, gross income, net income.

1. INTRODUCTION

Agriculture occupied a major (19.5%) share in the gross domestic product of Pakistan, involving 42.3% labor force [9]. Total cropped area was 23.40 million ha in Pakistan [16]. Tobacco crop occupied only 35251 hectares with the production of total 86.22 million kg tobacco [7]. Tobacco products included price earnings ratio of top fifteen companies in Pakistan. Tobacco in Pakistan was on growing value trend throughout the review period but declining trend in value term from past five years because Pakistan exported tobacco 1233.86 million rupees in (2015-2016) which was less than half 2732.29 million rupees in (2011-2012) [8]. Pakistan export raw tobacco and fine cigarettes to twenty-one countries with a worth 12294831\$ and biggest importing country was Paraguay in 2015-2016. Tobacco has witnessed decreased in production during 2016-17 by posting negative growth of 2.6 percent over the same period last year due to decrease in area [6].

Tobacco is only the crop in Pakistan whose yield is well above the average yield and matches per hectare yield in the US and other developing countries an average yield of 1900 kg per hectare. Internationally tobacco is used as cigarette, cigar, snuff, hookah and chewing purpose. Tobacco is supporting 1.2 million persons because this crop is highly labor intensive [2]. Internationally, tobacco is consumed as a wicked weed but still loved by many. Since 15 century, this crop is being utilized by human beings [21].

Dark Sun Cured Rustica tobacco is popular with a name of black leaf occupied an area of 7000 hectares with a production of 21 million kg [10]. Its product is consumed as snuffing and chewing. Black leaf is also called smokeless tobacco, spit tobacco, chewing tobacco and Naswar. Snuff is a fine-grain tobacco that often comes in teabag-like pouches that users "pinch" or "dip" between their lower lip and gum. Chewing tobacco comes in shredded, twisted, or "bricked" tobacco leaves that users put between their cheek and gum. [10].

Citation: Muhammad Faisal, Xia Chunping, Shoaib Akhtar, Muhammad Haseeb Raza, Azka Rehman, Zulqarnain Mushtaq, Muhammad Arslan Ajmal, Ashique Hussain (2018); Assessing the Factors Affecting the Yield of Dark Sun Cured Rustica Tobacco. A Case Study of Rajanpur, Punjab, Journal of Social Sciences and Humanity Studies, 4(6)1-6.

Recently [18] explored the economics analysis of tobacco in Malawi. All costs are included, whether they are independent or contract farmers. Tobacco is labor intensive crop sharing 13.4% in total cost. The average profit among all the farmers is 79\$ per acre.

Similarly [23] designed the study to investigate profitability of smoked tobacco in Pakistan. Economic analysis revealed that average cost Rs. 348637.18 acre⁻¹ with average tobacco output estimated to be 3244.73 kg acre⁻¹ and average gross revenue of Rs 430348.54 acre⁻¹ whereas the net profit was estimated to be Rs. 81711.36 acre⁻¹. The yield difference was observed in case of different farmers due to difference in the use of inputs. It indicates the existence of inefficiency in input usage [15].

In a study [11] performed the economics analysis of oriental tobacco in turkey. Average cost of tobacco production was calculated to be 4.71\$/kg. Total gross revenue obtained from tobacco was determined to be 320.79 \$. Net revenue obtained from a 1 kg was estimated to be 0.49\$/kg. There is a strong association exists between agriculture and various climate factors like precipitation, temperature, floods which ultimately influence on the economy of a country. Increase in the production as well as yield of agricultural crops is a need of time. [5, 6].

Smokeless tobacco production is said to be an important contributor to livelihood in terms of labor and revenue generation in Pakistan. In the light of above facts, study is required to estimate the total production cost, total revenue, benefit cost ratio, grass margin, net income and determinant of revenue of smokeless tobacco. The study also designed to give policy implications in the light of results.

2. MATERIALS AND METHODS

This study was based on primary data, collected from 210 smokeless tobacco growers from districts Rajanpur and Dera Ghazi Khan, Pakistan. For large size population, a sample of 210 respondents was appropriate for better results [20]. Multistage random sampling was adopted because it was helpful when total population was distributed into various sub-groups and a sample was taken from each sub-group on random basis [22]. Respondents were divided into three sub-groups such as small, medium and large farmers. Total operational land was less than 12.5 acres for small farmers; more than 25 acres for large farmers; and between 12.5 and 25 acres for medium farmers [12]. Small, medium and large farmers were 59.52%, 25.72% and 14.76%, respectively for present study.

Total revenue (TR) and total cost (TC) were estimated for economic analysis of smokeless tobacco production. Total variable cost incurred in the form of nursery cost, land preparation, seed, transplantation, fertilization, earthling up, hoeing, irrigation, pesticides, picking and stick replacement cost. Total fixed cost was the sum of land rent (six months)[1]. Software like Microsoft Excel, SPSS-15, DEAP-2.1 and Stata 13.0 were used for empirical analysis. Benefit-cost ratio, gross margin and net income were calculated with given formulas [3].

2.1 Benefit Cost Ratio (BCR)

BCR is obtained by dividing total revenue (TR) with total cost (TC). It explains the amount of revenue for the investment

of one rupee as total cost. BCR =
$$\frac{TR}{TC}$$
 (1)

2.2 Gross Margin

It is obtained by subtracting variable cost (VC) from total revenue (TR). GM = TR - VC (2)

2.3 Net Income (NI)

It is obtained by subtracting total cost (TC) from total revenue (TR). NI = TR - TC (3)

2.4 One-way analysis of variance (ANOVA)

ANOVA explained the difference in the mean values for various sub groups [19] by using following null and alternative hypothesis:

Null Hypothesis H_0 : $\mu_1 = \mu_2 = \mu_3$

Alternative hypothesis H₁: $\mu_1 \neq \mu_2 \neq \mu_3$

Equality and the mean values of sub groups was explored by null hypothesis and alternative hypothesis, respectively.

2.4.1 Econometric Model Specification

Easy estimation and interpretation of results is a major advantage of Cobb-Douglas model [13], Later, [4] introduced the logarithmic transformed form of Cobb-Douglas model because of easy coefficient estimation in linear form as:

$$Y = a + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \beta_9 x_9 + U_i$$
 (4)

Y = Average revenue (Rs.)

 $x_1 = Education$

 x_2 = Growing experience

 x_3 = Total Nursery Cost

 x_4 = Total labor Cost

 x_5 = Land Preparation Cost

 x_6 = Fertilizer Cost

 x_7 = Irrigation Cost

 $x_{s} = \text{curing Cost}$

 x_0 = Pesticide cost

a = constant

 U_i = Error term which shows the effect of unexplained factors

 $\beta_1 \dots \beta_q$ are the coefficient estimates

3. RESULTS AND DISCUSSION

Table 1 reveals the mean and ANOVA of socio-economic variables. On an average, large farmers had more education (5.38 years), operational land (33.94 acre), smokeless tobacco production area (30.84 acre) and experience of smokeless tobacco (21.38 years). Age (43.08 years) and family labor (2.95) was less than small and medium farmers. The difference in mean was insignificant for farming experience, but it was significant for age, education, farm size, land under tobacco and family labor of smokeless tobacco.

Table 1 mean and ANOVA of various socio-economic variables.

Particulars		Farm size Category			ANOVA		
	Large	Medium	Small	F-Value	Sig.		
Age (years)	43.08	44.98	39.33	5.758	.004		
Education (years)	5.38	2.96	3.15	4.430	.013		
Farming Experience (years)	21.38	23.46	19.15	2.811	.062		
Farm Size (Acres)	33.94	17.26	6.76	449.57	.000		
Land under Tobacco (Acres)	30.84	15.39	6.31	324.09	.000		
Family Labor	2.95	3.68	4.34	4.14	.017		

Table 2 depicts the production cost incurred in per acre production for smokeless tobacco. On average, expenditures of small farmers were high in nursery growing cost (1428.12). On average, large farmers spend more financial resources on fertilizer and FYM cost (Rs.25982.99) and irrigation cost (Rs. 7131.08). On average, medium farmers spend less money on land rent (Rs. 17303.57), fertilization (Rs. 23724.95), irrigation cost (Rs. 6962.50). Total cost was more for small farmer (Rs. 76499.81) followed by large (Rs. 74110.44) and medium farmer (Rs. 71824.32).

Citation: Muhammad Faisal, Xia Chunping, Shoaib Akhtar, Muhammad Haseeb Raza, Azka Rehman, Zulqarnain Mushtaq, Muhammad Arslan Ajmal, Ashique Hussain (2018); Assessing the Factors Affecting the Yield of Dark Sun Cured Rustica Tobacco. A Case Study of Rajanpur, Punjab, Journal of Social Sciences and Humanity Studies, 4(6)1-6.

Table 2. Total production cost acre-1 (Rs.) for smokeless tobacco

Table 2. I van production cost acre (133, 101 smokeless tobacco				
Production Practices/Costs	Sub Groups			
	Large	Medium	Small	
Total Nursery Cost	484.13	711.84	1428.12	
Uprooting and transportation cost	1727.03	1626.79	1658.12	
Gap filling cost	58.51	73.45	148.34	
Manual ridge making cost	245.95	244.64	270.94	
Fertilizer and FYM application Cost	1009.38	1007.85	1085.78	
Pesticide insecticide application charges	263.51	313.39	241.20	
Total Hoeing Charges	2448.65	2548.21	2560.68	
Manual Topping and de-suckering Charges	4059.46	4137.50	3973.50	
Labor cost of irrigation and water course cleaning	711.62	574.85	730.66	
Labor cost of Harvesting	1024.32	1057.14	1046.15	
Cost of picking tying and loading	1278.38	1296.43	1251.28	
Stick replacement cost	3732.43	3805.36	3637.61	
Total Labor Cost	16559.24	16685.61	16604.27	
Total Land Preparation Charges	4446.24	4841.19	6395.34	
Total Fertilizer and FYM Cost	25982.99	23724.95	24473.78	
Total Pesticide insecticide cost	1258.11	1030.36	984.19	
Total Irrigation Cost	7131.08	6962.50	7027.78	
Total Curing Cost (Plastic)	518.92	564.29	526.50	
Land rent	17729.73	17303.57	19059.83	
Total Cost	74110.44	71824.32	76499.81	

Table 3 describes that BCR was high for medium farmers (1.22) followed by large (1.18) and small (1.07) farmer. It depicts that medium farmer received Rs.1.22 in return by investing rupee one in smokeless tobacco production. The small farmers get more leaf production (31.52 40kg/acre), also get more stick production 7.88 40kg/acre and price (Rs.3955.98/40kg). Total revenue was also more for small farmers (Rs.1276290.00 40kg/acre). GM (Rs.70189.02 40kg/acre) was more for medium (70160.06kg/acre) and large farmer (68433.55 kg/acre). Smokeless tobacco is a profitable activity and it was in line with the results of [11, 18, 23] and [16].

Table 3. Economic Analysis of per acre smokeless tobacco Production

Tuble of Economic Timity six of per unit Smokeless tobuced Troduction				
Indicator/Unit	Sub-Groups			
	Large	Medium	Small	
Leaf Production (40 kg/acre)	30.92	31.21	31.52	
Average Price (Rs./40kg)	3945.95	3875.89	3955.98	
Stick Production (40 kg/acre)	7.73	7.80	7.88	
Stick Price (Rs./40kg)	303.11	292.86	294.66	
Total Cost (40 kg/acre)	74110.44	71824.32	76499.81	
Total Revenue (Rs.)	124814.26	124680.80	127629.00	
Gross Margin (Rs.)	68433.55	70160.06	70189.02	
Net Income (Rs.)	50703.82	52856.49	51129.19	
BCR	1.18	1.22	1.07	

Table 4 explains the acceptability of Cobb-Douglas model for smokeless tobacco according to $R^2(59.4)$, adjusted $R^2(57.5)$ and f- statistics (32.464). The regression results of tobacco growers showed a positive impact on revenue due to education, growing experience, land preparation cost, fertilizer cost and irrigation cost. The regression coefficient was significant and positive for education which shows 0.191% increase in revenue for 1% increase in education. Significant education coefficient was in line with previous studies [14, 17] and [16]. An educated farmer has the ability to understand new technology and learns about better production practices. The increase in revenue was 0.187%, 0.427% and 0.254% was due to 1% increase in land preparation cost, fertilizer cost and irrigation cost, respectively. Significant coefficient of extension services was in line with [17] and [16]. Positive coefficient of irrigation cost was in line with Khan & Ghafar (2013), [16] and Mwangi (2012). The revenue was decreased by 0.107% and 0.131% as a result of 1% increase in curing cost and growing experience respectively.

Table 4. Regression Results of Cobb- Douglass production function

Tuble is regression results of Cobb Douglass production function					
Variables		Std. Error	Coefficient	t-value	p-value
Constant		13738.518		2.453	0.015
Education		304.144	0.191	3.704	0.000
Growing Experience		113.633	-0.131	-2.657	0.009
Nursery Cost		2.133	-0.071	-1.229	0.221
Total Labor Cost		0.92	0.013	0.201	0.841
Land preparation Cost		0.897	0.187	3.362	0.001
Fertilizer Cost		0.251	0.427	7.746	0.000
Irrigation Cost		1.159	0.254	4.505	0.000
Curing Cost		6.638	-0.107	-2.128	0.035
Pesticide Cost		3.69	-0.004	-0.081	0.936
\mathbb{R}^2	59.40				
Adjusted R ²	57.50				
F Ratio	32.46				

4. CONCLUSION

Price instability, high middle man margin, expensive inputs, low quality inputs, lack of extension services and disease attack were the major issue as told by the respondents. Government should improve the services of extension department, to aware the farmers about optimum utilization of resources such as fertilizer, water and pesticides. Government should establish farmer field schools for the training of farmers about modern practices in agriculture. Monitoring teams should check the quality of agricultural inputs in retail market. Government should improve the technical education of farmers for the decrease in inefficiency score. Government should control the prices of various inputs like fertilizers, hybrid seed, electricity and chemicals. Government should also improve the quality of inputs like seed, sprays and fertilizers.

Conflict of interest

Authors would hereby like to declare that there is no conflict of interests that could possibly arise.

REFERENCES

- 1. Akhtar, S., et al., 2015. Economics and Dependence of Wheat Productivity on Farm Size in Southern Punjab. J. Environ. Agric. Sci. 2(4).
- 2. Ali, N., et al., 2015. The Economic Analysis of Tobacco Industry: A Case Study of Tobacco Production in Pakistan.
- 3. Ali, Q., M. Ashfaq, and M.T.I. Khan, 2006. An Economic Analysis of Off-Season Capsicum/Bell Pepper Production in Punjab, Pakistan.
- 4. Beattie, B. and C. Taylor, 1985. The Economics of Production. John Wiley & Sons, New York. The economics of production. John Wiley & Sons, New York.: p. -.
- 5. GOP, 2015. Economic Survey of Pakistan. Ministry of Finance, Islamabad.
- 6. GOP, 2016. Economic Survey of Pakistan. Ministry of Finance, Islamabad.
- 7. GOP, 2016. Economic Survey of Pakistan, Islamabad. Economic Advisor's wing, Finance Division, Islamabad, Pakistan, 2016. .
- 8. GOP, Punjab Development Statisitics. 2016, Bureau of Statistics. Government of Punjab, Lahore.
- 9. GOP, 2017. Economic Survey of Pakistan. Ministry of Finance, Islamabad.
- 10. GOP, 2017. Government of Pakistan, Pakistan Tobacco Board.
- 11. Gumus, G., 2008. Economic Analysis of Oriental Tobacco in Turkey. Bulgarian journal of agricultural science. 14(2008): p. 470-475.
- 12. Hassan, S., N. Tabasam, and J. Iqbal, 2005. An Economic Analysis of Wheat Farming in the Mixed Farming Zone of Punjab Province. Pakistan. Journal of Agriculture & Social Sciences. 1(2): p. 167-171.

Citation: Muhammad Faisal, Xia Chunping, Shoaib Akhtar, Muhammad Haseeb Raza, Azka Rehman, Zulqarnain Mushtaq, Muhammad Arslan Ajmal, Ashique Hussain (2018); Assessing the Factors Affecting the Yield of Dark Sun Cured Rustica Tobacco. A Case Study of Rajanpur, Punjab, Journal of Social Sciences and Humanity Studies, 4(6)1-6.

- 13. Heady, E., 1961. 0., and John L. Dillon, Agricultural Production Functions.
- 14. Ibekwe, U. and O. Adesope, 2010. Analysis of Dry Season Vegetable Production in Owerri West Local Government Area of Imo State, Nigeria. Journal of Development and Agricultural Economics. 2(6): p. 245-249.
- 15. Khan, H. and F. Ali, 2013. Measurement of Productive Efficiency of Tomato Growers in Peshawar, Pakistan. Agricultural Economics/Zemedelska Ekonomika. 59(8).
- 16. Khan, M.T.I., et al., 2017. Economic Analysis of Open Field Chilli (Capsicum Annuum L.) Production in Punjab, Pakistan. Journal of Experimental Biology. 5: p. 1.
- 17. Khan, R. and S. Ghafar, 2013. Technical Efficiency of Tomato Production: A Case Study of District Peshawar (Pakistan). World Applied Sciences Journal. 28: p. 1389-1392.
- 18. Makoka, D., et al., 2017. Costs, Revenues and Profits: An Economic Analysis of Smallholder Tobacco Farmer Livelihoods in Malawi. Tobacco control. 26(6): p. 634-640.
- 19. Ostertagová, E., O. Ostertag, and J. Kováč. Methodology and Application of the Kruskal-Wallis Test. in *Applied Mechanics and Materials*. 2014. Trans Tech Publ.
- 20. Poate, C.D. and P.F. Daplyn, Data for Agrarian Development. 1993: CUP Archive.
- 21. Qamar, W., et al., 2006. Economics of Tobacco Production in District Swabi, Nwfp. J. Agric. Biol. Sci. 1(3).
- 22. Teddlie, C. and F. Yu, 2007. Mixed Methods Sampling: A Typology with Examples. Journal of mixed methods research. 1(1): p. 77-100.
- 23. Ullah, S., et al., 2015. Economic Analysis of Tobacco Profitability in District Swabi. Economic Analysis. 10.





The New Gilead Society in the city of "Gilead" Depicted in the Novel "The Handmaid's Tale" by Margaret Atwood

Assist. Prof. Dr. Emine Sonal

Girne American University
The Faculty of Humanities
Head of English Language and Literature Department
Girne / North Cyprus

Received: September 11, 2018 Accepted: November 10, 2018

ABSTRACT

The novel written by Margaret Atwood titled, "The Handmaid's Tale" is a literary text about a community located in the city of "Gilead", a fictional place where a group of totalitarian, conservative and religious extremists take over control of the country. They abolished the existing democratic and egalitarian society. It is a dystopic male-controlled society set in the year 2195 where women are expected to perform the role of the Handmaid and are signed up for duties as surrogate mothers to become breeding tools for the "republic of Gilead". People in Gilead, especially women, are categorized and separated according to the roles and activities that they must perform. This paper analyses how the Handmaids are subordinated in their settings based on Gileadean law and the demands of the Commanders within the community. Emphasis is placed on the importance of setting and the impact it has on the novel.

KEYWORDS: setting, Gileadean law, handmaids, dystopic, surrogate mothers, oppression.

INTRODUCTION

Atwood successfully depicts a future dystopia and creates a totalitarian theocratic city by using "space" in a specific way in her novel. The "space" that the characters inhabit is narrow, barren and desolate. It helps the reader realize the futuristic society in the fictional city of Gilead. The word "Gilead" is a biblical name taken from Genesis (31.21) that refers to the "mountainous region east of Jordan" (Easton's Bible Dictionary). This novel was first published in 1985 and is set in the "near future," as a 22nd century version of the United States. Most of the novel's events are set in the present-day city of Cambridge, Massachusetts, specifically in the Harvard area, where the author received her Master's degree in English from Radcliffe College in 1962. Later, she continued her studies for a postgraduate degree at Harvard University. The "space" she occupies in her novel is a well-known setting to her. It is suggested that the buildings that have been occupied by the government are possibly the main buildings at Harvard University where she was studying literature on the American Puritans" (Atwood and Oates, 2017: 9).

In *The Handmaid's Tale*, the society of Gilead is ruled by a social system in which men have power and control over women. Gilead is governed by the Commanders¹ who advocate the new Christian government's extreme policies and a neo-puritan ideology that dominates all aspects of people's lives. In Gliead, institutions are founded according to the constitution of Bible and put under the control of the Commanders. Patriarchy manifests itself throughout the novel in terms of the social, political, and ideological points of view of the characters.

The Commanders of the Republic of Gilead insist that inappropriate use of advanced technology and industry has negatively affected the fertility of human beings. The common assumption is that excessive toxic chemicals, pollution and nuclear radiation have meant that three in four women are sterile. Offred, the protagonist of the novel is also the narrator who is a 35 year old woman, states the following:

The air got too full, once, of chemicals, rays, radiation, the water swarmed with toxic molecules, all of that takes years to clean up, and meanwhile they creep into your body, camp out in your fatty cells. (Atwood 1985, 143)

¹ In *The Handmaid's Tale*, there is a pecking order among the women in Gilead's patriarchal system. All the names for people and for place throughout the novel are capitalized by the author, Margaret Atwood such as "Wives", "Marthas", "Aunts", "Handmaids", "Econowives", "Unwomen", "Commander" and "Colonies". Hence, these names are capitalized in this study.

^{*}Corresponding Author: Assist. Prof. Dr. Emine Sonal, Girne American University, The Faculty of Humanities, Head of English Language and Literature Department, Girne / North Cyprus. eminesonal@hotmail.com Mobile Phone: 0 548 826 1032 (Work) (392) 650 2000 / 1461 (ext.) (Fax) (392) 650 2061

Throughout the novel, she reveals the details of her previous life and she explains that she had a happy life with her husband and daughter. She was one of the few remaining healthy and fertile young woman, she was taken away by the guards of the totalitarian theocratic state at the checkpoint when she was trying to escape to Canada with her family. Being a postmodern novel, Offred, the Handmaid, whose real name is not given, is narrating the events in non-chronological order in Stream of Consciousness and technique. Early in the story the reader is informed that she was kept in a gymnasium with other women, who were also young and fertile. Through her narration, the reader experiences the nightmare like world of Gilead and learns the women's desire to return to their traditional norms, values, and gender roles.

In the Republic of Gilead, women are categorized according to their reproductive capacity. Hogsette (1997) in his article, *Margaret Atwood's Rhetorical Epilogue in the Handmaid's Tale*, states that the Republic of Gilead defines the Handmaids in terms of the "condition of their ovaries" and as "objectified livestock" that have the "purpose of repopulating North America". Gökçen (2014, 42) in her article points out that Offred's function in this society is, "reduced to the reproductive capacity of her body" and emphasizes that "any deviation from this is punishable by no less than death" (p.42).

Offred was assigned to become the official breeder of a high-rank Commander named Fred whose wife had become sterile. Not only Offred, but other Handmaids were considered as being of value if their ovaries were capable of producing a fetus. The name 'Offred' itself is a possessive derivational prefix of the term 'Of Fred' which means she belongs to Fred, the Commander. This example alone exposes the atrocities that take place in the house of the Commander and the society of Gilead in general. Offred's life is unbearable; she has restricted freedom, stays in an isolated room, and is being watched by the "Eyes" who are the Gilead secret police. For Offred, her room with a single bed is just a place to sleep in as the following quote highlights:

There is suppose[d] to be nothing entertaining about us, no room is permitted for the flowering of secret lusts; no special favors are to be wheedled, by them or us, there are to be no toeholds for love. We are two-legged wombs, that's allsacred vessels, ambulatory chalices. (Atwood 1985, 176)

Humphrey, in his book titled, *The Politics of Atrocity and Reconciliation* quotes Foucault's view on atrocity which reflects the plight of Offred as given below:

Historically Foucault identifies atrocity as a mechanism used to display the absolute power of the sovereign. The spectacle of the 'tortured body' was a dramatically staged and tightly scripted event based on the triadic structure of ruler—ruled—victim. Atrocity—causing pain and suffering in the victim—was made a spectacle as a ritual of state power. Public torture demonstrated the sovereign's privilege and prerogative to absolute power over life and death. Atrocity, expressed in the excess of violence against the victim's body, demonstrated the sovereign's embodiment of the law and violence. He was both the law and above the law. (1977: 2-3)

The Bible and its teachings are used to control the people in Gilead, Offred's life of captivity and the Commander's regime is justified through its biblical scriptures. She manages to survive with help from her past life and memories related to her daughter, her husband Luke, her mother and her best friend Moira from the college. These are the memories that keep her alive in this depressing and gloomy atmosphere and the hope that one day Gilidean law and its oppressive rules will end and she can return to a peaceful time.

The Space (Setting) in The Handmaid's Tale

Henri Lefebvre, a French philosopher, sociologist and the space theorist who is best known for his work, "The Production of Space" states the following by quoting Marx and Engels:

...the concept of production ... has two senses, one very broad, the other restrictive and precise. In its broad sense, humans as social beings are said to produce their own life, their own consciousness, their own world. There is nothing, in history or in society, which does not have to be achieved and produced. (1991:68)

Based on the quotation above, in *The Handmaid's Tale*, the reader is first introduced to the "Rachel and Leah Reeducation Center," which in reality is the Red Center as called by Handmaids "because there was so much red" (125). The center used to be a school gymnasium before the Gilead society formed; but now the center is used for the indoctrination of Handmaids and a place where they learn their roles within the new system. Aunt Lydia

and Aunt Elizabeth are wardens working at the Red Center. They help the Commanders control the women and make sure they are obedient and silent. Here, the Handmaids are not permitted to talk to each other so they create their own unique form of sign language.

An important "space" for Offred is her room in the Commander's house where she serves as a Handmaid. She gives the details of her surroundings as follows:

A chair, a table, a lamp. Above, on the white ceiling, a relief ornament in the shape of a wreath, and in the center of it a blank space, plastered over, like the place in a face where the eye has been taken out. There must have been a chandelier, once. They've removed anything you could tie a rope to [...]. (Atwood 1985, 9)

Offred's room does not even have a mirror and anything that is considered as being a means for suicide is removed by the Commanders. "On the wall above the chair a picture, framed but with no glass: a print of flowers, blue irises, watercolor" (10). Gileadean authorities leave no items in the room that are considered as being nonessential for the Handmaids. For example, there is no dress hanger, no needle, no shelves, no side board, no body lotion and no comb. Offred finds it very difficult to get used to her new room:

The door of the room-not my room, I refuse to say *my*-is not locked. In fact it doesn't shut properly. I go out into the polished hallway, which has a runner down the center, dusty pink. Like a carpet for royalty, it shows me the way. (Atwood 1985, 11)

Humphrey furthermore states that "the modern state puts control on individual life at the centre of their sovereign power" (2002:3). In Gilead, power has reached into the very grain of individuals, touched their bodies and has inserted itself into their actions, attitudes, their discourses, learning processes and everyday life. It becomes an oppressive agent yet also a creative force. In the Commander's house, there is no privacy for Offred because the door of her room cannot be locked using a key and always remains half open. When she is in her room she is easily seen by the Marthas (the female guardians) from the corridor and the entrance of the kitchen. Yet, Offred manages to develop the idea that her room is her private space and accepts that she must obey the Gileadian order: "My room, then. There has to be some space, finally, that I claim as mine" (66). Offred, in her former life, was an independent woman earning money of her own and able to access knowledge through reading books, magazines and journals.

In the novel, all the women dress according to their status in that society. For example, the Commanders' viwes have a blue colored dress, the Martha's have a green dress while the Handmaid's have a red one. Each Handmaid must wear a restrictive white winged cap that prevents them from properly looking left or right. The idea that their bodies should be fully covered stems from the desire of the Commanders to commodify them according to their requirements:

Everything except the wings around my face is red: the color of blood, which defines us. The skirt is ankle-length, full, gathered to flat yoke that extends over the breasts, the sleeves are full. The white wings too prescribed issue; they are to keep us from seeing, but also from being seen." (Atwood 1985, 11)

Grocery shopping once a day with Ofglen, another Handmaid, is the only outside space Offred is permitted. When Offred and Ofglen walk to the food markets, there are no words written on the windows and even the traffic signs are presented in the form of pictures because woman are not allowed to read any more. Offred notes that there are barriers, floodlights, pillboxes and men with machine guns on both sides of the road. The installment of barricades prevents free movement to other places and the presence of guards and Eyes are a constant threat for Offred and all Handmaids. Offred and Ofglen go through a checkpoint where two guards check their identity. In the following quotation, Offred gives the reader clues about her captivity in Gilead:

We reach the first barrier, which is like the barriers blocking off roadworks, or dugup sewers: a wooden crisscross painted in yellow and black stripes, a red hexagon which means Stop. Near the gateway there are some lanterns, not lit because it isn't night. Above us, I know, there are floodlights, attached to the telephone poles, for use in emergencies, and there are men with machine guns in the pillboxes on either side of the road. I don't see the floodlights and the pillboxes, because of the wings around my face. (Atwood 1985, 26-27)

The city wall in Gilead is a physical barrier that restricts free movement from one place to another. Offred gives details about the wall in the following quotation:

The Wall is hundreds of years old too; or over a hundred, at least. Like the sidewalks, it's red brick, and must once have been plain but handsome. Now the gates have sentries and there are ugly new floodlights mounted on metal posts above it, and barbed wire along the bottom and broken glass set in concrete along the top. No one goes through those gates willingly. The precautions are for those trying to get out, though to make it even as far as the Wall, from the inside, past the electronic alarm system, would be next to impossible. (Atwood 1985, 43)

It is interesting to note that the wall in the text represents a barrier for the people in Gilead just as the Berlin Wall divided Germany from 1961 to 1989 and which became known as the "death strip." The wall in the text has many functions as described by Offred:

Beside the main gateway there are six more bodies hanging, by the necks, their hands tied in front of them, their heads in white bags tipped sideways onto their shoulders. There must have been a Men's Salvaging early this morning. I didn't hear the bells. Perhaps I've become used to them. We stop, together as if on signal, and stand and look at the bodies. It doesn't matter if we look. We're supposed to look: this is what they are there for, hanging on the Wall. Sometimes they'll be there for days, until there's a new batch, so as many people as possible will have the chance to see them. What they are hanging from is hooks. The hooks have been set into the brickwork of the Wall, for this purpose. Not all of them are occupied. The hooks look like appliances for the armless. Or steel question marks, upside-down and sideways. (Atwood 1985, 43)

The abortionists, rebels and protestors represent the victims of Gileadean society. Those who disobey Gileadean law are hanged on the wall to frighten and terrorize any disloyal people. The "Man's Salvaging" is the name of public executions that take place in the main square of the city in the novel. Lefebvre, in his work, *The Space of Production* states that "Any object may be extracted from everyday practice and suffer a displacement which will transform it by transferring it into monumental space." (1991:225)

Women are kept under control both physically and spatially, which means that their actions are subject to surveillance where citizens are also forced to spy on each other. The constant gaze acts as a disciplinary and normalizing force that instills control. Without surveillance there would be no controlling mechanism. Foucault (1977) calls this 'normalizing individuation,' where subjects are kept in institutions in such a way that they too become a resource of power whose conduct is patterned and supervised. The women share the fear of the outside world with each other and live in a dehumanized state. Gliead has the identical atmosphere of a prison as indicated by Foucault:

The carceral texture of society assures both the real capture of the body and its perpetual observation; it is, by its very nature, the apparatus of punishment that conforms most completely to the new economy of power and the instrument for the formation of knowledge that this very economy needs. (304)

The quotation given above reflects the carceral forms of the Glidean Republic. In the society, the Aunts have been forced to become loyal supporters of the Commanders because they are not young and fertile. As Callaway (2008) states, "the male- dominated power structure relies on women to regulate one another and enforce social standards" (10). Atwood in an interview with Danita J. Dodson explains that "In Gilead control comes amongst the women themselves" (1997:103). In an ironical manner Aunt Lydia in the Red Centre reminds all Handmaids about freedom:

There is more than one kind of freedom, Freedom to and freedom from. In the days of anarchy, it was freedom to. Now you are being given freedom from. Don't underrate it. (Atwood 1985, 33)

The most frequently mentioned "space" in the novel is the Commander's living room where he reads the Bible and performs official ceremonies. Offred is summoned for sex with the Commander once a month which has become an impersonal and wordless ritual since she was assigned to him as a Handmaid. Humphrey in his book, suggests that "Pain is the bodily feeling produced by violence; political power is the source of violence, and suffering is the legacy of violence remaining as a memory in individual bodies" (2002:1). Offred comments on the details about her painful and agonizing experiences as a victim in the Commander's house:

My red skirt is hitched up to my waist, though no higher. Below it the Commander is fucking. What he is fucking is the lower part of my body. I do not say making love because this is not what he's doing. Copulating too would be inaccurate, because it would imply two people and only one is involved. Nor does rape cover it: nothing is going on here that I haven't signed up for. . . . [The Commander] is preoccupied, like a man humming to himself in the shower without knowing he's humming; like a man who has other things on his mind. It's as if he's somewhere else, waiting for himself to come, drumming his fingers on the table while he waits. (Atwood 1985, 121-122)

Vassalo, in her article *Embodied Memory* states that, for the victim, pain is difficult to communicate and the traumatic experience is not easily recovered wholly (2008:190). Offred is unable to speak out effectively and reflect upon her agony and anger except when waiting for her destiny to reveal itself in her small and dark room.

The "Underground Frailroad" and "the Colonies" are frequently stated but do not exist as actual settings but are indirectly implied as "spaces" within the novel. The "Underground Frailroad" also refers to the conflict between those who struggle for freedom and those who prevent it. "Underground Frailroad" is an invented phrase that symbolically represents the Underground Railroad of Harriet Tubman's great effort during the civil war as an American abolitionist and humanitarian. She rescued hundreds of fugitive slaves through the Underground Railroad which was a vast network that helped them escape to the North and to Canada in the first half of the 19th century" (Outline of U.S. History, 2011:91). The Underground Frailroad in the novel represents escape from Gilead whereby women attempt to overthrow Gilead through the resistance network. The resistance network is a small group of men and women who secretly plan to escape Gliead by whatever means necessary. Hilde Steals notes that "Gilead's victims can find refuge only in a secret Female Underground Road that leads from New England to Canada". She says that, "the underground is also a hiding place in the margins of the society from which subversives attempt to disrupt the power of the regime above ground" (Steals 1995,455).

The "Colonies" are a place where the women [Unwomen] whose ovaries are no longer viable, are sent. They are taken away from the city to cleanse the toxic dumps until they die of radiation poisoning. Handmaids who do not want to bear children for the Commanders and are not fertile are obliged to work as prostitutes or they are sent to the dreaded Colonies to clean up radiation spills like Offred's mother. Offred's best friend Moira says that she saw Offred's mother at the Red Center in a film they showed them about women working in the Colonies: "There was a close-up, it was her all right. She was wrapped up in one of those gray things but I know it was her" (Atwood 1985, 327). The following is the inner thoughts of Offred about Moira, the most dynamic female character in the novel who fights against male oppression:

Here is what I'd like to tell. I'd like to tell a story about how Moira escaped, for good this time. Or if I couldn't tell that, I'd like to say she blew up Jezebel's, with fifty Commanders inside it. I'd like her to end with something daring and spectacular, some outrage, something that would befit her. But as far as I know that didn't happen. I don't know how she ended, or even if she did, because I never saw her again. (Atwood 1985, 325)

The word Jezebel that is used in the novel refers to a secret whorehouse where the Commanders are entertained in the evenings. It also refers to the women who work at the Jezebel club and the sterilized prostitutes who serve the Commanders of high status.

Furthermore, Malak, (1987) in his article, "Margaret Atwood's "The Handmaid's Tale" and the Dystopian Tradition" points out that "the state of Gilead prescribes a pattern of life based on conformity, censorship, corruption, fear and terror" (9-10). Atwood uses considerable skill in her literary work deliberately using limited "space" for its setting to maximize the impact on the reader. In the text, at the Red Center, the Handmaids are indoctrinated, humiliated and terrified by the Aunts as this quote reveals: "Aunt Sara and Aunt Elizabeth patrolled; they had electric cattle prods slung on thorns from their belts" (4).

CONCLUSION

Atwood's novel can be analyzed using the three stages outlined by Lefebvre. He introduces distinctive terms such as, "spatial practice," "representations of space," and "spaces of representation" to differentiate between the social and spatial practice of spaces which in turn contribute to the production of space according to their attributes. For Lefebvre, space is viewed in three ways: "as perceived, conceived and lived" which are never simple or stable. This Lefebvrian schema sees a unity between physical, mental and social space" (qtd. in Elden, 2001: 815).

The wall described in the novel restricts freedom of movement and generates fear in the Handmaids as they approach it. Physically, the wall is not only spatial geometry but also influences behavior where Handmaids are reminded of their reduced freedoms. It is the same social practice of traversing the wall "as a kind of neutral setting in which life transpires" (Molotch, 1993:888).

Stuart Elden, Professor of Political Theory and Geography, explains that physical space refers to "physical form" that is generated and used (2001:815). The physical space in novel centers around the Commander's house with its cellar and attic, Offred's small room, the doctor's office, the shop, the Jezebel, and the Colonies. These places become a cohesive composition of forms that have symbolic meanings and represent a routine of life where every individual is forced to confront their reality. Elden, on the other hand, points out that space refers to "the space of knowledge and logic" (2001:815) which corresponds with the conceived or proposed space tied to the relation of production that helps reader to visualize the novel in terms of the signs, maps, codes, colors, etc. "Space" can be "produced and modified over time through its use" (2001:816) and can be lived and experienced as part of the social world. Beaugerand (2011) also concludes that "space is made a product of action [and] space takes on a material existence" (474). In relation to those space theories, the concept of "space" depicted in Atwood's novel can be interpreted in the following ways:

- Perceived Space is the Jezebel for Handmaids who disobey the Gileadean rule and Colonies is the "space" where Unwomen are sent to clean toxic agents as a punishment
- Conceived Space is the Underground Frailroad where the victims of Gliead society can achieve ultimate freedom
- Lived Space is the Commender's house, Red Center and Offred's room, representing both spatial practice and space representation

It is accepted by scholars that "space" as setting, in other words, imaginative location in any literary work has significant meaning. In The Handmaids's Tale, the production of space reflects the creative and artistic ability of the author. The Handmaids in the novel are horrified at the government's reproduction policies. Their life is controlled, fragmented, dull, alienated and they are dehumanized because of the prohibition of reading, writing and speaking. They are victims of the regime where they gradually lose their identity and their personality is diminished to make them obedient to Gilead. Throughout the novel, the reader is reminded of the restricted "space" in which the Handmaids must live to be in accordance with Glidean law. This results in feelings of extreme isolation, suffocation and segregation from the other members of society in Gliead.

WORK CITED

- Atwood, Margaret. (1985). The Handmaid's Tale. U.S.A.: Ballantine Books.
- Atwood, Margaret and Oates, Joyce Carol. (2017). "A Conversation with Margaret Atwood". *Ontario Review*: Vol. 9, Article 3 (pp.5-18). http://repository.usfca.edu/ontarioreview/vol9/iss1/3.
- Callaway, Alanna A. (2008)."Women disunited: Margaret Atwood's The Handmaid's Tale as a critique of feminism". Master's Theses. The Faculty of the Department of English, San Jose State University.
- Dodson, Danita J. (1997). *An Interview with Margaret Atwood*. Critique: Studies In Contemporary Fiction Vol. 38, Iss. 2 (pp. 6-103).
- Elden, Stuart. (2001). "Politics, Philosophy, Geography: Henri Lefebvre in Recent Anglo-American Scholarship" *Antipode* (pp.809-825). U.S.A.: Blackwell Publishers.
- Foucault, Michel. (1977). *Discipline and Punish*. Trans: Alan Sheridan. U.S.A.: Vintage Books of Division of Random House, Inc.
- Gökçen, Nilsen. (2014). "Homo Ludens in Gilead: The Handmaid's Tale Revisited", Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, Erzurum: Atatürk Üniversitesi. 18. 2 (pp.139-155). Erzurum: Atatürk Üniversitesi.
- Hertzman, Clyde. (2010). "Framework for the Social Determinants of Early Child Development". *Importance of Early Childhood Development* (pp.16-21). Canada: University of British Columbia.
- Hogsette, David S. (1997). *Margaret Atwood's Rhetorical Epilogue in the Handmaid's Tale*: The Reader's Role in Empowering Offred's Speech Act", Critique: Studies in Contemporary Fiction 34.4 (pp.262-78).
- Humphrey, Michael. (2002). "Politics of Atrocity" *The Politics of Atrocity and Reconciliation: From Terror to Trauma*. (pp.1-10). London: Routledge.
- Lefebvre, Henri. (1991). The Production of Space Trans. Donald Nicholson-Smith. G.B.: Basil Blackwell Ltd.
- Malak, Amin. (1987). "Margaret Atwood's *The Handmaid's Tale* and the Dystopian Tradition", *Canadian Literature*, Vol.112 (pp.9-16).
- Molotch, Harvey. (1993). The space of Lefebvre. *Theory and Society*, Vol. 22, No. 6 (pp. 887-895). Springer Stable URL: http://www.jstor.org/stable/658004. Kluwer Academic Publishers. Web. 24. February 2011.
- Outline of U.S. History. (2011). Ed. Michael Jay Friedman.Bureau of International Information Programs, U.S. Department Of State. U.S.A.: Global Publishing Solutions.
- Staels, Hilde. (1995). "Margaret Atwood's *The Handmaid's Tale*: Resistance through Narrating." *English Studies* 78.5 (pp. 455-67).
- Vassallo, Helen. (2008). "Embodied Memory: War and the Remembrance of Wounds in Nina Bouraoui and Leila Sebbar", Journal of War and Culture Studies, Volume 1, No 2. Intellect Ltd. (pp. 189-200).

INSTRUCTION TO AUTHORS

Manuscript Submission:

Send your manuscript with attachment by mailing it to submit@textroad.com, textroadjournals@gmail.com along with covering letter.

Manuscript Preparation:

- * Title
- * Author names and addresses
- * Abstracts (Not more than 300 words)
- * Key words
- * Introduction
- * Materials and Methods
- * Results and Discussions
- * References (Use numbering in the text instead of full references).
 - Give full references at the end of the file
- * Photographs should be of high quality (Minimum 300-600 dpi)
- * Graphs should be in clearly visible form so that it may become easy to redraw
- * The manuscript must be submitted in MS-WORD file format.

INSTRUCTIONS TO AUTHORS

Submission

Submit manuscripts as e-mail attachment to the Editorial Office at:

textroadjournals@gmail.com or submit@textroad.com along with covering letter. A manuscript number will be mailed to the corresponding author same day or within 48 hours. The authors may also suggest two to four reviewers for the manuscript (JBASR may designate other reviewers). There is no page limit. The submitting author takes responsibility for the paper during submission and peer review.

Terms of Submission

Papers must be submitted on the understanding that they have not been published elsewhere (except in the form of an abstract or as part of a published lecture, review, or thesis) and are not currently under consideration by another journal. The submitting author is responsible for ensuring that the article's publication has been approved by all the other coauthors. All enquiries concerning the publication of accepted papers should be addressed to editor@textroad.com.

Review Process

All manuscripts are reviewed by an editor and members of the Editorial Board or qualified outside reviewers. Decisions will be made as rapidly as possible, and the journal strives to return reviewers' comments to authors within one or two weeks. The editorial board will re-review manuscripts that are accepted pending revision. It is the goal of the JBASR to publish manuscripts within 4 weeks after submission.

Style of Manuscripts

Manuscripts should be written in clear, concise and grammatically correct English (with 10 font size and Times New Roman font style) so that they are intelligible to the professional reader who is not a specialist in any particular field. Manuscripts that do not conform to these requirements and the following manuscript format may be returned to the author prior to review for correction. The entire manuscript, including references, should be typed single spaced on one side of the paper. All pages should be numbered consecutively in the bottom centre starting from the title page. The manuscript should be presented in the following order.

Title and Authorship Information

The title should be a brief phrase (capitalize first letter of each word in the title) describing the contents of the paper. The Title Page should include the authors' full names and affiliations, the name of the corresponding author along with phone, fax and E-mail information. Present addresses of authors should appear as a footnote.

Abstract

All manuscripts should not exceed 250-300 words and should describe the scope, hypothesis or rationale for the work and the main findings. Complete sentences, active verbs, and the abstract should be written in the past tense. Standard nomenclature should be used and abbreviations should be avoided. No literature should be cited.

Keywords

Key words (5-7 words) should be provided below the Abstract to assist with indexing of the article. These should not duplicate key words from the title.

Introduction

This section should include sufficient background information, provide a clear statement of the problem, the relevant literature on the subject, and the proposed approach or solution. The aims of the manuscript should be clearly stated. The introduction should not contain either findings or conclusions. It should be understandable to colleagues from a broad range of scientific disciplines.

Materials and Methods

This should be complete enough to provide sufficient detail to allow the work to be repeated by others. However, only truly new procedures should be described in detail; previously published procedures should be cited, and important modifications of published procedures should be mentioned briefly. Capitalize trade names and include the manufacturer's name and address. Subheadings should be used. Methods in general use need not be described in detail.

Results

Results should be presented in a logical sequence in the text, tables and figures; repetitive presentation of the same data in different forms should be avoided. The results should not contain material appropriate to the Discussion. It should be written in the past tense when describing findings in the authors' experiments. Results should be explained, but largely without referring to the literature.

Discussion

The discussion should consider the results in relation to any hypotheses advanced in the Introduction and place the study in the context of other work. Results and Discussion sections can be combined.

Conclusions

If an optional conclusion section is used, its content should not substantially duplicate the abstract.

Acknowledgment

The acknowledgments of people, grants, funds, etc should be brief.

References

Bibliographic references in the text appear like [1, 2, 5, 6], using square brace in superscript. References should be numbered consecutively, with style:

Journal paper:

1. Hadjibabaie, M., N. Rastkari, A.Rezaie and M. Abdollahi, 2005. The Adverse Drug Reaction in the Gastrointestinal Tract: An Overview. Intl. J. Pharmacol., 1 (1): 1-8.

Books:

1. Daniel A. Potter, 2002. Destructive turfgrass insects: Biology, diagnosis and control. Wiley Canada Publishers, pp: 24-67.

Chapters in Book:

1. Bray R.A., 1994. The leucaena psyllid. In: Forage Tree Legumes in Tropical Agriculture (eds R.C. Gutteridge and H.M. Shelton) pp. 283–291. CAB International, Oxford.

Titles of journals should be given in full. 'In press' can only be used to cite manuscripts actually accepted for publication in a journal. Citations such as 'manuscript in preparation' or 'manuscript submitted' are not permitted. Data from such manuscripts can only be mentioned in the text as 'unpublished data'.

A Report:

1. Makarewicz, J.C., T. Lewis and P. Bertram, 1995. Epilimnetic phytoplankton and zooplankton biomass and species composition in Lake Michigan, 1983-1992. U.S. EPA Great Lakes National Program, Chicago, IL. EPA 905-R-95-009.

Conference Proceedings:

1. Stock, A., 2004. Signal Transduction in Bacteria. In the Proceedings of the 2004 Markey Scholars Conference, pp: 80-89.

A Thesis:

1. Strunk, J.L., 1991. The extraction of mercury from sediment and the geochemical partitioning of mercury in sediments from Lake Superior, M. S. thesis, Michigan State Univ., East Lansing, MI.

Tables and Equations

Tables and equations should not be submitted in a format exceeding the A4 page size (in portrait form). **All tables should be embedded within the manuscript, and must be captioned and numbered sequentially.** Each table should be on a separate page, numbered consecutively in Arabic numerals and supplied with a heading and a legend. Tables should be self-explanatory without reference to the text.

Figures / Illustrations / Photographs

Graphics should be supplied as high resolution (at least 300-600 dp.i.) electronic files. Digital images supplied only as low-resolution print-outs cannot be used. Graphs, diagrams, chromatograms, photos, etc. should be prepared as clear, original positives, suitable for reproduction. All figures should be embedded within the manuscript, and must be captioned and numbered sequentially.

Proofs

Proofs will be sent via e-mail as an Acrobat PDF file (e-mail attachment) and should be returned within 3 days of receipt. Page proofs are considered to be the final version of the manuscript. With the exception of typographical or minor clerical errors, no changes will be made in the manuscript at the proof stage.

Check List

We recommend that you ask a colleague to read over your paper prior to submission to ensure it is of a high standard and conforms to a high level of scientific writing.

Before submission of your manuscript, please check that:

- All references cited in the text are included in the reference section.
- All figures and tables are cited in the text.
- Figures are at least 300 d.p.i.
- The pages are numbered.

Copyright © 2018, TEXTROAD Publishing Corporation

