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CONTENTS

Sr. No.	Paper Title	Page No.
1	To Assess the Cropping Pattern in Osmanabad District **Mrs. Chochande Ranjana Uttamrao**	1-6
2	Research and Development in Library Science Education In India **Dr. Bidve Maruti Shivajirao**	7-9
3	Socio-economic Impact of Sugarcane Production and Diversification in India **Prof. (Dr.) N. J. Patil**	10-13
4	Effect of a Programme for Enhancing English Language Competence at Secondary Level Students– A Study **Vinaya Keshav Kamble, Dr. Patil L.S.**	14-23
5	Indian Research Information Network System (IRINS): An Analysis of Faculty Profiles of the University of Agricultural Sciences Bangalore Learning During COVID-19 Pandemic **Kavya N, Puneeth B M**	24-31
6	Study On Laplace Transformation and Its Application Invarious Field **Mrs. Rajashree Sanjay Thorat**	32-37
7	Pharmaceutical Industry in Tamilnadu **DR. P. SEKAR, DR. MATHANRAJ. T**	38-53
8	Dowry Methods: Causes and Remedies **D. K. Dake**	54-57
9	Practical Causes of Monopolies **Dr. Gangambika C. Savagaon, Prof. Sairam Iyer**	58-63
10	Corporate governance models of India and UK -An Analysis **Hydarali**	64-67
11	Crypto currency –an analysis **Shashikala K**	68-73
12	Attitude towards Environmental Conservation: A Study among Secondary School Students **Hisi Soren, Dr.Sujata Acharya**	74-79
13	Population Characteristics of Bihar- India **Dr. Rekha Vishwakarma**	80-87
14	Psychological Distress & Childhood Neglect among Adolescents **A.Vasavi**	88-92
15	Emerging Significance and Challenges of Maritime Industry **Adv Biju Antony**	93-96
16	Role of Port State Jurisdiction **ALIYAR M E**	97-101
17	An Overview of Block chain Technology in Banking - Its Applications, Challenges, and Security Issues **Mrs. Thanuja V, Mrs. Prithvi Heggade**	102-111
18	Citizenship and Civic Sense in India **Dr. M. K. Hareesha**	112-114
19	Purpose of Seeking Information from News Papers and Magazines **Shivakumara A S, Dr. P. Dharani Kumar**	115-116
20	A Study on Allocation of Income and Expenditure in Special Development Plan for Kalyana Karnataka Region **Dr. N. Honnurswamy, Hosahalli Anilkumar**	117-125
21	Holistic and Multidisciplinary National Education Police in India -2020 Light but Tight **Dr.N. Honnurswamy, Siddesh C**	126-129
22	Githa Hariharan's Place in Indian Fiction **Dr. Rajkumar Ramrao Patil**	130-132
23	Analysis of Anti-Rape Act With Special Emphasis on Nirbhaya Case **Megha S**	133 -135
24	Comparative Study Of Ascorbic Acid (Vitamin C) Content From Locally Available Fruits & Vegetables **S. A. Peerzade**	136-139
25	Distress of Women Prisoners **Suranya.S.Kumar**	140-142

26	A Study of Cashless Economy in India and It's Trend **Mrs. S. A. Bhilare**	143-145
27	Honour Killing In India: A Sociological and Legal Perspective **Shefna S**	146-148
28	Analytical Study on Irrigation Facilities in Adoni Division of Kurnool district, Andhra Pradesh **B. Appanna, Dr.Y. Sujatha**	149-153
29	Importance of Education in Indian Rural Development- A Review **Dr. Munivenkatappa K, V. Narendra babu, DR. Narayanamma PN**	154-156
30	Studies on the Status of Available Micronutrients for Plant Growth in Different Soil Series of Villages near Mula River Upper Basin in Ahmednagar District (Maharashtra) **Mr. Rohit Chandrakant Muthe**	157-161
31	A Study on Tony Blair's Second Term As A United Kingdom's Prime Minister With Reference To The New Labour Party's 2001 Election Manifesto **Balasubramanya P. S.**	162-165
32	Empowerment of Tribal women through Education **Prof. Udaya Kumar C.R, Dr. Vyshali U.**	166-169
33	Perception Regarding Digital University **ANIL.N**	170-173
34	Gender Stratification in Work – An Analysis **Prof. Hameed Khan. K.**	174-177
35	Best Practices In Changing Context; A Case Study Of G.F.G.C. Library, Bantwal, Dakshina Kannada District, Karnataka **Puttegowda H C**	178-180
36	Female sensibility in poetry **Dr. Sujata C. Chalawadi**	181-184
37	A Constructive Role of Memory in A.K. Ramanujan's Poetry **VANAJA K.S.**	185-187
38	Digital Nomadism: The future of remote working **Kavitha M L**	188-191
39	Impact of Leadership on Student Achievement **Mr. Gaikwad Soham Arunrao**	192-194
40	Socio-Economic Infrastructure of Tribal Farmers in Karnataka: An Analysis **Dr. Rekha K Jadhav**	195-197
41	The Influence of Social Networking Sites on Youths: A Review **Venkatamma**	198-201
42	An Empirical Study on buying behavior of Consumer towards Mobile Phones in Dadra and Nagar Haveli **Ms. Shobhna Dangwar**	202-205
43	Small Production Industries in India: Opportunities and Challenges **Shankareppa P. Halingali**	206-209
44	Opportunities & Challenges of Rural Entrepreneurs in India: An Overview **Mr. Shivanand B. Rayanagoudar**	210-213
45	Increasing Female Participation in Advanced Level Mathematics **Dr.Varsha D. Chapke**	214-218
46	A Brief Introduction to Dewey decimal classification **B Rajesh Naidu**	219-223

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To Assess the Cropping Pattern in Osmanabad District

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Abstract

Cropping pattern means the proportion of area under various crops at a point of time. Cropping pattern is a dynamic concept as it changes over space and time. In the year of 2017, there were 948807 hectares total cropped area and total irrigation area were 120283 hectares in the district and surface irrigation were 114547 hectares and underground water irrigation were 5736 hectares. Main objective of this paper is to assess the Cropping Pattern in Osmanabad District.

Keywords: 1. Cropping Pattern, 2. Osmanabad District. 3. Agricultural land use.

Introduction:

Technical Committee on Co-ordination of Agricultural Statistics (T.C.C.A.S.) suggested standard classification of the total land area geographically available for major uses were categorised in 1950. An earlier appraisal of all land use categories in imperative, they are balancing to each other. An extension of any one category inevitably results in an advance upon the others. As such the various mechanisms of land use have been taken into deliberation and accordingly classified by the Government of India 1) Area Covered by Forest (2) Non cultivable Land (3) Other Cultivable Land (4) Fallow Land (5) Net sown area (6) Double Cropped Area (7) Gross Cropped Area. The impact of irrigation on land use is best understood, when two aspects of net sown area and double Cropped Area are considered. Net sown area directly involves the supposing of the other land use mechanisms, at times, through extended irrigation facilities. All Land which is used wholly or partly for agricultural production. Agriculture Land use is the surface utilization of all crops in particular region at particular time.

Objective:

To assess the Cropping Pattern in Osmanabad District.

Database and Methodology:

Present study depends on the secondary data. Collected through census handbook of Osmanabad District, District statistical Department, Water Resources Department of Osmanabad district, District booklet Showing the Progress and current status of all irrigation schemes of Osmanabad district and socio-economic abstract of Osmanabad District. The collected data are analysed by statistical and cartographic techniques. The actual growth rate of specific decade is found by distributing the difference between the Irrigation Source of Three decades.

Study Area:

Osmanabad is one of the 8 districts of Marathwada region. The district lying between $17^0 35'$ N to $18^0 40'$ North Latitude and $75^0 16'$ E to $76^0 40'$ East longitude situated in Balaghat plateau region. It has total geographical area of 7512.4 Sq. Km. the district of Osmanabad has following sub-divisions like Osmanabad, Tuljapur, Omerga, Paranda, Kalamb, Boom, Lohara and Washi. It is bounded by Sholapur District to the South-west, Ahemadnagar to the North West, Beed to the North, Latur to the East and North -East, Bidar & Gulbarga district of Karnataka state to the South.

Cropping Pattern:

Cropping pattern means the proportion of area under various crops at a point of time. Cropping pattern is a dynamic concept as it changes over space and time. The cropping patterns of region are closely influenced by the geoclimatic, sociocultural, economic, historical and political factors. The cropping pattern of a region or area unit may be determined on the basis of area strength of individual crops. The first, second and third ranking crops of an aerial unit may be called as the dominant crops.

Cropping Pattern in Osmanabad District

Crop	Year	Paranda	Bhoom	Washi	Kalamb	Osmanabad	Tuljapur	Lohara	Omerga	district
Rice	1991	0	0.36	0	2.19	1.21	5.04	0	4.51	2.37
	2001	0	0	0.53	0.65	0.51	0.91	1.32	3.32	1.03
	2011	0	0	0.48	0.47	0.38	0.87	1.27	3.18	0.92
	2017	1.49	2.5	1.09	0.69	1.08	1.81	1.85	2.19	1.48
Changes	1991 to 2017	1.49	2.14	1.09	-1.5	-0.13	-3.23	1.85	-2.32	-0.89
Wheat	1991	2.69	1.71	0	1.08	5.31	3.59	0	2.53	3.02
	2001	1.79	1.36	2.1	2.22	3.57	1.88	1.08	0.84	1.94
	2011	2.32	1.43	1.91	1.62	2.66	1.8	1.04	0.8	1.75
	2017	2.88	2.52	2.08	2.2	1.93	2.43	3.75	1.5	2.29
Changes	1991 to 2017	0.19	0.81	2.08	1.12	-3.38	-1.16	3.75	-1.03	-0.73
Total Jawar	1991	56.79	28.88	0	47.18	56.5	21.04	0	24.02	38.6
	2001	36.51	36.9	19.16	40.42	31.96	34.88	18.99	25.31	32.03
	2011	47.2	39.03	17.39	29.45	23.78	33.46	18.26	24.26	28.8
	2017	48.69	40.14	28.89	26.94	19.72	29.97	33.95	32.79	29.92
Changes	1991 to 2017	-8.1	11.26	28.89	-20.24	-36.78	8.93	33.95	8.77	-8.68
Bajra	1991	2.21	2.57	0	3.44	0	0.94	0	2.36	1.75
	2001	1.69	2.68	2.36	1.67	0.26	1.23	1.88	5.11	2.03
	2011	2.19	2.84	2.14	1.22	0.19	1.18	1.81	4.9	1.82
	2017	3.58	2.05	3.3	1.79	1.05	1.07	1.39	2.28	1.82
Changes	1991 to 2017	1.37	-0.52	3.3	-1.65	1.05	0.13	1.39	-0.08	0.07
Maize	1991	2.21	2.57	0	2.03	0.25	1.28	0	0.51	1.36
	2001	7	5.43	4.99	2.08	1.87	5.62	1.7	1.35	3.57
	2011	9.05	5.74	4.53	1.52	1.39	5.39	1.63	1.29	3.21
	2017	1.23	1.25	1.4	0.55	0.66	1.33	1.02	1.08	0.98
Changes	1991 to 2017	-0.98	-1.32	1.4	-1.48	0.41	0.05	1.02	0.57	-0.38
Other Cereals	1991	0	1.1	0	0.02	0.5	0.28	0	0.42	0.39
	2001	0.15	0.29	0	0.17	0.26	0.26	1.02	0.55	0.33

	2011	0.2	0.3	0	0.12	0.19	0.25	0.98	0.52	0.29
	2017	0.02	0.04	0.01	0.01	0.01	0.02	0.07	0.04	0.02
Changes	1991 to 2017	0.02	-1.06	0.01	-0.01	-0.49	-0.26	0.07	-0.38	-0.37
Gram	1991	2.24	3.19	0	2.19	6.82	3.21	0	2.85	3.56
	2001	7.15	8.36	12.86	12.33	9.35	4.69	10.32	8.06	8.56
	2011	9.25	8.84	11.67	8.98	6.96	4.5	9.92	7.72	7.7
	2017	7.27	9.1	6.48	3.65	2.94	3.23	7.22	7.3	5.18
Changes	1991 to 2017	5.03	5.91	6.48	1.46	-3.88	0.02	7.22	4.45	1.62
Pigeon Pea	1991	12.62	10.96	0	12.95	7.72	15.33	0	19.41	13.28
	2001	10.31	11.2	10.24	7.25	11.82	18.57	15.64	15.7	13.21
	2011	13.33	11.84	9.29	5.28	8.79	17.82	15.05	15.05	11.87
	2017	10.71	7.92	12.41	4.41	4.14	9.62	7.69	7.79	7.25
Changes	1991 to 2017	-1.91	-3.04	12.41	-8.54	-3.58	-5.71	7.69	-11.62	-6.03
Black gram	1991	0.22	2.99	0	2.77	1.53	2.41	0	5.4	2.55
	2001	1.08	8.52	6.04	4.37	4.08	6.36	10.93	10.41	6.35
	2011	1.39	9.01	5.48	3.18	3.04	6.11	10.51	9.97	5.71
	2017	4.61	3.87	2.4	3.17	4.54	5.16	6.7	6.73	4.63
Changes	1991 to 2017	4.39	0.88	2.4	0.4	3.01	2.75	6.7	1.33	2.08
Other Pulses	1991	0.6	3	0	0.18	1.78	3.03	0	4.41	2.3
	2001	0.69	2.22	1.97	2.65	1.87	3.05	4.3	2.97	2.53
	2011	0.9	2.35	1.79	1.93	1.39	2.93	4.14	2.85	2.27
	2017	0.61	0.13	0.15	0.16	0.25	0.06	0.34	0.34	0.23
Changes	1991 to 2017	0.01	-2.87	0.15	-0.02	-1.53	-2.97	0.34	-4.07	-2.07
Sugarcane	1991	2.12	0.63	0	5.41	3.2	8.29	0	3.07	3.89
	2001	6.05	3.63	5.25	6.14	9.86	3.38	5.84	5.02	5.68
	2011	7.83	3.84	4.76	4.47	7.34	3.24	5.62	4.81	5.11
	2017	3.19	1.37	2.71	1.9	1.65	3.33	1.39	2.45	2.18
Changes	1991 to	1.07	0.74	2.71	-3.51	-1.55	-4.96	1.39	-0.62	-1.71

	2017									
Fruits& Vegetable	1991	0.41	1.06	0	0.16	0.3	4.49	0	0.66	1.3
	2001	2.29	2.4	6.93	1.27	4.38	2.49	4.06	2.2	2.9
	2011	1.75	1.58	0.99	0.21	0.76	1.07	1.63	2.25	1.14
	2017	1.62	1.75	1.79	0.9	1.75	3.11	0.79	1.19	1.64
Changes	1991 to 2017	1.21	0.69	1.79	0.74	1.45	-1.38	0.79	0.53	0.34
Soyabean	1991	0	0	0	0	0	0	0	0	0
	2001	0.3	0.79	1.31	0.68	0.74	0.6	0.74	0.52	0.66
	2011	0.4	6.17	18.58	19.1	20.33	5.73	11.24	7.57	12.18
	2017	6.12	13.36	18.36	26.22	29.77	18.1	16.19	13.35	20.15
Changes	1991 to 2017	6.12	13.36	18.36	26.22	29.77	18.1	16.19	13.35	20.15
Oilseeds	1991	17.82	39.67	0	20.23	13.94	29.95	0	29.18	24.89
	2001	24.23	15.44	25.37	17.84	18.83	15.64	21.2	17.88	18.56
	2011	4.15	6.98	20.91	22.41	22.73	15.55	16.26	14.78	17.12
	2017	7.83	13.92	18.87	27.36	30.45	20.67	17.61	20.89	22.16
Changes	1991 to 2017	-9.99	-25.75	18.87	7.13	16.51	-9.28	17.61	-8.29	-2.73
Condiments& other Spices	1991	0.08	1.31	0	0.18	0.94	1.14	0	0.67	0.75
	2001	0.76	0.79	0.89	0.27	0.66	0.43	0.98	0.75	0.62
	2011	0.07	0.05	0.1	0.03	0.08	0.09	0.63	0.05	0.1
	2017	0.15	0.1	0.07	0.05	0.06	0.08	0.07	0.07	0.07
Changes	1991 to 2017	0.07	-1.21	0.07	-0.13	-0.88	-1.06	0.07	-0.6	-0.68

Source: calculated by author from various statistical techniques.

Rice:

Cropping Pattern of Rice in the years 1991 to 2017, changes in district were decreased 0.89 and highest increased Cropping Pattern of Rice were 2.14 in Bhoom tehsil and the highest decreased Cropping Pattern of Rice were recorded 3.23 in Tuljapur tehsil.

Wheat:

Cropping Pattern of Wheat in the years since 1991 to 2017, changes in the district were decreased 0.73 and highest increased Cropping Pattern of Wheat were 3.75 in Lohara tehsil and the highest decreased Cropping Pattern of Wheat were recorded 3.38 in Osmanabad tehsil.

Total Jawar:

Cropping Pattern of Total Jawar in the years 1991 to 2017, changes as shown in the Osmanabad district were decreased 8.68 and highest increased Cropping Pattern of Total Jawar were recorded 33.95 in Lohara tehsil and the highest decreased Cropping Pattern of Total Jawar were recorded 36.38 in Osmanabad tehsil.

Bajra:

Cropping Pattern of Bajra in the years since 1991 to 2017, changes as shown in the district were increased 0.07 and highest increased Cropping Pattern of Bajra were 3.3 in Washi tehsil and the highest decreased Cropping Pattern of Bajra were recorded 1.65 in the Kalamb tehsil.

Maize:

Cropping Pattern of Maize in the years since 1991 to 2017, changes as shown in the district were decreased 0.38 and highest increased Cropping Pattern of Maize were recorded 1.4 in Washi tehsil and the highest decreased Cropping Pattern of Maize were recorded 1.48 in Kalamb tehsil.

Gram:

Cropping Pattern of Gram in the years since 1991 to 2017, changes as shown in the district were increased 1.62 and highest increased Cropping Pattern of Gram were 7.22 in the Lohara tehsil and the highest decreased Cropping Pattern of Gram were recorded 3.88 in Osmanabad tehsil.

Pigeon Pea:

Cropping Pattern of Pigeon Pea in the years during 1991 to 2017, changes as shown in the district were decreased 6.03 and highest increased Cropping Pattern of Pigeon Pea were 12.41 in Washi tehsil and the highest decreased Cropping Pattern of Pigeon Pea were recorded 11.62 in Omerga tehsil.

Black gram:

Cropping Pattern of Black gram in the years since 1991 to 2017, changes as shown in district were increased 2.08 and highest increased Cropping Pattern of Black gram were 6.7 in Lohara tehsil and the lowest increase Cropping Pattern of Black gram were recorded 0.4 in Kalamb tehsil.

Sugarcane:

Cropping Pattern of Sugarcane in the years since 1991 to 2017, changes as shown in district were decreased 1.71 and highest increased Cropping Pattern of Sugarcane were 2.71 in Washi tehsil and the highest decreased Cropping Pattern of Sugarcane were recorded 0.62 in Omerga tehsil.

Fruits and Vegetable:

Cropping Pattern of Fruits and Vegetable in years since 1991 to 2017, changes as shown in the district were increased 0.34 and highest increased Cropping Pattern of Fruits and Vegetable were 1.79 in Washi tehsil and the highest decreased Cropping Pattern of Fruits and Vegetable were recorded 1.38 in Tuljapur tehsil.

Soyabean:

Cropping Pattern of Soyabean in the years between 1991 to 2017 changes as shown in district were increased 20.15 and highest increased Cropping Pattern of Soyabean were 29.77 in Osmanabad tehsil and the lowest increased Cropping Pattern of Soyabean were recorded 6.12 in Paranda tehsil.

Oilseeds:

Cropping Pattern of Oilseeds in the years between 1991 to 2017 changes as shown in the district were decreased 2.73 and highest increased Cropping Pattern of Oilseeds were 18.87 in Washi tehsil and the highest decreased Cropping Pattern of Oilseeds were recorded 25.75 in Bhoom tehsil.

Condiments and others Spices:

Cropping Pattern of Condiments and others Spices in the years between 1991 to 2017 changes as shown in the district were decreased 0.68 and highest increased Cropping Pattern of Condiments and others Spices were 0.07 in Washi tehsil, Paranda and Lohara tehsils and the highest decreased Cropping Pattern of Condiments and others Spices were recorded 1.21 in Bhoom tehsil.

Conclusion:

Cropping Pattern of Rice in the years 1991 to 2017, changes in district were decreased 0.89, Cropping Pattern of Wheat were decreased 0.73 ,Cropping Pattern of Total Jawar were decreased 8.68, Cropping Pattern of Bajra were increased 0.07, Cropping Pattern of Maize were decreased 0.38, Cropping Pattern of Gram were increased 1.62, Cropping Pattern of Pigeon were decreased 6.03, Cropping Pattern of Black gram were increased 2.08, Cropping Pattern of Sugarcane were decreased 1.71, Cropping Pattern of Fruits and Vegetable were increased 0.34, Cropping Pattern of Soyabean were increased 20.15, Cropping Pattern of Oilseeds were decreased 2.73 and Cropping Pattern of Condiments and others Spices in the years between 1991 to 2017 changes as shown in the district were decreased 0.68 .

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Research and Development in Library Science Education In India

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Abstract:
Research is an integral part of knowledge. Research is very important in human life. It is through this that humanity progresses progressively. Add new knowledge in to the current knowledge is the basic function of research. Research contributes to social development and development of nation. As research increases the knowledge base, so does the nation's economic progress. This paper presents the development of research and education in the field of Library and Information Science in India.
Keywords: Research, Development, Education, Library & Library Science

Introduction:

Research is an integral part of knowledge. Research is very important in human life. It is through this that humanity progresses progressively. Add new knowledge in to the current knowledge is the basic function of research. In order to develop any subject, it must be researched. Research must be made for the advancement of knowledge, scientific discovery, technological achievement, or for the creation of up-to-date, excellent material in that subject. Research contributes to social development and development of nation. As research increases the knowledge base, so does the nation's economic progress. The nations that knew this thing advanced faster than others. Recognizing this, almost all countries are spending a lot of money on research and have set up different institutions for it. Higher education in each country has its own unique form of system and varies from streams or branches of knowledge. Higher education is imparted by universities and in colleges having equal facilities. Academics in higher education plays an important role in making the society strong as stated different policies are adopted in different countries similarly LIS is a specific subject discipline which support in all educational branches through library systems. Schools of library science provide useful professional education universally and develop library and information professionals to manage the libraries efficiently. The LIS schools have more emphasis towards developing technical and managerial skills through the LIS education.

Definitions:

1. **Research :**

"Re-search in present period is treated as advancement in Knowledge acquired through scientific method."

2. **Development :**

"The process of economic and social transformation that is based on complex, culture and environmental factors and their interactions."

3. **Education :**

"Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, morals, beliefs, habits, and personal development."

4. **Library :**

"A library is a collection of resources in a variety of formats that is organized by information professionals or other experts who provide convenient physical, digital, bibliographic, or intellectual access and offer targeted services and programs with the mission of educating, informing, or entertaining a variety of audiences and the goal of stimulating individual learning and advancing society as a whole."

5. **Library Science :**

"Library science, the principles and practices of library operation and administration, and their study. Libraries have existed since ancient times, but only in the second half of the 19th century did library science emerge as a separate field of study. With the knowledge explosion in the 20th century, it was gradually subsumed under the more general field of information science."

Growth and Development of LIS Education in India:

Melvile Dewey started the first ever library in USA in 1987. W. A. Borden started the first formal Library training course in the country in 1911. An American librarian, who had in 1910, was invited by Maharaja Sayajirao Gaikwad, the ruler of the Erstwhile Baroda state, who was great library enthusiast, to organize a system of public libraries in the state. Borden had been a student of Melvil Dewey and C.A. Cutter and the Maharaja appointed him as a director of the State Library Department. The first one year course which was conducted in the central library, Baroda consisted of eleven students of 'high ability' of which 8 were men and three women. A more systematic training program was initiated by another American Librarian by name As a Don Dickinson at Punjab University, Lahore (now in Pakistan) in 1915. ADL Association course was started in 1920 and was the first library training course started by a library association at Vijayawada. Andhra seems to be aggressor in the movement of library and reading rooms. It was common people in Andhra who took lead in establishing library and reading rooms in 1934 the syllabus of the course was modified to include more subjects on library work.

During the year 1920, a training course for librarians and library workers was started in Karnataka. The main aim was to provide orientation and training to discharge the routine functions in the libraries, including systematic arrangements of books, presentation and circulation methods. It was MALA that began a regular certificate course in this stream in 1929. MALA started a concept of summer schools for college librarians, lectures in madras in 1928 and it was repeated in 1930. University of Madras prided over to include training courses prepared by MALA in 1931. In 1935 K. M. Asadullha khan an alumnus of the Punjab Library School started a regular full time Diploma course in librarianship at the imperial library, now called the National Library of India, Calcutta. The Bengal Library Association started a regular Certificate Course in Librarianship in 1937.

Andhra University started a Diploma course in 1935. Banaras Hindu University started diploma course at the post graduate level in the year 1942. Diploma Courses started in Bombay University in 1944. Calcutta University in West Bengal started diploma course in Library science in the year 1945. The first Department of library science to start one-year post-graduate diploma in library science, a few weeks before the dawn of Independence on August 15, 1947 was at the University of Delhi. As mentioned above, the development of library and information science has been reviewed.

Levels of Courses:

Presently Library and Information Science courses in India are offered at six levels namely, CLISc, DLSc, BLISc, MLISc, M.Phil. And Ph.D. These courses are broadly classified into semi professional and professional. Now LIS courses clusters were introduced Digital library Website design, Internet library, Network, Digitization, Knowledge management, Metadata, Network security, Internet application, Information seeking behavior, Multimedia and Digital publishing etc.

Levels of LIS Education in India:

The LIS education in India is offered at various levels such as certificate, diploma, degree, Associateship in Information Science (AIS), M. phil. and Ph.D. These programmes are offered on regular basis as well as through correspondence courses or distance education. In 1992, Utkal University, Bhubaneswar awarded D.Litt. to Dr. B.B. Shukla. It claimed to be first such degree in library science all over the world. University of Calcutta introduces five year integrated course in Library and Information Science in 2010. It will help the students to grasp and understand the contents for LIS in a better and exhaustive way.

Decade-wise growth of Ph.D. Thesis in LIS: Below table shows the growth of Library and Information Science Ph.D. Thesis in India.

Table No. 1, Decade-wise growth of Ph.D. Thesis in LIS

Sr. No.	Decades	Number of Ph.D. Thesis
1	2010 – 2018	628
2	2000 – 2009	345
3	1990 – 1999	325
4	1980 – 1989	117
5	1970 – 1979	12

6	1960 – 1969	2
7	1950 – 1959	1

Above table shows the growth of Library and Information Science in India 1950 to 2010. Lowest Ph.D. degree awarded in 1950-1959 decade is only 1. Highest Ph.D. thesis awarded in 2010-2018 is 628

Library and Information Science Education through Distance Mode:

Library and Information Science courses are taught through regular mode as well as open and distance mode. Distance education increases the possibility of access to education by facilitating learning, anytime and anywhere. This includes IGNOU, Delhi, YCMOU, Nashik, Bharti Vidyapeeth, Pune, and Dr. B.R. Ambedkar Open University. Hyderabad.

Present scenario of LIS Education in India:

Since its inception decades ago, LIS education has grown and developed into a full-fledged multi-disciplinary subject. There are now 96 universities in India imparting Library and Information Science education as independent departments in different levels. The Associateship in Documentation and Information Science (ADIS) has been upgraded to a fully fledged Master’s degree programme leading to M.S. (Lib.&Info.Sc.) degree. Indian Statistical Institute, Bangalore (Karnataka) and National Institute of Science Communication and Information Resources (NISCAIR) formerly INSDOC, New Delhi which is equivalent to Master degree of Library and Information Science (LIS).The University Grants Commission (UGC) and the Indian Council of Social Science Research (ICSSR) are promoting to research activity in library and information science by awarding scholarships to research and doctoral students. The National Centre for Science Information (NCSI) was also offering a two year postmasters degree course with intensive application of information and communication technology to Library and Information.

New horizons of LIS Education:

Technological related subjects added in curriculum of LIS education like Information management, Online services, Database accessioning, Digital information preservation, Database management, software installation and how to manage, organize, retrieve digital information and search techniques. Provide to users education about Web Application & Designing, security aspects in digital information, E-Learning & Publishing in this Digital cultures.

Conclusion:

Research and development are the index of prosperity of the nation. The LIS research in India is gaining the attention of LIS researchers. The library and information science closely related to all other subjects. The number of researchers registering for doctoral research is increasing encouraging. There could be several factors contributing this situation.

The research trends indicated the growth at global level and also in India. This paper presents the LIS education in India, Levels of courses, LIS education through distance mode, current trends, Influence of Digital Era in LIS, ICT impact, New Horizons in Library and information science.

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Socio-economic Impact of SugarcaneProduction and Diversification in India.

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Abstract-
India is the world's second largest producer of sugar after Brazil within average annual production of 25.1 million tonnes, with about 5.1 million hector under cane cultivation and its processing for value added products suchas sugar, jiggery, bio-ethanol, paper, bio-fertilizer, power cogeneration etc. has drawn awareness because of its socio-economic impact and environmental concerns. During first decade of 21st century, annual sugar production ranges from 12.7 to 28.4 million tonnes, leading to either deficit or surplus situation in Indian domestic market. This cyclist in sugar production largely affects the efforts of cane production and sustained supply of cane to sugar mills for economic benefits of both the farmers and millers. The sugar and co-products requirement expected to improve significantly during coming decades due to population growth, better purchasing power and increase in per capita consumption. Sugarcane cultivation is associated with inherent inconsistencies of area, yield variations due to rainfall, sugarcane and sugar price policy, prices of competing crops, inputs cost and supply, labour wages and its timely availability, cane price arrears, state government policies and sugar mills profitability. Despite of frequent fluctuations in sugar production, changes in government policies and infrastructural development, per capita domestic sweetener consumption has enhanced from 20 to 23 kg during past three decades.
Keywords-Production, Energy resource, Biofuel Police

Introduction-

Sugarcane originated in New Guinea, where it has been known since 6000 BC. In 1000 BC,its cultivation slowly spread along with human migration routes to Southern Asia and India. Some literature reveals that it hybridised with wild sugarcane origin of India and China, toproduce the thin canes. Sugarcane has incredibly long history of cultivation in the Indian subcontinent. The earliest reference to it is in the Atharva Veda (1500-800 BC), where sugarcane was calledIkshu and has mention as an offer during sacrificial rites. The Atharva Veda also mentioned it as the source and symbol of sweet pleasant appearance. The word 'sugar' is derived from theancient Sanskrit word“sharkara”. By 6th century BC, sharkara was frequently referred in Sanskrittexts which even distinguished superior and inferior varieties of sugarcane. A Persian description from 6th century BC gives the first account of solid sugar and describes it as coming from the Indus Valley. This early sugar would have resembled as raw sugar, traditional dark brown sugar /Indian jaggery / gur. Global sugarcane production was nearly 260 million tonnes from 6.3 million ha area, with average productivity of nearly 41 tonnes per ha during 1950's. In 1980's, the world annual sugarcane production had reached up to 770 million tonnes, cultivated on 13.6 million ha area with the average yield of 57 tonnes per ha. In next three decades time, world sugarcane production achieved the new height by more than two fold increase in production to 1800 million tonnes from the area of 25.4 million ha. In nutshell, global sugarcane production had enhanced nearly seven times during past six decades.

Study Area-

India is situated north of the equator between 8°4' and 37°6' north latitude and 68°7'and 97°25' east longitude. It is the seventh-largest, country in the world with a total area of 3, 287,263 square kilometres (1,269,219 sq mi). India measures 3,214 km (1,997 mi) from north to south and 2,933 km (1,822 mi) from east to west. It has a land frontier of 15,200 km (9,445 mi) and a coastline of 7,517 km.

The present study has been formulated with the following

OBJECTIVES-

(i) To examine changes in sugarcane area, production, productivity in India and other major production countries during past decades.
(ii) To identify the socio-economic constraints faced by the sugarcane growers and sugar producers in production and marketing of sugarcane, sugar, co-product and suggest suitable means for efficient sugarcane and sugar - energy supply chain in India.
(iii) To analyse the status of bio-ethanol production and national biofuel policies.

RESEARCH METHODOLOGY-

This research Paper is descriptive type of Nature. The data is collected by the secondary sources such as Government Gazette of India, varies book, Articles and web-based Journals.

Socio-economic impact of sugarcane production and processing in India-

Sugarcane cultivation had changed drastically during last six decades. The rationality of cane as the green source of renewable energy entails emphasis in its future planning as the ever-increasing population and desires of the people for better quality of life has resulted enormous demand for safe and green energy. Sugarcane crop has extra advantage in terms of biomass production potential because of multiple rationing that helps in minimizing cultivation cost and Produce biomass for several years. Therefore, it offers itself as the natural green carbon resource which could be utilized as a substitute for fossil fuels as biomass for bio-green energy efficient production. It had played crucial role in socio-economic development of rural areas through mobilization of production resources. It has generated enormous avenues for the income and employment generation to the rural work force. It is the main source of raw material for the production of white sugar, green bio-fuel (ethanol), electricity, jaggery and Khandsari. However, annual fluctuations in sugarcane acreage, production and productivity have continuously the matter of great concern. These fluctuations in sugarcane area, production and yield had serious implication on cane supply to sugar mills affecting crushing duration, sugar production and ultimately have impact on farmer's income and livelihood security. These fluctuations depend on farm input supply, comparative cost advantage and its relative crops profitability,

government price policies, infrastructural facilities, weather and climatic conditions.In India, there are two distinct zones for sugarcane cultivation, tropical and subtropical. The subtropical comprised of 61 per cent of total sugarcane area contributes only 43 per cent of total sugarcane and 34 per cent of total sugar production. Sugarcane cultivation, especially in subtropics had faced serious challenges of sustainability, due to factors such as climate change, escalating cost of cane production, deteriorating soil health, emergence of new diseases and pests, acute labour scarcity, improper cane marketing etc. severely impede sugarcane productivity and sugar recovery. Therefore, high cost of sugarcane production, less productivity and low sugar recovery in sub-tropical north zone are the foremost causes of overall difference between the two zones. The average sugarcane productivity in sub-tropical zone was 58.4 tonnes / ha as compare to 87.9 tonnes / ha in tropical zone during Triennium ending (T.E) 2011-12 respectively. There were more than 525 sugar factories which utilized nearly 73 per cent of the sugarcane produced and manufactured 25.1 million tonnes of sugar, with an average crushing duration 126 days in 2012-13. The Indian sugar industry also supports the rural economy through income and employment avenues. It also has phenomenal future growth potential, if it could fully exploit the power co-generation and green biofuels / ethanol production. Keeping in view, potential of sugar industry, Govt of India, has set up an expert committee to review that how bestow de-regulate sugar sector to realize and reap benefits. Indian sugar industry is considered worth of ` 80,000 crores with huge employment. The sugar industry paid nearly ` 50-60,000 crores annually to farmers / growers for the supply of sugarcane and also contributes ` 3,400 crores to the Central Exchequer, besides contributing over 2,200 crores to the state Governments. About 6million farmers, their dependents and a large number of agricultural labourers are involved in sugarcane cultivation, harvesting and ancillary activities. Besides it, more than 5 lakh skilled and semi-skilled workers, primarily from rural villages were engaged in sugar industry, probably thesecond largest agro-based processing industry after textiles industry / cotton processing in India

2. Ethanol production and its blending with petrol for automobile Sector

Prior to introduction of fossil fuels as the energy source in the twentieth century, energy generated from agricultural biomass holds the key position. The post-Independenceperiod witnessed the reversal scenario as agricultural production became gradually more reliant on fossil fuel based inputs, viz. chemical fertilizers, plant protection chemicals and power operated farm machinery used non-renewable fossil fuels. Similarly, the growing dependence ofsurface transportation system has made it more reliant on fossil fuel energy. Therefore, a small shock in the petroleum products supply, because of its production decline or prices increase has straight blow on the agricultural production and allied agro-processing sector. Like agriculture, many other sectors also depend on fossil fuels, which is a non-renewable source of energy.Bio-energy is the energy generated from renewable biomass of plants origin. The biofuelshave environmental, social and economic advantages, apart from the renewable alternative to fossil fuels. They may be useful in controlling the vehicle pollution and greenhousegases production through the emission of sulphur dioxide, lead and carbon monoxide are comparatively less from biofuels, Subramanian et al., (2005). These biofuels are classified as first and second generation biofuels. The first generation biofuels are produced from the agricultural biomass consist of sugars, starch, vegetable oils, animal starch and other biodegradable by product of processing industry, forestry and households wastes, by applying conventionalTechnologies.

The cereal crops such as maize, sweet sorghum and sugar crops like sugarcane; sugar beet etc. could be simply fermented for the ethanol production. The green bio-ethanol couldbe used as automobile fuel in either pure form or blended with the petrol/gasoline. However, the production of first generation biofuels had some limitations. They could not be produced beyonda threshold level without affecting food security. To overcome such problems, there is prime needs explore the possibility of second generation biofuels which are affordable, available in sustainable manner and eco-friendly. They comprise of lingo-cellulosic materials such as grasses,trees, agricultural crops residues, poultry manure and processing waste, animal waste and municipal solid wastes. Therefore, the possibilities for conversion of such agro-industrial waste material into bio-ethanol should be explored. The review of literature reported that the technologies to convert algae into ethanol had been developed. However, these processes are relatively complex as compared to sugars and food grains processing for bio-ethanol production. Keeping in view, bio-ethanol future demand, the R&D should be initiated to develop cost-effective processes and technologies to convert cellulosic rich crop and animal wastes into green bio-ethanol energy.

3. National biofuel policy of India

Government of India has undertaken several policy measures to augment production and blending of bio-ethanol during past one decade. The initiation of national biofuel mission (NBM)during year 2003 under the aegis of Planning Commission, GoI, is the front runner for such efforts in our country. The NBM laid special focus on phased expansion of area under alternative bioethanol feedstock crops such as sweet sorghum, sugar beet, palm, Cassava etc. The ethanol blended petrol programme EBPP is an integral part of NBM, aimed to initiate blending of green bio-ethanol with transport fuels like petrol / gasoline on large scale. In order to make bio-ethanol blending obligatory to the states, the ministry of petroleum and natural gas MoPNG, GoI, 2003

made five per cent ethanol blending with petrol mandatory in nine states and five union territories. It was implemented partially due to the non-availability of bio-ethanol because of low sugarcane production during 2003-05. The ethanol blending with petrol was further extended to20 states and eight union territories in 2006. The ethanol blending targets were partially implemented because of oil marketing companies OMCs inability to procure sufficient bioethanol from the distilleries at the existing market price. Later on national biofuel policy (NBP) formulated by the ministry of new and renewable energy (MNRE) was approved by the Cabinet Committee in 2008 and released in 2009. The policy foresees the bio-ethanol as a prospective to stimulate economy of sugar processing industries, sugarcane farmers and ruraldevelopment. It also generates additional employment opportunities to reap the environmental.

Conclusion-

Indian sugar industry and sugarcane cultivation is passing through a critical phase ofrestructuring. Hence, sugar industry should also harness the potential of sugarcane production and diversification for power, bio-ethanol, other co-product, jiggery and Khandsari for sustainable development of industry and economic prosperity of sugarcane farmer.

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Effect of a Programme for Enhancing English Language Competence at Secondary Level Students– A Study

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Abstract
The objectives of the study were to find out the language competence in writing skills in the IX standard students, to develop the program for IX standard students, to find out the effectiveness of semantic mapping activity on students of standard ninth in the unit of parts of speech, to find out the effectiveness of concept mapping activity on students of standard ninth in the unit of vocabulary, to find out the effectiveness of imitation activity on students of standard ninth in the unit of tense, to find out the effectiveness of COPs activity on students of standard ninth in the unit of punctuation, to give suggestions for using activities in teaching in English language. In the present study purposive sampling procedure was used. It was experimental study. True experimental research design was used. Teacher made tests were used to collect the data and data obtained were calculated by using descriptive and inferential statistics. The objective wise study was done. The conclusion of the research were the developed program proved more effective for the language competence in types of tense, vocabulary, punctuation marks, parts of speech among IX standard students. Students from the experimental group very easily identified the concepts like tense, vocabulary, punctuation marks, parts of speech. The experimental group found more superior for the application of tense, vocabulary, punctuation marks, parts of speech in written form. The experimental group found a more good score in the test for the development of interest and ability through the activities for enhancing language competence. The experimental group found parental support in their English learning through the activity.
Key Words: English language competence, activities for language development.

Introdution

All the people of the world can speak a language but all of them cannot write in that language. Any language is a system of communication. As compared to mother tongue i.e. Hindi, the English language has certain peculiarities in comparison with Marathi, it will help us to grasp English quickly and correctly. In the English language, spellings of words and pronunciation do not correlate with each other all the time. The sounds of vowels are different in English. English has a fixed word order in a sentence. If we try to change the sequence of words, the sentence does not convey any meaning. For our students need is to know the functional or working knowledge of English to understand the matter written in English. Learning another language provides access to a perspective other than one's own, increases the ability to see connections across, content areas and promotes an interdisciplinary perspective while gaining intercultural understanding.

Every school insists that achieving the highest possible rank in test scores should be the top priority in our school system, instead of producing happy well-adjusted human beings who can think, care about others and innovate. The vast range of learners in today's school environment is subjected following activities.

Activities for language development

1. Semantic mapping
2. Concept mapping
3. COPs
4. Imitation

Objectives of the Study

1. To find out the language competence in writing skills in the IX standard students.
2. To develop the program for IX standard students.
3. To find out the effectiveness of semantic mapping activity on students of standard ninth in the unit of parts of speech.
4. To find out the effectiveness of concept mapping activity on students of standard ninth in the unit of vocabulary.

5. To find out the effectiveness of imitation activity on students of standard ninth in the unit of tense.
6. To find out the effectiveness of COPs activity on students of standard ninth in the unit of punctuation.
7. To give suggestions for using activities in teaching in English language.

Null Hypothesis of the Study

1. There is no significant difference between the mean performance scores of students from group 'E' and that of group 'C' on post test after using semantic mapping activity for the unit of parts of speech.
2. There is no significant difference between the mean performance scores of students from group 'E' and that of group 'C' on post test after using concept mapping activity for the unit ofvocabulary.
3. There is no significant difference between the mean performance scores of students from group 'E' and that of group 'C' on post test after using imitation activity for the unit of tense.
4. There is no significant difference between the mean performance scores of students from group 'E' and that of group 'C' on post test after using COPs activity for the unit of punctuation.

Assumptions Of The Study

1. The uniform syllabus is used for all types of students.
2. There is no special provision for teaching English language in the classroom.
3. The group of students in the classroom are heterogeneous.

VARIABLES IN STUDY

Three types of variables considered in the study are as –

1. Independent Variable

Activities-Semantic mapping, Concept mapping, Imitation, COPs

2. Dependent Variable

Students' academic achievement in English language.

Delimitations And Limitations Of Study

1. The study was delimited only to implement the activities at standard ninth in English subject.

2. The research was delimited for only students studying at secondary level in academic year 2016-2017, in aided Marathi medium school.

3. The findings of the study is limited to only implementation of the activities- semantic mapping, concept mapping, imitation and COPs for students.

Limitations

1) The present study was limited to English language learners.
2) The present study was limited to develop grammatical competence of writing skills among secondary level students in an English textbook.
3) The present study is limited to develop grammatical competence.
4) The study was limited to Marathi medium secondary schools.

Need And Significance Of The Study

The researcher with his own experience, observation, and discussion with school teachers studied the existing methods which are used for teaching English. The researcher also studied the achievement of the student in English. It is fact that in the school grammar is taught by using a deductive method in which students memories the rules and regulations of grammar and then apply it for solving the grammar items in sentences. In this process, students forget the memorized rules. So it is a prime need to use functional ways of teaching grammar.

1. This study will help the students to show their potentialities.
2. This study will help the teachers to understand the need of students.
3. This study will help teachers to use the instructional material for students and enhance the academic achievement of students.
4. This study will help the institutions to identify the students and to give them special treatment.

Research Procedure

Research design

In the present study researcher has selected the True Experimental research design.

Research tools

Teacher made tests were used to collect the data.

The objective wise procedure

The first objective is to identify Gifted Students. For fulfillment of this objective researcher used purposive sampling procedure. Only 60 students were selected for the experiment. These 60 students then grouped randomly to form two equivalent groups i.e. Experimental group and Control group. Each group contain 30 students. The second objective is to find out the effectiveness of programme with activities for students of standard ninth in the units of parts of speech, vocabulary, punctuation marks, tense. For fulfillment of this objective the program for students was implemented only on experimental group of students for 28 days. After implementing the program the post test was administered on both control and experimental group and collected the required data through post test. The collected data was analyzed by using t-test.

Analysis And Interpretation

Objective wise analysis and interpretation as follows

Null hypothesis

There is no significant difference between the mean performance of the students from control group and experimental group in comprehensive test for development of grammatical competence in English writing.

Means and standard deviations were computed for both the groups. In order to the hypothesis-1 't' test was applied.

TABLE,

MEANS, SDs, and 't' VALUE OF BOTH THE GROUPS ON COMPREHENSIVE TEST

Group	N	M	SDs	Df	't' value	Level of significance
Control	30	11.66	1.21	1/29	20	0.10(s)
Experimental	30	19.06	1.99			

For df 1/58 = 0.10 – 1.70
0.02 – 2.46

S = significant

From the table 'D' critical value of 't'

Observations and interpretations

As the evident from the above table, the mean of control group is 11.66 and mean of experimental group is 19.06. the difference between the means of both the groups is 7.4 . the SDs of both the groups do considerably. The SEm is 0.22 and 0.36. theSEd is 0.37.the calculated 't' value is 20. It is significant at 0.10 level. On the basis of above observations and interpretations the hypothesis was rejected at 0.10 level.

The researcher has analyzed the performance of the students from control group and experimental group. The purpose of the section was to know the performance of the students from control group and experimental group learning English writing through the traditional method of teaching English and through the different activities.

Null hypothesis

There is no significant difference between the mean performance of the students from control group and experimental group in test on the parts of speech for development of grammatical competence in English writing.

Objective

To study the effectiveness of programme for development of grammatical competence in parts of speech in English writing among IX standard students.

TABLE

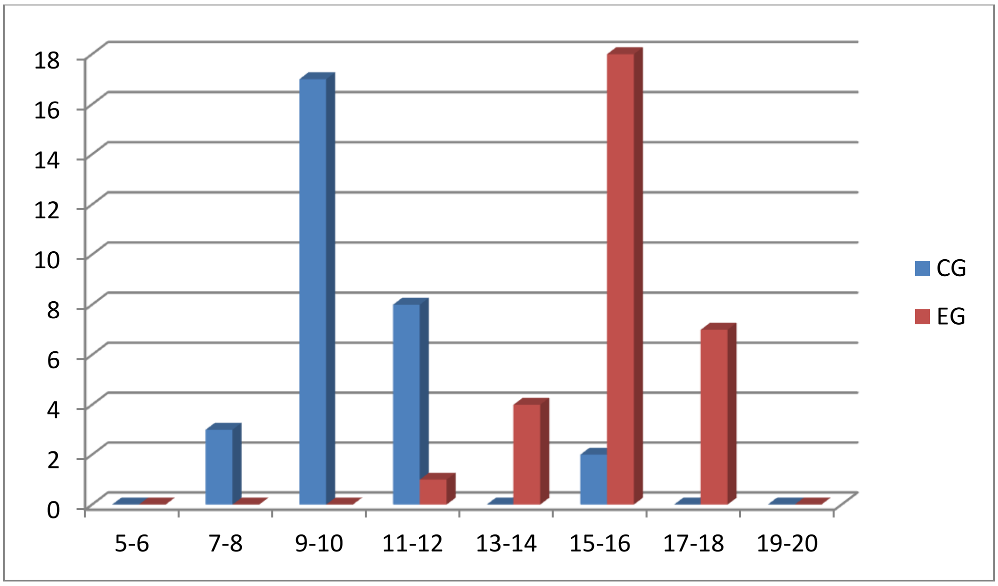
MEANS, SDs, and 't' VALUE OF BOTH THE GROUPS ON PARTS OF SPEECH

Group	N	M	SDs	df	't' value	Level of significance
Control	30	10.3	1.30	1/29	15.29	0.10(s)
Experimental	30	15.5	1.60			

Observations and interpretations: As the evident from the above table the means of both groups are different. The difference is 5.2. The SDs of both groups differ significantly which is 0.30. in order to know the significance between the two groups 't' value is calculated. The 't' value is 15.29. it is significant 0.10 level. Hence, the hypothesis no.2 was rejected at 0.10 level.

The experimental group is superior than that of control group in the tests on parts of speech.

Graph Of Scores Obtained By Control Group And Experimental Group On Parts of Speech



The graph shows that the range of marks obtained by control group is between 7-8 to 15-16. But that of experimental group is between 11-12 to 17-18.

So it is clearly evident from that the experimental group is superior than the control group in the comprehensive test.The comprehensive test described on the units-parts of speech, vocabulary, tense, punctuation marks. Students' performance is also measured by using statistical tools that is mean, SDs, and 't' value.

Null hypothesis

There is no significant difference between the mean performance of the students from control group and experimental group in test on the vocabulary for development of grammatical competence in English writing.

Objective

To study the effectiveness of programme for development of grammatical competence in vocabulary in English writing among IX standard students.

TABLE

MEANS, SDs, and 't' VALUE OF BOTH THE GROUPS ON VOCABULARY

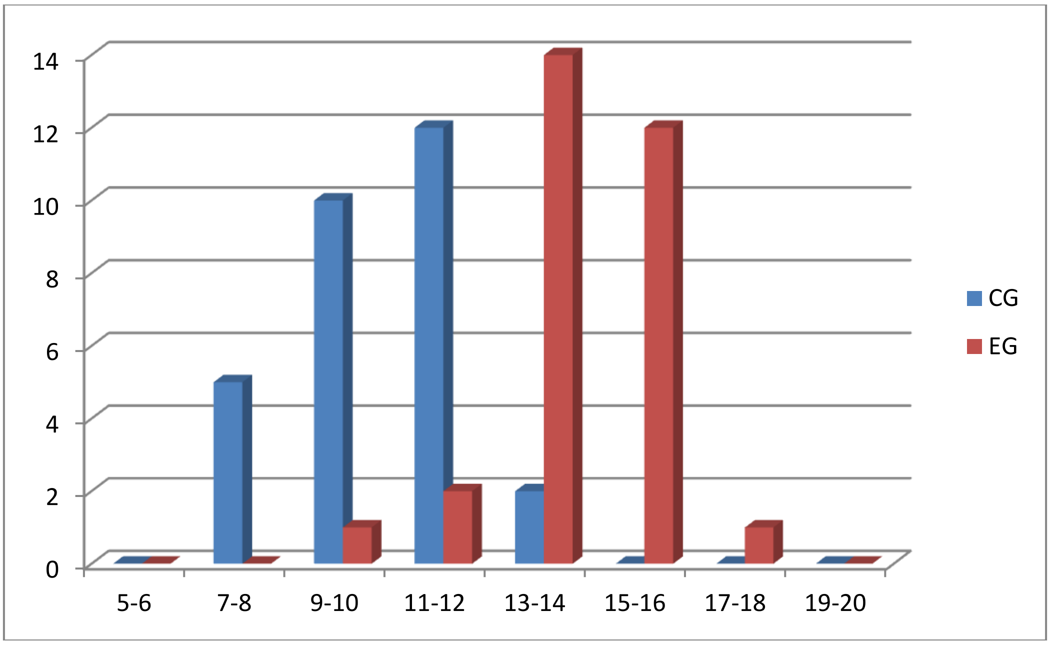
Group	N	M	SDs	df	't' value	Level of significance
Control	30	10.43	1.51	1/29	12.4	0.10(s)
Experimental	30	14.16	1.75			

Observations and interpretations

As the evident from the above table the means of both groups are different. The difference is 5.6. The SDs of both groups differ significantly which is 0.24. in order to know the significance between the two groups 't' value is calculated. The 't' value is 12.4. it is significant 0.10 level. Hence, the hypothesis no.3 was rejected at 0.10 level.

The experimental group is superior than that of control group in the tests on vocabulary

Graph of Scores Obtained By Control Group And Experimental Group On Vocabulary



The graph shows that the range of marks obtained by control group is between 7-8 to 15-16. But that of experimental group is between 11-12 to 17-18. So it is clearly evident from that the experimental group is superior than the control group in the comprehensive test. The comprehensive test described on the units- parts of speech, vocabulary, tense, punctuation marks. Students' performance is also measured by using statistical tools that is mean, SDs, and 't' value.

Null hypothesis

There is no significant difference between the mean performance of the students from control group and experimental group in test on the present tense for development of grammatical competence in English writing.

Objective

To study the effectiveness of programme for development of grammatical competence in present tense in English writing among IX standard students.

TABLE

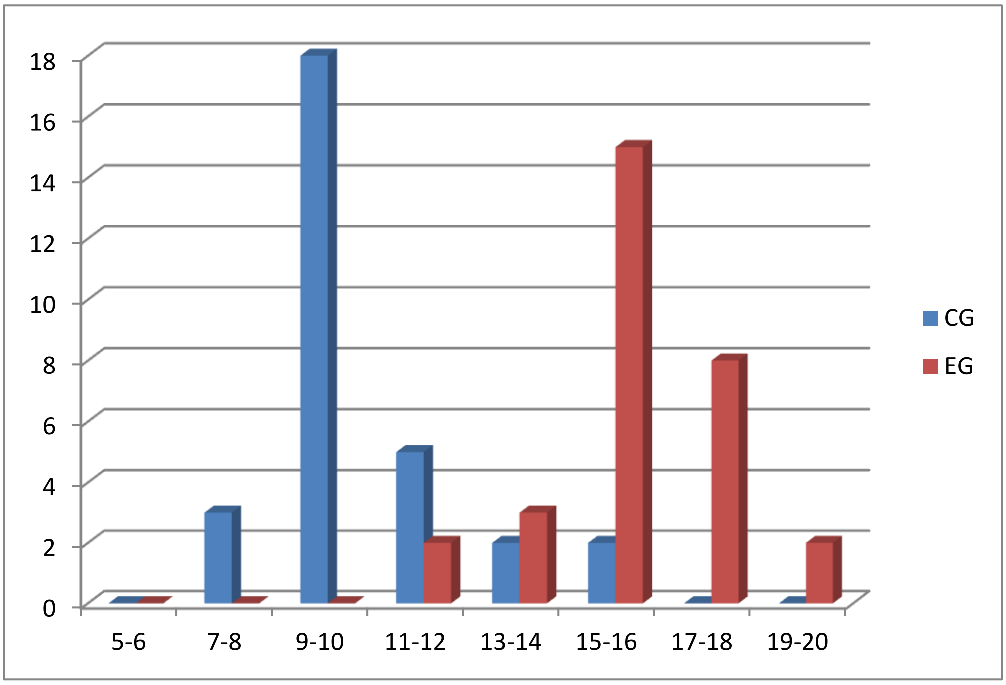
MEANS, SDs, and 't' VALUE OF BOTH THE GROUPS ON PRESENT TENSE

Group	N	M	SDs	df	't' value	Level of significance
Control	30	10.23	1.99	1/29	13.02	0.10(s)
Experimental	30	15.83	2.11			

Observations and interpretations

As the evident from the above table the means of both groups are different. The difference is 5.6. The SDs of both groups differ significantly which is 0.12. in order to know the significance between the two groups 't' value is calculated. The 't' value is 13.02. it is significant 0.10 level. Hence, the hypothesis no.4.1 was rejected at 0.10 level. The experimental group is superior than that of control group in the tests on present tense.

Graph of Scores Obtained By Control Group And Experimental Group On Present tense



The graph shows that the range of marks obtained by control group is between 7-8 to 15-16. But that of experimental group is between 11-12 to 19-20. So it is clearly evident from that the experimental group is superior than the control group in the comprehensive test. The comprehensive test described on the units- parts of speech, vocabulary, tense, punctuation marks. Students' performance is also measured by using statistical tools that is mean, SDs, and 't' value.

Null hypothesis

There is no significant difference between the mean performance of the students from control group and experimental group in test on the past tense for development of grammatical competence in English writing.

Objective

To study the effectiveness of programme for development of grammatical competence in past tense in English writing among IX standard students.

TABLE

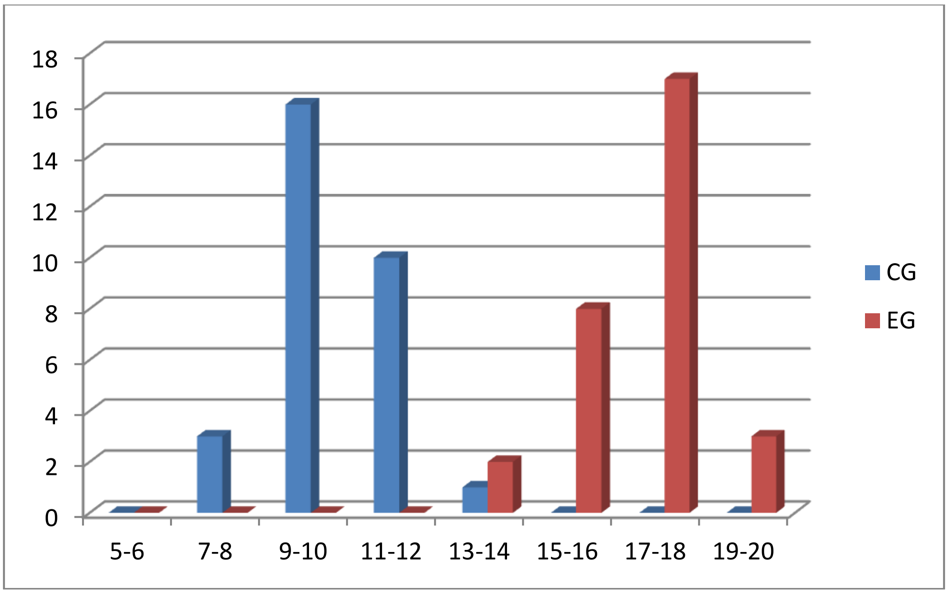
MEANS, SDs, and 't' VALUE OF BOTH THE GROUPS ON PAST TENSE

Group	N	M	SDs	df	't' value	Level of significance
Control	30	9.9	1.29	1/29	17	0.10(s)
Experimental	30	15	1.41			

Observations and interpretations

As the evident from the above table the means of both groups are different. The difference is 5.1. The SDs of both groups differ significantly which is 0.12. in order to know the significance between the two groups 't' value is calculated. The 't' value is 17. it is significant 0.10 level. Hence, the hypothesis no.4.2 was rejected at 0.10 level. The experimental group is superior than that of control group in the tests on past tense.

Graph Of Scores Obtained By Control Group And Experimental Group On Past tense



The graph shows that the range of marks obtained by control group is between 7-8 to 13-14. But that of experimental group is between 11-12 to 17-18 So it is clearly evident from that the experimental group is superior than the control group in the comprehensive test.The comprehensive test described on the units- parts of speech, vocabulary, tense, punctuation marks. Students' performance is also measured by using statistical tools that is mean, SDs, and 't' value.

Null hypothesis

There is no significant difference between the mean performance of the students from control group and experimental group in test on the future tense for development of grammatical competence in English writing.

Objective

To study the effectiveness of programme for development of grammatical competence in future tense in English writing among IX standard students.

TABLE

MEANS, SDs, and 't' VALUE OF BOTH THE GROUPS ON FUTURE TENSE

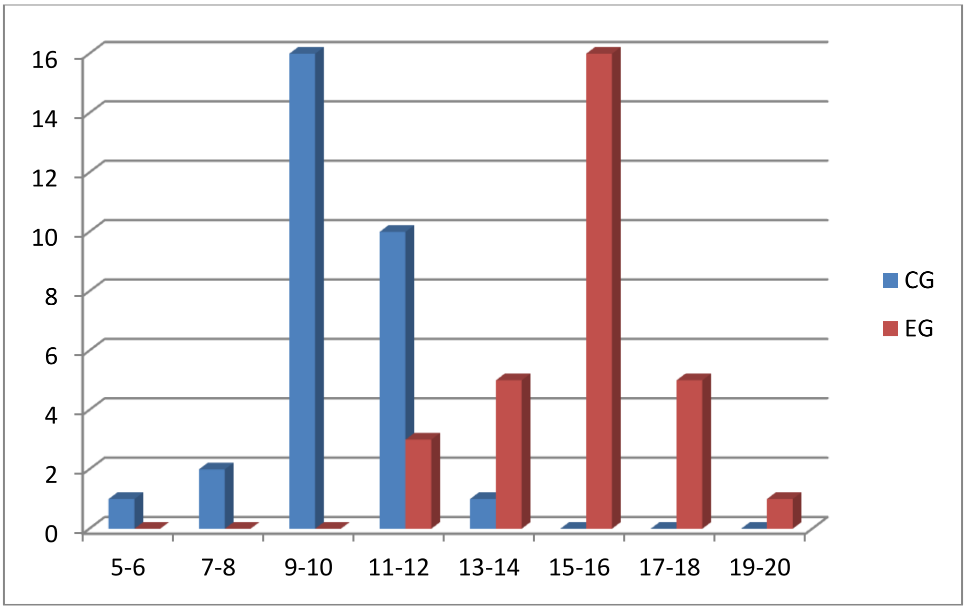
Group	N	M	SDs	df	't' value	Level of significance
Control	30	10.1	1.49	1/29	13.5	0.10(s)
Experimental	30	15.1	1.72			

Observations and interpretations

As the evident from the above table the means of both groups are different. The difference is 5. The SDs of both groups differ significantly which is 0.23. in order to know the significance between the two groups 't' value is calculated. The 't' value is 13.5. it is significant 0.10 level. Hence, the hypothesis no.4.3 was rejected at 0.10 level.

The experimental group is superior than that of control group in the tests on future tense.

Graph Of Scores Obtained By Control Group And Experimental Group On Future tense



The graph shows that the range of marks obtained by control group is between 5-6 to 13-14. But that of experimental group is between 11-12 to 19-20. So it is clearly evident from that the experimental group is superior than the control group in the comprehensive test.
The comprehensive test described on the units-parts of speech, vocabulary, tense, punctuation marks. Students' performance is also measured by using statistical tools that is mean, SDs, and 't' value.

Null hypothesis
There is no significant difference between the mean performance of the students from control group and experimental group in test on the punctuation marks for development of grammatical competence in English writing.

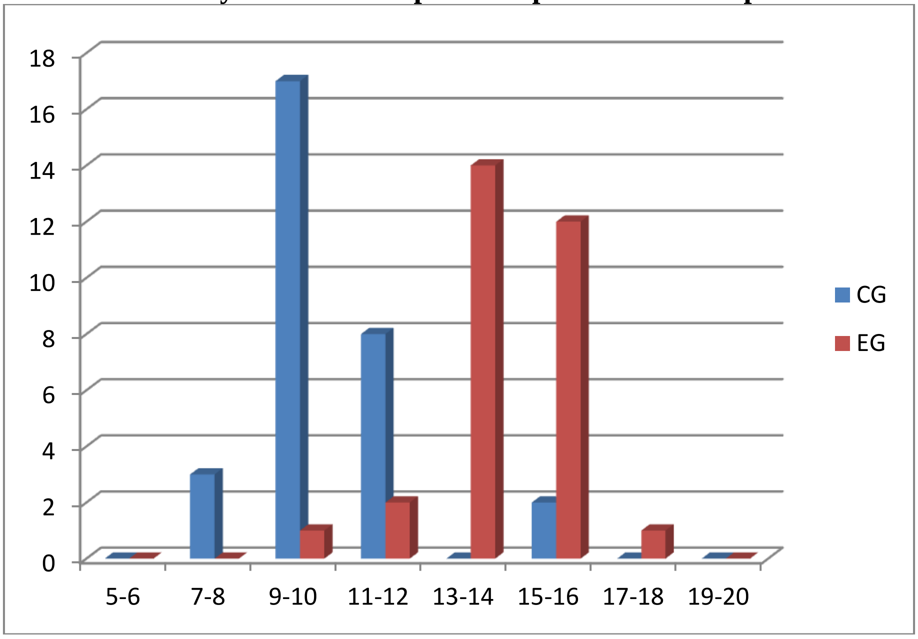
Objective
To study the effectiveness of programme for development of grammatical competence in punctuation marks in English writing among IX standard students.

TABLE
MEANS, SDs, and 't' VALUE OF BOTH THE GROUPS ON PUNCTUATION MARKS

Group	N	M	SDs	df	't' value	Level of significance
Control	30	10.3	1.60	1/29	10.43	0.10(s)
Experimental	30	14.16	1.51			

Observations and interpretations
As the evident from the above table the means of both groups are different. The difference is 3.86. The SDs of both groups differ significantly which is o.o9. in order to know the significance between the two groups 't' value is calculated. The 't' value is ……... it is significant 0.10 level. Hence, the hypothesis no.4.3 was rejected at 0.10 level.
The experimental group is superior than that of control group in the tests on future tense.

Graph Of Scores Obtained By Control Group And Experimental Group On Punctuation Marks



The graph shows that the range of marks obtained by control group is between 5-6 to 15-16. But that of experimental group is between 9-10 to 17-18. So it is clearly evident from that the experimental group is superior than the control group in the comprehensive test. The comprehensive test described on the units- parts of speech, vocabulary, tense, punctuation marks. Students' performance is also measured by using statistical tools that is mean, SDs, and 't' value.

CONCLUSION

1) The developed program proved more effective for the language competence in types of tense , vocabulary, punctuation marks, parts of speech among IX standard students.
2) Students from the experimental group very easily identified the concepts like tense, vocabulary, punctuation marks, parts of speech.
3) The experimental group found more superior for the application of tense, vocabulary, punctuation marks, parts of speech in written form.
4) The experimental group found a more good score in the test for the development of interest and ability through the activities for enhancing language competence.
5) The experimental group found parental support in their English learning through the activity.
6) The government should arrange training programme for the teacher to deal the students.
7) The government should compact the curriculum for the students.

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Indian Research Information Network System (IRINS): An Analysis of Faculty Profiles of the University of Agricultural Sciences Bangalore Learning During COVID-19 Pandemic

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Abstract: The main aim of the article is to find out the scholars' profile, and their citation status in different disciplines of UAS Bangalore. The current research study required to examine the Indian Research Information Network System (IRINS) instances with special reference to University of Agricultural Sciences Bangalore. The research paper discovers top departments, faculty's publications and citations of individual university. The Research information system plays that significant role in displaying the institutional prospective in term of faculty profiles, research publications, project particulars, grant and awards, citations, etc. The finding shows that the UAS Bangalore holds 394 of faculties and 3834 scholarly publications, 7603 Scopus citation and 6239 Crossref citation.
Keywords: Google Scholar Citations, IRINS, Faculty Profiles, Profile Management System, Altmetrics. UAS Bangalore

Introduction

The educational institutions in India are striving for their eminence by displaying their research subsistence in respect to assorted key factors across the national and international benchmarking and ranking frameworks (Jeyapragash et.al, 2019). The faculty members research output like article publications, citations and other academic output has been very much sprinkled, as a result, it's not easy to keep the information flow regarding research capabilities of faculties, departments, educational institutions (Melgar et.al, 2019). A systematic research information management keeps up to date the scholars about the newest subject matters, institute associations, and dissimilar trends in their relevant subject in addition to the close by areas. This type of research data is required for enhanced research, innovation and measurement of research activity. The IRINS eases and facilitates the flow of information about completed research and serves as a common platform for projecting individual faculty, departments, educational institutions, performance on various Bibliometrics parameters (Andres et.al, 2019)

The significance of IRINS and its existence in each academic institution make stronger the departments throughout its crucial actions, for instance by describing the department development from the overall organization research publications. It facilitates to compare research output within the same institute's departments, such as determining the strength of individual departments based on their research output.

Review of Literature

Sunil (2021) conducted a study to examine the examples of the IRINS with a focus on Indian universities. The article investigates each university's top departments, faculty publications, and citations.The data for this study was gathered from the IRINS website. The current study focused on 29 Indian universities, the majority of which are financed by the Indian government. Statistical approaches were used to classify, evaluate, and tabulate the acquired data. Tamizhchelvan and Anbalagan (2020) described how to use the IRINS system as a benchmarking tool for research output. The information was gathered from the Gandhigram Rural Institute - Deemed to be University's Indian Research Information Network System. The article's goals are to examine academic individuals, departments, and their scholarly papers with citations, as well as their influence. With 742 (34.13 percent) and 14306 (57.15 percent), respectively, the Department of Chemistry has the most publications and citations. Professor P. Balasubramaniam of the Department of Mathematics has the most publications (255, or 11.73%) and citations (5764). (21.76%). Four faculty members from the Department of Chemistry, two from the Department of Mathematics, and two from the Department of Physics were among the top ten. The highest publication resource is a journal article.

Singh and Kumar (2019) in their study analyzed the participation of Library and

Information Science (LIS) faculty members on IRINS. This study also contributes to access research productivity of LIS faculty members at different spheres. The data have been collected from IRINS by visiting individual faculty profiles. The collected data have been analyzed and the major findings are - maximum faculties are registered on IRINS are from Annamalai University, maximum publications are contributed by Professors and maximum citations are received by Professors. The publications by faculties of the International Institute of Information Technology are more preferred than other institutions. The present study concluded on the fact that the inclusion of LIS faculties on IRINS was low. Thus this study suggests organizational level and individual level inclusion on IRINS indeed satisfy the objective behind IRINS. Sab et.al (2019) discussed the Information and Library Network (INFLIBNET) Centre; An Inter-University Center of the University Grants Commission, Gandhinagar, Gujarat built a database called "VIDWAN" as part of the IRINS web-based Research Information Management (RIM) service. Expert database and National Research Network" is a well-known database of research profiles of scientists/researchers and faculty members active in teaching and research at India's major academic institutions and R&D organisations. Academics, R&D organisations, faculty members, and scientists were given the opportunity to collect, curate, and promote scholarly communication efforts, as well as to form a scholarly network. The IRINS is accessible as free software to academic and research and development organisations in India.

About IRINS

Indian Research Information Network System (IRINS), IRINS is a web-based Research Information Management (RIM) service formulated by the Central University of Punjab, Bathinda in collaboration with Information and Library Network Centre (INFLIBNET). The portal allows higher education institutions and research institutes to highlight their research contributions to the scholarly community and create a scholarly network. The IRINS is available to academic and R&D organizations in India as free software-as-a-service (INFLIBNET, 2018). The IRINS would assist with the integration of existing research management systems including Human resource management, course administration, project management, institutional repositories, and open and commercial citation databases, and scholarly publishers, among others (Naik, 2020). For consuming scholarly publications from diverse sources, it has merged with academic identities such as Research ID, Microsoft Academic ID, ORCID ID, Scopus ID, and Google Scholar ID. The portal's major goal is to locate academic institutions, research and development companies, faculty members, and scientists in order to collect, curate, and promote scholarly communication activities.

Objectives of the study

1. To learn more about the Department's publications, citations, and rankings
2. To determine the number of publications, citations, and average ranking per department
3. To determine the top ten faculty members in terms of publications, citations, and overall ranking
4. To find out the various types of publications.
5. To identify the profile of the scholar in a specific subject

Methodology

IRINS was a project undertaken by the Information and Library Network (INFLIBNET) Centre. The article's major goal is to determine the scholars' profiles and citation status in various disciplines. The data were collected from UAS Bangalore IRINS website (https://uasbangalore.irins.org//). As of January 2022, there are 394 scholars, 3834 publications, and 7603 citations. Only departmental publications, citations, top ten faculty publications, citations, and other categories of publications were examined in the study. For the analysis, Ms-excel were employed with simple computations.

Data Analysis and Findings

The information gathered from the UAS IRINS website was examined using simple percentages, averages per publication, and a ranking system based on frequency and average per publication. In addition, the top ten faculty profiles and articles are examined and highlighted. On the UAS faculty profiles view (Figure 1) and the institutions admin expert view (Figure 2), the portal can be browsed (Figure2).

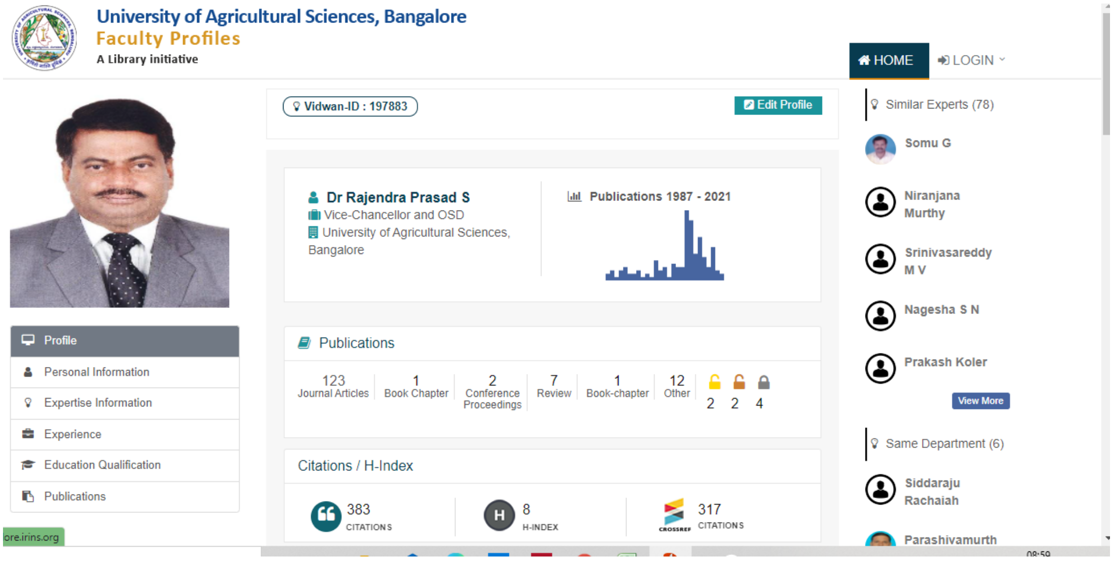

Fig.1 Sample Scholars Profile

The profile of a scholar is seen in Figure 1. Scholar's name, designation, Vidwan ID, subject specialisation, name of organisation, state Total publications, SCOPUS citations, Crossref citations, H-index, and view profile are all available.

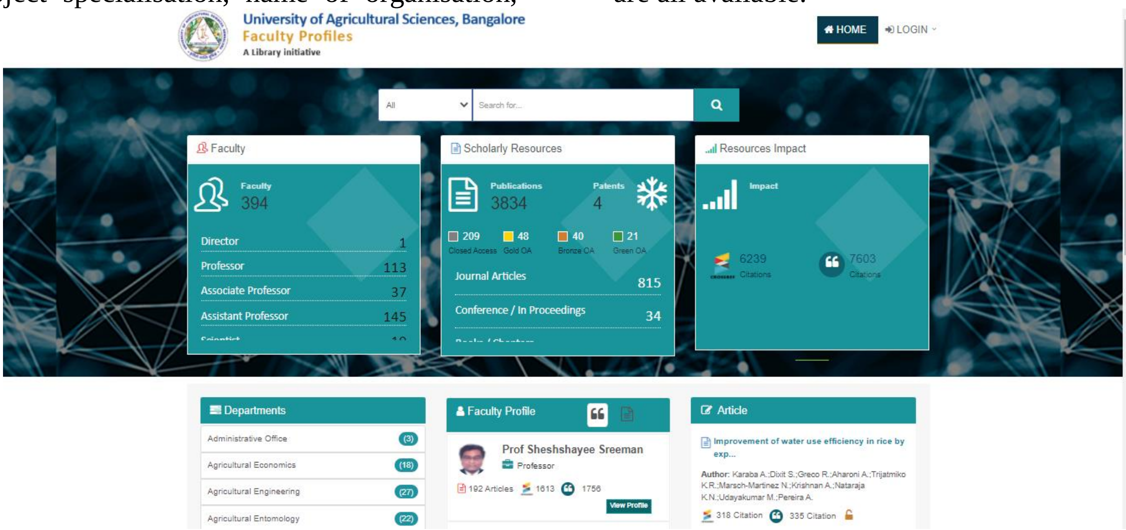

Figure 2 Faculty Profiles

Table: 1 Type of Publications

SL. No	Documents	No. of Publications	Percentage	Rank
	Journal Articles	815	21.25	2
	Conference Proceedings	34	0.88	4
	Books in Chapters	49	1.27	3
	Others	2936	76.57	1

The types of publications are shown in Table 1. It shows that the majority of 2936(76.57) publications are published in other publications and have ranked first, followed by 815 (21.25) publications published in Journal Articles and ranked second, Chapters in Books have ranked third with 49(1.27) publications, and Conference Proceedings have ranked fourth with 34(0.88) publications.

Table: 2 Department wise Contributions – Frequency Rankings.

Sl. No.	Department	Publications	Rank	Citations	Rank	CROSSREF Citations	Rank	h-index
	Genetics and Plant Breading	478 (12.46)	1	667 (8.77)	2	589 (9.44)	2	12
	Agronomy	471 (12.28)	2	69 (0.90)	13	20 (0.32)	14	5
	Crop Physiology	419 (10.92)	3	3637 (47.83)	1	3360 (53.85)	1	31
	Plant Pathology	346 (9.02)	4	346 (4.55)	5	280 (4.48)	6	8
	AICRP Sunflower & Pigeon pea, PHET	250 (6.25)	5	112 (1.47)	11	198 (3.17)	7	7
	Agricultural Economics	227 (5.92)	6	39 (0.51)	16	2 (0.03)	19	3
	Seed Science and Technology	218 (6.68)	7	385 (5.06)	4	317 (5.08)	5	8
	Agricultural Entomology	207 (5.39)	8	242 (3.18)	7	90 (1.44)	9	5
	Agricultural Engineering	162 (4.22)	9	101 (1.32)	12	49 (0.78)	12	4
	Plant Biotechnology	126 (3.28)	10	330 (4.34)	6	335 (5.36)	4	14
	Food Science and Nutrition	125 (3.26)	11	16 (0.21)	19	0 (0)	20	2
	Agricultural Microbiology	119 (3.10)	12	124 (1.63)	10	34 (0.54)	13	5
	Apiculture	115 (2.99)	13	17 (0.22)	18	6 (0.09)	17	2
	National Seed Project (Crops), Seed Technology Research Unit	112 (2.92)	14	57 (0.74)	14	11 (0.17)	16	6
	Agricultural Extension	112 (2.92)	15	5 (0.06)	22	0 (0)	22	20
	Soil Science and Agricultural Chemistry	109 (2.84)	16	442 (5.81)	3	389 (6.23)	3	13
	Administrative Office	86 (2.24)	17	147 (1.93)	9	95 (1.52)	8	6
	AINP on Vertebrate Pest Management	63 (1.64)	18	1 (0.01)	25	0 (0)	25	1
	Forestry and Environmental Science	61 (1.59)	19	199 (2.61)	8	87 (1.39)	10	7
	Library	58 (1.51)	20	6 (0.07)	21	0 (0)	21	1
	Dryland Agriculture Project	55 (1.43)	21	13 (0.17)	20	6 (0.09)	18	3
	Sericulture	29 (0.75)	22	45 (0.59)	15	54 (0.86)	11	3
	Research Institute on Organic	18 (0.46)	23	0 (0)	26	0 (0)	26	0

	Farming							
	Horticulture	17 (0.44)	24	0 (0)	27	0 (0)	27	0
	Bakery Training Unit	14 (0.36)	25	19 (0.24)	17	16 (0.25)	15	1
	Directorate of Extension	14 (0.36)	26	0 (0)	28	0 (0)	28	0
	Agricultural Marketing Co-Operation and Business Management	11 (0.28)	27	2 (0.02)	23	0 (0)	23	1
	Inland Fisheries Unit	11 (0.28)	28	0 (0)	29	0 (0)	29	0
	All India Co-Ordinated Research Project on Castor	10 (0.26)	29	2 (0.02)	24	0 (0)	24	1
Total		**3834**		**7603**		**6239**		

(Percentage values are indicated in parenthesis)

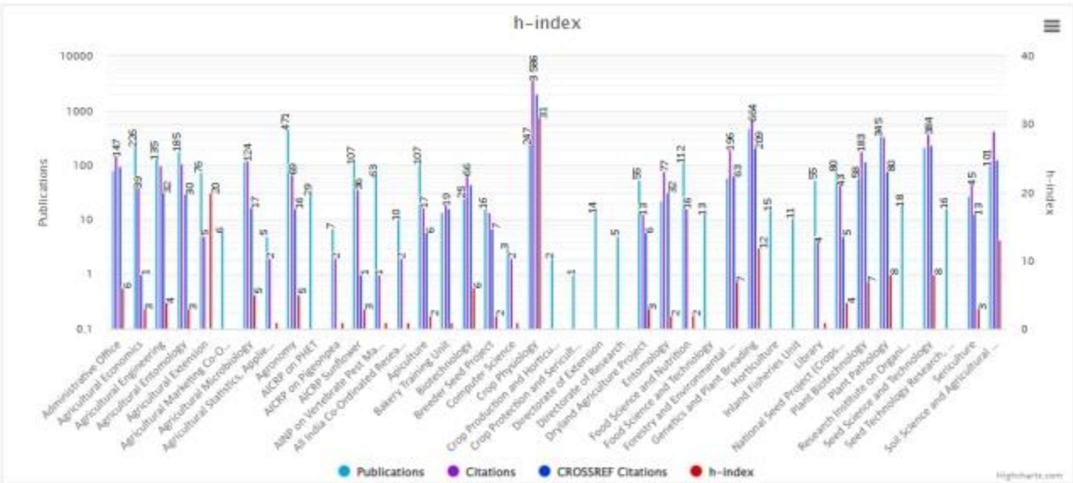

Figure 3: H-index, publications, and CrossRef chart by department

Table 2 shows the number of publications per department, as well as their percentages and rankings. The information was gathered from the IRINS, which only has publications available in departments. Table 2 indicates on the department-wise contributions in the IRINS projects, as per the IRINS database. It is found that Department of Genetics and Plant Breading has contributed a maximum number of 478(12.46) publications have positioned 1st rank, followed by the Department of Agronomy has contributed 471 (12.28) publications have positioned 2nd rank. Scopus citations, CrossRef, and h-index are used to assign rankings. It is found that Department of Crop Physiology got citations of 3637(47.83) and CrossRef of 3360(53.85) and Department of Genetics and Plant Breading got citations of 667(8.77) and CrossRef of 589(9.44). It is confirmed that the ranking secured as same rank with publications wise.

Table: 3 Top Ten Faculty Members Citations publications - Frequency Rankings

SL. No	Faculty	Department	Publications	Scopus Citations	CrossRef Citations	h-index	Google Scholar Citation		
							Citations	h-index	I10-index
	Sheshshayee Sreeman	Crop Physiology	192 (5.27)	1695 (25.42)	724 (22.73)	26	3125 (22.35)	32	66
	Nataraja Karaba Nalkur	Crop Physiology	110 (3.02)	1526 (22.89)	1159 (39.38)	19	2566 (18.35)	24	45
	Geetha Govind	Crop Physiology	17 (0.46)	648 (9.72)	568 (17.83)	10	932 (6.66)	12	13
	Prakash N B	Soil Science and agricultural chemistry	111 (3.05)	386 (5.79)	108 (3.39)	13	872 (6.23)	17	24
	Kumaraswamy R. V.	Agricultural Biotechnology	12 (0.32)	415 (6.22)	512 (16.07)	8	664 (4.74)	11	11
	Rajendra Prasad S	Seed Science and Technology	123 (3.38)	382 (5.73)	229 (3.43)	8	1240 (8.86)	16	23
	Ramesh S	Genetics and Plant Breading	51 (1.40)	223 (3.34)	138 (4.33)	6	2718 (19.44)	24	53
	Krishnaprasad Bendehakkalu	Plant Biotechnology	24 (0.65)	181 (2.71)	250 (7.84)	3	616 (4.40)	10	10
	Ramappa H K	Plant Pathology	13 (0.35)	206 (3.09)	4 (0.12)	5	389 (2.78)	7	6
	Harinikumar K M	Plant Biotechnology	59 (1.62)	208 (3.12)	173 (5.43)	5	1038 (7.42)	12	17
	Total		**3638**	**6666**	**3185**		**13980**		

Table 3 shows the Top Ten faculty members publications Scores, Scopus citations and CrossRef Scores and h-index as well as rankings. Furthermore, Google Scholar Citations Scores, h-index and i-10 index and its rankings are pointed out. It is cleared from the table that, Sheshshayee Sreeman (Dept. of Crop Physiology) has contributed a maximum number of 192(5.00) publications, Scopus Citations 1816 (23.88) , CrossRef 1662 (26.63) and h-index 26 placed first rank, whereas Nataraja Karaba Nalkur (Department of Crop Physiology)has contributed the highest number of 110 (2.86) Scopus Citations with 1603 (21.08), and CrossRef 1459(23.38), h-index 19, and Google Scholar citations secured 2 ranks and overall second rank. Harinikumar K M (Department of Plant Biotechnology) has contributed number of 59 (1.53), Scopus Citations with 211 (2.77), and CrossRef 183 (2.93) h-index 6, and Google Scholar citations secured 10th ranks.

4. Individual Researcher Score

Sheshshayee Sreeman, Professor, Dept. of Crop Physiology has been taken for the individual scholar profile and revealed in the fig. 4 and 5. The information on multiple academic identities, as well as the same department colleague names with links, is displayed in the profile. The publications are organised by article type, such as journal articles, conference papers, and so on. At the article level, the Citations / h-index, Google Scholar and 513 Co-authors Network diagram (Figure 5) and Altmetrics score are also displayed. Figure 6 shows Altmetrics and citations of a particular publication. Individual Faculty Members' data can be altered, updated, and modified using the edit profile option. In addition, a Vidwan-ID with number link is supplied in the profile view, via which anyone can obtain his or her CV.

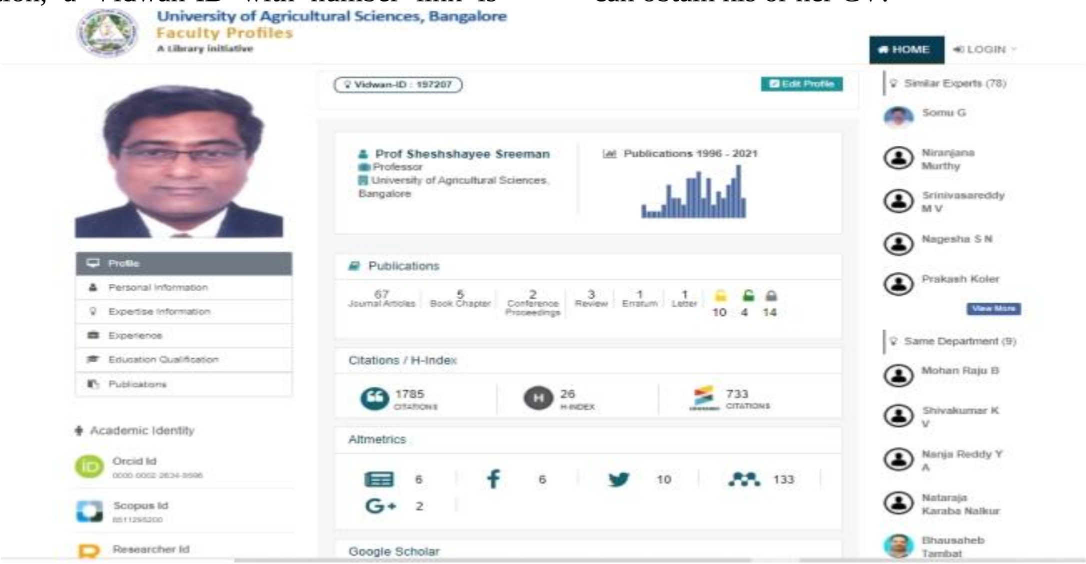

Figure 4 Sheshshayee Sreeman's publications, Scopus, CrossRef, and Google Scholar scores

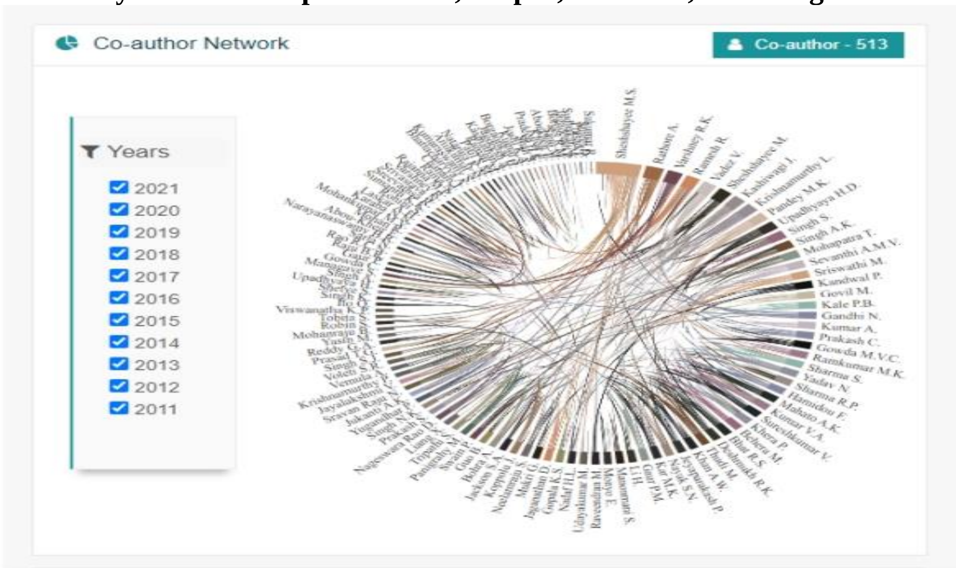

Figure 5 Sheshshayee Sreeman's Co-author network

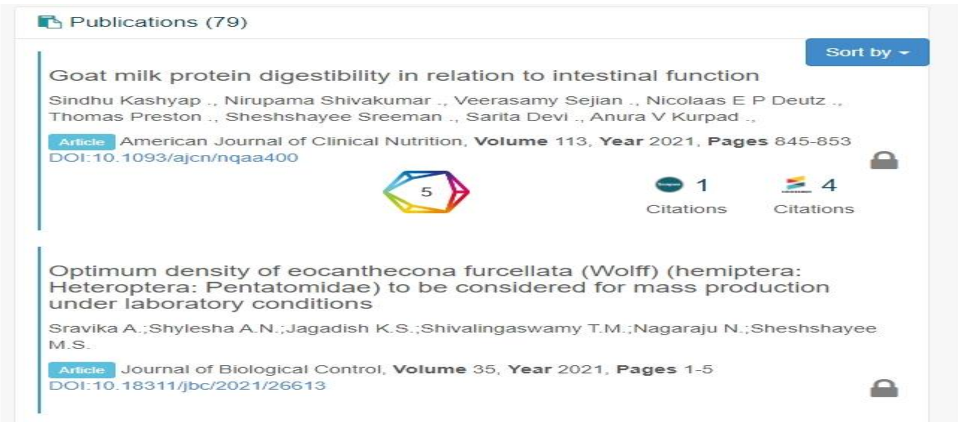

Figure 6 Altmetrics and citations of particular publication

Conclusion

In India, the Indian Research Information Network System (IRINS) has made a significant role to support and bring more perception towards the research information management system for the higher education system and its advantages. Academic institutions could use IRINS as a tool to highlight their research output, expertise, talents, research experience, accomplishments, projects, and other scholarly activity. This study recommends that all higher learning institutions use IRINS to increase the visibility of their research to the general public. Academics, R&D organisations, faculty members, and scientists were given the opportunity to collect, curate, and promote scholarly communication efforts, as well as to form a scholarly network. The IRINS is accessible as free software to academic and research and development organisations in India.

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Study On Laplace Transformation and Its Application Invarious Field

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ABSTRACT: *Importance of mathematics is increasing in modern life. Laplace Transform is one of the major techniques used by scientist and researchers for finding the results to their problems. In this paper we study broad range of "Applications of Laplace Transformations in various fields". The study results of numerical studies, allow us to recommend the use of this technique to model their problem mathematically and to find the solution to the same.*

Keywords: Laplace Transform, Applications, Differential Equation, Analysis.

Introduction

In This paper deals with a brief overview of what Laplace Transform application is in the applied science and Engineering Problems. The study of Electronic Circuit and Solution of Linear differential equation of higher order is solved by using Laplace Transform. This paper shows about the applications in Mathematics, Real life, Applied sciences and Engineering and helpful for calibrating integral, differential Equations, circuit systems, mechanical systems, avionics systems.

"Laplace transform will be denoted by L

In numerous problems, Laplace transformation is applied to derive the general solution. In particular, the Laplace Transformation method is applied in solving the IVP (initial value problem) of nth order linear Differential equations with constant coefficients Laplace Transform techniques also provide powerful in various fields of technology such as control theory, population growth and decay problems where knowledge of the system transfer function is important and at which Laplace Transform comes into its own.

2] Definition of Laplace Transform

The Laplace Transform of the function (t) for all $t \geq 0$ is defined as

$$\boxed{\mathbf{L\ [F(t)]} = \int_0^\infty e^{-st}\,\mathbf{F(t)\,dt} = \mathbf{f(s)\ldots\ldots(1)}}$$

Where L is Laplace Transform operator. The Laplace Transform of the function (t) for all $t \geq 0$ exist if $\mathrm{F}(t)$ is exponential order and piecewise continuous. These are only sufficient conditions for the existence of Laplace Transform of the function (t).

3] APPILICATIONS OF LAPLACE TRANSFORM

In section we study of the importance of Laplace Transform. Laplace Transform is mostly used in Science Fields and Engineering Fields. Laplace Transformation Reduce Differential Equation to algebraic equation which can be solved by formal rules of Algebra.

3.1 Applications in Electrical Engineering:

How can we use the Laplace transform to solve circuit problems?

Consider simple electric circuit where R-resistance, L-inductance, C-capacity and E-electromotive power of voltage in a series.

Laplace Transforms – resistors:

Time-domain **s-domain (Laplace)**

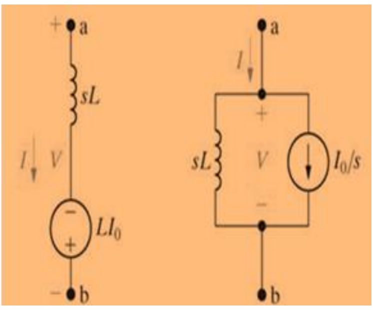
$\mathcal{L} \rightarrow$

$v(t) = RI(t)$ $V(s) = RI(s)$

Laplace Transform – inductors:

Time-domain **s-domain (Laplace)**

$\mathcal{L} \rightarrow$



$v(t) = \frac{di(t)}{dt}$ $V(s) = s\,L\,[I(s)] - L[Io]$

$i(0) = I$ $I(s) = \frac{V(s)}{sL} + \frac{Io}{L}$

Write the set of differential equations in the time domain that describe the relationship between voltage and current for the circuit.

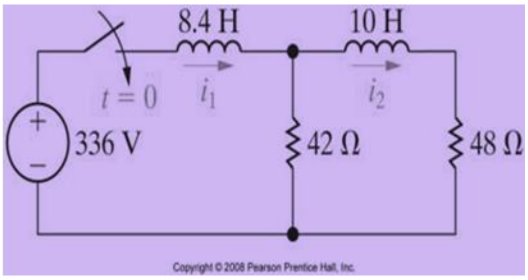
Use KVL, KCL, and the laws governing voltage and current for resistors, inductors (and coupled coils) and capacitors

Laplace Transforms the equations to eliminate the integrals and derivatives, and solve these equations for V(s) and I(s).

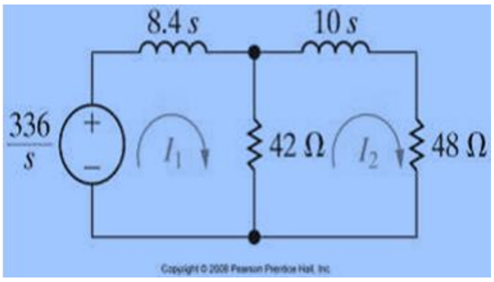
•Inverse-Laplace Transform to get v(t) and i(t).

Example:

i) There is no initial energy stored in this circuit. Find $I_1(t)$ and $I_2(t)$ for t > 0



L→



Solution -

$$\frac{-336}{s} + (42+8.4s)\, I_1 - 42\, I_2 = 0$$

…... (1)

$$(10s-(48+42))\, I_2 - 42\, I_1 = 0$$

…… (2)

$$\Rightarrow I_1 = \frac{10s + 90}{42} I2$$

……. (3)

Substitute in (2)

$$\frac{-336}{s} + [\frac{(42+8.4s)\,(10s + 90)}{42} - 42]\, I_2 = 0$$

$$I_2 = \frac{336\,(42)}{s(42+8.4s)\,(10s + 90) - 42\hat{}2}$$

3.3 Application in Nuclear Physics:

In nuclear Physics Solution of Differential Equation in successive radioactive decay of a nucleus atom.

$$I_2 = \boxed{\frac{168}{S\hat{}3 + (14S)\hat{}2 + 24\,S}}$$

……Put in (3)

$$I_1 = \frac{10s + 90}{42} I2$$

$$\Rightarrow \qquad I_1 = \frac{10s + 90}{42}$$

$$\left(\frac{168}{S\hat{}3 + (14S)\hat{}2 + 24\,S}\right)$$

$$I_1 = \boxed{\frac{40s + 360}{s\hat{}3 + (14S)\hat{}2 + 24\,S}}$$

Analysis of Electrical and Electric circuit breakdown complex Differential Equation into simpler polynomial forms. Laplace Transform gives Information about steady and transient state.

3.2 Application in Mechanical Engineering: In Mechanical engineering field, Laplace Transform is mostly used to solve differential equations occurring in mathematical modeling of mechanical system to find transfer function of that particular system.

Laplace transform makes easy to study analytic part of Nuclear physics possible. Laplace transform is a very effective tool to simplify many complex problems in nuclear physics field.

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3.4 Application in Signal process:

The two main techniques in Signal Processing, convolution and Fourier analysis, teach that a linear system can be completely understood from its impulse or frequency response. This is a very generalized approach, since the impulse and frequency responses can be of nearly any shape or form. In fact, it is too general for many applications in science and engineering**.**

3.5 Application Population Growth Problem-

The growth of population **(growth of a species, an organ, or a plant, or a cell)** is can be written as first order linear ordinary differential equation

$$\frac{dp}{dt} = \alpha P \text{...........} \quad (1)$$

with the initial condition as

$$P(t_0) = P_0 \text{........} \quad (2)$$

Where α is a positive real number, **P** is the amount of population at time **t** and $P_0$is the initial population at time t_0**.**

Equation (2) is also known as Malthusian law of population growth.

Then, Laplace transform for population growth problem given by from (1) and (2)

By applying Laplace transform on both sides of (2),

$$L[\frac{dp}{dt}] = \alpha L[P(t)] \quad \text{.......} \quad (3)$$

Now applying the property, Laplace transform of derivative of function, on (3), we have,

$$sL[P(t)] - P(0) = \alpha L[P(t)] \text{........} \quad (4)$$

Using (3) in (4) and on simplification, we have,

$$(s-\alpha)L[P(t)] = P_0$$

$$\Rightarrow L[P(t)] = \frac{P0}{(s-\alpha)} \text{......}$$

By operating inverse Laplace transform on both sides of (5),

we have,

$$P(t) = L^{-1}[\frac{P0}{(s-\alpha)}]$$

$$\Rightarrow P(t) = P_0 e^{\alpha t} \text{...........} \quad (6)$$

This is required amount of population at time t.

3.6. Population Decay problem-

The decay problem of the substance is defined mathematically by the first order linear ordinary differential equation

$$\frac{dp}{dt} = -\alpha P \text{...........} \text{ (a)}$$

with the initial condition as,

$$P(t_0) = P_0 \text{ .... (b)}$$

Where α is a positive real number, **P** is the amount of population at time **t** and P_0 is the initial population at time t_0.

In equation (a), the negative sign in the right side is taken as mass of the substance is decreasing with time and so derivative $\frac{dP}{dt}$ must be negative.

by applying Laplace transform for decay problem given in (a) and (b)

$$=> P(t) = P_0\ e^{-\alpha t}$$

This is required amount of population at time t.

Numerical-1:

The population of town grows at a rate proportional to the number of people presently living in the town. If after five years, the population has doubled, and after ten years the population is 200000, Estimate the number of people initially living in the town.

Solution-

This problem mathematically written as,

$$\frac{dp(t)}{dt} = \alpha \quad P(\text{t}) \qquad \ldots\ldots\ldots\ldots\ldots (1)$$

Where **P** denotes the number of people living in the town at any time **t** and α is the constant of proportionality.

Consider P_0 is the number of people initially living in the town at **t = 0.**

by Laplace transform applying in

$$L[\frac{dp}{dt}] = \alpha L[P(t)] \qquad \ldots\ldots\ldots\ldots\ldots\ldots$$

Now applying the **property of Laplace Transform at derivative of function**, on (2)

$$L[P(t)] = \frac{P0}{(s-\alpha)}$$

$$=> \quad P(t) \quad = \quad P_0 e^{\alpha t} \ldots\ldots\ldots\ldots\ldots\ldots (3)$$

Now at t = 5, $P(t) = 2P_0$, use in (3) we get

$$=> 2P_0 = P_0\ e^{\alpha t}$$

$$=> \quad 2 = e^{5\alpha}$$

$$=> \alpha = 0.13862943611 \ldots\ldots\ldots\ldots\ldots\ldots (4)$$

Now using the condition t = 10, at that time P = 200000, use in (3)

we have,

$$=> 200000 = P_0 e^{0.13862943611 * 10}$$

$$=> \quad P_0 = 50000$$

=> This is initially population in the town.

4. Conclusion:

To sum up, it can be seen, through the above description that the application of the Laplace Transform can be used in various fields. In addition to these, Laplace Transform is very effective tool to simplify Critical Problem in various fields. The advantage of Laplace Transform is that it is useful to convert Ordinary Differential Equation to Algebraic

Equation of same order that simpler to solve to conclude.

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Pharmaceutical Industry in Tamilnadu

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Abstract

India is ranked as the fastest emerging economy and a major global player in the years to come. The Indian pharmaceutical industry is one of the most attractive investment destinations in the world. With ever increasing returns, lowering risks and anticipated multifold growth, investors are more interested in this industry than ever before. The following are specific objectives of the present study. (i) To analyze the growth trend of pharmaceutical industry in Tamil Nadu during 1990-91 to 2009-2010 (ii) To identify the total factor productivity performance of pharmaceutical industry, labour productivity and capital productivity during the study period. The present study is based entirely on secondary data. The study period is from 1990-91 to 2009-2010. The data were collected from the Annual Survey of Industries (ASI), factory sector. The annual survey of industries report has provided information about India pharmaceutical and chemical industry. For the present study, the researcher has chosen four major items and characteristics about the pharmaceutical industry for the study. The analysis was done by the use of SPSS and Excel. The study used to analyze with the help of statistical tools such as the percentages, Total Factor Productivity, analyzing the data.

Keywords: *Pharmaceutical Industry, Simple Linear Regression Model, Total Factor Productivity.*

Introduction

The pharmaceutical industry in India is going through a major shift in its business model in the last few years in order to get ready for a product patent regime from 2005 onwards. This shift in the model has become necessary due to the earlier process patent regime put in place since 1972 by the Government of India. This was done deliberately to promote and encourage the domestic health care industry in producing cheap and affordable drugs. As prior to this the Indian pharmaceutical sector was completely dominated by Multinational Companies (MNCs). These firms imported most of the bulk drugs (the active pharmaceutical ingredients) from their parent companies abroad and sold the formulations (the end products in the form of tablets and capsules, syrups etc.) at prices unaffordable for a majority of the Indian population. This led to a revision of Government of India’s (GOI) policy towards this industry in 1972 allowing Indian firms to reverse engineer the patented drugs and produce them using a different process that was not under patent. The entry of MNC’s was also discouraged by restricting foreign equity to 40%. The licensing policy was also biased towards indigenous firms and firms with lesser foreign equity. All these measures by GOI laid foundations to a strong manufacturing base for bulk drugs and formulations and accelerated the growth in the Indian Pharmaceutical Industry (IPI), which today consists of more than 20,000 players. As a result the Indian pharmaceutical industry today not only meets the domestic requirement but has started exporting bulk drugs as well as formulations to the international market. Currently the main activities of Indian pharmaceutical industry are broadly restricted to producing (i) bulk drugs and (ii) formulations with very few companies risking investing in primary research aimed at developing and patenting new drugs. The bulk drug business is essentially a commodity business, whereas the formulation business is primarily a market driven and brand oriented business. Multinational companies which have entered the Indian market have mostly restricted themselves to formulation segment till date. The domestic pharmaceutical industry (MNC's and Domestic) meets about 90% of the country's bulk drug requirement and almost the entire demand for formulations. The economics of bulk drug business and that of formulation business are quite different. Since a majority of the Indian companies are producing both bulk as well as formulations, these are considered together for the purpose of the present study.

Significance For The Study

Pharmaceutical industry being an important medium of communication its demand is highly correlated with the overall performance of a country and the state of literacy rate. So the production and productivity of parametrical industry acquire great significance in the context of growth in the developing economies. These economies are characterized by acute scarcity of resources and must use the available resources as best as they can. Also generation of surplus resources which play a pivotal role in their growth depends crucially on the efficiency with which resources are used. Higher productivity means efficient use of resources leading to the growth of the industry. When capital is invested in appropriate and efficient means of production, it leads to increase the productivity. Therefore, productivity measure is considered as one of the important measures in evaluating the performance of an Industry. Evidently, the present study on productivity performance of pharmaceutical industry in Tamil Nadu would be of much interesting, as it will bring out how effectively the investments were made in raising the total efficiency of the resource used. It also helps to identify those variables that are responsible for higher productivity in Tamil Nadu. This type of analysis would help to identify areas for corrective action towards planning and redeployment of resources to achieve better results. It has also direct development of parametrical \industry in Tamil Nadu. Thus, the present study is mainly concerned with growth and productivity of pharmaceutical industry in Tamil Nadu.

Objectives of the Study

The following are specific objectives of the present study.

1. To analyze the growth trend of pharmaceutical industry in Tamil Nadu during 1990-91 to 2009-2010.
2. To identify the total factor productivity performance of pharmaceutical industry, capital intensity, labour productivity and capital productivity during the study period.

Limitations of the Study

1. The main limitation of this study is that the analysis is done on the basis of the secondary data only.
2. This study takes into consideration of the period of 20 years from 1990-91 2009-10.
3. This study is only confined to the supply side of the pharmaceutical industry in Tamil Nadu.

Research Methodology

The present study is based entirely on secondary data. The study period is from 1990-91 2009-10. The data were collected from the Annual Survey of Industries (ASI), factory sector. Research foundation, Mumbai. The annual survey of industries report has provided information about

India pharmaceutical and chemical industry. For the present study, the researcher has chosen four major items / characteristics about the pharmaceutical industry for the study. The selected five major variables are.

1. Number of factories
2. Number of employees
3. Gross Fixed Capital Formation
4. Gross value added
5. Value of Gross Output

In this study the researcher has followed the method of total factor productivity suggested by Kendrick. The variables were used in logarithmic form. The total factor productivity has been arrived at by using the following formula.

$$TFP = \frac{V}{\alpha L + \beta k}$$

Where, TFP = Total Factor Productivity, V = Gross value added, L = Number of employee, K = Gross Fixed capital, α = Share of labour (total emoluments), β = 1-d share of capital in gross value added. This index is based on the assumption of competitive equilibrium constant returns to scale and Hicks neutral technical change.In this study, the labour productivity has been measured as gross value added to per labour (employee). The capital productivity has been measured as gross value added to per gross fixed capital employed. The gross fixed capital to per labour(employee) has been taken as to measure the capital intensity.

$$\textbf{Labour productivity} = \frac{\textbf{Gross Value Added}}{\textbf{Labour (employee)}}$$

$$\textbf{Capital productivity} = \frac{\textbf{Gross Value Added}}{\textbf{Gross fixed capital}}$$

Simple Linear Regression Model

$$\mathbf{Y = a + b_t}$$

Where, Y= dependent variable T=Time ‘a’ and ‘b' parameters

$$\text{Linear growth rate} = \frac{b}{y_1} \times 100$$

Where, Y_1 value of dependent variable in the starting period.

Pharmaceutical Industry In Tamilnadu

Tamil Nadu pharmaceuticals industry is globally respected and is one of the most successful industries in India. The Data pertaining to the pharmaceutical industry in Tamil Nadu are presented Table No. 1.1

Number Of Factors Of Pharmaceutical Industry In Tamil Nadu

The data on number of factories of Pharmaceutical industry from 1990-91 to 2009-10 are given in Table No.1.1.

Table No.1.1number Of Units Of Pharmaceutical Industry In Tamilnadu

Year	Number of Factories	Percentage Change Over the Previous Year
1990-91	218	-
1991-92	212	-2.75
1992-93	217	2.35
1993-94	250	15.2
1994-95	219	-12.4
1995-96	211	-3.65
1996-97	214	1.42
1997-98	201	-6.07
1998-99	874	33.4
1999-00	979	12.01
2000-01	946	-3.07
2001-02	925	-2.21
2002-03	895	-3.24
2003-04	915	2.23
2004-05	894	-2.29
2005-06	984	10.06
2006-07	845	-14.12
2007-08	767	-9.2
2008-09	870	13.42
2009-10	830	-4.59

Source: Annual Survey of Industries.

Table No.1.1 shows that number of factories of pharmaceutical industry in Tamil Nadu increased from 218 to 830 during 1990-91 to 2009-10. It was nearly threefold increase during the study period. The number of factories of pharmaceutical industry decreases from -2.13 per cent to -4.5 per cent during the study period. It was nearly six fold increased during the study period. It touched the highest 33.4 value per cent in 1998-99.

Number of Employees of Pharmaceutical Industry in Tamil Nadu

The data on number of employees of the pharmaceutical industry from 1990-91 to 2009-10 are given in Table No.1.2.

Table No.1.2number of Employees of Pharmaceutical Industry in Tamilnaduduring 1990-91 to 2009-10 (Rs Lakhs)

Year	Number of Employees	Percentage Change over the Previous Year
1990-91	84220	-
1991-92	76610	-9.03
1992-93	79690	4.02
1993-94	104290	30.86
1994-95	93320	-10.51

1995-96	110190	18.07
1996-97	130340	18.28
1997-98	904600	59.40
1998-99	120837	-0.8
1999-00	125793	4.10
2000-01	119460	-5.03
2001-02	116921	-2.12
2002-03	114629	-1.96
2003-04	109490	-4.48
2004-05	118210	7.96
2005-06	107781	-8.82
2006-07	110770	2.77
2007-08	109286	-1.33
2008-09	110720	1.31
2009-10	120861	9.15

Source: Annual Survey of Industries.

Table No.1.2 shows that the number of employees of pharmaceutical industry in Tamil Nadu increased from Rs 84220 lakhs to Rs 120861 lakhs during in 1990-91 to 2009-10. It was nearly six fold increased during the study period. The number of employees of pharmaceutical industry increased from 4.03 per cent to 30 per cent. It touched the highest value 59 per cent in 1997-98.

Gross Value Added Of Pharmaceutical Industry In Tamil Nadu

The data on the Gross value added of pharmaceutical industry in Tamil Nadu for the period from 1990-91 to 2009-10

Table No.1.3deflating Gross Value Added Of Pharmaceutical Industry in Tamil Nadu during 1990-91 to 2009-10

Year	Gross Value Added	Wholesale Price Index (Base year 1990-91)	Constant Price
1990-91	54950	100	54950.00
1991-92	63910	203.4	31420.84
1992-93	45300	225.6	20079.78
1993-94	94230	243.2	38945.88
1994-95	38223	100	38223.00
1995-96	161980	112.3	144238.00
1996-97	171350	121.9	140566.00
1997-98	176210	124.4	141647.90
1998-99	197250	128	154101.56
1999-00	207200	133.6	155089.80
2000-01	210830	137.2	153666.18
2001-02	210950	141.7	148870.85
2002-03	220780	144.3	153000.69
2003-04	230640	148.1	155732.61
2004-05	253843	156.5	162200.00
2005-06	264040	166.3	158773.30
2006-07	273068	171.4	159316.21
2007-08	283080	179	158145.25
2008-09	294462	180.5	163136.84
2009-10	354982	179	198313.96

Source: Annual Survey of Industries.

Table No.1.3 shows that Gross Value Added at current and constant price. The Gross value added at current was Rs.54950 lakhs in 1990-91 and Rs.354982 lakhs in 2009-10 an increase of six fold during the period 1990-91 to 2009-10. Gross value added at constant price and it was Rs. 54950 lakhs in 1990-91 to Rs. 198313.9 lakhs in 2009-10 an increase of nearly two and half fold.

Table No.1.4.Gross Value Added Of Pharmaceutical Industry In Tamil Nadu During 1990-91 To2009-10 At Current And Constant Price Level (Base Year 1990-91=100)

Year	Current Price	Percentage Change Over the Previous Year	Constant Price (Base Year 1990-91)	Percentage Change Over the Previous Year
1990-91	54950	-	54950	-
1991-92	63910	16.30	31420.84	-42.81
1992-93	45300	-29.11	20079.78	-36.09
1993-94	94230	108.01	38945.88	93.95
1994-95	38223	-59.43	38223	-1.85
1995-96	161980	323.77	144238	277.35
1996-97	171350	5.78	140566	-2.54
1997-98	176210	2.83	141647.9	-8.85
1998-99	197250	11.94	154101.56	8.79
1999-00	207200	5.04	155089.8	0.64
2000-01	210830	1.75	153666.18	-0.91
2001-02	210950	0.05	148870.85	-2.68
2002-03	220780	4.65	153000.69	-2.77
2003-04	230640	4.46	155732.61	1.78
2004-05	253843	10.06	162200.00	4.15
2005-06	264040	4.01	158773.30	-2.11
2006-07	273068	3.41	159316.21	0.34
2007-08	283080	3.66	158145.25	-0.73
2008-09	294462	4.02	163136.84	3.15
2009-10	354982	20.5	198313.96	21.56
Mean	**190363.9**			**123773.43**

Source: Annual Survey of Industries.

Gross Value Added Of Pharmaceutical Industry In Tamil Nadu

The data on the value of gross value added of pharmaceutical Industry in Tamil Nadu over the period 1990-81 to 2009-10 are given in TABLE NO.1.1.4. For the convenience of analysis the 20 year period.

Table No.1.5deflating the Depreciation of Pharmaceutical Industry in Tamil Nadu during 1990-91 To 2009-10

Year	Depreciation	Machinery Price Index (Base Year 1990-91)	Constant Price
1990-91	632	100	632
1991-92	1059	206.2	513.57
1992-93	1333	210.7	632.65
1993-94	1356	223.5	606.71
1994-95	1420	245.4	578.64
1995-96	3087	278.8	1107.24
1996-97	4563	302.8	1506.93
1997-98	3112	313.7	992.03

1998-99	12492	148.8	8395.16
1999-00	60400	159.4	37892.09
2000-01	46673	167.9	27798.09
2001-02	47068	172.7	27254.19
2002-03	49643	183.1	27112.50
2003-04	56293	196.6	28633.26
2004-05	52190	214.6	24319.66
2005-06	60725	234.2	25928.69
2006-07	52795	263.5	20036.05
2007-08	54517	287.2	18982.24
2008-09	41645	294.5	14140.91
2009-10	75777	297.5	25471.26

Source: Annual Survey of Industries.

Table No.1.5 also reveals that Gross value added at constant price and it was Rs.54950 lakhs in 1990-91 to Rs.198313.96 lakh in 2009-10 an increase of nearly two and half fold. In period (1990-91 to 2009-10), Gross value added of pharmaceutical industry increased from Rs.54950 lakhs to Rs. 354982 lakhs. In period (1990-91 to 2009-10), the mean value of the Gross value added at current price in this period Rs.190363.9 lakhs. The mean value of the Gross value added at constant price in this period (1990-91 to 2009-10) was Rs. 12773.43

Depreciation of Pharmaceutical Industry in Tamil Nadu

The data on the value depreciation of pharmaceutical Industry in Tamil Nadu over the period 1980-81 to 2009-10 are given in Table No.1.6for the convenience of analysis the 20 year periods.

Table No.1.6depreciation In Pharmaceutical Industry In Tamil Naduduring 1990-91 To 2007-08 At Current And Constantprice Level (Base Year 1990-91=100) (Rupees In Lakhs)

Year	Current Price Level	Percentage Change Over the Previous Year	Constant Price (Base Year 1990-91)	Percentage Change Over the Previous Year
1990-91	632	-	632	-
1991-92	1059	67.56	513.57	18.73
1992-93	1333	25.87	632.65	23.19
1993-94	1356	1.72	606.71	-4.10
1994-95	1420	4.71	578.64	-4.63
1995-96	3087	117.1	1107.24	91.35
1996-97	4563	47.81	1506.93	36.09
1997-98	3112	-31.79	992.03	-34.16
1998-99	12492	301.41	8395.16	746.26
1999-00	60400	383.50	37892.09	351.35
2000-01	46673	-22.72	27798.09	-26.63
2001-02	47068	0.84	27254.19	-1.95
2002-03	49643	5.47	27112.50	-0.51
2003-04	56293	13.39	28633.26	5.60
2004-05	52190	-7.28	24319.66	-15.06
2005-06	60725	16.3	25928.69	6.61
2006-07	52795	-13.05	20036.05	-22.72
2007-08	54517	3.26	18982.24	-5.25

2008-09	41645	-23.61	14140.91	-25.50
2009-10	75777	81.95	25471.26	80.12
Mean	**31339**		**14626.69**	

Source: Annual Survey of Industries.

Table No.1.6 shows that Depreciation at current and constant prices. Depreciation at current price was Rs.632 lakhs in 1990-91 and increased to Rs. 75777 lakhs in 2009-10. It was an increase of two fold during the study period at current price level. In period (1990-91 to2009-10), Depreciation of pharmaceutical industry increased from Rs.632 lakhs to Rs.25471.21 lakhs. In period (1990-91 to 2009-10), the mean value of the depreciation at current price was Rs.31339 lakhs and the mean value of the depreciation at constant price in period (1990-91 to 2009-10) was Rs.14626.69 lakhs.

Fixed Capital of Pharmaceutical Industry in Tamil Nadu

The data on the fixed capital of pharmaceutical Industry in Tamil Nadu over the period 1980-81 to 2009-10 are given in Table No.1.7. For the convenience of analysis the 20 year periods.

Table No.1.7deflating Fixed Capital of Pharmaceutical Industry in Tamil Nadu During 1990-91 To 2009-10

Year	Fixed Capital	Depreciation	Machine Price Index	$K_T = \dfrac{K_0 D_o \, x2}{P_0} + \dfrac{E^T_{t-1} = (S_t + D_t) - (S_{t-1} + D_{t-1})}{P_t}$
1990-91	8345	632	100	-
1991-92	7988	1059	206.2	105481.13
1992-93	6086	1333	210.7	82041.65
1993-94	17106	1356	223.5	77055.93
1994-95	14726	1420	245.4	207558.66
1995-96	44780	3087	278.8	170398.13
1996-97	54011	4563	302.8	991684.27
1997-98	51158	3112	313.7	1627807.89
1998-99	413425	12492	148.8	1039982.03
1999-00	768901	60400	159.4	69417921.76
2000-01	575485	46673	167.9	582704166.6
2001-02	553252	47068	172.7	319947597.3
2002-03	572522	49643	183.1	301568910.7
2003-04	563900	56293	196.6	310448160.7
2004-05	529126	52190	214.6	322925787.4
2005-06	672386	60725	234.2	257363983.9
2006-07	576636	52795	263.5	348681415.6
2007-08	581342	54517	287.2	231070213.1
2008-09	670332	41645	294.5	220703752.5
2009-10	959619	75777	297.5	1895819764

Source: Annual Survey of Industries.

Table No.1.1.7 shows that fixed capital at current price and constant price. Fixed capital at current price was Rs. 8345 lakhs in 1990-91 increased to Rs.959619 lakhs in 2009-10. It was an increase of four and half fold during the study period at current price level**.** Shows that fixed capital at constant price and at current price it was Rs.105484 lakhs in 1990-91 and Rs.1895819764 lakhs in 2009-10.

Total Emoluments of Pharmaceutical Industry in Tamil Nadu

The data on the total emoluments of pharmaceutical Industry in Tamil Nadu over the period 1980-81 to 2009-10 are given in Table No.1.8. For the convenience of analysis the 20 year periods.

Table No.1.8deflating The Total Emoluments Of Pharmaceutical Industry Intamil Nadu During 1990-1991 To 2009-10 (Rupees in lakhs)

Year	Total Emoluments	Consumer Price Index(Base year 1990-91)	Constant Price
1990-91	1993	100	1993
1991-92	1961	219	895.43
1992-93	1568	240	653.33
1993-94	3701	258	1434.49
1994-95	3157	284	1111.61
1995-96	5635	313	1800.31
1996-97	6591	342	1927.19
1997-98	4099	366	1119.94
1998-99	42368	414	10233.81
1999-00	72376	428	16910.28
2000-01	54310	444	12231.98
2001-02	58809	463	12701.72
2002-03	58309	482	12097.30
2003-04	63092	500	12618.4
2004-05	65261	520	12550.19
2005-06	77320	542	14265.68
2006-07	75274	579	13000.69
2007-08	79924	133	60093.23
2008-09	79800	580	13758.62
2009-10	80210	570	14071.92

Source: Annual Survey of Industries.

Table No.1.8 shows that total emoluments at current price and constant price. A total emolument at current price was Rs. 1993 lakhs in 1990-91 and Rs. 80210 lakhs in 2009-10. It was an increase of more than seven fold during the study period at current price level. When as it was only three and half fold increase at constant price level.

Table No.1.9total Emoluments Of Pharmaceutical Industry In Tamil Nadu During1990-91 To 2009-10 At Current And Constant Price Level (Base Year 1990-91)

Year	Current Price Level	Percentage Change Over Previous Year	Constant Price(Base Year1990-91)	Percentage Change Over the Previous Year
1990-91	1993	-	1993	-
1991-92	1961	-1.60	895.43	-55.07

1992-93	1568	-20.04	653.33	-27.03
1993-94	3701	136.03	1434.49	119.56
1994-95	3157	-14.69	1111.61	-22.50
1995-96	5635	78.49	1800.31	61.95
1996-97	6591	16.96	1927.19	7.04
1997-98	4099	-37.80	1119.94	-41.88
1998-99	42368	933.61	10233.81	813.78
1999-00	72376	70.82	16910.28	65.23
2000-01	54310	-24.96	12231.98	-27.66
2001-02	58809	8.2	12701.72	3.84
2002-03	58309	-0.85	12097.30	-4.75
2003-04	63092	8.20	12618.4	4.30
2004-05	65261	3.43	12550.19	-0.54
2005-06	77320	18.47	14265.68	13.66
2006-07	75274	-2.64	13000.69	-8.86
2007-08	79924	6.17	60093.23	362.23
2008-09	79800	-0.15	13758.62	-77.10
2009-10	80210	0.51	14071.92	2.27
Mean	**41787.9**		**10773.45**	

Source: Annual Survey of Industries.

Table No.1.9 reveals that total emoluments at constant price and current price total emoluments at current it was Rs.1993 lakhs in 1990-91 increased to Rs. 80210 lakhs in 2009-10.It was an increase of three fold during the study period at current price level. It was an increase of nearly fivefold at constant price level. During the study period 1990-91 to 2009-10. It was Rs.1993 lakhs and increase to Rs.14071.92lakhs at constant price. The mean value of the total emoluments at current price in period I was 41787.9 lakhs and it was Rs. 10773.45 lakhs in the constant price.

Value of Output of Pharmaceutical Industry in Tamil Nadu

The data on the value of output of pharmaceutical Industry in Tamil Nadu over the period 1990-91 to 2009-10 are given in TABLE NO.1.10. For the convenience of analysis the 20 year periods.

Table No.1.10 Deflating the Value of Output of Pharmaceutical Industry in Tamil Nadu during 1990-91-2009-10 (Rupees in lakhs)

Year	Value of output	Whole sale price	Constant price value of output
1990-91	22590	100	22590
1991-92	25346	203.4	12461.16
1992-93	22150	225.6	9818.26
1993-94	48850	243.2	20086.34
1994-95	68440	100	68440
1995-96	82330	112.3	73312.55
1996-97	85030	121.9	69753.89
1997-98	55755	124.4	44819.13
1998-99	876856	128	685043.75
1999-00	1360662	133.6	1018459.58
2000-01	1069932	137.2	779833.81
2001-02	954153	141.7	673361.32
2002-03	955676	144.3	662284.13

2003-04	1120771	148.1	756766.37
2004-05	1223209	156.5	781603.19
2005-06	1473054	166.3	885781.11
2006-07	1343329	171.4	783739.20
2007-08	1176950	179	657513.96
2008-09	1158672	180.5	641923.54
2009-10	1253054	179	700030.16

Source: Annual Survey of Industries.

Table No.1.11 Value Of Output Of Pharmaceutical Industry In Tamil Nadu During1990-91 To 2009-10 At Current And Constant Price Level (Base Year 1990-91= 100) (Rupees In Lakhs)

Year	Current Price Level	Percentage Change Over Previous Year	Constant Price(Base Year1990-91)	Percentage Change Over the Previous Year
1990-91	22590	-	22590	-
1991-92	25346	12.20	12461.16	-44.88
1992-93	22150	-12.60	9818.26	-21.2091
1993-94	48850	120.54	20086.34	104.5815
1994-95	68440	40.10	68440	240.7291
1995-96	82330	20.29	73312.55	7.119448
1996-97	85030	3.27	69753.89	-4.85409
1997-98	55755	-34.42	44819.13	-35.7468
1998-99	876856	1472.69	685043.75	1428.463
1999-00	1360662	55.17	1018459.58	48.67074
2000-01	1069932	-21.36	779833.81	-23.4301
2001-02	954153	-10.82	673361.32	-13.6532
2002-03	955676	0.159	662284.13	-1.64506
2003-04	1120771	17.27	756766.37	14.26612
2004-05	1223209	9.13	781603.19	3.281967
2005-06	1473054	20.42	885781.11	13.32875
2006-07	1343329	-8.80	783739.20	-11.52
2007-08	1176950	-12.38	657513.96	-16.1055
2008-09	1158672	-1.55	641923.54	-2.37112
2009-10	1253054	8.14	700030.16	9.051953
Mean	**718840.45**			**267381.05**

Source: Annual Survey of Industries.

Table No.1.11 shows that value of output at current and constant price. The value of output at current price was Rs.22590 lakhs in 1990-91 and was Rs. 1253054 lakhs in 2009-10. It as an increase for the one and half fold during the study period at current price level. That value of output at constant price and it was Rs. 22590 lakhs in 1990-91 increased to Rs. 700030.16 lakhs in2009-10 an increase of nearly seven fold at constant price level. The mean value of the value of output at current price in period I was 718840.45 lakhs and it was Rs. 267381.05 lakhs in the constant price.

Table No.1.12linear Growth Rate Of Pharmaceutical Industry In Tamil Nadu During 1990-91 To 2009-10(Current Price Level) (Per Cent Per Annum)

Dependent	Mth	Rsq	d. f	B_0	B_1	F	Significant
Number Units “t” values	**Linear**	.833	17	1977.388 (37.9)	4.881 (4.3)	18.52	0.000
Gross value added ‘t’ Values	**Linear**	.860	17	1994.358 (19.72)	5.444.05 (6.73)	45.28	0.000
No of Employee ‘t’ Value	**Linear**	801	17	1996.526 (750.79)	1.319.04 (1.26)	20.38	0.001
Depreciation ‘t’ value	**Linear**	.823	17	1994.312 (17.20)	1.476.09 (5.79)	33.58	0.000

Source: Calculated by Researcher

In the estimation of the various linear trend models, the results show that the linear, models the Number factory, Gross value added, number of employee and Depreciation more than 80 per cent of the variations in the pharmaceutical industry. All the four models are found significant in terms of their respective values of ‘F’ statistic. The regression co-efficient of the four models are found significant except the co-efficient of ‘t’ variables in the linear model.

Productivity Analysis

In this study, the total factor productivity has been calculated by using Kendrick’s index only. Where ‘V’s the gross value added of two factors of production. ‘K’ s capital, ‘L’ labour and value added ‘P’ share of capital in gross value added.

$$TFP = \frac{V}{\alpha L + \beta k}$$

The rate of growth of the total factor productivity had been worked out to acquire the trends in pharmaceutical industry during the study period in Tamil Nadu level. Growth rates are computed by using simple linear regression model for different time periods such as period (1990-91 to 2009-10). All the value factors are deflected by 1990-91 base year of price index.

Table No.1.13 Analysis Of Total Factor Productivity By Using Kendrick Index(Rupees In Lakhs)

Year	No of Employment (L) (Figures in No)	Share of labour (α)	α(L) (Figures in No)	Gross fixed capital (K)	Share of capital (β)	β (k)
1990-91	84220	27.57	2321945	8345	-26.57	-221727
1991-92	76610	32.59	2496720	7988	-31.59	-252341
1992-93	79690	28.89	2302244	6086	-27.89	-169739
1993-94	104290	25.46	2655223	17106	-24.46	-418413
1994-95	93320	12.10	1129172	14726	-11.10	-163459

1995-96	110190	28.74	3166861	44780	-27.74	-1242197
1996-97	130340	25.99	3387537	54011	-24.99	-1349735
1997-98	90460	42.98	3887971	51158	-41.98	-2147613
1998-99	120837	4.65	561892.1	413425	-3.65	-1509001
1999-00	125793	2.86	359768	768901	-1.86	-1430156
2000-01	119460	3.88	463504.8	575485	-2.88	-1657397
2001-02	116921	3.58	418577.2	553252	-2.58	-1427390
2002-03	114629	3.78	433297.6	572522	-2.78	-1591611
2003-04	109490	3.65	399638.5	563900	-2.65	-1494335
2004-05	118210	3.88	458654.8	529126	-2.88	-1523883
2005-06	107781	3.41	367533.2	672386	-2.41	-1620450
2006-07	110770	3.62	400987.4	576636	-2.62	-1510786
2007-08	109286	3.54	386872.4	581342	-2.54	-1476609
2008-09	110720	3.69	408556.8	670332	-2.69	-1803193
2009-10	120861	4.42	534205.6	959619	-3.42	-3281897

Source: Calculated by Researcher

Table No.1.14 Analysis Of Total Factor Productivity By Using Kendrick Index

Year	α(L) (Figures in No)	β (k)	α(L)+ β (k)
1990-91	2321945	-221727	2100218
1991-92	2496720	-252341	2244379
1992-93	2302244	-169739	2132505
1993-94	2655223	-418413	2236810
1994-95	1129172	-163459	965713
1995-96	3166861	-1242197	1924664
1996-97	3387537	-1349735	2037802
1997-98	3887971	-2147613	1740358
1998-99	561892.1	-1509001	-9471089
1999-00	359768	-1430156	-1070388
2000-01	463504.8	-1657397	-1193893
2001-02	418577.2	-1427390	-1008812.8
2002-03	433297.6	-1591611	-1158313.4
2003-04	399638.5	-1494335	-1094696.5
2004-05	458654.8	-1523883	-1065228.1
2005-06	367533.2	-1620450	-1252917.1
2006-07	400987.4	-1510786	-1109798.9
2007-08	386872.4	-1476609	-1089736.2
2008-09	408556.8	-1803193	-1394636.3
2009-10	534205.6	-3281897	-2747691.4

Source: Calculated by Researcher

Table No.1.15trend In The Total Factor Productivity Of Pharmaceutical Industry In Tamil Nadu (Rupees In Lakhs)

Year	Total factor Productivity
1990-91	0.02
1991-92	0.02
1992-93	0.05
1993-94	0.04

1994-95	0.03
1995-96	0.08
1996-97	0.08
1997-98	0.10
1998-99	-0.02
1999-00	-1.93
2000-01	-0.17
2001-02	-0.20
2002-03	-0.19
2003-04	-0.21
2004-05	-0.23
2005-06	-0.21
2006-07	-0.24
2007-08	-0.25
2008-09	-0.21
2009-10	-012

Source: Calculated by Researcher

Labour Productivityanalysis

Labour productivity and capital productivity are the partial productivity measures. Gross value added per employee has been taken to measure labour productivity. Further, the gross value added per gross fixed capital has been taken to measure capital per employee has been applied to measure capital intensity. All the value factors were deflated for 1990-91 as the base year.

Table No.1.16trend In The Labour Productivity Of Pharmaceutical Industry In Tamil Nadu During 1990-91 To 2009-10 (Rupees In Lakhs)

Year	Labour Productivity
1990-91	0.65
1991-92	0.83
1992-93	0.56
1993-94	0.90
1994-95	0.40
1995-96	1.47
1996-97	1.31
1997-98	1.94
1998-99	1.63
1999-00	1.64
2000-01	1.76
2001-02	1.80
2002-03	1.92
2003-04	2.10
2004-05	2.14
2005-06	2.44
2006-07	2.46
2007-08	2.59
2008-09	2.65
2009-10	2.93

Source: Calculated by Researcher

Table No 1.16 reveals that the labour productivity of Tamil Nadu has increased from 0.65 lakhs in 1990-91 to Rs 2.93 lakhs in 2009-10 during the study period. The labour productivity is positive trend in pharmaceutical industry in tamil Nadu. The highest value 2.93 per cent in during the period 2009-10.

Capital Productivity

The gross value added per gross fixed capital is called capital productivity.

$$CP = \frac{GVA}{GFC}$$

Table No.1.17trend In The Capital Productivity Of Pharmaceutical Industry In Tamil Nadu During 1990-91 To 2009-10(Rupees In Lakhs)

Year	Capital Productivity
1990-91	0.52
1991-92	0.29
1992-93	0.24
1993-94	0.50
1994-95	0.18
1995-96	0.84
1996-97	0.14
1997-98	0.08
1998-99	0.14
1999-00	0.22
2000-01	0.26
2001-02	0.46
2002-03	0.50
2003-04	0.50
2004-05	0.50
2005-06	0.61
2006-07	0.45
2007-08	0.68
2008-09	0.73
2009-10	0.10

Source: Calculated by Researcher

Table no1.17 clearly illustrates the trends of capital productivity of pharmaceutical industry in Tamil Nadu. For the period from 1990-91 to 2009-10 capital productivity and pharmaceutical industry increased from Rs 0.52 lakhs in 1990-91 to Rs 0.10 lakhs in 2009-10 by making increase in the during the period.

Conclusion

From the forgoing summary and finding of the study, the following important conclusion has emerged. Pharmaceutical industry in Tamil Nadu is a capital intensive industry. Technological advancement happened in pharmaceutical industry in Tamil Nadu, it was not efficiently utilized by the pharmaceutical industry. The growth of total factor productivity was mainly because of growth in labour productivity. The performance of the total factor productivity and growth of total factor productivity. The pharmaceutical industry very useful the development of education and industry development there is need to strengthen research and development to increase the gross value added of pharmaceutical industry in Tamil Nadu.

Suggestion For Pharmaceutical Industry

To the pharmaceutical industry in Tamil Nadu

1. The industry shared enhances its technology through increase the capital than labour.
2. The capital should be used efficiency to increase the gross value added through efficient management.
3. The industry should increase the factor size through increase the number of factories.
4. The industry should increase the total emoluments than number of emoluments than number of employees.
5. The industry should increase the increase the depreciation.

Suggestion to the Government

- The factors that influence the productivity of pharmaceutical industry in Tamil Nadu. To improve the productivity, capital productivity, and labour productivity also increased in Tamil Nadu. The government should be framed separate policy introduced.
- Government should help to increase the capital requirement of pharmaceutical industry in Tamil Nadu.
- Government has to enhance research and development activities to increase the gross value added in pharmaceutical industry in Tamil Nadu.

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Dowry Methods: Causes and Remedies

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Preface:

In the case of Indian women, the dowry that is increasing day by day and taking the life of a woman is the dowry sacrifice. When the idea of giving was accepted by the society, then marriage of a woman is a gift. Therefore, adorned Kanyadan was the practice of Kanyadan with ornaments. Marriage was a must for her and her family. Keeping a marriageable bride in the house was considered a matter of public slander. Moreover, there is a constant fear that if this girl commits a sin or if someone takes advantage of her, the whole family will be ruined. From this point of view, woman is a burden to the house from birth. Because at the time of marriage, the groom, the groom's family had to give cash, gold, coins, gifts, etc. to the bridegroom's father. The practice was further supplemented by a non-religious basis and dowry was made compulsory for a woman to marry. Those who could not bear the burden of the girl child had to kill their daughter at birth. In other words, she was born a victim of atrocities against women due to dowry. In support of the dowry, the child's education expenses, expenses for his business, expenses for building a new world, expenses for his sister's wedding, the right to ask for a share in the daughter's father's property in the name of the daughter, Etc. The reasons are stated. The practice of dowry and bride price in Indian society is a problem that reaches its peak of inhumanity. The highest prevalence of dowry is in North India, Andhra Pradesh, Haryana, Maharashtra, Orissa and Rajasthan. In particular, many parents have to take out a loan to pay the dowry. People from the upper caste cause financial and mental problems to the bride and groom. In order to repay the loan, the girl's father has to live a life of hardship for the family under financial stress. Mental health in the family is destroyed. If the debt is not repaid then the house and land have to be lost. Either way, girls who feel that they are a burden to the householder, like their parents, run away from home holding someone's hand and commit suicide. Poor parents, regardless of their daughter's likes and dislikes, get married on a whim or old men. Employees are corrupt for the marriage of a girl in the workplace. Even if a girl is sexually harassed and abused in the workplace, the girl is allowed to work in that place to collect dowry money. If the dowry amount is not paid in full at the time of marriage, then the girls and their families have to face such difficulties as the marriage breakup, taking the bride back. If a girl learns, she will have to find a boy who is more educated, then she will have to pay more for them. Dowry system is one of the oldest undesirable practices in Hindu society. Although it is not possible to say exactly when this method was introduced, there is no doubt that it is very ancient. In the old days it was customary for the father of the bride to donate his daughter along with the cow at the time of marriage by choosing the right bride. The idea behind it was to provide for the family. This practice was later distorted and turned into a dowry-like practice. There is a definite relationship between the dowry system and the economic productivity of women.

Objective:

1) Explain the dowry methods
2) Understand the legal aspects of Hund method

Data analysis:

The nature of dowry has become a necessary vice. Due to the shameless practice of dowry, many innocent girls were killed. There were numerous suicides. The number of adult virgins increased. Many marriages broke up. Disasters befell the woman on many sides only because of the conundrum. The greed for money, general poverty, unemployment, limited area of choice of spouses, racial constraints, competition for a rich husband made Honda firmly entrenched in the society. Dowry is given as it is a socially accepted practice. But at the same time, she should bathe happily. But after the actual marriage, some girls have to face some problems in the husband's house. Whether her father-in-law is rich or poor, educated or uneducated. She has to face these problems. Sometimes a fixed amount of dowry is not paid. Sometimes, the girl's father-in-law is greedy even after paying the amount fixed by the girl's family and getting respect. She is often played by Maher with demands like Amukan, Tamuk and so on. These demands increase with time. If these demands are not met, then Sune should be taunted, Maher should be rescued, which is very insulting to the girl. Some unfortunate women were even involved in a business by their father-in-law, in whose name her husband, Dira or father-in-law started the business. The woman is only a partner in name only. Now if the husband asks for signature, how can she say no? And then to get out of debt and not pay the check, but the husband, brother-in-law, father-in-law and the woman had to stand in the cage of the accused as a criminal in the name of the criminal, then the family would say in disguise, Set her free. " The end of this persecution is the dowry sacrifice. Dowry victim cases such as poisoning, throwing in a well, trapping are sometimes caused by electric shock. Sometimes she is beaten, unbearably insulted, starved, endless greed of her father-in-law's people and helplessness of Maher's people. She thinks that the only way to get rid of it is to commit suicide. This suicide is also a form of dowry. The Indian Penal Code was amended in 1986 to include 304B."If a woman dies within seven years of marriage in suspicious circumstances due to burns or other injuries and is proved to have been beaten or tortured by her husband or his relatives just before her death in connection with the demand for dowry, such death shall be deemed 'dowry victim'."

The number of dowry victims in India is as high as five thousand every year (Daily Sakal, 8 August 2011) Dr. According to Ram Ahuja's study on dowry, 70 per cent of dowry victims are in the age group of 21 to 24 years. The dowry rate is highest among middle class women. Even in higher castes, the rate of dowry is higher. These women are mentally, emotionally and socially mature. In this case, it is the mother-in-law who is in control of the house and her husband who is telling the truth. Before embracing actual death, a woman often has to face persecution, beatings, insults, and terror. Dowry practice is the mother of dowry problem. Dowry incidents occur in both rural and urban communities. But in rural areas, the proportion is much higher than in affluent areas. A survey shows that the proportion is much higher in the backward and undeveloped east than in the affluent western part of sugarcane in Sangli district. Both educated and uneducated women are oppressed. However, the proportion of educated, employed women in dowry is low. The majority of cases of dowry are found in the family together. Almost all the in-laws are against the dowry victim. The advice of second marriage was given by all, Deer or father-in-law forced the woman to have an immoral relationship with him, etc. But these things are considered the only reason for the dowry not to come forward.

Reasons for Dowry:

The following are some of the reasons why Honda has become so commonplace.

1) Patriarchal society: Like other atrocities against women, the Honda system is also responsible for the patriarchal society. As Indian society is patriarchal, men dominate women. Men have more rights than women. Therefore, the status of men is considered superior and the status of women is considered inferior. The hunda practice is indicative of the secondary status of women in society.

2) Reference to religiosity: In ancient times, it was believed that the father should give the bride's ornaments for salvation. At that time salvation was considered to be the ultimate goal of human life. Therefore, the practice of voluntarily giving Kanyada for the purpose of attaining salvation became common and the custom of giving something as a gift while giving Kanyada was created.

3) Traditional Rituals About Marriage: Dowry practice has become a tradition in accordance with the religion and over time it has become a compulsory tradition, so it is not uncommon for people to take dowry as it is customary to do so. But over time, the practice of dowry has become a serious problem.

4) Caste restrictions for mate selection: The rule that one should have a mate of one's own caste for marriage still exists today. Due to this rule, the scope of selection of spouses was limited. Therefore, the practice of dowry has been indirectly promoted.

5) Expecting a suitable groom: When marrying a girl, it is expected that the boy's side should be higher socially and economically than his family. In the marriage market, the richer the son, the higher the dowry.

6) The social prestige gained by the dowry: The false prestige gained by the dowry in the society has become another strong cause of the dowry practice. People proudly say that we gave so much dowry at our daughter's wedding and took dowry at our son's wedding. In other words, the dowry system was

strengthened to uplift one's reputation in the society.

7) The tendency to imitate the rich: A handful of rich people give and take dowry, it is possible for them. But even people with poor financial status try to imitate them. They also take out loans for this purpose, so the practice of dowry is increasing among the lower castes of the society.

8) Compensation: We got married by giving so much dowry in our daughter's wedding. In return, the bridegroom demands a dowry when marrying a child. Sometimes the child understands the right to get his compensation through dowry if he has spent so much for education and getting a job. Therefore, the practice of dowry is also increasing.

9) Expectation that the life of the girl should be happy: Most of the parents of all the girls think that their daughter should bathe happily. The girl gets a good place, she should not face any problem, her life should be happy.

The visible side effects of the dowry method are:

1. Suicide or dowry
2. Child murder
3. Odd marriage
4. Divorce
5. The practice of child marriage
6. Problems of adult virgins
7. Increase in immoral relationships
8. Making mental stress
9. Debt formation.
10. Promoting corruption and crime
11. Increased family conflict

Many of these side effects are due to dowry practices.

Dowry Problem Troubleshooting Plan:

Legal measures, as well as some preventive measures, are required to address the problem of dowry system or dowry victimization.

A) Dowry Prohibition Act

The Dowry Prohibition Act was enacted in 1961 with the continuous and comprehensive efforts of social activists, various women's organizations, plays, literature and newspapers to solve this problem. The Dowry Prohibition Bill was introduced in the Lok Sabha on 27 April 1956.

In short, the law made it a crime to give or take a dowry as well as to demand a dowry. The law was amended in 1984 and again in 1986. The provisions of this Act are as follows

1) This law was applied to all the states except Jammu and Kashmir.

2) Dowry is a non-bail leble offense under this Act.

3) Those who respond to taking and giving dowry are liable to imprisonment for five years and fine of Rs.15000 / -.

4) If a woman dies due to unnatural cause within seven years after marriage, the government will inquire whether the incident is due to dowry.

5) The guilty person will be sentenced to a minimum of seven years.

B) Dowry system or preventive measures against dowry problem:

1) Legal Aid: Government officials should sincerely take steps in this regard by removing the shortcomings in the prevailing law. For this, a separate section should be opened and it should be strictly investigated. If a government employee is found guilty of this crime, strict action should be taken by the office. If a married woman dies within a certain period of time, the law of judicial inquiry should be implemented honestly. If possible, it is important to conduct a confidential court inquiry, taking care of the girl's interests. Everyone should run to court without falling prey to dowry harassment, false prestige or family reputation.

2) Organizational Movement: There should be a large scale public protest against the family members who are harassing the bride. In Mumbai, Delhi, organizations of charitable activists have been formed for such women. That should be the case everywhere. Those who are sympathetic to the Honda issue should join this organization. Financial support should be given to these organizations. Also, if your neighbor is being harassed, report it to the police. The police should take note of the anonymous letters.

3) Public education: Dowry is a sin. People should be taught that you are a moral crime. Mahatma Gandhi used to say that only those who take dowry should be thrown in the sand. Government, events and newspapers as well as TV, radio and other media should be used effectively. Publicly appreciate the marriage of those who do not take dowry and those who do not.

4) Self-determination: A few years ago, young boys and girls took an oath not to take or give dowry. This should happen on a large scale everywhere. Lessons of self-determination should be given under the

leadership of those who have not taken or given dowry.

5) Promotion of inter-caste marriage: If inter-caste marriage is encouraged, the area of choice will be widened. This will reduce the width of the dowry.

6) Women's education and women's self-reliance: Women's education will increase women's self-reliance. As a result, they will be able to stand on their own two feet and men will have less of a sense of ownership over them. The woman is afraid that her husband will leave her. It is under the pressure that you have to live a life of abandonment. Her self-reliance will diminish. There is a feeling in the minds of such girls that they will not get married by giving dowry, that they can wait till they get a life partner according to their wishes.

7) Changes in values and expressions: Opposition to dowry can be a great success if there is a systematic change in values. A woman who has been harassed by her parents for her own marriage should not be introverted and expect a dowry from her child. It is important to treat the bride like a girl. A good place is only a place of good financial condition. I will give him my daughter, even if he has little financial strength. Such an attitude should be created. Unnecessary dowry for marriage should be torn apart. The newly educated youth should not be content with mere material pleasures. Taking or giving them a dowry should be considered as disgusting as adultery. In addition, Maher should give a helping hand to a girl who is being harassed for dowry or other reasons. If it becomes unbearable, she should bring a prostitute and seek redressal in the court. Divorce and remarriage should not be underestimated. A marital relationship should not be associated with a family that has persecuted a married woman for a dowry but has acquitted her through legal evasion.

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Practical Causes of Monopolies

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Abstract

Study reveals that in reality, there is not any example of a case wherein a monopoly was built solely by acquisition of key input resources by private firms. Because private firms cannot effectively acquire all available supply of any resource and thus create a barrier to entry for competitors. Even if it is attempted, either the surplus resource shall still be left for other potential entrants who shall innovate new methods and inputs, shifting away from the scarce and expensive input. For the cases like De Beer, where a monopoly was formed, was not by way of private market system, but through the intervention and support of government. In case of Alcoa also monopoly was natural due to its higher efficiency & productivity and lowest cost of production. It shows that control over key inputs by a firm does not lead to a long run sustainable and profitable monopoly.

Introduction:

It is observed in a market the complete control of the entire supply of goods or service in a certain area or market by a big company. Such firm that has complete ownership or control over the supply is called monopoly. Monopoly is defined as being the only one in a given market selling a specific product, or having exclusive control over certain thing. It is a condition in which a single company is the exclusive manufacturer of a product or provider of a service or controls an entire industry, thereby allowing the company to fix prices. This condition can arise by aggressive behaviour, legal privilege, agreement, inventions or patents. Even group of companies forming themselves in to cartel restricting new entrants is monopoly practice. According political economist J. S. Mill natural monopoly means the domination of a commercial market by only one supplier, worldwide or in a particular region.

Research Methodology:

This paper attempts to consider above mentioned possibilities in capitalist economy whether valid or not. Arguments given by liberal economists from Austrian school of thought are applied to this analysis. It also considers how these theoretical issues translate to reality. The study attempts to find out the real reasons behind operation of monopoly in the long run by companies. It is explained with the help of two case studies. Objectives of the study are-

1-To understand the meaning monopoly

2-To explain the case-1

3-To find out the reasons for De Beers monopoly

3-To explain the case-2

4-To find out the reasons for ALCOA monopoly

The study is based on secondary data collected from reference books, journals & articles.

Meaning of Monopoly:

In this study monopoly is referred as a case wherein a sole supplier exists in a market due to a barrier to entry in a market. Such barrier leaves no scope for entrants irrespective of their efficiency and profit potential. A monopoly arises when a firm is able to purchase and acquire sole ownership over a particular resource or input, in a particular region, which is vital for the commodity to be produced. Such ownership bars other firms from entry due to lack of supply of input in the domestic region. Acquiring the inputs from outside the domestic region entails high transportation costs, which affects the profitability of the competing firms. This method is often cited as a preventive step taken by wealthy firms to forbid entry by any new firms, and thus remove the potential risk of competition. The scarcity of supply of the input and the uneven distribution of the same are the root cause which makes this strategy possible. It is harmful for consumer welfare, as it can create artificial scarcity and thus inflates the market price.

Case-1: De Beers Diamond Cartel

The most commonly given example of this form of monopolisation is of De Beer diamond cartel, which was a monopolist of diamond supply in the global market. The De Beers Diamond Cartel that existed for longer than a century whose power and autonomy began to decrease only in the late 1990s, but it still maintained most of its influence nonetheless. It was headed by the De Beers consolidated mines company established in South Africa, under the ownership of Rothschild Bank of England in 1888. This company formed a cartel with the intention of acquiring sole ownership of the diamond found in South Africa. Before 1870, diamond reserves were found only in India and Brazil by 1870, diamond reserves were discovered in South Africa. Since it was one of the extremely rare reserves on a global scale the De Beers company attempted to gain control of it by cartelisation to ultimately control the world supply of diamonds. Accordingly, in 1888, the De Beers cartel was formed by the mine owners and suppliers to control the fall in price of diamonds due to inflow of fresh supply. By the beginning of the 20th century, the cartel had a control over 90% of the world diamond supplies. By 1981, it was considered as the most successful cartel, managing to consistently maintain high prices regardless of the world economic conditions. De Beers having largest reserves of diamonds set up a Central Selling Organisation (CSO) at London. This CSO acted as a body to buy rough diamonds and sell them to cutters and dealers for distribution. It provided extremely lucrative terms, and thus drew other miners also to employ the services of the CSO, as a hub for exchange. By this, it succeeded in monopolising an entire segment of the supply chain & became a regulator of the supply of diamonds in the global market. It determined the supply to be released every year and marketed the same through CSO. By this, it managed to restrict the output in the market as well high prices.

Having understood the brief history and modus operandi of the cartel, the researcher explains the views of Austrian economists over this concept. The case of De Beers cartel was studied in depth by Rothbard which was published in the Austrian newsletter “The Free Market” in 1992. According to Austrian theory under a free market economy, a cartel would be unsustainable. The De Beers cartel was able to continue its existence over so many years because it was not functioning in a free market. To understand the source of monopoly power exercised by this cartel, it is essential that the source of ownership of the mines and the state of mining industry of South Africa be checked. South Africa is rich in diamond reserve endowments and thus is a major centre for the industry. Because of the importance of the industry to the National Income, the government denied access to the private sector and did not allow free market to function therein. Instead, the government levied strict rules by which all diamonds acquired from any of the mines or other reserves shall be legally deemed to be property of the state. This extended not only to the government controlled mines, but also to any diamonds acquired from private properties. Thus, the ownership of all the mines and the diamonds therein lay with the government. The mines were given to private miners under licenses for mining activities on lease. But the whole procedure for acquiring the licences was complicated with multiple regulatory and compliance hurdles. This reduced the number of firms willing to apply for licenses, thus decreasing the participants in the industry. Compared to these firms, the De Beers had high financial support with the backing of Rothschild. Given this situation, De Beers applied for and acquired a large number of mines under leasing agreements with the government. It also provided many lucrative offers to the other miners and drew cooperative agreements with them, thereby creating a stronghold. The cartel could have been controlled by allowing free competition in the newly discovered diamond mines of Russia, but the Russian government took ownership of the mines and instead of releasing the diamonds into the open market directly government entered into a deal with the cartel for supply of their diamonds. This further strengthened the position and influence of the cartel.

Causes Responsible for Monopoly of De Beers:

Rothbard states, that the De Beers cartel was thus formed and strengthened by the government actions. Given the extent of the cartel and the duration of its existence, it was believed that successful cartels have foolproof price control. Even a cartel like De Beers can only influence the price to some degree. The ultimate market price is determined by demand and supply jointly. The cartel fell into a decline in the early 1990s, following the great recession of 1980 and the end of Angolan civil war. The recession of 1980s hit the global market demand for diamonds, forcing the cartel to cut prices in response. The conclusion of the Angolan civil war drastically reduced the political power available with the South African government. This damaged the imposed government ownership over the diamonds. The miners were also given free access to the Kwango River, which was a rich reserve of diamonds. Drought caused the river to dry up and gave ease of access to mine the diamonds. The political instability and chaos resulted in a removal of government restrictions and thus, diamond mining became a comparatively freer industry than before. This alone created an influx of more than 3000 prospectors and miners into the industry. The potential increase in supply of diamonds was a risk to the cartel. Thus, De Beers responded by forming a Diamond Trading Company (DTC), as a joint venture between De Beers and South African, Botswana and Namibian governments. This quasi-public company, controls up to 75% of the world supply of diamonds in value. Another body, the World Diamond Council (WDC), was established and empowered by the United Nations. This council set up a regulatory process called the Kimberly Process Certification Scheme. Under this scheme blood diamonds' supply was regulated by the WDC, and WDC was given the authority to determine which diamonds would be permitted to be supplied. Although the idea of the scheme seems effective, but WDC was comprised of major diamond producers and suppliers, members of various cartels like DeBeers, World Federation of Bourses, and others. Thus, these major producers were empowered by the UN to authorise the supplies of diamonds. The WDC thus catered to their self-interests more than the actual responsibility assigned by the UN. Study reveals that the cartel that monopolised diamonds was established by South African government's licensing, strengthened by Russian government's agreement and empowered to suppress competitors by the UN. Every single instance of threat to the cartel for free market was neutralised by government intervention. Therefore, the Austrian claims that exploitative monopolies arise due to direct & indirect government intervention in this case.

Case-2 Alcoa:

The case of Aluminium Company of America (Alcoa), which fell under the same accusation of monopolising all the ores of bauxite, is the second case to be considered. Bauxite ore is the base input for aluminium production. This case captures how efficiency may lead to monopoly, which is a socially desirable outcome for the market. The Alcoa was accused of attempting to monopolise the aluminium industry of America by taking over majority of bauxite ores in the country. It was charged for the same in 1945, on the reason that monopoly would be harmful for social welfare. The success of Alcoa began in the late 1800s, along with the growth in the aluminium industry. Aluminium a newly discovered material demanded better technology for its production than the existing one. This caused limited production and rise in its value. The future owner of Alcoa, one Mr. Charles Hall, discovered a method of electrolysis that provided an efficient, cost effective method for refining aluminium in 1888. This innovation was patented and the firm (Pittsburgh Reduction Company) began its production. This reduced cost of production was further when the firm commenced the generation of electric power supply at Niagara Falls for self-use. This allowed the firm to sell its output at extremely low prices with high profits. This unmatched efficiency & competitive edge raised the firm to its peak position. The output supply of aluminium also increased sufficiently to match with widespread application in common use.

The price of the ingots was $5 in 1887, before the setup of the Pittsburgh Reduction Company which happened in 1888. With Hall's method, the market output surged, due to which the market price slumped. Within a year of operation, the price had decreased to $3 in 1889, and by 1910, 38 cents & 1941 it was 15 cents. Given the efficiency of the firm, its market share inflated. These prices could not be matched by competing firms, which had far more inefficient and expensive production methods. The price cuts were not a result of practising Predatory pricing by company, but instead, caused by innovation and technological efficiency. The manufacturing process employed by the firm consisted of two distinct processes, of which, one was patented by Alcoa in 1889 and the other patented by another company owner in 1910 and thus held the sole rights of employing the production procedure by way of patents.

Viewing under the Austrian lens, it was a mere adjustment of competition across the efficiency differentials among the firms. The entry to the market itself was not restricted to anyone, but the potential entrants faced difficulties in entering, due to being unable to match the efficiency of the firm. The difference in productivity and cost of production could not be covered by them. Many who owned bauxite deposits, sold off at the factor market at the time of exit, which increased the supply reducing the price. Due to strong competition, unmatched low prices and effective marketing techniques of Alcoa, few other entrants left the industry. Thus, most of the excess inflow of bauxite deposits in the factor market was absorbed by Alcoa in an attempt to expand its operations. The company captured nearly $2/3^{rd}$ of the global market supply of aluminium & became a dominant supplier on global stage.

Causes Responsible for Monopoly of ALCOA:

The World War-I had forced many firms to suspend their operations temporarily, which further reduced the competitors in the industry. Other entrepreneurs like J.B. Duke, Ford Motor Company, and others, also sought entry opportunities with their heavy financial resources. However, no actual entry took place since the investors lacked confidence in successfully competing against the technologically endowed performance of Alcoa. The Alcoa further invested heavily in the research and development for new applications in aluminium. Aluminium having strong non-corrosive properties with potential of a substitute for many products, its demand increased tremendously. The Federal Trade Commission (FTC) conducted an investigation & submitted its report. The observations in the report by clearly revealed that Alcoa's monopoly in the scrap market was not a hostile takeover of the industry, but the outcome of natural competition. It states that a hostile attempt at monopolising the scrap market was impossible due to the scattered nature of the market. Report also shows no record that Alcoa had any monopoly over the bauxite ores or water power generation, as were alleged in the FTC enquiry. There was clear evidence of competition between Alcoa and foreign imports of aluminium ingots. Most evidences found Alcoa's monopoly were superficial or inadmissible. Thus, the FTC examination report disproved the notion of Alcoa being a monopoly. However, later appeals in a court overruled this judgement thereby creating a notion of monopoly. Ignoring the efficiency cause, the law instead criticised the firm and defended the inefficient firms.

This case depicts the failure of the competition law in not only recognising the welfare effects of an efficient firm, but also being disconnected from the very fundamental principles of economics. The market share of the firm, its ownership over ores was an allocation made by the market forces, towards optimality. So Alcoa was able to generate most value compared to other inefficient firms. Its dominance not only in US, but also in the world market is indicative of its efficiency & capabilities which managed to surpass the standards of even the international market. Thus, the law protected the inefficient and punished the efficient, in complete contravention of the market principles.

Conclusion

In reality, there is not any example of a case wherein a monopoly was built solely by acquisition of key input resources by private firms. Because private firms cannot effectively acquire all available supply of any resource and thus create a barrier to entry for competitors. Even if it is attempted, either the surplus resource shall still be left for other potential entrants who shall innovate new methods and inputs, shifting away from the scarce and expensive input. For the cases like De Beer, where a monopoly was formed, was not by way of private market system, but through the intervention and support of government. In case of Alcoa also monopoly was natural due to its higher efficiency & productivity and lowest cost of production. It shows that control over key inputs by a firm does not lead to a long run sustainable and profitable monopoly.

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Corporate governance models of India and UK -An Analysis

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Abstract
Efficient allocation of resource among various competing alternative is the crux of perfect competitive market. Efficiency in all sphere of business management is the essence for sustenance of competitive advantage of the organization. Organizations must strive to maintain competitive spirit without compromising the ethical principles. Corporate governance calls for ethical leadership from the people who create organizations. The corporate governance across the world emanates from United Kingdom which is the pioneer of corporate form of organization. United States of America too has a well-defined and structured corporate governance mechanism in place. Indian ethos on corporate governance stems from inbuilt culture. Blend of western and eastern concepts of corporate governance puts Indian experience in unique way. A well-defined system, structure and a proactive leadership makes corporate governance practice work. The present paper entitled corporate governance in India and UK an analysis is an attempt to analyse similarities and distinctions of corporate governance practices of these countries. The paper is based on secondary data and it bis explanatory and exploratory as well.
Key words: Corporate Governance, Indian ethos, efficiency, ethical leadership, culture, corporate leadership

Introduction

United Kingdom colonized many countries in the past. The colonization process had its pros and cons. It drained the local resources of its colonies to the advantage of colonial masters. On the other hand, UK also transferred better management skills to colonies. The knowledge dissemination and structured systems placed by colonial masters were adopted by its colonies. The legal system code of conduct and mercantile laws were adopted from British law by almost all those commonwealth (erstwhile British ruled) countries. United Kingdom is the pioneer of establishing systems and processes which led to standardization and coding. The systems pioneered by UK are still in vogue in many of the commonwealth countries of the world. The record keeping, governance process, methods, systems, procedures and policies are time tested and still are in high standards of credibility. The corporate governance is internally fathomed ideas and cultural heritage to the organization, which is capable of creating a long-term impact on working of the organization. It serves as yardstick and goal post for framing organizational polices. A well governed organization with utmost care for each and every nuance of routine and exceptional management require well placed corporate governance mechanism in place. Corporate governance is a set of relationships between a company’s management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. Good corporate governance should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and shareholders, and should facilitate effective monitoring, thereby encouraging firms to use recourses more efficiently[i]”

Corporate governance is well defined systems, structures and procedures through which company is directed and controlled. Various stakeholders’ interests in a corporate set up needs to be considered while designing and framing a well-balanced corporate governance model.

Literature Review

Kamal Kishore (2017)[ii] made a comparative study regarding the existence of independent directors in the Board in UK and India. Study revealed that the independent director’s style of working and its structure slightly differs between two countries. However, the practice almost similar in two countries

Pallak Bhandari (2018)[iii] made a comparative analysis of corporate governance experience of US and India for 13 elements. His results show a significant difference in corporate governance practice in India and Us between India and US due to cultural differences

Prthvijoy Das(2019)[iv] in his paper discussed about the implementation corporate governance practices based on various committee recommendations

Harish Kumar (2014)[v] made a comparative study between India and south Africa on Corporate Governance Practice based on 13 parameters . The study concluded that both Countries follow Anglo American model of corporate governance and the prevailing corporate governance environment is similar

Christopher Pass (2002)[vi] made an attempt to study the impact of Cadburry committee recommendations for corporate governance related to role of non-executive directors. The study was based on 51leading FTSE companies of UK. He concluded that The committee recommendations were implemented by these companies albeit its effectiveness is questioned

Ghaeli(2018)[vii]

Sunaina Kanojia and Gunjan Khanna (2019)[viii] studied the effectiveness women participation in board and its impact on corporate governance

Objectives of the study

To compare the following between India and United Kingdom

1. Legal framework and Regulatory Agencies
2. Gender sensitivity
3. Agency problems

Corporate governance and best practices are adopted by various governments across the globe in order to enhance the credibility of corporate form of governance, to restore investors' confidence and to prevent corruption and other fraudulent deals of the people who run the organization. After unearthing fraudulent deals that includes insider trading, conflict of interest, selective leaking of unpublished price sensitive information, insider trading, taking huge sum of compensation package detrimental to the interest of the retail investors etc. are the practices which inhibits corporate governance. Various governments formed the committees in order to enhance the credibility of corporate governance practices so as to protect investors interest. In UK Cadburry Committee (1992) , Green Burry report 1998 and Hempel committee report of 1998 were the three leading committee's with the terms of reference to recommended better corporate governance practices and code of best practice In India Confederation of Indian Industries (1998). Kumara Mangalam Birla Committee (2000) Nareshcahandra Committee 2002, NR Narayana Murthy Committee (2003) JJ Irani's committee (2005) gave sweeping recommendations in the arena of corporate governance The Sarbanes Oxley's act 2002 in US became landmark legislation to put in place strong regulative mechanism in ensuring ethical code of conduct in governance The suggestions of these committee on corporate governance are made based on prevailing corporate environment. The scandals created a bad image in structure of corporate governance. A feeling that the board members primacy of their interest over the interest of shareholders. The compensation level top management were too high

Keeping in view this the committee's recommended the following

Transparency: Accurate adequate and timely information about operating efficiency of the corporate, proper dissemination of accounting information to the general public in the prescribed format As the ultimate responsibility of auditing is management. The management has to ensure that the audit committee should have more of executive directors and independent directors with fair knowledge on reading and understanding profit and loss account and balance sheets Recommendations on cap on the remuneration of directors and meeting procedures were displayed

Legal Framework

Corporate law

In India companies Act of 1956 was the solid piece of legislation that covered formation, management and governance of corporate form of organization comprehensively. It was replaced with companies act of 2013 to adopt the current trends in corporate set up. Besides this India has a very good corporate governance eco system.

Industrial revolution originated in UK and its offshoot was a system of pooling collective capital known as joint stock or corporate form of organization. Joint stock Companies Act 1856 is considered the pioneering modern law on corporate form of organization. Companies Act 1948 and companies Act of 2006 are the major piece of legislation dealing with corporate set up.

Standardization in reporting system:

Transparency in reporting financial performance of the organization forms the basis for investment decisions. Financial reporting in a fair and transparent and standardized manner is important. In India though reporting part is covered under company's act 2013,other aspects like regulating markets, infusing the liquidity and investors grievance handling are supporting services. The agency which controls these roles is Securities and Exchange Board of India SEBI. SEBI ,Reserve bank of India and Institute of Charted Accountants of India plays its role measurement and reporting of qualitative as quantitative aspects of financial performance of companies in India

In UK the major accounting body which issues standards and enforce professional code of conduct for accounting practices is Institute of Charted accountants of England and Wales (ICAEW) Financial Services Authority (FSA). Bank of England too plays its role as overall apex body of controlling Monetary system of the country Indian and UK system of reporting and structure of organizations and methods of standardization is almost the same

Gender sensitivity

One of the major issues of the globe is to ensure equal opportunities to both men and women in work force. By and large men outnumber women in corporate work force though their population almost 50% of total population. women in leadership position important factor in financial performances. The companies Act of 2013 has mandated to have women in board in certain class of companies, which is a welcome step. The participation of women in leadership role is depending upon cultural context. In India women's participation in the helm of affairs of company is minimal. The legal back up might help in bolstering the percentage of women participation. At least one women director in a listed company

Several studies showed a positive correlation between better corporate governance and role of women in leadership position

Agency Problem: The corporate form of organization is theoretically owned by a large pool of shareholders spread across wide geographical area. However, the executing company's programs and policies rests with paid executive directors. The remuneration and perks of the directors in corporate world increasingly at higher rate at times detrimental to the interests of majority of shareholders. The trend of executives acting their narrow self-interest against the companies stated goal is technically termed as agency problem

Various committees on corporate governance in India and UK came out with stringent corporate governances' codes to curb this practice. It suggested the requirements of Non-Executive Director who are not in any way related to the company directly and who brings in their domain expertise and are the persons of proven track record in the field of corporate governance. It also mandates to have independent directors in the board. Further Corporate governance code stipulates audit committees and remuneration committees with exclusive membership of non-executive directors and Independent Directors Corporate governance is well defined systems, structures and procedures through which company is directed and controlled. Various stakeholders' interests in a corporate set up needs to be considered while designing and framing a well-balanced corporate governance model.

Conclusion:

From the above analysis it is clear that corporate governance practices followed in India and UK are almost similar. The UK precedes in setting precedents in corporate governance practices. The laws procedures and codes of corporate governance of UK and are at par with best practices of the world. However, the corporate governance codes in both countries came as reactive step to arrest further scandals and scams .

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Crypto currency –an analysis

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Abstract

A **cryptocurrency**, **crypto-currency**, or **crypto** is a digital currency designed to work as a medium of exchange through a computer network that is not reliant on any central authority, such as a government or bank, to uphold or maintain it. Individual coin ownership records are stored in a digital ledger, which is a computerized database using strong cryptography to secure transaction records, to control the creation of additional coins, and to verify the transfer of coin ownership. Despite their name, cryptocurrencies are not necessarily considered to be currencies in the traditional sense and while varying categorical treatments have been applied to them, including classification as commodities, securities, as well as currencies, cryptocurrencies are generally viewed as a distinct asset class in practice. Criptocurrencies are traded through traditional brokers and crypto currency exchanges. Cryptocurrency does not exist in physical form (like paper money) and is typically not issued by a central authority. A cryptocurrency is a tradable digital asset or digital form of money, built on blockchain technology that only exists online. Cryptocurrencies use encryption to authenticate and protect transactions, hence their name. There are currently over a thousand different cryptocurrencies in the world, and their supporters see them as the key to a fairer future economy.
Bitcoin, first released as open-source software in 2009, is the first decentralized cryptocurrency. Since the release of bitcoin, many other cryptocurrencies have been created,
such as Ethereum, Ripple, Ethereum etc.In this paper an attempt is made on general understanding of cryptocurrencies, how to trade on it and on taxation rules.

Key words: crypto currency, digital leader, traditional brokers block chain technology,Bitcoin,Ribble.

Meaning of cryptocurrency

Crypto currency is a form of currency that exists digitally or virtually and uses cryptography to secure transactions. It does not have any central issuing or regulating agencies like Rupee which is regulated by RBI, instead it uses decentralized system to record transactions and issue new units. Cripto-currency does not rely on banks to verify transactions. Instead of being physical money carried around and exchanged in the real world, crypto currency payments exist purely as digital entries to an online database describing specific transactions It is stored in digital wallets. Crypto currency received its name because it uses encryption to verify transactions.

Origin of crypto currency: More than 1500 crypto currencies are traded virtually in the world. Origin of crypto currency dates back to 2009 when Bitcoin was introduced. Some of the best examples include the following

1. Bitcoin:

Founded in 2009, Bitcoin was the first cryptocurrency and is still the most commonly traded. The currency was developed by Satoshi Nakamoto – widely believed to be a pseudonym for an individual or group of people whose precise identity remains unknown.

2 **Ethereum:**

Developed in 2015, Ethereum is a blockchain platform with its own cryptocurrency, called Ether (ETH) or Ethereum. It is the most popular cryptocurrency after Bitcoin.

3 Litecoin:

This currency is most similar to bitcoin but has moved more quickly to develop new innovations, including faster payments and processes to allow more transactions.

4 Ripple:

Ripple is a distributed ledger system that was founded in 2012. Ripple can be used to track different kinds of transactions, not just cryptocurrency. The company behind it has worked with various banks and financial institutions.

Non-Bitcoin cryptocurrencies are collectively known as “altcoins” to distinguish them from the original.

How to buy cryptocurrency

The three steps to be followed to buy crypto currency is given below

Step 1: Choosing a platform

The first step is deciding which platform to use. Generally, we can choose between a traditional broker or crypto-currency exchanges.

- **Traditional brokers**. These are online brokers who offer ways to buy and sell cryptocurrency, as well as other financial assets like stocks, bonds, and Electronic fund transfers. These platforms tend to offer lower trading costs but fewer crypto features. Traditional brokers have the advantage of offering a wide selection of investible securities Robbinhood ,interactive brokersWebull,TradeStation,Binance.US, Coinbase,eToro,Kraken,CharlesSchwab,TD Ameritrade are best examples .
- **Cryptocurrency exchanges**. There are many cryptocurrency exchanges to choose from, each offering different cryptocurrencies, wallet storage, interest-bearing account options, and more. Many exchanges charge asset-based fees .Gemini, GDAX ,Kraken Squares Cash App etc are examples.

When comparing different platforms, consider which cryptocurrencies are on offer, what fees they charge, their security features, storage and withdrawal options, and any educational resources.

Step 2: Funding our account

Once we have chosen our platform, the next step is to fund our account so that we can begin trading. Most crypto exchanges allow users to purchase crypto using fiat (i.e., government-issued) currencies such as the US Dollar, the British Pound, or the Euro using their debit or credit cards – although this varies by platform.

Crypto purchases with credit cards are considered risky, and some exchanges don't support them. Some credit card companies don't allow crypto transactions either. This is because cryptocurrencies are highly volatile, and it is not advisable to risk going into debt — or potentially paying high credit card transaction fees — for certain assets.

Some platforms will also accept ACH transfers and wire transfers. The accepted payment methods and time taken for deposits or withdrawals differ per platform. Equally, the time taken for deposits to clear varies by payment method.

An important factor to consider is fees. These include potential deposit and withdrawal transaction fees plus trading fees. Fees will vary by payment method and platform, which is something to research at the outset.

Step 3: Placing an order

We can place an order via our broker's or exchange's web or mobile platform. If we are planning to buy cryptocurrencies, we can do so it by selecting "buy," choosing the order type, entering the amount of cryptocurrencies we want to purchase, and confirming the order. The same process applies to "sell" orders.

There are also other ways to invest in crypto. These include payment services like PayPal, Cash App, and Venmo, which allow users to buy, sell, or hold cryptocurrencies. In addition, there are the following investment vehicles:

- Bitcoin trusts: We can buy shares of Bitcoin trusts with a regular brokerage account. These vehicles give retail investors exposure to crypto through the stock market.
- Bitcoin mutual funds: There are Bitcoin ETFs and Bitcoin mutual funds to choose from.
- Blockchain stocks or ETFs: We can also indirectly invest in crypto through blockchain companies that specialize in the technology behind crypto and crypto transactions. Alternatively, the investor can buy stocks or ETFs of companies that use blockchain technology.

The best option for us will depend on our investment goals and risk appetite.

How to store cryptocurrency

Once we have purchased cryptocurrency, we need to store it safely to protect it from hacks or theft. Usually, cryptocurrency is stored in crypto wallets, which are physical devices or online software used to store the private keys to our cryptocurrencies securely. Some exchanges provide wallet services, making it easy for us to store directly through the platform. However, not all exchanges or brokers automatically provide wallet services for us..

There are different wallet providers to choose from. The terms "hot wallet" and "cold wallet" are used:

- **Hot wallet storage**: "hot wallets" refer to crypto storage that uses online software to protect the private keys to our assets.
- **Cold wallet storage**: Unlike hot wallets, cold wallets (also known as hardware wallets) rely on offline electronic devices to securely store our private keys.

Typically, cold wallets tend to charge fees, while hot wallets don't.

What can we buy with cryptocurrency?

When it was first launched, Bitcoin was intended to be a medium for daily transactions, making it possible to buy everything from a cup of coffee to a computer or even big-ticket items like real estate. That hasn't quite materialized and, while the number of institutions accepting cryptocurrencies is growing, large transactions involving it are rare. Even so, it is possible to buy a wide variety of products from e-commerce websites using crypto. Here are some examples:

Technology and e-commerce sites:

Several companies that sell tech products accept crypto on their websites, such as newegg.com, AT&T, and Microsoft. Overstock, an e-commerce platform, was among the first sites to accept Bitcoin. Shopify, Rakuten, and Home Depot also accept it.

Luxury goods:

Some luxury retailers accept crypto as a form of payment. For example, online luxury retailer Bitdials offers Rolex, Patek Philippe, and other high-end watches in return for Bitcoin.

Cars:

Some car dealers – from mass-market brands to high-end luxury dealers – already accept cryptocurrency as payment.

Insurance:

In April 2021, Swiss insurer AXA announced that it had begun accepting Bitcoin as a mode of payment for all its lines of insurance except life insurance (due to regulatory issues). Premier Shield Insurance, which sells home and auto insurance policies in the US, also accepts Bitcoin for premium payments.If we want to spend cryptocurrency at a retailer that doesn't accept it directly, you can use a cryptocurrency debit card, such as BitPay in the US.

Cryptocurrency fraud and cryptocurrency scams

Unfortunately, cryptocurrency crime is on the rise. Cryptocurrency scams include:

Fake websites: Bogus sites which feature fake testimonials and crypto jargon promising massive, guaranteed returns, provided you keep investing.

Virtual Ponzi schemes: Cryptocurrency criminals promote non-existent opportunities to invest in digital currencies and create the illusion of huge returns by paying off old investors with new investors' money. One scam operation, BitClub Network, raised more than $700 million before its perpetrators were indicted in December 2019.

"**Celebrity" endorsements**: Scammers pose online as billionaires or well-known names who promise to multiply your investment in a virtual currency but instead steal what you send. They may also use messaging apps or chat rooms to start rumours that a famous businessperson is backing a specific cryptocurrency. Once they have encouraged investors to buy and driven up the price, the scammers sell their stake, and the currency reduces in value.

Romance scams: The FBI warns of a trend in online dating scams, where tricksters persuade people they meet on dating apps or social media to invest or trade in virtual currencies. The FBI's Internet Crime Complaint Centre fielded more than 1,800 reports of crypto-focused romance scams in the first seven months of 2021, with losses reaching $133 million.

Otherwise, fraudsters may pose as legitimate virtual currency traders or set up bogus exchanges to trick people into giving them money. Another crypto scam involves fraudulent sales pitches for individual retirement accounts in cryptocurrencies. Then there is straightforward cryptocurrency hacking, where criminals break into the digital wallets where lpeople store their virtual currency to steal it.

Four tips to invest in cryptocurrency safely

According to Consumer Reports, all investments carry risk, but some experts consider cryptocurrency to be one of the riskier investment choices out there. If you are planning to invest in cryptocurrencies, these tips can help you make educated choices.

1.Research exchanges:

Before you invest, learn about cryptocurrency exchanges. It's estimated that there are over 500 exchanges to choose from. Do your research, read reviews, and talk with more experienced investors before moving forward.

2.Knowledge on how to store our digital currency:

If a person buy cryptocurrency, he has to store it. He can keep it on an exchange or in a digital wallet. While there are different kinds of wallets, each has its benefits, technical requirements, and security. As with exchanges, he should investigate his storage choices before investing.

3. **Diversify our investments**:

Diversification is key to any good investment strategy, and this holds true when we are investing in cryptocurrency. Don't put all money in Bitcoin, for example, just because that's the name you know. There are thousands of options, and it's better to spread your investment across several currencies.

4.Prepare for volatility:

The cryptocurrency market is highly volatile, so be prepared for ups and downs. You will see dramatic swings in prices. If your investment portfolio or mental wellbeing can't handle that, cryptocurrency might not be a wise choice for you.

Cryptocurrency is all the rage right now, but remember, it is still in its relative infancy and is considered highly speculative. Investing in something new comes with challenges, so be prepared. If you plan to participate, do your research, and invest conservatively to start.

One of the best ways you can stay safe online is by using a comprehensive antivirus. Kaspersky Internet Security defends you from malware infections, spyware, data theft and protects your online payments using bank-grade encryption.

Crypto taxation in India

So far, the Indian government has not yet granted any status of legal tender to cryptocurrencies In 2018, RBI tried to impose a ban by restricting banking facilities to the crypto exchanges. However, the ban was ruled out by the Supreme Court on constitutional grounds and virtual exchanges fundamental rights. The income tax department has not yet offered any clarification regarding the tax implications on the gains earned from the crypto currency

Is crypto a 'currency' or an 'asset'? Tax experts have been contemplating the classification of the cryptocurrency between 'currency' or an 'asset'. Cryptocurrency and crypto-assets are the names largely used interchangeably. However, classifying it as a 'currency' needs some legal backing from the government, in the absence of which it is safe to classify it as an 'asset/property'.

Since the cryptocurrency is not yet legalised by the Reserve Bank of India (RBI), it cannot escape from taxability. An investor earning profits from the sale of crypto-currency must pay tax.

All incomes, except exempted explicitly by the Income Tax Act, are subject to tax. Till we receive any clarification from the income tax department, investors must pay income tax on the crypto-transactions.

However, classifying it as a 'currency' needs some legal backing from the government, in the absence of which it is safe to classify it as an 'asset/property'.

How gains from sale of crypto-currency taxed?

1.If cripto currency is held for short period then the income from the sale of such currency is treated as business income.

2.If it is held as long term investment then it is treated as capital asset and tax rules of capital gains is applicable. If it is heid for not less than 3 years then gain on sale of such investment is treated as short term capital gain on the other hand if it is held for more than 3 years then gain on such transactions is treated as long-term capital gain. This point is cleared below:

As per the standard income tax rules, the gains on the crypto-transactions would become taxable as (i) Business income or (ii) Capital gains This classification will depend on the investors' intention and nature of these transactions.

If there are frequent trades and high volumes, gains from the cryptocurrency transactions will be taxed as 'business income'.

However, they will be taxed as 'capital gains' if the purpose of owning them is primarily to benefit from longer-term appreciation in value with fewer trades.

If the crypto-transactions are classified as 'investments', they will be considered capital gains or losses under the head 'capital gain'.

If the sale value of the transaction is more than the cost, it will be regarded as 'capital gain', and if the price is higher than the sale value, it will be considered 'capital losses'.

As per the applicable income tax slabs, short-term capital gains tax will be leviable if crypto assets are held for less than three years (<=36 months). If the crypto-assets are sold after holding the investment for three years (> 36 months), they will be treated as long-term investments and taxed at 20% with indexation benefit.

There is no directive from the income tax authorities regarding the treatment of capital losses. However, if your sale transaction has resulted in a loss, we suggest you consult an expert.

If crypto transactions are reported as business income, the implication of Goods and Services Tax (GST law) also needs to be examined. All the direct and indirect expenses will be allowed as deductions from the profits on the sale of the crypto assets. The profits will be added to the other income and taxed as per the income tax slab rates.

The taxable event for GST implication is the supply of goods or services or both. The concept of supply is an inclusive one, and it covers a large number of transactions.

'Services' is defined as anything other than goods, securities and money. It includes activities related to using money or its conversion by cash or any other mode for which a separate consideration is charged.

Considering the above definition, GST may become applicable on the buying and selling of cryptocurrencies as the supply of goods or services.

The Central Economic Intelligence Bureau (CEIB) has proposed categorising cryptocurrencies as intangible assets and applying GST on all the crypto transactions. Since the government has not yet defined its taxability and the proposal is under discussion, a general rate of 18% may likely become applicable going forward.

If your turnover has exceeded Rs 20 lakh, you may have to consider paying GST on your turnover; please get in touch with an expert on this matter.

Crypto-assets can also be reported as 'income from other sources' while filing ITR and taxed accordingly. Income from other sources is also added to the total income and taxable as per the applicable tax slab of the taxpayer.

Also, there are views to treat the income from crypto assets as 'speculation business income' and taxed as per the highest tax slab. However, till any clarification is received from the income tax department, the taxpayers can benefit from classifying it as capital gains or ordinary business income.

Even though no clarification has been received from the income tax department, it is essential to report the gains in the ITR and pay taxes on the gains.

Ministry of Corporate Affairs (MCA) mandatory compliance in disclosing gains and losses in virtual currencies. Also, the value of cryptocurrency as on the balance sheet date is to be reported. Accordingly, changes have been made in schedule III of the Companies Act starting from 1 April 2021. This mandate can be considered as the first move of the government towards regulating cryptocurrencies.

Union Budget 2022-23: Finance minister Nirmala Sitharaman on Tuesday announced a 30 per cent tax on the proceeds made on the transfer of virtual digital assets.

The gifts are to be taxed on the hands of the recipient, she said, adding that there will also be a 1 per cent tax deducted at source (TDS) on the payments made for the transfer of digital assets. It was also announced that any loss made on the transaction of such digital assets cannot be set off against any other gain.

Conclusion

Investments in cryptocurrencies have many advantages.,such as easy transactions,incredible security,short settlement times and low fees,greater scope for industrial growth,more private transactions,portfolio diversification of investments etc Eventhough there are advantages the investments in cryptocurrencies involve lot of online transactions.There may be the possibility og cybercrimes ,hacking of accounts**.** The overall system which manages the entire cryptocurrencies network is quite safe. Hackers cannot really enter these blockchain networks or take control of them. On the other hand, hackers can and do hack into individual accounts. A lot of the time, they use techniques such as phishing and social engineering. This means that instead of hacking into the system, they actually trick the investor and obtain the password voluntarily. Data theft is common amongst cryptocurrency investors. In the year 2020, the estimated value of data theft related to cryptocurrencies shot up to $2 billion. This number was the result of a 45% increase in the value of thefts as compared to the previous years. Since there is no centralized authority that facilitates cryptocurrency-based transactions, data thefts are common. Some fintech companies are trying to provide security solutions. However, those solutions will have to be implemented at the individual level and will have to be paid for individually.Again there may be the scope for entry of illegal money inside the country.So it has to be curbed ,so government of India charging tax @30%

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Attitude towards Environmental Conservation: A Study among Secondary School Students

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Abstract

Modern man has forgotten about nature in his incessant quest for comfort and sophistication. In their journey for wealth and dominance, nations have also ignored nature. It was only when severe destruction of the environment began to cause significant setbacks; the human world got prompted to show at least some compassion and consideration for nature. It is too late for man to realize that humankind will have to pay a heavy price if the exploitation of natural resources continues. However, it is appreciable that now many countries have started environmental conservation projects and programmes realizing the need of the hour. India is one of the major nations that give prominence to environmental protection through various measures. Formal education is an essential domain for developing a proper environmental attitude. The present study is an enquiry into the attitude towards environmental conservation among secondary school students in the Mayurbhanj district of Odisha. The investigator prepared the scale to measure the attitude towards environmental conservation of secondary school students, and the same got administered on a random sample of 200 students for the survey. The results show a neutral (neither favourable nor unfavourable) attitude towards environmental conservation among student in general, indicating the need to implement adequate environmental education in secondary schools.

Keywords: Environmental Attitudes, Environmental Education, Environmental Conservation, Environmental Protection, Secondary School Students.

INTRODUCTION

Perhaps the most fundamental menace to contemporary man is the collapse of his environment. Man thinks himself to be the master of nature and its resources and acts accordingly. The greedy and merciless man selfishly exploits nature for his vested interests. He vainly believes that he can transform his environment as he likes to any extent. But nature reacts to these brutalities of man done to his habitat. The destruction of the natural environment causes several disasters and maladies unknown to former generations. Prolonging a man's present lifestyle and culture will surely lead him to an irrevocable state of helplessness and danger. Different factors such as population growth, urbanization, industrialization and automation have detrimental effects on the environment. Deforestation, unscientific plastic and electronic waste management, and polluting the environment by emission of poisonous chemicals and gases lead to climatic changes, global warming, loss of biodiversity, and many other ill-effects. We are too late to address various environmental issues that threaten us. The conservation of nature and prevention of environmental degradation are crucial challenges for human beings. The dreadful conditions of life on earth have called for several international and national initiatives to address the environmental issues faced by humankind. World countries are aware of this serious issue. However, no one is genuine and sincere to implement stringent measures to protect and preserve our environment because of the difficulty in lessening or losing the presently enjoying amenities and luxuries. Knowingly or unknowingly, most people engage in various activities that harm the natural environment.

Attitude towards Environmental Conservation

Environmental conservation has to be a practice of safeguarding the planet earth to prevent it from collapsing due to human actions, such as deforestation, mining of natural resources, unscientific agriculture, burning fossil fuels, and dumping domestic, commercial, and industrial waste. It is "a careful preservation and protection of something especially planned management of a natural resource to prevent exploitation, destruction, or neglect" (Merriam-Webster, n.d.). Attitude is a psychological tendency of a person manifested in their behaviour. It is the predisposition or inclination to respond and react specifically towards an object, situation or idea, usually accompanied by feelings and emotions. Attitude towards environmental conservation can be defined as a learned predisposition to respond consistently favourably or unfavorably to protect the environment followed by corresponding behaviour. To improve the environmental condition, one should develop a positive attitude towards the environment. A person with a favourable and positive attitude towards environmental conservation will behave in such a manner to protect the environment; they will employ nature-friendly actions and behaviour such as adopting scientific methods for waste disposal, minimizing the use of fossil fuels and handling plastics by following the three R's, i.e. reduce, reuse, and recycle.

Several factors influence the attitude toward environmental conservation. Over-optimism towards technological development and the ease in handling consumer goods using plastics were the two major reasons for ignoring environmental issues among students (Chan, 1996). Pavalache-Ilie and Cazan (2018) observed that honesty, agreeableness, openness, proactive personality and pro-attitude towards environmental conservation predict environmental behaviour. Wray-Lake et al. (2010) noticed that the trends in adolescent attitude towards environmental savings, beliefs, and behaviours showed increases during the early 1990s but declines across the following three decades. However, in a recent study, Al-Rabaani and Al-Shuili (2020) found that Omani students possess adequate knowledge of environmental issues and a highly favourable attitude towards environmental protection, and they behave consistently with this knowledge and perspectives. Likewise, Nyberg et al. (2020) argue that in Sweden and France, teachers and student teachers possess a predominantly eco-centric attitude showing favorableness towards environmental conservation. But the Indian situation seems to be pathetic. It is shocking to note that in a study among college students in Karnataka, Ushashri and Tiwari (2021) found about 40% of students were not adequately aware of the environment and related issues and were unwilling to alter their current lifestyle for protecting the environment.

Ponmozhi and Krishnakumari (2017) emphasized the impact of school type as a moderate predictor of attitude towards environmental conservation, whereas Gökmen (2021) carried out a meta-analysis and highlighted gender differences in attitude towards the environment. Apace et al. (2017) noticed that women's attitude towards environmental conservation was higher than men's. Severin (2020) reported no significant difference in the attitude towards the environment based on locale. The inefficiency of traditional teaching in developing environmental concerns in students got highlighted by Gupta (2018) and suggested teaching facilitated through social media sites that inspire learners to think critically and engage in solving environmental issues.

NEED AND SIGNIFICANCE

Development is an inevitable process of the human world. Every nation tries to improve the socio-economic conditions of its citizenry. But the development process, especially when it is not sustainable, entails a certain degree of environmental degeneration. The consequences of development are more people, more buildings, more production units, more vehicles, and more exploitation of natural resources. The roads become overloaded with cars and people. Automobiles are primarily responsible for the increasing air pollution in cities. In the name of development, forests are devastated, directly affecting climate change. Tremendous overcrowding, noise and pollution of water, land, and air are the aftermath of all such actions.

Population explosion coupled with the mass movement of people from rural to urban areas has created multifarious environmental problems. Domestic and commercial wastes cause serious environmental problems. Also, the lack of an effective and efficient system of waste disposal leads to pollution of the environment. Uncovered wastes create a nuisance as they get dumped near the residential area. They also became the breeding ground for harmful organisms like flies, mosquitoes, worms, etc. The combustion of fossil fuels contaminates the air. All these cause outbursts of pandemics and deadly diseases. Tremendous overcrowding, noise and pollution of water, land, air are the aftermath of all such human activities. Regarding the amount of waste and the extent of harmfulness, the major source is industry. Industrial wastes cause soil and water pollution when stored in open ponds or tanks. Another category of pollutants are wastes generated from construction and destruction of buildings, roads, etc. These wastes are composed of discarded building materials of bricks, wood, stones, plastics, concrete, and metals. Generally, this sort of waste material is non-degradable and destroys the fertility of the soil.

Besides all, there is a need for human subsistence and developmental activities for natural resources. A significant amount of non-renewable resources gets utilized for various purposes. Hence the stock of such energy resources is in severe depletion.

Man is a part of vast nature. He has always been an inseparable part of the environment since his existence on earth. He is born from the earth, lives in the earth and dissolves in the earth. His physical body extracts necessary nutrients and other elements from this earth. The survival of human beings on earth resorts on a healthy environment and the availability of resources. So everybody must develop an attitude that creates love for nature and its protection. Education has to teach a man how to interact with the surrounding environment to conserve it.

In the present study, the investigator attempts to study the attitude of secondary school students towards environmental conservation. Individuals possessing a favourable attitude toward protecting nature and conservation of the environment seem to be cautious about the destruction of the environment through various means. Such people make serious efforts to prevent environmental pollution, attempt to refurbish the environment and preserve nature to save our planet earth from further deterioration.

The first step is to make an individual responsible and realize his responsibility towards the environment to maintain the environment in an appropriate and balanced way. In student life, the secondary level is the adolescent stage, in which students are highly impulsive to their inner and outer world. That is why they respond quickly to any change, and at this stage, their learning gets stabilized forever. It is the right time to inculcate environmental responsibility among them. It will be valuable to know the extent of students' attitudes toward environmental conservation and how they react to various environmental problems to initiate any step in this direction.

Statement of the Problem

The study examines the attitude of secondary school students in the Mayurbhanj district towards environmental conservation and is entitled **"**Attitude towards Environmental Conservation: A Study among Secondary School Students**."**

Objectives of the Study

The objectives of the present study are:

1. To study the attitude towards environmental conservation among secondary school students in Mayurbhanj district.
2. To compare the attitude towards environmental conservation of secondary school students based on gender.
3. To compare the attitude towards environmental conservation of secondary school students based on the locality of residence.
4. To compare the attitude towards environmental conservation of secondary school students based on academic achievement.

Methodology in Brief

The study adopted a survey method for its conduct. Students of all the secondary schools in the Mayurbhanj district of Odisha constitute the population. Two hundred students randomly selected from two rural schools and two urban schools constituted the sample for the present study. To gather data regarding students' attitudes towards environmental conservation, the investigator prepared a scale for measuring attitude towards environmental conservation based on certain relevant dimensions such as environmental pollution, deforestation, population explosion, hygiene and sanitation, and E-waste problems. The data obtained were studied with the help of descriptive and inferential statistics such as mean, standard deviation, t-test, and ANOVA.

Data Analysis And Discussion

1. Attitude towards Environmental Conservation among Secondary School Students

The scale employed for measuring attitude towards environmental conservation in this study consisted of 40 items written in the form of statements. The scoring was carried out by following the Likert's method. The analysis shows that the secondary school students of Mayurbhanj district possess neither favourable nor unfavourable attitude towards environmental conservation since their mean score (M = 123.88; SD = 13.76) is very close to 120, the middle score of the scale (40×3) which indicates a neutral attitude. Table 1 shows the categorization of secondary school students based on different degrees of attitude towards environmental conservation. Students possessing favourable attitude towards environmental conservation are taken as those who obtained scores greater than *M+SD*. Students having unfavourable attitude are those who obtained scores below *M-SD* and students having almost neutral attitude are those who obtained scores in between *M+SD* and *M-SD*.

Table 1

Number and Percentage of Secondary School Students Possessing Different Levels of Attitude towards Environmental Conservation

Unfavourable		**Neutral**		**Favourable**	
N	**%**	***N***	**%**	***N***	**%**
32	16.00	139	69.50	29	14.50

Apparently, 16.00% of students hold an unfavourable attitude towards environmental conservation, 14.50% hold a favourable attitude, and 69.50% of students hold a neutral, i.e. neither favourable nor unfavourable attitude towards environmental conservation.

2. Comparison of Attitude towards Environmental Conservation Based on Gender

The data and results of the independent sample *t*- test carried out to match the attitude towards environmental conservation of male students and that of female students are shown in table 2.

Table 2

Details of the Independent Sample t-Test for the Comparison of Attitude towards Environmental Conservation of Secondary School Students Based on Gender.

Category	***N***	***M***	***SD***	***T***
Female	100	127.65	13.22	3.918 (p = . 00012)
Male	100	120.11	13.98	

Table 2 shows that there is substantial difference between attitude towards environmental conservation of male students and that of female students, t = 3.918, p = .00012; female students (M = 127.65, SD = 13.22) possess high degree of favorableness towards environmental conservation when compared to male students (M = 120.11, SD = 13.98). The result indicates that gender of students is a factor that influences the attitude towards environmental conservation.

3. Comparison of Attitude towards Environmental Conservation Based on Locality of Residence

The findings from *t*-test carried out to compare the attitude towards environmental conservation of the subsample of students from rural areas and that of subsample from urban areas are shown in table 3.

Table 3

Details of the Independent Sample t-Test for the Comparison of Attitude towards Environmental Conservation of Secondary School Students Based on Locality of Residence.

Category	***N***	***M***	***SD***	***T***
Rural	92	121.23	13.43	2.509 (p = . 0128)
Urban	108	126.14	14.09	

Table 3 shows that there is significant difference (at .05 level) between attitude towards environmental conservation of rural students and that of urban students, t = 2.509, p = .0128; urban students (M = 126.14, SD = 14.09) possess high degree of favorableness towards environmental conservation when compared to rural students (M = 121.23, SD = 13.43). The result indicates that locality of residents of students is another factor that influences their attitude towards environmental conservation.

4. Comparison of Attitude towards Environmental Conservation Based on Academic Achievement

In order to compare the attitude of secondary school students with regard to their academic achievement, the students in the sample (*N*=200) were categorized in to above average (high achievers), average (medium achievers), and below average (low achievers). The total mark obtained by each student in the previous year final examination was collected from school records. These individual scores were then converted into *T* (standard) scores based on the class average and standard deviation. From the mean and standard deviation of all the *T* scores, the students were categorized in to above average (having *T* scores more than *M+SD*), average (having *T* scores between *M+SD* and *M-SD*), and below average (having *T* scores less than *M-SD*). Thus 56 students were categorized as low achievers; 110 as medium achievers; and 34 students were grouped as high achievers. The scores obtained by these groups for the attitude scale were subjected to ANOVA for comparison. The details are shown in table 4.

Table 4

Summary of Analysis of Variance for the Attitude Scores of Secondary School Students Based on level of Academic Achievement.

Source of Variance	**Sum of Squares**	***Df***	**Mean Square**	***F* Ratio**
Between Groups	3409.9567	2	1704.9783	1.5093 (p = .2236)
Within Groups	222538.3983	197	1129.6365	
Total	225948.355	199		

Table 4 shows that the *F* ratio obtained from ANOVA for the environmental conservation attitude scores of three groups of secondary school students (categorized based on level of academic achievement) is 1.5093 and is less than 3.04, the *F* critical value for .05 level of significance; hence the difference in means compared is not significant (p = .2236). Thus it may be assumed that the attitude towards environmental conservation among secondary school students does not differ significantly with respect to their level of academic achievement.

Conclusion

The findings of the study realize that the secondary school students of Mayurbhanj district possess neither favourable nor unfavourable attitude towards environmental conservation in general. However, gender and locale differences are noticed; female students show more favourable attitude than male students and urban students show more favourable attitude than rural students. High, medium, and low achievers hold similar attitude towards environmental conservation. Previous studies (Yapici et al., 2017; Gökmen, 2021) reported similar results concerning the gender difference; but the findings in the present study regarding influence of locality are contradictory to that reported in Severin (2020).

The results of the study indicate the immediate need of implementing programmes for inculcating environmental awareness among secondary school students so as to develop in them environmental friendly attitude. They must feel that conservation of environment is everybody's business and each one needs to attempt for protecting environment and nature. New generation should raise their voice against the cruelties against nature and over exploitation of natural resources. They have to be molded as advocates of sustainable development.

Scope And Delimitations Of The Study

The study under discussion attempts to assess the attitude towards environmental conservation among secondary school students belonging to the Mayurbhanj district. The study will highlight the present trend among adolescent students about the environment, its preservation and its protection. The present study's findings will help provide proper environmental education among the target population. The study will be helpful for secondary school teachers and all other stakeholders to provide guidelines to the students regarding environmental issues such as pollution and its ill effects, misuse of plastics, disposal of e-waste, etc.

The delimitations of the study are listed below:

1. The number of the sample is limited to 200 secondary school students.
2. The investigator prepared the scale for measuring attitude towards environmental conservation used in the study. The tool may not have broad applicability, and hence the study may not allow generalization to a great extent.

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Population Characterstics of Bihar- India

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Abstract:- The population growth means changes in total population it may be positive or negative with growth of population some aspects may change and these affect the health of society. These change in total population and its situation, on the basis we can predict the population of the future, with help of population projection. In short population distribution and growth are related each other's and therefore it is essential to study population density for better planning of facilities for society. From this point, the study of population distribution and growth is essential. The data was collected with sub themes like, male, female, rural and urban in population in rural as well as urban areas. The study reveals that rapid population growth has put several pressures on the land. Bihar registered a 10% incensement in the no. of women who were not using a family planning method. Education linkage, fertility decline among uneducated rural women in the state as well as country. Role of female education as a factor contributing to lower fertility, so the maintenance of a healthy environment increasingly becomes necessity.
Key Words:- Population, Growth, Density, Literacy, Population Projection

Introduction:-

Population could be a very valuable capital of any country amongst various resources available on the world, population itself is that the most vital resource. Man is that the creator, producer, and consumer of natural resources. Population of a given area plays a really vital role for any quite development of that specific area. Generally, population means all the inhabitant of a specific geographical region at a given time. The rapid climb of population is also appreciated from the actual fact that a bit but 2 million(20 lakh) person are added year, or about 17 lakh persons each month, or about 74 thousand persons very day, or about 52 persons ever minute. The disaster of population explosion in India is that each sixth person within the world population is an Indian. growth is that the increase within the no. ofindividuals within the population. the primary census was recorded in Bihar state at the time of British India rule out 1901 was 21.24 million people, by 1951 the population raised to 29 million within the first ever census conducted by independent India and seven.76 million was increased within the 50 years within the state of Bihar mostly within the British colonial rule. By the subsequent 50 years the Bihar population was almost tripled taking to 82 million as per the census conducted within the year of 2001. within the last census of 2011, the population is recorded as 104 million people increasing at rate of 25% from the last census. At the 2011 census Bihar was the 3rd most populous state of India with the full population of 104,099, 492 nearly 89% of rural. it had been also India's most densely populated state with 1106 person per square kilometre. The sex ratio was 918 females for 1000 male. Almost 58% of Bihar population was below 25-year age.

Methodology:-

Present study is completely based on Secondary Data pertaining to popular collected, from various census of Indian Publication and supplemented with field work. The present paper analysis the phenomenon of growth of population in State Bihar. For the study of population distribution and growth we have taken data from the census Handbook 2011. The analytical method has been used in this study.

Objective: The main objective of the paper is to outline:-

- It shows the variation in population density from 2001-2011.
- The position of population growth in present time and prospects in future in State Bihar.
- This study is found out the temporal and spatial pattern of sex ratio in Bihar.
- To explain the temporal and spatial pattern of literacy and trace out the level of literacy.
- It explains the Population Projection from 2011-2021.

Study Area:

Bihar is that the eastern state of India bordered by Nepal within the north, Jharkhand within the South, state within the West and Meghalaya on the east. the realm under study lies along the 24o 20' 10" north to 27o 3' 15" north latitude and 83o 19' 50" to 88°17'40" east longitude. it's the third largest state by population after Uttar Pradesh and Maharashtra. it's about 173 feet above the mean water level. It extends over a district of 94.163 square kilometre. the full state of the divided into 09division, 38 district, and 101 subdivisions for administrative purpose. In 2021 there have been 128864915 persons living in 38 districts in study area. Sex Ratio 919 females per every 1000 males and Literacy Rate 63.8% and increase rate is 25.07%.

Discussion & Analysis: - Firstly discussion the conceptual background of variation of population and then analyse distribution of population, sex ratio, literacy, density, growth of population, population projection of the study area.

Decadal Variation:- The decadal growth of population was about 1.52%. During 1921 the population of state Bihar was 21,358. The decadal growth was -0.97%. In 1931 the population of study area was 23,438. The decadal grow the between 1921-1931 was 9.74%. The population of Bihar during 1941 was 26,302. The decadal growth was 12.22. During 1951 the population of state Bihar was 29,085. And the decadal growth was 10.58%. In 1961, the population of state Bihar was 34,841. The decadal growth was 19.79%. The population of study area was 42.126 in 1971. The decadal growth was 20.91%, by 1981 the population of study area was 52,303. The decadal growth was 24.16%. During 1991 the population of state Bihar was 64,541. The decadal growth was 23.38%. The population of state Bihar in 2001 was 82,999. The decadal growth from 1991-2001 was 28.62%. The population of Bihar grew from 21,243 in 1901 to 82,999 in 2001. The growth was 2011 25.07% and population 104,099

Table No: 01, Estimated Population in Bihar

Most Populous Districts			Least Populous District		
District	Population (2011)	Population Estimated (2021)	District	Population (2011)	Population Estimated (2021)
Patna	*5838465*	*7207001*	**Sheikhpur**	*636342*	*785501*
Purbi Champaran	*5099371*	*6294664*	**Sheohar**	*656246*	*810070*
Muzzafarpur	*4801062*	*5926431*	**Arwal**	*700843*	*856121*
Madhubani	*4487379*	*5539221*	**Lakisarai**	*1000912*	*1235526*

Population growth is determined by four factors, Birth, Death, Immigration and Emigration, using formula expressed as P= B-D+1-E. the population growth of a period can be calculated in two parts, natural growth of population (B-D) and mechanical growth of population (I-E), mechanical growth of population is mainly affected by social factors.

Table No.02, Decadal Growth Rate in India & Bihar (During 1901-2011)

	INDIA		BIHAR	
Decadal	**Growth Rate**	**Variation**	**Growth Rate**	**Variation**
1901-11	*5.75*	-	*1.52*	-
1911-21	*-0.31*	*-6.06*	*-0.97*	*-2.49*
1921-31	*11.00*	*11.31*	*9.74*	*10.71*
1931-41	*14.22*	*3.22*	*12.22*	*2.45*
1941-51	*13.31*	*-0.91*	*10.58*	*-1.64*
1951-61	*21.64*	*8.33*	*19.79*	*9.11*
1961-71	*24.80*	*3.16*	*20.91*	*1.12*
1971-81	*24.66*	*-0.14*	*24.16*	*3.25*
1981-91	*23.86*	*-0.80*	*23.38*	*-0.78*
1991-2001	*21.54*	*-2.32*	*28.62*	*5.24*
2001-2011	*17.64*	*-3.90*	*25.07*	*-3.55*

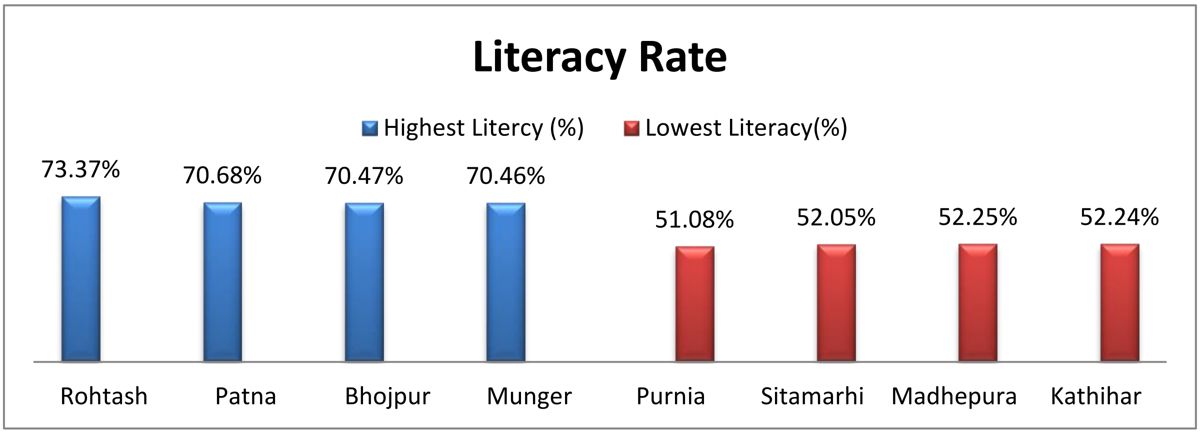
Causes of Rapid Growth:-

Following are the main cause of rapid growth of population.

1. High birth rate, low death rate.
2. Low age of marriage over 65% of the girls get married before 18 years of age at which they are not ready for marriage socially and motional.
3. High literacy- the over-all female literacy is low. Family planning has a direct link, with female education, general status of women, their fertility, and infant mortality.
4. Religious attitude towards family planning. The religious orthodox are against family planning.
5. Joint family system and lack of responsibility of younger couples.
6. Low per capital income and low standard of living.

Literacy:- Literacy is a very important quality of a population obviously only on informed and educated citizens can make intelligent choices and undertake research and development project . Literacy in an important indicator of socio-economic and cultural development of a country. Low levels of literacy are serious bstacles for economics improvement. The literacy rate male and female are 73.39% and 53.33 % respectively. The average literacy rate is 63.82 in study region, recording a growth of 20% in female literacy over the preceding decade.

Average literacy rate in Bihar for urban region was 76.86% in which makes 82.56% literacy while female literacy stood at 61.95%. Total literates in urban region 7,692,401. The study of decadal increase in literacy rate in Bihar reveals that though overall percentage growth in district is higher. It is lower in comparison of district of other state. On the other hand, in case of Bihar, with such a low



rural female literacy rate is very difficult to find adequate women voluntary teachers with makes literacy campaigns are the more difficult.

Bihar Population 2011:-

More than 10.41 crores people live within the 94.163 sq. km. area. Proportion on male and feminine population within the study region involves 54278157 and 49821295 respectively during 2011. The population has increased from 25.42% to 28.43% within the year 2011. In 2001 total population was 82,998,509 during which males were 432423795 while females were 39754714. the entire increment during this decade was 25.42%. The previous decade it had been 28.43%. The population of Bihar from 8.60% of India in 2011. In 2001 the figure was 8.07%

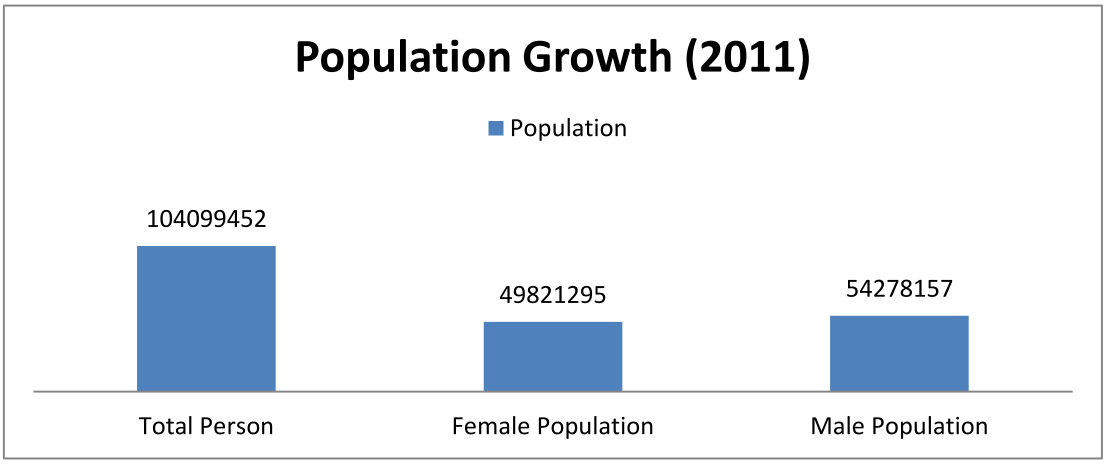
.**Table No: 03**

Highest Population Growth (2001-2011)

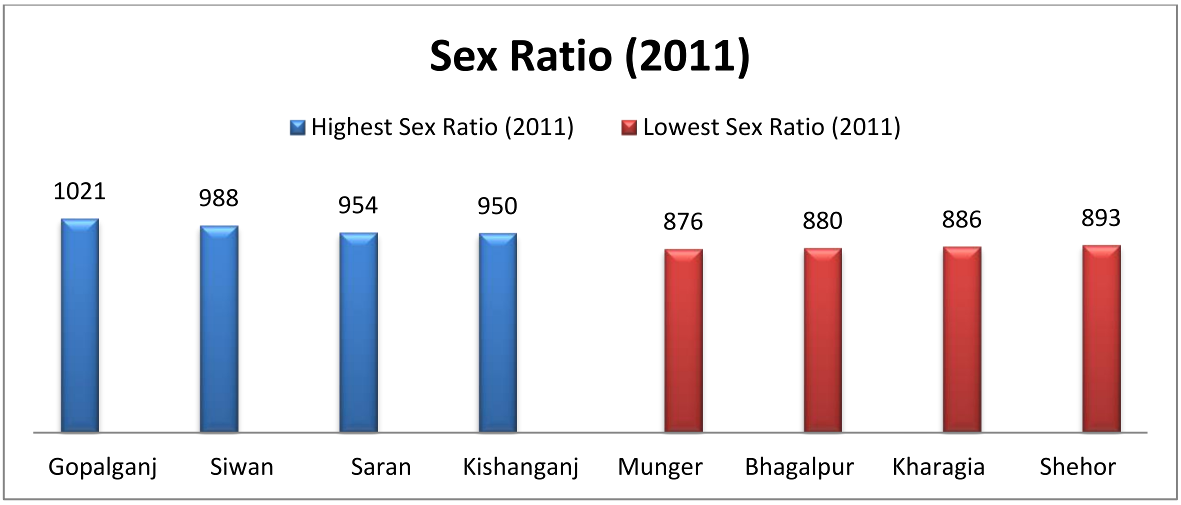
District	Population Growth (%)
Madhepura	*31.12*
Kishanganj	*30.40*
Araria	*30.25*
Kahagaria	*30.19*
Purbi Champaran	*29.43*

Bihar population in 2020/2021 is 119, 461, 013 (119.46 million) as compared to last census 2011 is 104,099,452. Growth rate of 14.76% of population increased from year 2011 in Bihar till 2018.

Sex Ratio:- Sex Ratio or sex component i.e. numbers if female per 1000 males is an important rather

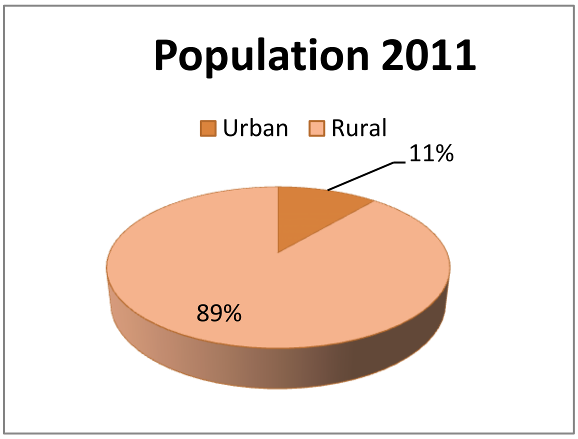


essential parameter in the demographic of the study area. In India, the cities have more male in comparison to females, as a consequence of which the sex ration in the Indian cities is forms to be low. The rush of rural population to be urban centres causes an increase in the urban settlement on one hand and a decrease in the overall proportion males to females on the others. Sex ratio also affects other demographic elements like growth of population, marriage rate, occupational, structure etc. The knowledge of sex ratio is essential for understanding the employment and consumption, pattern and social needs. The average sex ratio of Bihar is 918 while the national average is 943 in 2011. In urban regions of Bihar were 895 females per 1000 males. For child (0-6) sex ratio the figure for urban region stood at 912 girls per 1000 boys. Total children (0-6 age) living in urban areas of Bihar were 1,750,263 of total population in urban region 14.89% we're children (0-6).



Rural & Urban Population:-

Total, Rural and Urban population of Bihar state respectively stand at 103.8 million, 92.07 million and 11.73 million in 2011 whereas in 2001 census there was 83.00 million (total)., 74.32 million rural and 8.68 million urban. It means, there are increase if 20.8 million in total, 17.75 million in rural and 3.05 million in urban population of study area over 2001 census. These constitute 25.07%, 22.90% and 35.11% growth in total, rural and urban population respectively. The population divides into rural and urban region as 92.07% and 11.73%. The male and female population are Rural 1032273 and urban 112850 and female rural 968847 urban 102683



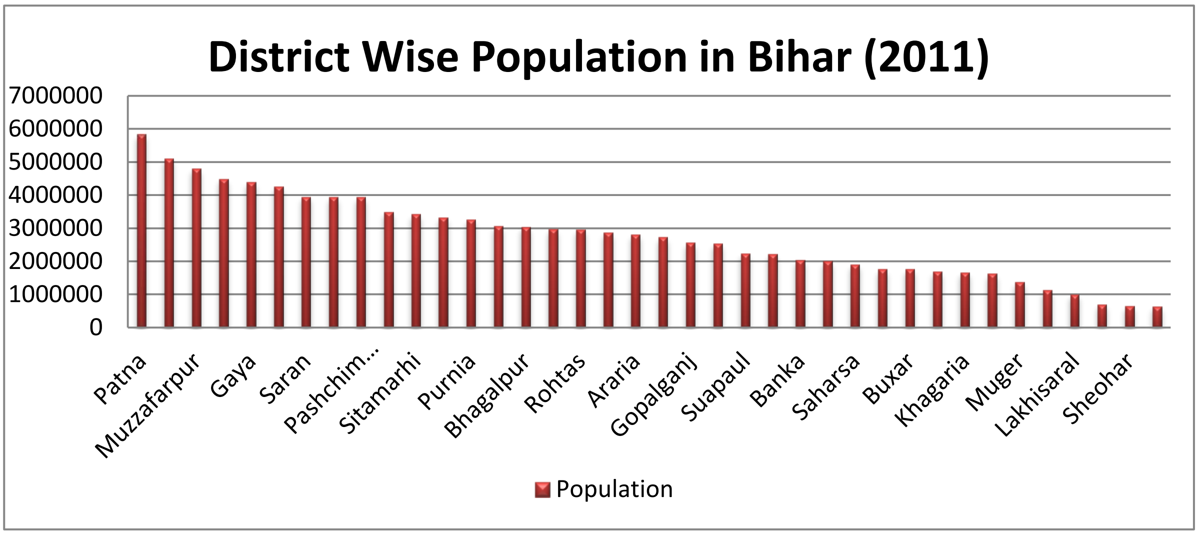
respectively of total population. The rural and urban population of study area have increased by 17758319 and 3047809 respectively in 2011 over 2001 census in terms of person. population rose by 8369464 in rural and 1495112 in urban in 2011 over 2001 census. Total population of rural areas of Bihar state was 92,341,436. The increment rate recorded for this decade (2001-2011) was 88.71%. At the 2011 census, Bihar was the third most populous state of India with the entire population of 104,099,452, nearly 89% of it rural. it had been also India's most

Similarly, male population has risen by 9388855 in rural and 1552697 in urban in 2011 over 2001 and female

densely populated state with 1106 persons per sq. Km. Out of total population of Bihar, 11.29% people sleep in urban region. the entire figure of population living in urban areas is 11,758,016 of which 6,204,307 are males and while remaining 5,553,709 are females. The urban population within the last 10 years has increased by 11.29%.

District Wise Population:-

Bihar state has currently 38 districts. The average population of the district is 27, 31, 01 most populous district is Patna with 6,539,081 and least Populous is Sheikhpura with 712,703. Bihar district wise population as per census 2011 and 2020 projection. District wise rural population it is found the district of Purba Champaran the census of 2001 and 2011 in terms of persons, males and females. Even the growth the rural population for persons, males and females for this district is the highest among all the district of the Bihar state.



Density of Population in Bihar: - The detailed analysis of population census 2011 published by government of India for Bihar state reveal that population of Bihar has increased by 25.42% in this decade compared (2001-2011) to past decade (1901-2001). The density of Bihar state in the current decade is 2863 per sq. mile. The density of Bihar state is 1106 per sq. km. population density of Bihar increased from 370 per person per sq. km. in 1961 to 1106 people for sq. km. in 2011 growing at an average annual rate of 21.26%. Density knows the current (2021) population of Bihar and also the population according to the 2011 census. District with highest populationdensitySheohar

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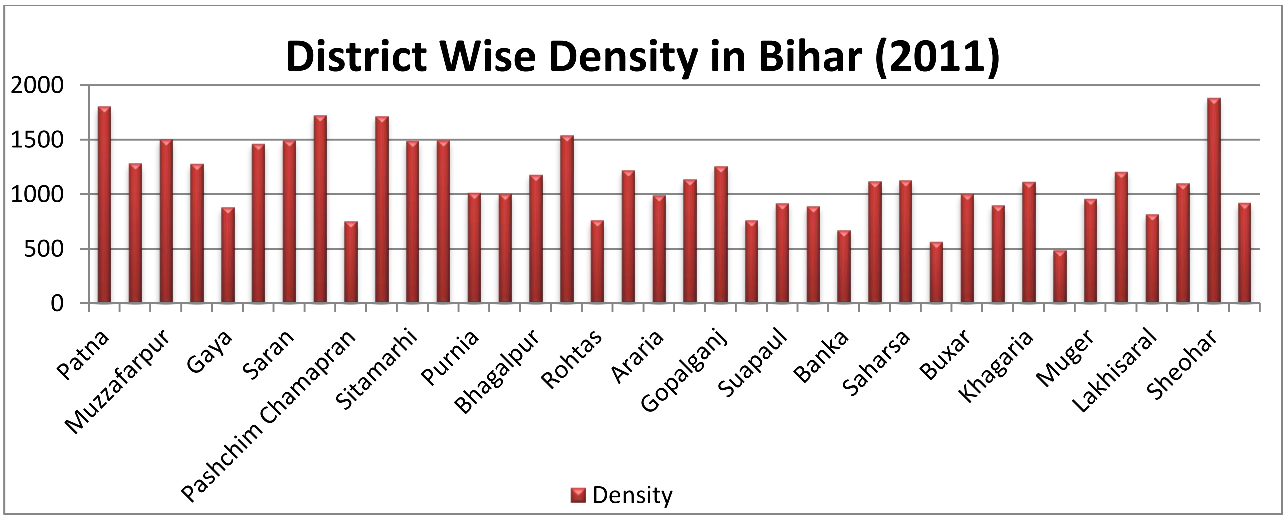

Population Projection in Bihar: - If Bihar were a country, they would probably be the 3rd most populated country in the world by 2036 the government's latest population projection predicts after 42% growth for Bihar population is get toss an even stepper growth for 104 million (10.4 crore) in 2011 to 148 million (14.8 crore) in 2036. As per the latest report, the population of India is expected to increase from 121.1 crore to 152.2 crore during the period 2011-2036, an Increase of 25.7% in 25 years at the rate of 1.0% annually. The rise in population in the state Bihar could be attributed to the high flexibility raids in contrast to many other states, suggest those in South India, where owing to an increasing access to birth control measures and better educations, healthcare and professional opportunities, the projected growth rate is only 9%. According to the report the only state with TFR is higher than 2 by 2035 will be Bihar at 2.38.

Table No:04

Bihar: Projected Population (2011-2021)

Census	Projected Population
2011	*10.38*
2012	*10.64*
2013	*10.89*
2014	*11.15*
2015	*11.42*
2016	*11.67*
2017	*11.92*
2018	*12.17*
2019	*12.42*
2020	*12.67*
2021	*12.88*
2022	*13.09*

Conclusion:- The importance of population studies has increased during few last decades. Rapid increase has created various socio-economic and ecological problems further as regional imbalance. Rapid increase is detrimental to achieving economic and social progress and to sustainable management of the resource base. But there remains a sizeable gap between the private and social interest in fertility reduction and this gap must be narrowed policies and programs that influence, health, education, the status of ladies, and be amount of kids successively influence attitude towards child bearing, family, planning and people's ability to regulate family size

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Psychological Distress & Childhood Neglect among Adolescents

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Abstract
Child neglect is a form of child abuse. It is a deficit in meeting the basic needs of the child. The neglect can include leaving a child alone when he or she needs protection, failure to provide proper food, clothing, medical attention or education. Neglect mostly occurs for long term and can't be identified easily. The long term avoidance by the parents may lead to increased aggression, depression etc. Hence the aim of the present study is to explore the relationship between the previous childhood neglect and current psychological distress of college students. A random sampling technique was used. Nearly 100 samples were collected from both male and female. The participants for the study were taken from different institutes of Salem district. The Neglect Scale [Straus, kinard and Williams, 1995] which consist of 20 items and the Kessler Psychological Distress Scale [Kessler et al, 2002] that consist of 6 items was used to measure the past parental neglect and the present psychological distress. Correlation analysis was used to examine the relationship between the two variables. The results of Pearson correlation were found that there is a significant relationship between the childhood neglect and psychological distress.
Key Words: Avoidance, Psychological distress, Isolation, Relationship, Neglect.

Introduction

Neglect is defined as an on-going pattern of inadequate care by the individuals in close contact with the child. Neglect has the serious and long lasting effects on children. In more severe cases the child may dies from malnutrition or when denied by the care they need from the caretaker. The person who faces neglect shows the signs of poor appearance and hygiene, health and developmental problems, housing and family issues and changes in their behavior. There may be multiple causes for the neglect such as having a disability, having complex health needs and are born prematurely etc. The neglect may be in any form such as physical, educational, emotional or supervision needs. Physical neglect is delay in seeking health care, food etc. Educational neglect includes failure to provide adequate school needs, special educational needs. Emotional neglect includes marked inattention, refusal to provide needed psychological care In recent years, the detrimental results of neglect have been focused on the early stages of child development (Chapple & Vaske, 2010). While the research concerning the effects of childhood neglect on adults is scare, it is suspected that early neglect will lead to criminal behavior, personality disorders, substance abuse and stressful life events at the adult life stage (Hildyard & Wolfe, 2002).

Review of Literature

Hildyard KL, et al.(2016) concluded that child neglect can have severe, deleterious short and long term effects on children's cognitive, socio- emotional and behavioral development. Relative to physically abused children, neglected children have more severe cognitive and academic deficits, social withdrawal and limited peer interactions and internalizing problems. Kotch JB and Lewis T, et al (2018) identified that the child neglect in the first two years of life may be a major precursor of childhood aggression than later neglect or physical abuse at any age. This study examined the association between early childhood and later childhood aggression. Romano E et al, (2015) indicated that children with maltreatment histories often experience impairments in both their academic performance and mental well- being such as anxiety, low mood, aggression, social skills deficits; poor interpersonal relationships.They also indicated that mental health difficulties are negatively associated with children's academic achievement. Similarly, the academic deficits are also associated with mental health problems.

Objectives:

The main purpose of this present study is to identify the relationship between previous childhood neglect and the current psychological distress in adult population.

To find out the past childhood neglect and present psychological distress among college students with respect to gender, age, locality, birth order and studying year.

Hypothesis:

There is no significant relationship between childhood neglect and psychological distress.

There is no significant difference in childhood neglect with respect to demographic variables such as gender, age, locality, birth order and studying year.

There is no significant difference in psychological distress with respect to gender, age, locality, birth order and studying year.

Methodology

Sample:

Random sampling technique was used 100 participants took part this study. The participants were under the age group of 17-23 from both male and females. The participants were selected from various institutes of Salem district.

Tools:

1. To measure the individual's past experience of neglect, THE NEGLECT SCALE (NS) developed by Straus, kinard & Williams, 1995 was used.
2. To measure the current psychological distress, the KESSLER PSYCHOLOGICAL DISTRESS SCALE (K6) developed by Kessler et al., 2002 was utilized.

Data analysis:

Data's were analyzed by using descriptive statistics, frequency distribution, t- test, f-test, Mean,

Standard deviation and Pearson correlation to find out significant differences in SPSS version 25.

The present study was conducted on the following variables:

Dependent variables: psychological distress.

Independent variables: childhood neglect and demographic variables such as gender, age, locality, birth order and studying year.

Result and Discussion

TABLE-1

Distribution of samples on the basis of demographic variables

Variables	Sub- variables	Frequency	percentage
Gender	Male Female	47 53	47% 53%
Age	17-18 19-20 21-23	25 62 13	25% 62% 13%
Locality	Urban Mid urban Rural	50 31 19	50% 31% 19%
Birth order	First born Middle born Second born Last born	56 10 15 19	56% 10% 15% 19%
Studying year	1st year 2nd year 3rd year 4th and PG	26 16 46 12	26% 16% 46% 12%

TABLE – 2

Showing Mean, SD, t- value and P- value of childhood neglect with respect to gender.

Variables	Sub- Variables	N	Mean	SD	t- value	P- value
Gender	Male Female	47 53	59.51 60.21	8.102 7.836	-0.437	0.663

Table- 2 shows that, the mean score of male is 59.51 which is lower than the mean score of female that is 60.21.This shows that females have faced more childhood neglect than males. No significant difference was found .Thus the null hypothesis is accepted.

TABLE- 3

Showing Mean, SD, t- value and P-value of psychological distress with respect to gender.

Variable	Sub-variable	N	Mean	SD	t- value	P-value
Gender	Male Female	47 53	9.94 9.74	4.702 3.352	0.247	0.805

From the above table, it is observed that the mean score of male is 9.94 which is higher than the mean score of female that is 9.74. The shows that males have more psychological distress than females. Hence, it is observed that there no significant difference in psychological distress with respect to gender.

TABLE- 4

Showing Mean, SD, f- value & P- value of childhood neglect with respect to demographic variables such as age, locality, birth order and studying year.

Variables	Sub-variables	N	Mean	SD	f- value	P- value
Age	17-18 19-20 21-23	25 62 13	61.76 60.16 54.92	5.967 8.314 7.858	3.444	0.036*
Locality	Urban Mid urban Rural	50 31 19	59.86 59.87 59.95	8.454 5.920 9.635	0.001	0.999
Birth order	First born Middle born Second born Last born	56 10 15 19	60.04 57.80 62.67 58.32	7.644 7.131 5.984 10.122	1.104	0.351
Studying year	1st year 2nd year 3rd year 4th and PG	26 16 46 12	59.58 57.88 61.04 58.75	7.366 7.500 8.154 8.986	0.759	0.520

*Significant at 0.05 level.

From the above table, it is observed that the mean score of age group 17-18 (M=61.76) is higher than the other two categories, shows that they have faced more neglect than the other two age groups. While in locality, the rural students face more neglect than urban and mid urban students. In birth order, the second born students have faced more neglect than the first, middle and last born students. On the other hand, the students who are pursuing third year in colleges seem to face more neglect than the students at other years. From this table it is clear that, there is significant difference only for age and the other variables are not significant.

TABLE- 5

Showing Mean, SD, f- value & P- value of the psychological distress with respect to demographic variables such as age, locality, birth order and studying year.

Variables	Sub-variables	N	Mean	SD	f- value	P-value
Age	17-18	25	10.56	3.513		
	19-20	62	9.74	4.345	0.812	0.447
	21-23	13	8.85	3.262		
Locality	Urban	50	9.92	3.875		
	Mid urban	31	9.87	4.500	0.067	0.935
	Rural	19	9.53	3.777		
Birth order	First born	56	9.68	4.161		
	Middle born	10	10.70	3.368		
	Second born	15	10.40	4.014	0.359	0.783
	Last born	19	9.37	4.112		
Studying year	1^{st} year	26	11.54	4.081		
	2^{nd} year	16	9.81	4.102		
	3^{rd} year	46	9.43	3.816	3.046	0.032*
	4^{th} and PG	12	7.67	3.551		

*Significant at 0.05 level.

It is inferred that, higher rates of distress was felt by students under 17-18 years. While in locality, urban students felt more distress than others. Middle born students seem to feel more distress than others. When compared to other students, 1^{st} year students have felt more distress. From this it is observed that there is a significant difference only for studying year, the other hypothesis were accepted.

TABLE- 6

Relationship between the Independent and Dependent variables.

	Childhood neglect	psychological distress
Childhood neglect	1	.089
Psychological distress	.089	1

The above table shows the relationship between childhood neglect and psychological distress. This showed that there was a significant correlation between previous childhood neglect and present psychological distress (P= 0.089).

Conclusion

At the last of study, it is concluded that there exist a significant relationship between previous psychological neglect and present psychological distress. In short it can be concluded that, females have faced more neglect than males but males have more psychological distress later. While in age group, 17-18 years old students have higher rates of both childhood neglect and psychological distress and in locality wise rural students have high rates of childhood neglect but urban students have more distress. 3^{rd} year students faced more neglect than other year students but 1^{st} year students have high rates of distress this may be due to their new environment. It is recommended that the need for increased early intervention services and post neglect treatment will reduce the later effects.

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Emerging Significance and Challenges of Maritime Industry

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ABSTRACT

International trade between various countries has a prominent role in raising living standards as well as for building up stable economy. Shipping is the major mode of global trade and has become the life blood of a nation to become an emerging economy. International trade and the global economy are very much linked with maritime transport. Around 80 percent of international trade is carried out through sea and the volume of the international trade value through maritime transport is over 70 percent. The emerging significance of the Maritime Law regarding Territorial waters and High Seas is very relevant for India which enjoys a rich maritime heritage with a length of 7516.6 km which is consisted of 5422.6 main land and 2094 km of Island Territories. Compared to past where modern jurisprudence had a prominent role and reputation in common law circle, maritime law now is pacing fast with superiority in the international arena since Maritime Law has immense potentials for development in her field where major trade and trade disputes take place. The research tries to explain the emerging significance of maritime law, its dearth and consequences for a brighter future of the world economy.

Introduction

The focus of this paper is the emerging significance of maritime Law and speaks about past deficiency and future statures. Maritime industry is a logistic industry with its own risks and advantageous. The industry is an international industry where its routes are connected with all coastal states and ports. It has a long history of international trade and business and link with various cultures of the world. The traces of its heritage can be visible even in the Hindu scriptures of India and it had built up a glorious maritime history and tradition for centuries even before the rise of the maritime supremacy of Europe. The arrival of the British regime the indigenous shipping industry was significantly discouraged owing to the preferential consideration given to the British ships and deterring navigational system of the regime. The industry has its own dearth as well as merits. The conservation and preservation of the industry is very significant for the commerce handles above 70 percent of world trade and transport. The very reason and objective of the study is to highlight the prominence of marine industry in the world economy.

Meaning of Maritime Law

Maritime law is a set of rules and regulations which are formulated to govern the matters relating to shipment of goods and passenger by sea and other waterways. It is also known as admiralty law. According to the Black's Law dictionary, "the body of law governing marine commerce and navigation, the carriage at of persons and property, and marine affairs in general; the rules governing contract, tort and workers' compensation claims or relating to commerce on or over water" (Black's Law Dictionary, 2019). Prof. Grant Gilmore and Charles L. Black defines maritime law, "A corpus of rules, concepts and legal practices governing certain centrally important concerns of the business of carrying goods and passengers by water." (Hailegabriel Gedecho, 2013) The international laws governing the use of the ocean and seas are known as the Law of the Sea.

The Concept Of Marine Transport

Maritime transport can be defined as means of transport where goods or people are transported via sea routes. The entire land is connected with either by waterway for ships or water crafts. Ships are used to cover major seas and watercrafts are used to transport in shallow waters. It is an independent industry which is engaged in the transit of passengers and goods more than any other means of shipment. The fortunes of globalization and of maritime transit is closely interlinked for it is the backbone of major commercial flows for it handles more than 70 percent of the global trade and business (Luiz Andrei Gonçalves Pereira, William Rodrigues Ferreira, 2014). The industry is regulated by the United Nations Convention on the Carriage of Goods by Sea held in the year 1978 which is also known as Hamburg rules.

The Economic Significance of Maritime Transport

International trade between various countries has a prominent role in raising living standards as well as for building up stable economy. Transportation has been called one of the four cornerstones of global economy along with liberalization, international standardization and communication advancements. Transportation through shipping is the major mode of global trade and has become the life blood of a nation to become an emerging economy. International trade and the global economy are very much linked with maritime transport. Around 80 percent of international trade is carried out through sea and the volume of the international trade value through maritime transport is over 70 percent (Alexandra Fratila, Ioana Andrada Gavril, Sorin Cristian Nita and Andrei Hrebenciuc, 2021). Thus, it is the cheapest and most economic transport industry in the national and international trade and commerce. It is economic for its large individual capacity, low price and low costs of the conveyance, flexibility to demand, less cost of infrastructure since sea is broad, long service life etc. It is significant to note that almost all countries no matter of its geographical position involves in maritime trade. The task of a merchant ship is to transport goods and passengers. This transport service is based on the economic effect expected from the navigation. It depends on the balance of the costs which emerge during a trip and the profit generated from that trip. Profit is a fee a ship company receives for the executed transport service and the costs arise from the expense ships incur during navigation and in the ports. There are two, rather contrasting interests. One is the interest of the ship owner to generate the highest profit possible and the other is the owner of the cargo wishing to pay as less as possible for the service of transport (Mitrovic, 2008). In the maritime transport industry, ton mile is used as the unit for measuring transport performance. It is the product of multiplication of the cargo volume and the mileage (Bartulovic, 2000).

The most important economic activities of the maritime transport are lowering prices of many mass articles, raw materials and commercial goods (Jelinovic, 1983). Many places in the world depend mainly on the goods transported by the sea. Maritime transport contributes to the modernization of the foreign trade, for it generates profit by trading with currencies via import and export of goods from and into foreign countries. During the disruption of supply and demand equilibrium, the party which at that point holds greater interest to perform transport activities is also liable for the consequences which influence the freight rates. In those situations, expansion or contraction of the maritime shipping market can take place. During the rise in demand, new ships are ordered which are rarely being exploited during the period of influences which caused their production. Namely, world merchant fleet is expanding rapidly above its real requirements, which results in damaging consequences. This is because, after a relatively short-term market rise, a longer-lasting recession follows, often followed by depression (Mencer 1990). The imbalance in demand is also connected with the change of the scope of global trade which relies on the industrial production, economic factors and political situation. The ships' capacity is in fact inflexible.

It is impossible to adjust the capacities to the elasticity of the demand, and there is also difference in the intensity of flexibility between various types of ships. In order to reduce that, shipping companies order multi-purpose vessels. The industry of maritime shipping and its components is one of the most liberal economy branches, inside which special trading activities have developed. Namely, all of its capital and other components, like vessels, ships' flag, classification register, insurance, banking services, the accounting, technical and commercial management of the ships and the crew, can be purchased i.e., bought or negotiated in the global market. Maritime shipping is becoming the service of the economy in general and, in doing so, has the tendency of strategic linking to higher level economic systems. The increase and extension of the demand scope in the maritime transport market has resulted in the fact that it cannot function as an industry outside the rest of the economy (Kunda, 2013)

Problems Faced By Marine Transport

Shipping industry is the largest industry and is not free from hustles and problems. Some of the difficulties faced by the industry are inherent in traditional structure such as cargo imbalances and competitions but some others are created by institutions whose solutions rest on the will to act of the countries involved. Institutional barriers are excessive Paper Works, red tape that burdens merchant vessels and consular intervention in trade and transport operations which makes the trade more expensive and delay (Cuadernos De La Cepal, 1987). Following are the few barriers that curb the marine industry in India.

1. Cargo Imbalances and Competitions

Shipping industry can be economical only if there is cargo steadiness in export as well as import. The balance should also relate to solid bulk and liquid fuels. Due to severe competitions, vessels had to move to the port in time and underuse of space on at least one leg of voyage might cause adverse effect on transport costs and make it difficult to harmonize and coordinate shipping industry (Cuadernos De La Cepal, 1987). Persistent variation in supply and demand also badly affects the industry. Though the transit through water is comparatively cheaper assessing the value of time and need many of the traders choose air ways to do their trade and business. The discovery of new sources of raw materials also may create fluctuations in marine trade and business (Cuadernos De La Cepal, 1987)

2. Lack of Sufficient infrastructure

Another major drawback of the Indian maritime industry is the infrastructural scarcity of all major as well as minor ports which is to be increased for the better growth of the Indian Economy. Due to the lack of sufficient and updated technical application and obsolete marine architecture at ports the loading and unloading time is comparatively uncompetitive with the neighbouring foreign ports also is a set back to Indian Marine Industry. The development of the marine industry is also very intimately linked with the advanced development of the coastal road and rail network, electricity and other infrastructural development.

3. Economic Challenges

It is high time to explore and establish strong and efficient financial links to support ship building and other maritime business such as shipping, offshore and marine equipment industry. The challenges faced by the industry is so vast that may not be easily solved by individual economies and thus the aid and support of the government is essential to patch up every need of the marine industry since it plays a vital role in its social and economic strengths. The economic contribution as per the ministry of shipping, India is around 95% of India's transaction by volume and 70 percent by value is done through ocean transit and it should have been a sufficient attraction to the government to patch up all challenges but still it is dragging (UNCTATAD, 2020).

4. Vessel size

It is much economical to do business with large ships than small vessel so there is a tendency in the marine industry for large vessels and many of the Indian ports are not fit to accommodate larger vessels. It is high time to cope with the time and tide to rise to the demands of the time. New Generation young vessels are more environmentally friendly as well as more efficient to cope with all needs of the time. Yong ships are constructed as sustainable ships in the path to evolving to zero emission vessels (UNCTATAD, 2020).

5. Slow Registration Process

It should be noted that as per the statistics issued on 1st January 2019, Greece, Japan, China, Singapore and Hong Kong hold 50 percent of the world's ship registration as flag states. It is an interesting fact that in the world, there are more than 70 percent of vessels are registered in foreign countries due cheaper registration process. In India only 66 percent of the Indian ships' owners have registered their vessels with the Marine Mercantile Department (UNCTATAD, 2020). The rigidity of the bureaucracy and its reluctance to act and overlapping powers between the central, state and local government make the competitive field a chaos. The introduction of a single window flag state registration would be a solution to the mess.

6. Geographical Challenges

Maritime industry is focussed on major ports and routs however its transit is greatly depended on geographical changes that may affect the industry very badly. Usually, the risks beard by the maritime industry during the summer monsoon seasons starting from April to October in the Indian Ocean and South

China Sea is much hazardous compared to other seasons so the industry has to take longer routs to avoid such catastrophic risks of the nature. The industry is very much depended upon the primary passages such as Panama Canal, the Suez Canal, the Strait of Hormuz and Strait of Malacca to save time and money reduce the cost of materials in the market (Jean Paul Rodrigue , 2017).

Conclusion

Maritime industry which holds a very prominent role in the world economy and it is clearly visible by the fact that there is no country in the world without marine transport in spite of its geographical position whether land locked or coastal state. Marine transport hold much advantageous position compared to other means in their vast capacity to contain in bulks, economic use of energy and broad free way of transit which needs comparatively very less investment for the infrastructure which could bring down the prices of commodities to low costs and low price. The industry is with various struggles but the light before the industry i.e., cheap transportation, is far brighter than any other means of transport so the industry has always a better milage. The natural water way connecting the entire world which need not have any special investment for any infrastructure or development is always the best for all economies of the world.

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Role of Port State Jurisdiction

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Abstract
Port state control (PSC) is an inspection regime for countries to inspect foreign-registered ships in port other than those of the flag state and take action against ships that are not in compliance. The evolution of Port State Jurisdiction concept was due the issues confronted with the absolute failures of Flag States' monitoring and regulating of their own vessels. There were number of incidents of mishaps of vessels causing huge amount of losses. Here a Coastal State having an international port may exercise its PSJ over foreign-flagged ships and to regulate activities beyond national jurisdiction.(1) PSJ includes multilateral agreements desires to protect common concerns. The agreements in form of MoUs aims to monitor and prevent to use substandard ships even in the case of foreign fishing vessels.(2) The data of the article is collected from the secondary sources and the objective of the article is to impart a depth knowledge of the significance of port state jurisdiction that is envisaged by IMO for standardization of safety of each and every ship that is sailing in the high seas.

Introduction.

Ships that trade internationally has to call at various ports all over the world. Sometime these international trading ships may not reach to its home ports due to various and in such circumstances Ship's Certificates cannot be renewed or provide general maintenance. Therefore, in order to avoid such conditions ships must be inspected at various ports to ensure compliance with rule requirements as regards safety, maintenance, manning, etc. This control is termed as Port State Control. Port state jurisdiction is not covered by UNCLOS directly, but UNCLOS provisions confirm this practice, indicative of residual jurisdiction in relation to port state-control. Port state control (PSC) is an inspection regime for countries to inspect foreign-registered ships in port other than those of the flag state and take action against ships that are not in compliance. Inspectors for PSC are called PSC officers (PSCOs), and are required to investigate compliance with the requirements of international conventions, such as SOLAS, MARPOL, STCW, and the MLC. Inspections can involve checking that the vessel is manned and operated in compliance with applicable international law, and verifying the competency of the ship's master and officers, and the ship's condition and equipment. A port state enjoys limited jurisdiction over a foreign-flagged vessel in its port. When a foreign vessel comes to the coastal state ports they are subject to the coastal state's criminal laws, civil laws, and regulations, yet the Coastal State has discretion as to whether jurisdiction will be exercised in each instance. This means it is up to the coastal state to decide if, how, and when to exercise its jurisdiction (enforcement.)

Such types of jurisdictional enforcement powers help to consider Port State Control (PSC). PSC helps port states to inspect and verify that foreign vessels on the basis of international standards for ship condition which includes:-

- Vessel Source Pollution
- Equipment
- Manning

Operations are conducted on three grounds mainly:

- Own initiative
- At the request of the Flag State or another Coastal State
- After a third party complaint

These enforcement powers have reasonable restrictions over foreign sovereign immune vessels such as warships, vessels owned and operated by a sovereign foreign state entity, and vessels which may be controlled, owned, or operated by diplomatic missions.

Difference Between Voluntary And Forced Entry

When a foreign vessel enters voluntarily to a port state, it has got limited freedom rather than if a vessel has entered the port forcefully or due to other conditions of distress such as severe weather, mechanical or structural integrity problems, etc. If the vessel forcefully enters to ports it should not have an intention to dock in that port. It must not have early intended plans. In such circumstances port state grant a vessel limited immunity from prosecution in matters specifically related to the coastal state's jurisdiction (violations of coastal / port state's civil laws, and domestic environmental regulations) as the vessel in distress could not take appropriate measures to avoid entering the waters / port and hence avoid non-compliance. In particular, they are generally considered exempt from non-malicious breaches of marine pollution laws and regulations. Under extreme circumstances and violations of international. However, if while the vessel is in port, and the vessel (including members of the crew) violate the laws of the coastal state they may be subject to the jurisdiction of the local authorities (i.e., committing crimes while in port, etc.). this is called the grey and it is debated often. If the authorities are under the impression the vessel or members of the crew may currently be engaging in activities which violate the laws or regulations of the coastal state they may increase their jurisdiction, including enforcement powers, and even prosecution.

Regional Port State Control

The first regional arrangement for port states was created in Europe tin the year 1982 Memorandum of Understanding on Port State Control in Implementing Agreements on Maritime Safety and Protection of the Marine Environment, known as the Paris Port State Control MOU. The Paris Memorandum of Understanding on Port State Control is the official agreement between the 27 participating Maritime Authorities implementing a harmonized system of Port State Control. Later it was followed by Latin American Agreement on Port State Control in the year 1992 and later in 1993 by Tokyo Port State Control MOU, the 1996 Caribbean Port State Control MOU, and in 1997 MOU on Port State Control in the Mediterranean Region. The most recent Port State Control MOU is for the Indian Ocean and East Africa. All the regional port state control arrangements are substantively similar and follow the model of the 1982 Paris Port State Control MOU.

Formation of Paris Mou

There was a massive oil spill in the year 1978 on the coast of France by an oil tanker named ***Amoco Cardiz***. (3) Due to such spill, twelve European maritime authorities decided to develop a system in order to inspect foreign ships to find defect and deficiencies in their ports.

This resulted in the formation of Paris MOU on port state control. Under this Act each administration decided to inspect at least 25 percentage of foreign ships visiting their ports. The Paris Memorandum of Understanding on Port State Control (Paris MoU),(4) adopted in Paris (France) on 1 July 1982. It consists of 27 member countries as participants.

It was a common inspection procedures and centralized recording of all inspections of the ship which are to be stored in the computer database. After the formation of Paris MOU, it was realized that if neighbouring countries also exercise control on the same ship within short intervals, then this would lead to unnecessary duplication of work. So with regards to this, a regional co-operation amongst the countries was agreed which would avoid duplication of work. Under this act, it was also decided to share information and tracking of ship movement and previous history of the ships between the maritime countries. As per the information, the inspections can be followed up as required.

Ship Risk Profile (SRP) (5)

The Ship Risk Profile (SRP) is based on the following factors, using details of ship's inspections in the Paris MoU area in the last 36 months:

- Type and age of ship
- Number of deficiencies
- Number of detentions
- Performance of ship's flag
- Performance of the Recognised Organisation (RO)
- Performance of the Company responsible for the ISM Management (holder of Document of Compliance)

Risk Assessment Matrix Determination of SRP:

■ Low Risk Ships are ships which meet all criteria of the low risk parameters

■ High Risk Ships are ships with 5 or more points

■ Standard Risk Ships are ships which are neither LRS nor HRS

Inspection Categories

Under the NIR there are two categories of inspection; Periodic and Additional. For the former, a time window will open after the vessel's last inspection in the Paris MOU region, the frequency of which will vary according the vessel's Ship Risk Profile:

- High Risk Ships – time window between 5-6 months after the last inspection
- Standard Risk Ships – time window between 10-12 months after the last inspection
- Low Risk Ships – time window between 24-36 months after the last inspection

It a ship calls at a Paris MOU port within the time window, it will be classified as Priority II and may be selected for a Periodic inspection. However, if it arrives after the time window it will be classified as Priority I and must undergo a Periodic inspection before it leaves port.

Priority I inspections may, in certain circumstances, be deferred to another port in the same Member State, or a port in another Member State if the latter agrees. Inspections will not be conducted if a port call takes place only at night or if in the judgement of the Port State the inspection would create a risk to the safety of the inspectors, the ship, its crew, the port or the marine environment. However, in the event of repeated port calls at night, special arrangements will be made to carry out an inspection. Additional surveys are triggered by an "overriding factor" or "unexpected factor", depending on the severity of the incident. A vessel will be classified as Priority I in the event of an "overriding factor", irrespective of when its next periodic survey is due. "Overriding factors" include:

- Ships which have been suspended or withdrawn from their class for safety reasons since the last inspection
- Ships which have been the subject of a report or notification by another Member State
- Ships which cannot be identified in the inspection database
- Ships which have been involved in a collision, grounding or stranding on their way to the port
- Ships which have been accused of an alleged violation of the provisions on discharge of harmful substances or effluents
- Ships which have manoeuvred in an erratic or unsafe manner whereby routing measures, adopted by the IMO, or safe navigation practices and procedures have not been followed
- Similarly, an "unexpected factor" will cause the ship to be classified as Priority II. "Unexpected factors" include:
- Ships which have not complied with the applicable version of the IMO Recommendation on navigation through the entrances to the Baltic Sea
- Ships carrying certificates issued by a formerly recognised organisation whose recognition has been withdrawn since the last inspection
- Ships which have been reported by pilots or port authorities or bodies as having apparent anomalies which may prejudice their safe navigation or pose a threat of harm to the environment
- Ships which have failed to comply with the relevant notification requirements
- Ships which have been the subject of a report or complaint by the master, a crew member, or any person or organisation with a legitimate interest in the safe operation of the ship, on-board living and working conditions or the prevention of pollution, unless the Member State concerned deems the report or complaint to be manifestly unfounded
- Ships which have been previously detained more than three months ago
- Ships which have been reported with outstanding deficiencies, except those for which deficiencies had to be rectified within 14 days after departure, and for deficiencies which had to be rectified before departure
- Ships which have been reported with problems concerning their cargo, in particular noxious and dangerous cargoes
- Ships which have been operated in a manner posing a danger to persons, property or the environment
- Ships where information from a reliable source becomes known, to the effect that their risk parameters differ from those recorded and the risk level is thereby increased

Inspections carried out under the present regime will count for determining when the next inspection is due.

Notwithstanding any of the above, a Member State has the right to inspect a vessel at any time if they deem it to be appropriate.

Inspection Types

Under the NIR there are three types of inspection: initial, more detailed and expanded. Periodic inspections of Low Risk Ships and Standard Risk Ships other than bulk carriers, gas tankers, oil tankers, chemical tankers or passenger ships, older than 12 years of age, will be an initial inspection. However, if clear grounds are found during an initial inspection indicating that the vessel is not complying with particular convention requirements, a more detailed inspection will be carried out. (6)

All High Risk Ships regardless of type, and all bulk carriers, gas tankers, oil tankers, chemical tankers and passenger ships, older than 12 years of age, will be subject to an expanded inspection, together with vessels due to be re-inspected following a ban.

If an Additional inspection is warranted, this will be no less than a more detailed inspection. However, in the case of a High Risk Ship or a bulk carrier, gas tanker, oil tanker, chemical tanker or passenger ship, older than 12 years of age, the Member State may decide to perform an expanded inspection.

Banning and Refusal of Access Criteria

Under the present system only certain ship types may be banned or refused access to EU ports if registered with a flag state appearing on the Paris MoU black list. Under the NIR, this sanction will apply to all vessels regardless of type if registered with a flag state appearing in the Paris MoU black or grey lists.

From 1 January 2011 vessels will be refused access to all ports in the EU region if:

- Registered with a black listed flag state and detained more than twice in the preceding 36 months
- Registered with a grey listed flag state and detained more than twice in the preceding 24 months

  Bans will also be subject to a minimum duration:

- 3 months after the first ban
- 12 months after a second ban
- 24 months after a third ban
- Permanent after a fourth ban

  Any subsequent detention following a second ban will lead to another ban.A vessel banned for the third time must comply with stringent conditions before the 24 month period has elapsed, otherwise it will be refused access permanently.It is important to note that a ban affects a vessel's EU Port State Control record for life, regardless of any changes of ownership, class or flag.

Reporting

In addition to the current reporting requirements, as from 1 January 2011 the following information must be transmitted for all ships arriving or leaving a port or anchorage within the EU region:

- Pre-arrival notification, at least 72 hours in advance for ships eligible for expanded inspection
- Pre-arrival notification at least 24 hours in advance (or on departure from the previous port if the voyage is less than 24 hours)
- Actual Time of Arrival
- Actual Time of Departure

  The requirement for the operator, agent or master of a ship which is subject to an expanded inspection to provide 72 hours' notice before the expected time of arrival (or before leaving the previous port or anchorage if the voyage is expected to take less than 72 hours) already exists for certain ships. However, as from 1 January 2011 this requirement will also apply to:

- All ships with a high risk profile
- Any passenger ship, oil tanker, gas tanker, chemical tanker or bulk carrier, older than 12 years of age

  Information on ships eligible for expanded inspection will be made available online.

  The 72-hour notification must include at least the following information:

- Ship identification (name, call sign, IMO or MMSI number and flag)
- Planned duration of the call (ETA/ETD)
- For tankers: (a) hull configuration: single hull, single hull with segregated ballast tanks, double hull, (b) condition of the cargo and ballast tanks: full, empty, inerted, (c) volume and type of cargo

Planned operations at the port or anchorage of destination (loading, unloading, other)

- Planned statutory survey inspections and substantial maintenance and repair work to be carried out whilst in the port of destination
- Date of the last expanded inspection in the Paris MoU region

TOTAL NUMBER OF INSPECTIONS AND DETENTIONS PERCENTAGE

INSPECTION			DETENTION			DETENTION PERCENTAGE	
2010	2011	2012	2010	2011	2012	2010	2011
24,058	19,058	18,308	790	688	669	3.28	3.61

INDIAN OCEAN Mou (7)
The Indian Ocean Memorandum of Understanding on Port State Control (Indian Ocean MoU), signed in Pretoria (South Africa) on 5 June 1998. It consists of 20 members. The Indian Ocean Memorandum of Understanding (IOMOU) on port State control (PSC) in the Indian Ocean region was finalized on the basis of the First preparatory meeting held in India in October 1997 and the second meeting in June 1998 in South Africa. The second meeting was attended by Australia, Bangladesh, Djibouti, Eritrea, Ethiopia, India, Iran, Kenya, Maldives, Mauritius, Mozambique, Myanmar, Oman, Seychelles, South Africa, Sri Lanka, Tanzania and Yemen. A total of 5943 inspections were carried out in 2019. Out of these 5943 inspections, 2852 inspections had deficiencies and the total numbers of deficiencies were 10960. Serious deficiencies noted by the PSCOs led to the detention of 232 ships and needed to be rectified prior to the ships' departure; the overall detention percentage for the year was 3.9%. There was increase in total number of inspections in 2019, compared with those in 2018; and the detention percentage decreased from 4.42 % recorded in 2018. The average number of deficiencies per inspection in 2019 (1.84) has slightly decreased compared to the previous year (2.07).

Authority	Number of Inspections	Number of Inspections with Deficiencies	Number of Deficiencies	Number of Detentions	Detention Percentage
Total	5943	2852	10960	232	3.9

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1) *Introduction: Port State Jurisdiction: Challenges and Potentia*l, Cedric Ryngaert, The International Journal of Marine and Coastal Law 31 (2016) -394
(2) *The shaky Foundations of the FAO Port State Measures agreement: How watertight is the Legal Seal against access for Foreign Fishing Vessels?* Andrew Serdy, The International Journal of Marine and Coastal Law 31 (2016) 422-441.
(3) ***Amoco Cadiz*** was a VLCC (very large crude carrier) owned by Amoco Transport Corp and transporting crude oil for Shell oil. Operating under the Liberian Flag of Convenience, she ran aground on 16 March 1978 on Portsall Rocks, 2 km (1.2 mi) from the coast of Brittany, France. Ultimately, she split in three and sank, resulting in the large oil spill of its kind in history to that date. **(AMOCO CADIZ -IMO-7336422)**
(4) Paris MoU.
https://www.parismou.org/The Paris MoU on PSC is an administrative agreement between twenty-seven Maritime Authorities. In 1978 the 'Hague Memorandum' between a number of maritime authorities in Western Europe was developed. It dealt mainly with enforcement of shipboard living and working conditions as required by ILO Convention no. 147.
(5) Ship Risk Profile (SRP). http://www.parismou.org>inspections-risk.library-flag. A ship's risk profile is recalculated daily taking into account changes in the more dynamic parameters such as age, the 36 month history and company performance. Recalculation also occurs after every inspection and when the applicable performance tables for flag and R.O.s are changed.
(6) Southampton on Shipping Law-Chapter VI-The Liabilities of the Vessel, Richard Shaw and Dr. Michael Tsimplis, (page 156) Institute of Maritime Law-Informa, London (2008)
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An Overview of Blockchain Technology in Banking - Its Applications, Challenges, and Security Issues

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Abstract
Banks are among the most established and greatest monetary intermediaries in India. Since liberalization, a few huge changes have happened in the operation of the financial system. Banking and innovation are firmly related and developments have changed banking definitely throughout the timeframe. Blockchain, the innovation that is utilized in the well-known cryptographic money 'Bitcoin', is progressive in numerous ways. Blockchain innovation can upset the financial business applications as it gives the super durable and sealed recording of exchanges in a conveyed network. This innovation became renowned in the wake of presenting the first digital currency, which is known as 'Bitcoin'. Currently, banks are facing many issues with regards to bulk transactions, security, etc., and the Blockchain can tackle these issues. The main objective of this study is to provide an overview of blockchain technology in Banking with its uses and privacy issues. This paper gives information regarding the application, advantages privacy issues, and future of the Blockchain technology for secure financial operation.
Keywords: Blockchain, DLT, Application, Security, Decentralization,

Introduction

What is truly significant for people? Well, no one knows without a doubt except for Money is most certainly one of those! Also, that is the reason why the financial area is one of the main areas on the planet. This area incorporates various institutions, for example, banks, finance organizations, venture companies, insurance agencies, and so forth. These are different support points that support the economy of the world. Ordinarily, there is almost no impact of the most recent state-of-the-art innovations in the financial area yet Blockchain is certainly an exemption. Indeed, Blockchain is an innovation that might even change the fate of banking!

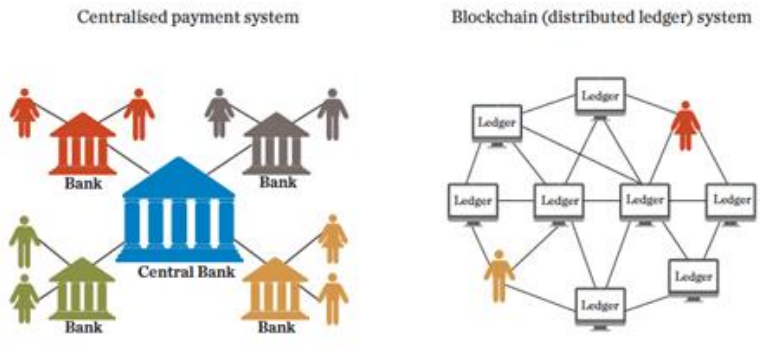

Figure 1: Traditional V/s Blockchain: Spreading the Burden, Souce: IMF e-library

However, It is an extravagant tech word that is tossed around a ton yet there are not very many individuals who get what Blockchain genuinely is. That is the reason we should comprehend the fundamental meaning of Blockchain first and afterward get to know its different applications in the financial area and how it might improve this area.

Blockchain Technology- Meaning

Blockchain is a procedure for recording data that makes it troublesome or difficult to change, hack, or cheat the framework. A blockchain is an advanced record of exchanges that are copied and appropriated across the whole organization of PC frameworks on the blockchain. Each square in the chain contains various exchanges, and each time another exchange happens on the blockchain, a record of that exchange is added to each part's record. The decentralized educational assortment controlled by various people is known as Distributed Ledger Technology (DLT). Blockchain is a kind of DLT wherein exchanges are recorded with a consistent cryptographic engraving called a hash. Blockchain innovation is neither an organization nor an application, rather it is a super progressed approach to recording and sharing information most dependably. A blockchain in the easiest manner can be characterized as a rundown of computerized records which are assembled impedes and are anchored. A blockchain resembles a conveyed record that is imparted to all PCs (which is by and large called here as Nodes) with a web association. Each PC associated with the blockchain will have the admittance to add more data, gave different hubs of a similar chain have verified the information. When a piece of information is verified and refreshed in the chain that can never be questioned, erased, altered, or adjusted without the information and consent of the individuals who made that record, as well as the more extensive local area.

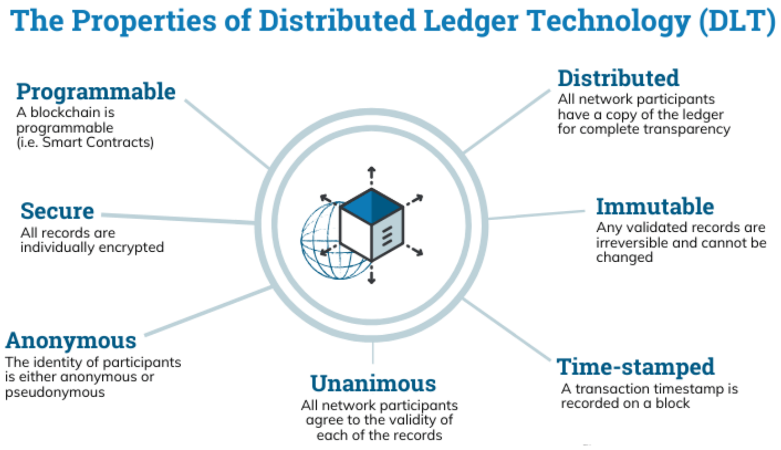

Figure 2. Properties of DLT, Source: Euromoney learning 2020

This implies assuming one square in one chain was transformed, it would be promptly obvious it had been messed with. To ruin a blockchain framework, they would need to change each square in the chain, across every one of the dispersed forms of the chain.

Blockchains, for example, Bitcoin and Ethereum are continually and consistently developing as squares are being added to the chain, which fundamentally adds to the security of the record.

How Does Blockchain Work?

The information in a blockchain is recorded in blocks. All of these squares hold a specific gathering of data. At the point when another gathering is added, it frames another square that is affixed onto the past square consequently the name "blockchain".

This chain structure is a pivotal piece of what makes a blockchain not quite the same as different kinds of information bases. To perceive how the actual chain functions, it's essential to comprehend three key components associated with each square on a blockchain. Each square contains:

Its hash code- A hash code is an alphanumeric portrayal of information. A square's hash is extraordinary to that square, and it changes assuming any of its fundamental information changes in any capacity.

The hash code of the square before it in the chain- This hash fills in as a kind of perspective that keeps the squares in a direct, sequential request. On the off chance that each square alludes to the one-of-a-kind hash of the square in front of it, the chain stays in salvageable shape. Furthermore recall whether the data in the square changes, the hash changes, as well.

A timestamp- This time stamp tells when the square was made, so it additionally assists in keeping the chain in sequential request.

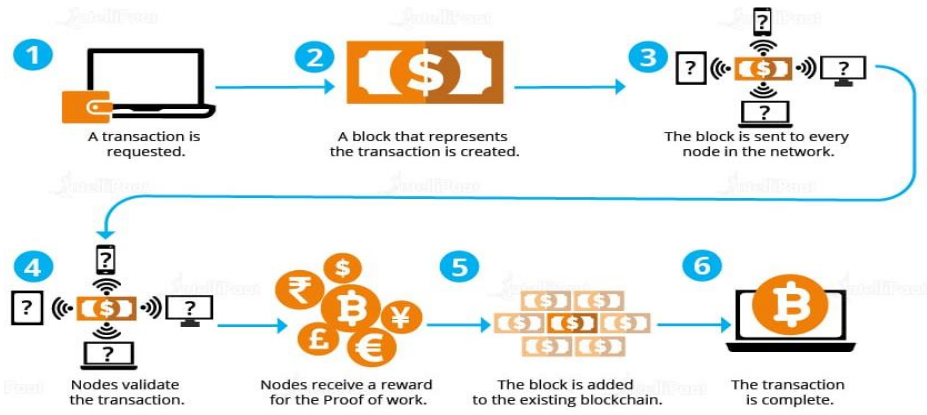

Figure 3: How Blockchain Technology works, Source: intellipaat.com

These three elements work together to ensure that the blocks in a blockchain are immutable—in other words, they can't be changed. If someone attempted to change one block, that block's hash and time stamp would change. The next block in the chain would no longer include the hash of the block preceding it, and it would quickly become apparent that the blockchain had been altered.

Review Of Literature

A literature review of academic exploration was directed. As it is the reinforcement of a wide range of exploration.

Binghui Wu and Tingting(2021) discuss the potential gains of blockchain development for business banks from the going with perspectives: charging action, cross-line portion action, and the asset securitization business of business banks. Blockchain development can decrease trade costs for the two players while additionally expanding the functioning capability of business banks' and chiefs' exercises.

Cointelegraph.com says that The Blockchain is another innovation that has created a ton of buzz as of late. It's exceptionally difficult to discuss ongoing advancements disregarding the expression "Blockchain". A Blockchain is an innovation that permits computerized information to be put away in a public, shared data set. It is just a progression of permanent squares. This innovation is notable as the digital currency (Bitcoin's) spine innovation. During 2018, it was seen that all over the place, from gaming to banking and everything in the middle, there were employments of the Blockchain. It was 2017 when the "leap out-of-the-cake" second on the Blockchain was held. These days, all over the place and in each tech block, it is seen that Blockchain is referenced on different occasions

Ittay Eyal(2017) talk about the possible results of using the blockchain in finance and dealing with the financial area. The goal was to find the possible worth of the blockchain in the asset and in dealing with the record section. The creator explored how the blockchain requests about the past. Bitcoin is shutting these fissures and a couple of the difficulties remain.

Luisanna Cocco, Andrea Pinna, Michele Marchesi's paper discusses the challenges and chances of executing blockchain development across banking. Blockchain development can smooth out the overall monetary system, achieving prudent developments, using more productive structures than at this point. The creators recommend that using blockchain advancement in monetary cycles can be dealt with by vanquishing the current preventions of the blockchain, which are viewed as in "bitcoin". These weights are the high energy utilization and the significant expense of the gear.

Larry Li, Malick Sy, Adela McMurray's paper's essential explanation is to show that blockchain development might upset the current game plans and to research how this might occur. New headways like the blockchain may be one of the drivers of the strategy's turn of events. Around the finish of this paper, it is proposed that clients should follow enhancements in this field to anticipate possible breaks in business.

Charles Gallo, Anna Jumamil, and Pak Aranyawat discussed how the square chain can expect an immense part in the financial incorporation measure. They said that FI using blockchain for internal and cross-line portions

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can cut down costs, condense settlement time, and give a superior client experience. They assumed that regulators should attract, intervene toward the starting stage and shape the turn of events.

1. **Application Of Blockchain Technology In Banking**

The blockchain was at first made for digital money - Bitcoin. Blockchain caused ripple effects generally due to the cryptographic types of cash. In the language of digital money or currency, a block is a record of new trades. Whenever each block is done, it is added to the chain, making a chain of blocks this is called a blockchain. blockchain innovation has a lot a bigger number of uses other than digital forms of money. Few are discussed below:

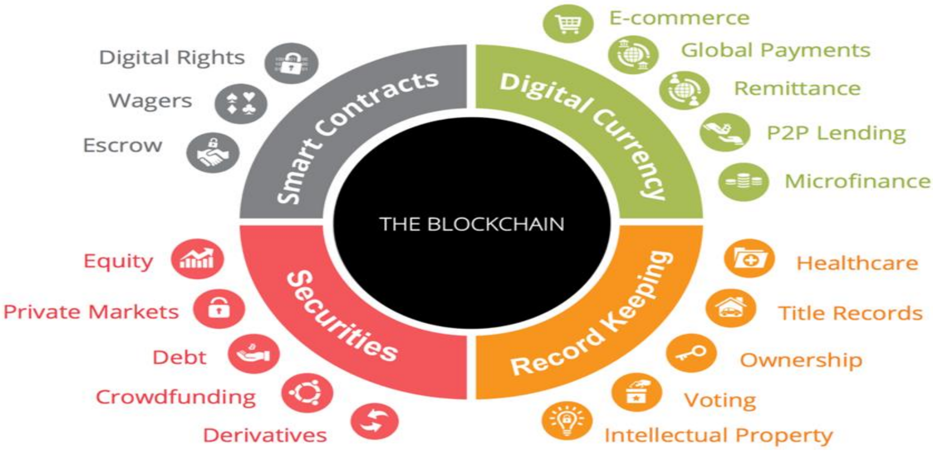

Figure 4: Blockchain applications, Source: Stoodnt.com

1. **Payments:** Payments are the as a matter of first importance use instance of any banking and additionally monetary framework. With regards to blockchain finance, both focal and business banks all around the world are currently taking advantage of this innovation as far as Payments handling and expected giving of their advanced monetary forms. This pattern likewise embraces the cross-border payments, which have been fueled for the most part by Western Union as of recently.
2. **Peer to Peer Transfers:** With P2P moves, clients can move assets from their ledger or Mastercard to someone else's record using the Internet or cell phone. The market is loaded with P2P move applications, yet every one of them has specific impediments. For instance, the capacity to move cash just inside one geological area, or, in actuality, the failure to move cash on the off chance that the two players are situated in a similar country. Moreover, a portion of the P2P administrations charge enormous commissions for their administrations and are not secure to the point of putting away delicate information. These issues can be tackled with blockchain-based, decentralized applications for P2P moves.
3. **Digital Identity Verification:** Online monetary exchanges are unthinkable without personality confirmation. Notwithstanding, this confirmation requires a ton of steps to be taken, for example,

- Eye to eye checking
- Confirmation: The bank client needs to demonstrate their character each time they sign in to the assistance.
- Approval: Proof of the client's goals is required.

These means should be taken for each new specialist organization.

4. **Syndicated Lending:** Syndicate lending alludes to giving advances to people by a gathering of moneylenders, typically banks. Because of a few members included, the conventional handling of such syndicate loans by banks can require as long as 19 days. Blockchain monetary administrations can supercharge this cycle and make it faster and more transparent.
5. **Trade Finance:** Blockchain likewise assumes a significant part in the exchange finance area - monetary exercises that are

connected with business and worldwide exchange (not stock trade exchanging). Indeed, even in the present troublesome universe of innovation, many exchange finance exercises include heaps of administrative work, like bills of replenishing, solicitations, letters of credit, and so forth Obviously, many request the board frameworks permit to do this desk work on the web, yet, it consumes bunches of time.

6. **Accounting, Bookkeeping, and Audit:** Most likely no other circle that includes as much desk work as bookkeeping, and it is digitalized somewhat leisurely. The explanation for that might be in severe administrative prerequisites in regards to information legitimacy and trustworthiness. Accordingly, bookkeeping is one more area that can be changed with the force of blockchain innovation finance, from improving on the consistence to smoothing out the customary twofold section accounting. Rather than keeping separate records given exchange receipts, organizations can compose their exchanges straightforwardly into a joint register, with the passages disseminated and cryptographically secured. Accordingly, the records are more straightforward, and any endeavors of fashioning are exceptionally difficult. Consider it an "electronic public accountant" checking the exchanges. Furthermore, block chain's shrewd agreements can be utilized to consequently pay solicitations.
7. **Hedge Funds:** A speculative stock investment is a venture organization comprising an asset administrator and a gathering of financial backers (restricted accomplices). In any case, mutual funds members are merchants rather than standard financial backers. The motivation behind mutual funds is to expand financial backer returns and limit chances. As per Autonomous NEXT, the number of speculative stock investments that exchange digital currencies has multiplied between October 2017 and February 2018. Notwithstanding, one ought to recognize the conventional crypto speculative stock investments and decentralized crypto mutual funds.
8. **Crowdfunding**: Crowdfunding includes raising assets by requesting a huge number from individuals each for a limited quantity of cash, commonly on the web. This industry is an ideal fit for blockchain innovation finance. Introductory Coin Offerings (ICOs), monetary instruments that assist to launch youthful digital forms of money are the most known illustration of blockchain-based crowdfunding. ICO tokens are like portions of an organization, however as a rule without value trade. All things considered, the financial backers buy tokens either for existing cryptographic money, for example, Bitcoin, or actual cash, like US dollars. Afterward, in the event of achievement, they can sell these tokens on digital money markets. Like in crowdfunding, reserves are raised to carry out an idea at the stage when the organization has no item.
9. **Trade Finance:** Blockchain additionally assumes a significant part in the exchange finance area - monetary exercises that are connected with business and global exchange (not stock trade exchanging). Indeed, even in the present troublesome universe of innovation, many exchange finance exercises include bunches of administrative work, like bills of filling, solicitations, letters of credit, and so on Obviously, many request the board frameworks permit to complete this administrative work on the web, yet at the same time, it consumes loads of time.
10. **Stock Exchange and Share Trading:** Trading stocks and offers has consistently elaborated a ton of outsiders, like representatives and the stock trade itself. As we probably are aware, the customary stock trade process includes heaps of stages and organization and can require as long as 3 days. Be that as it may, the decentralized idea of blockchain innovation in banking can eliminate that multitude of superfluous go-betweens and empower exchanging to be run on PCs everywhere. Not any more devoted servers joined into an interconnected organization.

2. Benefits Of Blockchain Technology

Blockchain works differently from a conventional bank since it is 100% decentralized and it depends on a great many PCs to check its exchanges. This implies it runs day in and day out, all year long. The main benefit of all of the Bitcoin blockchain is its straightforwardness because the blockchain goes about as a public record for each exchange made in the Bitcoin organization.

In 2022, banking was the business with the biggest blockchain spending, coming to practically 30% of the portion of the overall industry. While utilizing blockchain, banks get a scope of benefits, fundamentally work on the nature of offered types of assistance, and lift their incomes.

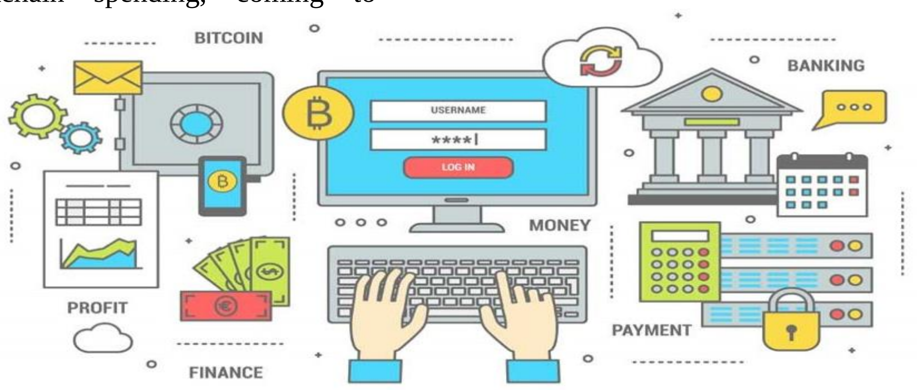

Figure 5: Blockchain, Source: The Financial Express

The money-related business is conceivably the feeblest field and requires additionally created protection. That is the explanation blockchain may be likely the most intelligent solution for ensuring high security while taking out distortion, cutting down useful risks, and diminishing administrative costs. Banks see all of the benefits this development can bring, and more than 90% of US and European money-related establishments have started to explore the possibilities of blockchain. Underneath we will analyze the going advantages of blockchain in banking and assets:

•Less administrative work and organization
•Straightforwardness
•Information uprightness
•Security
•No middle people for exchanges approval
•Decentralization and in this way, autonomy from focal archives
•Lower costs and quicker handling of exchanges

Limitations Or Demerits Of Blockchain Technology

a. High introductory expense: Blockchain saves exchange cost and time however it needs high starting capital expense.

b. Complexity: This innovation includes completely new jargon. Members ought to have particular information about the innovation.

c. Network size: Blockchain requires an enormous organization of members. If it isn't a broadly conveyed matrix of organization, it turns out to be more challenging to accomplish the advantages.

d. Transaction expense: Transaction cost of initial, not many years is free. In any case, after that, it raises the exchange cost in the organization.

e. Criminal movement: A blockchain, for example, Bitcoin's is intended to safeguard client classification, which makes it challenging to hack. Yet, this equivalent component implies that crooks might endeavor to utilize blockchain innovation to execute money illicitly. Banks for the most part have severe cycles to confirm their clients' characters, yet this isn't dependably the situation with digital money.

f. Speed and cost: Contingent upon the specific framework used to check exchanges, a blockchain may suck up tremendous measures of computational power. How much time it takes to deal with an exchange may likewise turn into a drawback in certain blockchains. It might require minutes to add another exchange or square to the chain, however, with an expanded number of clients, speed can turn into an issue.

g. Limited versatility and capacity issues: Blockchain has an agreement component to confirm the exchanges. This restricts the number of exchanges that can be made in a given period. Blockchain has a changeless disseminated chain of squares that develops at an extremely fast space, then, at that point, this can course for capacity issues.

h.Unavoidable security blemish: If the greater part of member hubs support the organization an untruth, it will end up being a reality.

i. Energy and asset utilization: A blockchain network consumes weighty assets. When a blockchain network develops, diggers need to approve the squares additionally get expanded. So it expanded weighty energy utilization.

The Impact And Future Of Blockchain Applications

The expected uses of blockchain are practically unending. Interestingly, decentralized, shared organizations can be made utilizing straightforward, permanent records of exchanges. Individuals can perform activities on an organization without requiring authorization, in manners that everybody can see and concur upon, and those activities can be hardened safely on the blockchain.

Whatever can be improved by taking out dependence on an outsider go-between presumably has at least one blockchain use case accessible. Making decentralized organizations and information bases opens up a universe of potential outcomes that a couple of might have envisioned preceding the creation of Bitcoin back.

The fate of Blockchain Technology

Banking chiefs accept that blockchain should satisfy a few circumstances before turning into a standard innovation in banking. To benefit as much as possible from blockchain, banks need first to foster the foundation expected to work as a worldwide organization utilizing matching arrangements. Just a broad reception of blockchain will lead this innovation to upset the area.

However, the speculation will accompany critical returns. Once completely taken on, blockchain is relied upon to empower banking establishments to handle instalments quicker and all the more precisely, meanwhile diminishing exchange handling costs. All things considered, blockchain-empowered financial applications will convey a superior client experience and help customary financial organizations to contend with blade tech new businesses.

3. Security Issues In Blockchain Technology

Blockchain has arisen as perhaps the most problematic innovation and has limited the predominant security issues in monetary exchanges. As other feasible executions for the innovation are being investigated, blockchains are coming to the front as strong competitors for tackling a variety of network safety challenges and giving start to finish security to banking organizations.

However blockchain enjoys a few upper hands over different frameworks, there are as yet a couple of difficulties as far as consistency, guidelines, and requirement that should be tended to. In any case, the undeniably developing interest and acknowledgment by undertakings would assist with defeating these difficulties sooner than expected. With this augmentation in predominance, different blockchain security issues have arisen. The following are the most squeezing security issues connected with blockchain innovation.

1. **Undefined Terminology:** The limited capacity pool open for blockchain development has extended the prerequisites for authoritative workplaces to demand that industry experts explain the advancement and any associated stresses. These prerequisites, essentially increase the bet of catch by regulators, believe it or not, even just the terms "DTL" and "blockchain" are bewildering. To lay it out simply, there is a general shortfall of specific cognizance among clients, business firms, and trained professionals.
2. **Regulations and guidelines Issues:** Still another blockchain security issue is the shortfall of clear administrative guidelines. Since there's little normalization in the blockchain world, engineers make some trying memories profiting from the slip-ups of others.
3. **Keeping up with Data Privacy:** Organizations ought to be mindful with regards to the uprightness and security of the information put away in records, remembering both exchange information and information for the record's own action. Associations need to guarantee that main individuals with suitable consent can get to the information
4. **Hazard of Adoption:** Even if there are typical financial benefits, the gathering and execution expenses of DLT/blockchain for existing undertakings can promptly become huge. The utilitarian costs related to taking on DLT/blockchain stay muddled. Taking everything into account, right now, certain authoritative

focus cycles can't be helpfully taken out or replaced with DLT/blockchain game plans

5. **Absence of Technical Clarity:** Given the record's decentralized nature and its capacity as a steady record, laying out clear administration rules is significant for both approved and unapproved Ledgers.
6. **Network Security:** A cover assault happens when a rival controls bits of affiliation correspondence and coherently allocates relationships to gather synchronization delay, a model is a fundamental refusal of association assault to work on pretentious mining and twofold spending. In obscure assaults, an aggressor picks and conceals data from something like one person, possibly by yielding the development of squares to a middle point.
7. **Security:** Privacy and classification are as yet major worries with blockchain exchanges because every node can get information from another node, and anybody seeing the blockchain can see all exchanges
8. **Lacking Testing:** The last issue to address: While blockchain has generally been utilized for digital money exchanges, it's undeniably being utilized in different fields. The issue is the coding utilized in non-cryptographic money applications will in general be untested and exceptionally test, implying that programmers might have the option to find and take advantage of weaknesses.
9. **Crime:** Bitcoin-empowered outsider exchanging stages permit clients to buy or sell a wide assortment of items. These cycles are unknown, making it challenging to follow client conduct and force real endorses
10. **Versatility Issues:** The present blockchains are the biggest at any point assembled, and as the innovation keeps on acquiring in ubiquity, blockchains are simply going to get greater. This has made a few specialists careful, essentially because these enormous scope blockchains are untested. Normal worries base on the issue that as the blockchain environment develops, extra weaknesses might be found and taken advantage of, or that the tech framework that upholds blockchain will turn out to be more inclined to basic errors.

4. Role Of Cyber Security In Keeping Blockchain Secure

Still, the innovation is new, numerous challenges are to be searched out to make it more helpful.

While blockchain presents potential security gambles, there is a lot of that network protection experts can do to moderate these dangers. IT experts who have meticulously evolved logical and specialized abilities will be very much situated to convey blockchain as securely as could be anticipated. One significant stage for network protection experts to take is to utilize encryption. By further scrambling the information that is sent through blockchain innovation, network protection experts can assist with mitigating a portion of the natural dangers.

Also, digital protection experts can utilize their relational abilities to plainly express expected perils to their clients. This might be pretty much as straightforward as advance notice an organization to painstakingly vet sellers and raise digital protection worries before embracing a new blockchain stage. A network protection expert may likewise exhort on some sound judgment practices for data security, like involving aliases online exchanges. Here are a couple of best practices for getting Blockchain arrangements:

- Enable identity and access management (IAM) controls to handle data access in the blockchain.
- Execute multifaceted verification.
- Keep solid cryptographic key administration.
- Do regular vulnerability assessment and penetration testing
- Fix security provisos to safeguard blockchain-based applications from weaknesses and information breaks.
- Securely store identity keys.
- Utilize privileged access management solution to secure blockchain ledger entries after suitable business logic.
- Safeguard API-based transactions with API security best practices.
- Use a data-gathering method for managing safeguard data or client information.
- Use security-saving headways for delicate information.
- Blockchain entrance testing: It is a security evaluation process done by moral software engineers or security specialists to test the security strength of the

blockchain-based course of action or application. The standard reason behind blockchain entrance testing is to reveal shortcomings and security stipulations and perceive misconfiguration botches in the plan. By performing Blockchain penetration testing, affiliations get encounters on the overall security position of their blockchain security and grant them to fix the potential weaknesses for their blockchain-based game plans or applications.

Conclusion

The blockchain will get a significant change in the Banking ng Sector. It can upset the customary plans of action and make the current frameworks old. According to a hypothetical viewpoint, in light of the writing survey, Blockchain Technology has high worth and great possibilities in settling issues of information trustworthiness, further developing straightforwardness, improving security, forestalling extortion, and layout out trust and protection. Blockchain advancement is an interesting yet moreover outstandingly complex development due to its working mechanics. Fintech and new organizations should eagerly work with government associations and regulators to ensure that the genuine and managerial design maintains the use of blockchain applications. The gathering of blockchain has a couple of challenges like security, protection, and versatility which will get tended to all through some unclear period. In general spending on blockchain is depended upon to reach $15.9 billion by 2023 stood out from $1.5 billion of each 2018. It shows the reputation of this advancement and its fast development. We can firmly recommend that time is prepared for the gathering of blockchain in India. Finally, it could be said that blockchain is a very moderate development that has consolidated the whole exercise of arrangement working with the carefulness of code.

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Citizenship and Civic Sense in India

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Abstract: Citizenship and civic sense are distinctive characters of democracy. A democratic country becomes successful only when civic sense is so strong towards national goal. Indian democracy is characterized by claims of citizen's rights in every field and lack of civic sense. Somehow, most of the Indian citizens do not care much for civic sense. Indian citizens today are so driven towards their personal goals that national priorities and policies have become a low priority.

Indian citizenship is conferred under the constitution of India in part II and Fundamental Rights are conferred for all citizens equally in part III of the constitution. The citizenship and citizen's rights are protected constitutionally and the judiciary is the guardian of these rights. Rights always include duties and both are two faces of same coin. Fundamental Duties should be the part of Fundamental Rights and eligibility to claim these rights should be based on discharge of these duties. However Fundamental Duties of Indian citizens which represent civic sense are incorporated in part-IV A of the constitution and are non-enforceable. In recent years most of Indian citizens are ignoring their fundamental civic responsibilities but they are very eager to claim their rights. This is a big hurdle towards achieving national development and prosperity.

Concept of Civic Sense:

Civic Sense is nothing but social ethics. It is consideration by the people for the unspoken norms of society. It has to do with discharging citizen's responsibilities towards nation, fellow citizens, social and natural environment, law-abiding, and maintaining decorum in public places. A lot of foreign democracies function in a smooth manner because of the strong civic sense amongst its people. Indian cultural tradition shows us our ancestors were lived with high social values. Every action of public life was based on 'Dharma' which means life of an individual is correlated, not to harm life of not only other people but entire living creature on earth. 'Karma' which means duty of an individual towards fellow living creatures got importance than personal interest. The generations fought for independence of our country maintained high values of social life. Sacrifice of our ancestors for freedom of the country is forgotten in recent years. After independence leaders fought for independence took the responsibility of nation building. They were honest and didn't wish to make money using political power. But in recent years spirit and principles of freedom struggle is forgotten and personal gains are getting prominence. However there are people living with honesty and high moral standards. It is also true that all people are not completely dishonest, as a human character of every individual has both the characters of good and bad. Strong civic sense is need of the hour to overcome selfishness and to build better society and nation.

Important areas where Lack of civic sense in India:

Communalism, caste politics, vandalism, intolerance, racism, road rage etc. are all examples of lack of civic sense in India. People are becoming less and less tolerant of each other, of other's cultures, backgrounds, and other similar traits. India has really diverse people and the need of the hour is general civic sense. It is not uncommon to read or hear about communal friction. Disregard for the law is a primary cause for lacking civic sense. It is so important to keeping the roads, streets and public property clean. There are random garbage and overflowing sewers at most streets of India. Roads are not dirty because nobody cleaned it, but because somebody dirtied it in the first place. Citizens criticize government for every problem, but they ignore their own civic responsibility. The areas where civic sense is very low in India can be listed as follows.

1. **Ignoring constitutional ideal of fraternity for electoral gains:** The preamble of the Indian constitution promotes fraternity and it is the reflection of our traditional value of Vasudeva Kutumbakam. The Fundamental Duty is to promote harmony and the spirit of common brotherhood amongst all the people

of India transcending religious, linguistic and regional or sectional diversities. However, Indian elections are characterized by religious and caste polarization. Caste politics is originated in the university education institutions. Social science professors and students in Universities grouped in the line of caste while ignoring the merit of students. University caste politics is patronized by political leaders for electoral gains. Caste polarization spreads through university graduates and caste leaders to common man in urban and rural areas. Today political discussion and affiliation is motivated by caste affiliation.

2. **Failure to judge proper candidate in election and vote:** Majority of the people vote in general election on the basis of their caste and religious affiliation. Voting percentage in general elections in urban areas is around 50% compared to rural areas of around 80%. Villagers vote enthusiastically from the early morning and most of the voting is complete by afternoon. Voting percentage in urban area indicates lack of interest in voting but they are first to criticize everything in politics. More than 40% of the people do not vote and they can elect an honest candidate.
3. **Criticizing own rich cultural heritage:** Ahimsa, unity in diversity, yoga, ayurveda, vegetarian diet, Vasudeva Kutumbakam, athithi devo bhava, spiritual path, care for environment and wild life, joint family system and family relationship are core values of Indian culture. The Fundamental Duty is to value and preserve the rich heritage of our composite culture. Appreciation of colonial rule and criticizing our own rich tradition, ignoring own historical monuments and appreciation of foreign culture, ignoring traditional knowledge, cultural heritage and social values is the clear indication of lack of civic sense in India. Every country has its own social values and social transformation in the changing time is the natural phenomenon. Indian society is passing through the process of social transition but great values of social life are prevail and must be preserved.
4. **Polluting natural environment:** It is the Fundamental Duty of every citizen to protect and improve the natural environment including forests, lakes, rivers, wildlife and to have compassion for living creature. Polluting the natural environment is taken as normal business and ignoring the civic sense is habit of most of urban people in India. It is a common sight in almost all cities and towns in India of people throwing garbage in the road or neighborhood. People from the urban areas in weekend and holidays going to forest areas, hill stations, waterfalls, river side, home stays and resorts in villages near by forest and throwing garbage there is clear violation of Fundamental Duties in the Indian constitution. Plastic bags, plates, cups and bottles, liquor bottles are thrown in the natural environment endanger agriculture ecology and wildlife.
5. **Destroying public property in the name of protest:** Every Indian citizen has the Fundamental Duty to safeguard public property and to abjure violence. Violent protest and destroying public property is the clear indication of lack of civic sense in India. Public property is the national property belongs to all and destroying it is the clear violation of rights of fellow citizens. Violent protest disrupts the normal life of others and brings a huge revenue loss to the country. Moreover, these protests hurt the business sector and socio-economic lives of the common people. Protests should be peaceful in nature so that the whole nation does not get affected due to the violent actions of some sections of the society.
6. **Lack of unity during national emergency:** It is the Fundamental Duty to defend the country and render national service when called upon to do so. Citizens should unite to protect the country during national emergency. People from some sections of the society question the defense forces during anti-terrorist operation and border clashes with enemy countries. It is happens only in India even defense forces are accused for pleasing some people for electoral gains. During recent days lockdown is imposed to prevent Covid-19 pandemic. However some people refused to stay in home and clashed with the police. This is the clear indication of some people oppose every national policy and only claim rights while refusing duties of responsible citizen.
7. **Lack of self respect and grabbing poor people's welfare schemes:** The government of India and state governments introduced several welfare schemes for poor families to uplift them poverty. Housing and free ration is essential for BPL families. An economically developed person having BPL card and free houses from the government is shameful and is lack of self respect. These people use free

ration as cattle feed and free house as cattle shed. An economically developed person is coming to BPL ration shop on luxury car without self respect shows how these people are greedy and no civic sense.

8. **Lack of honesty while paying taxes:** Income tax payers in India are only 6% of the total population and most of them are having bank account transactions and employees having salary through bank account. Remaining people pay only indirect taxes and most of them try to hide their actual income to avoid income tax. These people always complain about lack of civil amenities, under development and demand subsidized service everywhere. Small family living in a huge bunglow, luxurious marriage function, accumulating huge wealth by corrupt practice are the clear indications of ignorance of Indian traditional social values.
9. **Disobeying national laws and policies:** There are some citizens having negativity and suspecious for every policy and every law made in the interest of the nation. Economic liberalization, developmental projects like national highways, railway reform, construction of ports, airports, and other industrial infrastructures, modernization of defense forces are opposed in the name of philosophy. Agriculture reforms are very essential for the survival of formers. Prices of agricultural products are same as in 20 years back. The cost of agricultural production is increasing continuously from past 20 years. Some people having luxurious life, complain of price rise of agricultural products are shameful.
10. **Ignoring national interest while promoting personal interest:** Promoting personal interest while sacrificing national interest is dangerous in long term. Promoting caste politics for electoral gains, polluting and over exploitation of natural resources, inciting communal clashes, opposing national policies and programmes for political gains, hiding actual income to avoid income taxes show how some people are promoting personal interest and ignoring national interest.

Way Forward is Integration of Fundamental Rights and Duties

Indians are assertive in nature when it comes to their rights which can be easily observed by numerous protests, strikes and movements that take place all over the country. Indian citizens need to understand the lack of civic sense that is hindering national development and prosperity. Thus, Indian citizens need to play their role in a manner which helps India prosper. There is a need to bring the positive and constructive discourse of civic sense in India so that citizens can play their role in strengthening the democracy.

Indian citizens need to incorporate the virtue enshrined in the Fundamental Duties of the constitution of India. Citizens who have understand the civic sense would become an asset for the country. Several countries made the Fundamental Duties compulsory for all citizens, correlated Fundamental Rights and Duties. Fundamental Duties incorporated in Indian constitution under Article 51A are utmost importance for India a successful democracy, where everyone lives peacefully without any violence. The usage of beautiful words like brotherhood, composite culture, environment, scientific temper, humanism, nation, education etc. reminds citizens of the values which need to be preserved at any cost to develop India as a strong nation.

The Fundamental Duties were added to Indian constitution in 1976, upon recommendations of the Swaran Singh Committee. It was decided to make Fundamental Duties non-enforceable because the majority of the population was illiterate; many were unaware of their constitutional obligations. However in 2020s the literacy rate is high and Indian economy is developing rapidly. Majority of the people overcome their poverty and leading good standard of life. It is the right time to make Fundamental Duties enforceable and relate them to the Fundamental Rights.

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Purpose of Seeking Information from News Papers and Magazines

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Abstract: Newspapers and magazines are periodic print media that are published on a regular basis. Newspapers used to be published every day or every week, but they were also published semi-weekly, bi-weekly, and monthly in the past. Weekly, biweekly, monthly, or quarterly magazines, on the other hand, were more common. Newspapers and magazines may be purchased individually or as part of a subscription at newsstands, grocery stores, book stores, train stations, and other locations.
Key Words: News Paper, Magazine, Purpose, Importance

Introduction:

Newspapers and magazines are periodic print media that are published on a regular basis. Newspapers used to be published every day or every week, but they were also published semi-weekly, bi-weekly, and monthly in the past. Weekly, biweekly, monthly, or quarterly magazines, on the other hand, were more common. Newspapers and magazines may be purchased individually or as part of a subscription at newsstands, grocery stores, book stores, train stations, and other locations.In general, the goal of a newspaper is to deliver current information, or "news," to a certain readership as quickly as possible. What counts as "news" is determined in part by the target audience. Newspapers geared at a wide audience will cover politics, crime, wars, economy, and just about everything else that could pique the reader's interest. A farm newspaper, on the other hand, may publish information on innovative agricultural techniques, the status of farm-related legislation in Congress, commodity pricing, and information about county and state fairs, among other things.

Scope of News Papers and Magazines:

A newspaper is a type of printed media that is made up of several sheets of printed paper. It includes news, education, events, reviews, and ads, among other topics. In today's world, a newspaper is a must-have. It is currently available in virtually every language and in every country on the planet. It informs us about current events across the world. We used to get our news through newspapers, where we could read about politics, religion, the economy, society, movies, food, and other topics. But now he not only has news, but he also has a variety of subjects to watch.

1. As a result, there are currently numerous types of newspapers. They may be categorized based on how many times they emerge every year. Some are done every day, twice a week, once a week, semi-printed, and once a month. The newspaper offers us with a wealth of local, national, and worldwide information. We must be informed of everyday happenings in politics, civic life, industry, business, fashion, sports, scientific accomplishments, art, and other disciplines. Newspapers provide a variety of functions. They have greater power and influence.
2. They bring us up to date on what is going on in the country and across the world. They tell us about the most recent inventions, research results, and fresh ideas. Newspapers are used by merchants to market their products. Their product sales are increasing. In today's world, business cannot thrive without advertisement.
3. As a result, newspapers play an important role in trade. He is in charge of the country's administration and the nation as a whole. She frequently offers constructive criticisms of government actions, admits her faults, and continues on the correct track. The general public is made aware of social misbehavior through this means of communication. Various occurrences are reported by news journalists.Send battle and sporting event reports straight from the scene.

Purpose of Seeking Information from News Papers and Magazines:

The more civilization develops; the more communication channels are required. Newspapers and magazines are significant forms of communication in our lives.To begin with, newspapers and magazines provide us with a wide range of news every day. They keep us up to date on the world's political condition. We may learn about what is going on in our country and around the world by reading newspapers and periodicals. Newspapers and magazines provide significant contributions to the advancement of our knowledge. We learn a lot of intriguing things from valuable and delicate critical and commentary articles on culture, social civilization, and new life styles. Our minds and points of view are cemented and enriched as a result of newspapers and periodicals. We can strengthen our reasoning skills by reading them.

Comparison between News Papers and Magazines:

Sl.No	News Paper	Magazine
1	A newspaper is a printed publication that offers news, stories, information, advertising, and communication in folded pages that are typically unstapled.	A magazine is a publication that contains intriguing articles, interviews, tales, and drawings about a certain subject and is aimed at a specified audience.
2	Newspapers have a large readership because virtually everyone reads them.	Magazines have a small readership because they appeal to a certain demographic.
3	Frequency of Publication Daily, twice a week, once a month, once a quarter, twice a year, or once a year.	Frequency of Publication Periodically
4	When compared to pictures, text is more.	A well-balanced text-to-image ratio.
5	The layout and design are simple and consistent.	It does not have a consistent layout or design.
6	Length of the articles is Short and precise.	Length of the articles is Long and detailed
7	Economical enough for the average person to purchase.	Moderately Expensive

Importance of News Papers and Magazines:

The role of news papers is to provide us with many surprising and enlightening news that is happening daily in every corner of the world, in the state, in the country and abroad. For many, day newspaper is an important hobby. The digital revolution has made it possible for us to read all the news on mobile and computers. But many still find comfort in reading the news papers.

Reading and Writing Ability
Common Sense
Entertainment
The Best Speech
Creative Activities

Conclusion: Newspapers and magazines are important tools for improving communication skills. We comprehend what is going on around us when we read newspapers and periodicals. This applies to both our country and the rest of the globe. This aids in the development of our vocabulary, which will be useful for communicating with others.The majority of people nowadays prefer to read internet news since it is a cost-effective and efficient method of staying informed. More Options at any given time, you may read a large number of articles, news, and editorials. Updates are available at all times. Online news is updated in real time, giving you the most up-to-date information.

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A Study on Allocation of Income and Expenditure in Special Development Plan for Kalyana Karnataka Region

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Abstract: *Kalyana Karnataka is a district in the southern state of Karnataka. It has been given special statues for financial allocation and expenditure by the government. The dispraise in development after due to region compared to each district in Kalyana Karnataka was shown. The southern Kalyana Karnataka region government trying to improve the standard of living people in different part of the region. The study is aim is to reduce and wealth disparities between different areas of the year by year. This paper is an attempt to analysis the disparities in financial allocation of Kalyana Karnataka region and compared to inter district disparities in Kalyana Karnataka regions. This study has used some statistical tools for understanding of the growth and volume of the development, they are like mean, standard deviation, standard error, coefficient of variation, range and ANOVA, Etc. The study find the no waste variation in inter district in Kalyana Karnataka district along with the all other districts.*
Key words: Income. Expenditure. Growth. Regional Disparities.

Introduction:

Regional disparity is a common problem faced by every nation and state. But the lot of difference regional imbalance. In some countries or states it is high and for some it is low. Perhaps, no country and state are an exception to this problem. Because of developing nations and states comparatively regional imbalances like India than other developing country. The Karnataka is developing economy fastest but present situation was regional disparities to exist. Regional imbalances of Karnataka can be overview from the background of the British rule. After independent Karnataka was divided mainly into three parts, namely Bombay Karnataka, Mysore princely state and Hyderabad Karnataka. But Mysore was a developed region because number of social welfare programmes was implemented. Hyderabad Karnataka was ruled by the Nizams which was underdeveloped there is no Implementation of the region, at the same time Bombay Karnataka was ruled by the Maratha's which was also underdeveloped but was a comparatively better placed region than Hyderabad Karnataka. After the completion of several decades of India independence (75 years) there is no overall development lot of different in regional imbalance, now too there is no considerable reduction in regional imbalances. Unsatisfied people (especially from north Karnataka) have protested and demanded a separate state during 1995-99. Considering this, Karnataka State Government set up a high-power committee on redressed of regional imbalances under the chairmanship of Prof. D.M. Nanjundappa the most popularly known as Dr. Nanjundappa Committee. This report shows that north Karnataka region is more backward in general and Hyderabad Karnataka is the most backward compared to south Karnataka. Though this Committee has submitted the report during 2002, the Government had delayed in the implementation and started the implementation during 2007-08 with allocation of Rs. 1571.50 crore in the budget.

Special Development Plan (Sdp):

Dr. Nanjundappa Committee suggests an 8-year Special Development Plan to reduce the existing regional imbalances with Rs. 31,000 crore at constant prices of 2002-03. Of this, Rs. 15,000 has to be spent in the normal budget and the remaining Rs. 16,000 crore through additional allocation for the underdeveloped regions. On what basis, this amount of Rs. 16,000 crore has been suggested is not mentioned clearly. Further, what should be the share of taluks is also not mentioned in the report. Instead, the Committee has suggested financial allocation for the four administrative divisions.

Hence, the main problem is that the entire money cannot be spent on some taluks, because money is needed for district head quarters also. For example, additional money is needed for District Hospitals, Universities etc in under developed regions. Here the Committee has not gone through the district sector spending/allocation. It jumps directly from taluks to divisions through adding the CDI values. It should have calculated CCDI and CDI at district level using the appropriate indicators. That would have been helpful for the preparation of district sector plans.

Implementation of Special Development Plan

The programmes under the SDP are planned on the basis of the requirement sent by the concerned departments. The progress of the works under SDP is revised at the state and district level in KDP meeting every month and a DSS system has been incorporated for providing online information about the programmes undertaken under SDP and the physical and financial progress achived. A special head of account with the object code 133 is allocated for scheme under SDP. Special cells have been establishing in the planning department to co-ordinate and monitor the implication process. The amount allocated releases made and expenditure incurred. A state level monitoring committee is constituted under the chairmanship of additional chief secretary and development commissioner by government order no. PD 03 2014, Bangalore, dated; 30.12.2014. A special 39 nodal officer has been appointed to monitoring the 39 most backward taluk; government order is issued No P D 99 PSD 2015 dated 121.11.2015.

Table:- 01

Sectoral Allocations Suggested by D.M. Nanjundappa Committee

Sl. No	Sector/Programme	outlay (Rs. in Cr)
1	**Agriculture and Allied**	**2,340 (7.6)**
1	Agriculture including market, training, land and soil improvement, machinery and equipment, price stabilisation fund	2000
2	Sericulture	100
3	Horticulture	100
4	Fisher	70
5	Animal husbandry	70
2	**Rural development**	**7100 (23.1)**
1	Rural roads	600
2	Z. P. Roads	400
3	Rural water supply	4500
4	Rural housing	1600
3	**Irrigation**	**8000 (26.0)**
1	Irrigation	7800
2	Water recharging scheme	200
4	**Energy**	**3000 (9.8)**
1	Power	3000
5	**Industries and minerals**	**400 (1.3)**
1	industry (Industrial Sheds, Industrial Infrastructure, State Finance Corporation of North Karnataka)	400
6	**Transport**	**1650 (4.5)**
1	Railways	500
2	Airstrips/Reviving airports fallen into disuse	1000
3	Ports	150
7	**Science and Technology**	**200 (0.7)**
1	I.T. & B.T.	200
8	**Economic Services**	**10 (0.03)**
1	Banking, Co-operation & other financial Institutions	10

9	**Social Services**	**8025(26.1)**
1	Health	800
2	Education	1000
3	Sports	25
4	Tourism	2000
5	Urban Development	200
6	Urban Water Supply	3000
7	Weaker Section, Women Development & Social Welfare	1000
10	**Total**	**300725 (100)**
	Rounded off to	**31,0000**
	Anticipated amount from the Annual Budget for 114 Taluks	15,000
	Additionality for 114 Taluks	16000

(Source: HPC FRRI)

It is very difficult to spend according to Dr. Nanjundappa Committee's recommendations because it suggests only sector-wise allocation, not through programme. When the Government spends money, it should have a proper plan, targets and aims; otherwise, it becomes only a political act of satisfying the people.

By the High-Power Committee, the following have been implemented in kalyana Karnataka regional development:

- A Central University was established in Kalburgi.
- Food Parks was established in Kalburgi
- A Textile Park are under process in Kalburgi.
- Airport has been set up in Kalburgi.
- 6 new Government Medical colleges were established at Hassan, Mandya, Shimoga, Raichur, Belagavi and Bidar.
- Karnataka Veterinary and Fisheries Science University was established in Bidar.
- Dairy Science College is established in Gulbarga.
- Kasturba Gandhi Girls Schools were established in all the 39 Most backward Taluks.
- Dialysis wards are setup in 23 district hospitals and 34 taluk hospitals. l Bidar – Kalburgi. railway line, open to public service.
- 172 new breeding centres are established.
- APMC markets are capable of operating independently in 162 Taluks.
- The department has announced that finding a land to setup a Government Medical Colleges on priority basis due to no availability of Private or Government Colleges in Haveri, Yadgiri, Bagalakokte, Chitradurga,Chikkamanagalur, Chikkaballapura and Ramanagara districts.

Sector wise programmes 2020-21

Horticulture For 2020-21 an amount of Rs.34.43 Crore has been allocated under National Horticulture Mission Scheme.

Health Construction and upgradation of primary health canters have been taken up. Action has also been initiated for improvement of health facilities by establishing Suvarna Aarogya Suraksha Trust. For 2020-21 an amount of Rs.185.05 crore has been earmarked to Health and Family Welfare Department for Ayushman Bharat–Pradhana Mantri Jana Arogya Yojane (PMJAY) (Rs.75.00 crore), National Health Mission (NHM) (Rs.45.00 crore) and for Hospital Construction / Upgradation (Rs.65.05 crore).

Education A sum of Rs.28.30 crore has been allocated in 2020-21 for infrastructure facilities like School buildings, drinking water and sanitary facilities.

Infrastructure Development: -

One of the prime objectives of SDP is to fill up the gaps of infrastructure in the backward taluks and fasten the development process in these taluks. Under energy sector, the focus is on provision of electricity to villages, hamlets and tends. Schemes of Rural Load Management System (RLMS) are being implemented. The Minor airports at Bidar, Kalburgi, Vijayapura, Belagavi and Hubballi are provided with additional funds for completion. The Committee had identified 90 taluks (61 in north Karnataka and 29 in south Karnataka) out of 175 taluks which have road length less than the State average. Under the

Special Development plan, development of rural roads has been taken up under NABARD-assisted schemes, Suvarna RastheVikasaYojane and other road development schemes. Rs.363.14 crore is allocated for Rural Drinking Water Supply for 2020-21 and Rs.156.59 crore is allocated for Namma Grama Namma Rasthe during 2020-21 for improvement of roads. Under K-SAFE project, for construction fire stations and officers/ staff Quarters in 2020-21 Rs.3.14 Crores has been earmarked to Home Department. For 2020- 21 an amount of Rs. 62.98 crore has been provided to Transport sector for construction of new depots, upgradation of existing bus stands, provision of toilet facilities, asphalting the bus stands and construction of waiting rooms etc., in four divisions. Rs.24.85 crore has been provided to share the cost of railway schemes.

Reviews of Literature:

1. P. Ponmuthsaravanan and G. Ravi (7 July, 2016): This article considers disparities from multi-dimensional aspect in India. Some dimensions are, the level of economic growth, level of education, level of health services, level of nutrition, status of women, etc.

2. Dr. Parul Mittal and Jyothi Devi (Dec, 2015): This study highlighted about regional imbalances among various states of the country. In addition, the study offered some suggestions to bring down these disparities.

3. Shobha K and Ambuja Devi (Oct 13, 2014): The study examines the differences in fifteen states in India. Very importantly, this paper focuses on disparities in level of development among the states with respect to economic and social indicators, viz. percapita gross domestic product, people below poverty line, literacy rate, infant mortality rate and life expectancy at birth.

4. Dr. S. Saravanan and Dr. A. Joseph Durai (2012): This paper discusses the pattern and determinants of economic growth of major Indian states during period of 1960-2008. Besides, this paper analyzed inter-state and intra-state differentials with paper comparison growth of per-capita state domestic product (SDP) and per-capita district domestic product (PDP) for the period of 1960-2008.

5. Shiddalingaswami H and Raghavendra V.K (Dec, 2010): This study attempts to investigate the trends and pattern of per-capita income of Karnataka regarding district and division level disparities. Moreover, this study explicates the relationship among and between per-capita incomes, human development, and workforce from 1991 to 2007-08. Above all, this study suggested that social over head capital is major factor in reducing the regional disparities.

Objectives of the Study: -

1. To assessment of Kalyana Karnataka Regional Development Board financial allocation from District wise.
2. To know the financial expenditure Inter-district wise Kalyana Karnataka Regional Development Board.
3. To know the assessment of development districts statues in Kalyana Karnataka Regional Development Board.

5) Scope And Limitations Of The Study:

The scope of the study covers major 6 districts in Karnataka to determine the level of development of Kalyana Karnataka Regional Development Board. This study major cover 6 district development find out and includes overall growth performances.

The present study analysis concentrates on different issues pertaining to the regional variation in development from 2013 to 2021 in the year how many financial allocations in Kalyana Karnataka regional development district. And at the same time financial allocation growth of these district. The study is which district more fund allocation and which state low fund allocation find out. Final suggested which district most drawback and which district high development in Kalyana Karnataka regional district at same time which district. this study compares Ballari along growth another district.

6) Financial Allocation And Expenditure: -

Table: - 2
Financial allocation and Expenditure in Bidar district

Year	Bidar		Ballari		Changes in Amount in lakh		%changes expenditure in lakh	
	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure
2013-14	1753.19	1724.7	1176.12	1134.46	577.07	590.236	149%	152%
2014-15	11966.1	11560.9	6017.03	5692.44	5949.05	5868.44	199%	203%
2015-16	9597.76	8905.18	7812.75	6713.98	1785.01	2191.2	123%	133%
2016-17	9984.85	9110.91	10404.6	8698.81	-419.72	412.102	96%	105%
2017-18	19824.5	16743.2	16165.2	13490.3	3659.29	3252.92	123%	124%
2018-19	13890	10592.2	16444.5	12962.7	-2554.51	-2370.48	-84%	-82%
2019-20	20449.7	10600.4	23730.2	15641.4	-3280.41	-5041.01	-86%	-68%
2020-21	13895.6	273.48	16215.3	134.312	-2319.68	139.168	86%	204%

(Source: - Kalyana Karnataka regional development board Kalburgi)

The above table showing the fund allocation and actual expenditures incurred for development since from last 8 years between Ballari and Bidar from Kalyana Karnataka regional development board. The allocation of fund to Bidar is more in the year of 2013 to 16, but 2018 to 21 onwards the allocation of fund to Ballari considerably increased in the year of 2020-21 the allocation to Ballari was 86% more than Bidar. The table also depicting the Expenditure for development between Bidar and Ballari is varies from year to year. The expenditure for Bidar development was greater than Ballari in the year of 2013 to 2017. In the year of 2017-18 onwards expenditure for Ballari development increasing, but in the year 2020-21 much of expenditure incurred in Bidar it was 204% greater than Ballari. In the year 2014 – 15 there was huge gap between two districts, Bidar stake was 203% greater than Ballari.

Table: - 3
Financial allocation and Expenditure in Yadgiri district

Yadgiri								
Year	**Yadgir**		**Ballari**		**Changes in Amount in lakh**		**%Changes expenditure** in lakh	
	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure
2013-14	1290.67	1148.028	1176.12	1134.46	114.55	13.5675	110%	101%
2014-15	6628.34	5566.685	6017.03	5692.44	611.31	-125.753	110%	-98%
2015-16	8785.18	7872.438	7812.75	6713.98	972.43	1158.46	112%	117%
2016-17	10066.5	8022.566	10404.6	8698.81	-338.07	-676.241	-97%	-92%
2017-18	14412.21	11631.31	16165.2	13490.3	-1753.03	-1858.97	-89%	-86%
2018-19	11187.34	9129.891	16444.5	12962.7	-5257.15	-3832.77	-68%	-70%
2019-20	16297.4	7955.067	23730.2	15641.4	-7432.75	-7686.33	-69%	-51%
2020-21	9788.988	0	16215.3	134.31	-6426.3	-134.312	-60%	-0%

Source: - Kalyana Karnataka regional development board Kalburgi

The above table screening the fund allocation discrimination for development between Ballari and Yadgiri from Kalyana Karnataka regional development board since from last 8 years. The allocation of fund to Ballari is more as comparing to Yadgiri despite of 2013-14 and 2015-16 because the allocation stake for Yadgiri was more that is 110% and 112% respectively. The allocation of fund is more to Ballari (60%) in the year 2020-21. The table also illustrating the Expenditure for development difference between Yadgiri and Ballari. The expenditure was low in Yadgiri district as compare to Ballari district. Where as in the 2013-14 and 2015-16 expenditure in Yadgiri was more

101% and 117% respectively. Despite of two years the Ballari stake of expenditure is more in the year of 2020-21 no expenditure incurred in Yadgiri district but where as in Ballari 134.31 in lackh incurred for development.

Table: -4, Financial allocation and Expenditure in Kalburgi district

Year	Kalburgi		Ballari		Changes in Amount in lakh		% of financial expenditure in lakh	
	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure
2013-14	3875.25	3358.781	1176.12	1134.46	2699.13	2224.32	329%	296%
2014-15	25869.52	22661.5	6017.03	5692.44	19852.5	16969.1	430%	398%
2015-16	26780.3	22933.69	7812.75	6713.98	18967.6	16219.7	343%	342%
2016-17	32989.78	27838.04	10404.6	8698.81	22585.2	19139.2	317%	320%
2017-18	34968.34	30585.51	16165.2	13490.3	18803.1	17095.2	216%	227%
2018-19	26380.66	19956.28	16444.5	12962.7	9936.17	6993.62	160%	154%
2019-20	41641.49	16874.6	23730.2	15641.4	17911.3	1233.2	175%	108%
2020-21	26479.84	317.416	16215.3	134.312	10264.6	183.104	163%	236%

Source: - Kalyana Karnataka regional development board Kalburgi

The above table displaying the fund allocation since from last 8 years between Ballari and Kalburgi from Kalyana Karnataka regional development board. The allocation of fund to Kalburgi district is high since from 2013-21. The allocation gap greater in the year 2014 to 2015 the Kalburgi stake (430%) was more than Ballari. The above table also depicting the Expenditure for development between Kalburgi and Ballari is varies from year to year. The expenditure for Kalburgi development is more since from 8 years. The allocation was 398% greater than Ballari in the year of 2014-15. In the year of 2019-20 the gap is declined to 108%. But in the year 2020-21 gap has increased to 236%.

Table:- 5, Financial allocation and Expenditure in Raichur district

Year	Raichur		Ballari		Changes in Amount in lakh		% changes in expenditures in lakh	
	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure
2013-14	2085.09	2002.691	1176.12	1134.46	908.97	868.231	177%	177%
2014-15	9294.97	7987.132	6017.03	5692.44	3277.94	2294.69	154%	140%
2015-16	10461.67	9156.138	7812.75	6713.98	2648.92	2442.16	134%	136%
2016-17	12894.75	10936.79	10404.6	8698.81	2490.18	2237.98	124%	126%
2017-18	21846.11	17257.91	16165.2	13490.3	5680.87	3767.63	135%	128%
2018-19	17227.88	13224.93	16444.5	12962.7	783.39	262.276	105%	102%
2019-20	24883.93	12450.88	23730.2	15641.4	1153.78	-3190.52	105%	-80%
2020-21	17363.56	1875.138	16215.3	134.312	1148.27	1740.83	107%	139%

(Source: - Kalyana Karnataka regional development board Kalburgi)

The above table showing the fund allocation discrimination between Raichur and Ballari since from 8 years. The fund allocation to Raichur was more in 8 years despite of 2019-20 in that year allocation to Ballari is greater than Raichur. The allocation gap considerably declining since from 2013 to 2020 from 177% to 107%. Now in the year of 2020 it was recorded low discrimination in allocation between them. The table also depicting the Expenditure deviation for development between Raichur. The expenditure in Raichur district was more as comparing to Ballari since from 2013 to 21 but in the year 2019-20 the expenditure is Ballari (80%). The huge difference recorded in the year of 2013, but later on gap is considerably declining.

Table:-6, Financial allocation and Expenditure in Koppal district

Year	Koppal		Ballari		Changes in Amount in lakh		Changes expenditure in lakh	
	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure	Allocation in lakh	Expenditure in lakh
2013-14	1358.67	1323.43	1176.12	1134.46	182.55	188.969	116%	117%
2014-15	8394.2	7468.006	6017.03	5692.44	2377.17	1775.57	140%	131%
2015-16	9382.23	8858.914	7812.75	6713.98	1569.48	2144.94	120%	132%
2016-17	13308.29	12172.45	10404.6	8698.81	2903.72	3473.64	128%	140%
2017-18	15002.72	12762.22	16165.2	13490.3	-1162.52	-728.061	-93%	-95%
2018-19	11705.8	10051.61	16444.5	12962.7	-4738.69	-2911.05	-71%	-78%
2019-20	17111.31	10589.06	23730.2	15641.4	-6618.84	-5052.33	-72%	-68%
2020-21	9716.17	431.396	16215.3	134.312	-6499.12	-297.084	-60%	-321%

(Source: - Kalyana Karnataka regional development board Kalburgi)

The above table showing the fund allocation and actual expenditures incurred for development since from last 8 years between Ballari and Koppal from Kalyana Karnataka regional development board. The allocation of fund is more to koppal district since 2013 to 2017, the share of allocation to Koappal district is more. But after that much preference is given to Ballari district in allocation of fund for development. The allocation gap between them was more up to 2016-17 then after the gap was considerably declined.The Expenditure for development between koppal and Ballari is varies from year to year. The expenditure for koppal development was 140% greater than Ballari in the year of 2013-17. After the year 2017 onwards, expenditure in Ballari district was increased than Koppal. There recorded huge expenditure gap in the year of 2020-21 it has 321%.

Table:- 7, Financial Allocation in five districts

Year	Bidar	Yadgir	Kalaburagi	Raichur	Koppal	Ballari
2013-14	1753.19	1290.67	3875.25	2085.09	1358.67	1176.12
2014-15	11966.08	6628.34	25869.52	9294.97	8394.20	6017.03
2015-16	9597.76	8785.18	26780.30	10461.67	9382.23	7812.75
2016-17	9984.85	10066.50	32989.78	12894.75	13308.29	10404.57
2017-18	19824.53	14412.21	34968.34	21846.11	15002.72	16165.24
2018-19	13889.98	11187.34	26380.66	17227.88	11705.80	16444.49
2019-20	20449.74	16297.40	41641.49	24883.93	17111.31	23730.15
2020-21	13895.61	9788.99	26479.84	17363.6	9716.17	16215.29
Mean	12670.22	9807.08	27373.15	14507.5	10747.42	12245.71
Standard deviation	5988.36	4613.37	11015.35	7343.99	4821.04	7221.16
Standard Error	2117.20	1631.07	3894.51	2596.49	1704.49	2553.06
Rang	18696.55	15006.73	37766.24	22798.84	15752.64	22554.03

(Source: - Kalyana Karnataka regional development board Kalburgi)

The above table showing the fund allocation fund for development since from last 8 years between five districts in Kalyana Karnataka regional development board. The average allocation hos made to Kalburgi followed by Raichur, Bidhar and allocation is low to koppal followed by Ballari.

Table:-8 ANOVA Financial Allocation results in five districts

ANOVA FINANCIAL ALLOCATION						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	7.01E+08	5	1.4E+08	3.404565	0.011346	2.437693
Within Groups	1.73E+09	42	41177912			
Total	2.43E+09	47				

It is observed that there is no significant difference in expenditure for development between five districts in Kalyana Karnataka. the null hypothesis is accepted because the P Value less than 0.05.

Table:-9 Correlation Financial Allocation

CORRELATION FINANCIAL ALLOCATION						
Districts	Bidar	Yadgiri	Kalburgi	Raichur	Koppal	Ballari
Bidar	1.00	0.95	0.88	0.96	0.90	0.90
Yadgiri	0.95	1.00	0.94	0.97	0.97	0.93
Kalburgi	0.88	0.94	1.00	0.87	0.97	0.80
Raichur	0.96	0.97	0.87	1.00	0.92	0.97
Koppal	0.90	0.97	0.97	0.92	1.00	0.86
Ballari	0.90	0.93	0.80	0.97	0.86	1.00

The above table showing their existing strong positive co-relationship between Ballari and other five Districts in Kalyana Karnataka region.

Table: - 10, Financial Expenditures

Year	Bidar	Yadgiri	Kalburgi	Raichur	Koppal	Ballari
2013-14	1724.696	1148.028	3358.781	2002.691	1323.43	1134.461
2014-15	11560.88	5566.685	22661.5	7987.132	7468.006	5692.438
2015-16	8905.177	7872.438	22933.69	9156.138	8858.914	6713.978
2016-17	9110.909	8022.566	27838.04	10936.79	12172.45	8698.807
2017-18	16743.2	11631.31	30585.51	17257.91	12762.22	13490.28
2018-19	10592.17	9129.891	19956.28	13224.93	10051.61	12962.66
2019-20	10600.39	7955.067	16874.6	12450.88	10589.06	15641.39
2020-21	273.48	0	317.416	1875.138	431.396	134.312
Mean	8688.863	6415.748	18065.73	9361.451	7957.136	8058.541
Standard Deviation	5344.431	3987.007	10911.01	5364.352	4688.388	5727.208
Standard Error	1889.542	1409.62	3857.625	1896.585	7957.136	2024.874
Rang	16469.72	11631.31	30268.1	15382.77	12330.82	15507.08

Source: - Kalyana Karnataka regional development board Kalburgi

The above table showing the fund expenditure for development since from last 8 years between five districts in Kalyana Karnataka regional development board. The average expenditure his made to Kalburgi followed by Raichur, Bidhar and expenditure is low to koppal followed by Ballari.

Table:- 11 ANOVA Test- Financial Expenditures

ANOVA FINANCIAL EXPENDITURES						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	7.01E+08	5	1.4E+08	3.404565	0.011346	2.437693
Within Groups	1.73E+09	42	41177912			
Total	2.43E+09	47				

It is observed that there is no significant difference in expenditure for development between five districts in Kalyana Karnataka. the null hypothesis is accepted because the P Value less than 0.05.

Table:- 12 Correlation Financial Expenditure

CORRELATION FINANCIAL EXPENDUITURE						
Districts	Bidar	Yadgiri	Kalburgi	Raichur	Koppal	Ballari
Bidar	1.00	0.93	0.91	0.94	0.90	0.82
Yadgiri	0.93	1.00	0.92	0.98	0.97	0.89

Kalburgi	0.91	0.92	1.00	0.86	0.94	0.68
Raichur	0.94	0.98	0.86	1.00	0.95	0.93
Koppal	0.90	0.97	0.94	0.95	1.00	0.88
Ballari	0.82	0.89	0.68	0.93	0.88	1.00

The above table showing their existing strong positive co-relationship financial expenditure between Ballari and other five Districts in Kalyana Karnataka region.

FINDINGS:-

- From 2013 to 2016 he allocation of fund to Bidar was greater than Ballari, then 2016 onwards share of allocation to Ballari is more.
- There discrimination in fund allocation by KKRDB between five districts.
- There is a fund allocation grater then Ballari in the year of 2017 to 2021,
- From the year 2014 to 2015 high expenditure Bidar compare to Ballari. Then 2020-21 onward share of expenditure in Bidar.
- The Bidar financial allocation first high after that allocation of amount decline year by year.
- The fund allocation in the year 2014 to 2016 is high in yadagir compare to Ballari and after that fund allocation more preference goes to Ballari.
- Form the year 2015 to 2016 is high expenditure in Yadagir but onward decline expenditure.
- The allocation of amount more than Ballari compare to Yadrigi district in Kalyana Karnataka region region.
- Financial expenditure 2020 to 21 year there is no expenditure Yadagiri district in Kalyana Karnataka region Region.
- Science the year 2015 to 16 Kalyana Karnataka region board high expenditure Yadagiri district.
- From the year 2013 to 2021 the more fund Allocation Kalburgi rather than Ballari in Kalyana Karnataka region.
- Kalyana Karnataka Region board more allocation of fund in the year of 2014 to 2015 share of amount 430% in Kalburgi but overall development Kalburgi compare Ballari.
- In the expenditure of amount 2020 to 21 highest in Ballari share of amount Expenditure 236% in Kalyana Karnataka Region board.
- Form the Raichur find allocation is high in the year 2013 to 2018 increase and after that 2020 in the year high increase amount allocation and Ballari allocation is negative expenditure.
- The financial allocation 2013 to 2017 more fund allocation goes to Koppal in the highest share of amount 140% In Kalyana Karnataka region board district.
- Onward 2017 to 21 continually increase fund expenditure more Ballari district, rather than Koppal in Kalyana Karnataka region board.
- Finally, Ballari fund expenditure is high in the year 2020 t 2021 In the share of expenditure 321% compare to Koppal in Kalyana Karnataka region board.

Conclusion:-

In the present study inter-district disparities in financial allocation and financial expenditure were analysis. Regional development has been one of the prime objectives of the government. The existent of the backward regions in developing counters like ours necessitates supplementary emphasis on the regional development. In 2013-21 onward government had releases special grant to Kalyana Karnataka region, but it is noticed that in Kalyana Karnataka region in the districts level of disparities in financial allocation and expenditure. Government has to take steps to increase in Kalyana Karnataka region development facilities in the districts. Hence the Kalyana Karnataka region improved in the region.

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Holistic and Multidisciplinary National Education Police in India -2020 Light but Tight

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Abstract: National Education Policy envisions an education system rooted in Indian ethos that contributes directly to transforming India, that is Bharat, sustainably into an equitable and vibrant knowledge society, by providing high-quality education to all, and thereby making India a global knowledge superpower. The Policy envisages that the curriculum and pedagogy of our institutions must develop among the students a deep sense of respect towards the Fundamental Duties and Constitutional values, bonding with one's country, and a conscious awareness of one's roles and responsibilities in a changing world. The vision of the Policy is to in still among the learners a deep-rooted pride in being Indian, not only in thought, but also in spirit, intellect, and deeds, as well as to develop knowledge, skills, values, and dispositions that support responsible commitment to human rights, sustainable development and living, and global well-being, thereby reflecting a truly global citizen. This study is going to attempt to review of NEP- 2020 and specially it enlightening Higher education part of the study.
Key words: Holistic, Multidisciplinary, Equity, Inclusion, Quality.

Introduction:

The implementation of previous policies on education has focused largely on issues of access and equity. The unfinished agenda of the National Policy on Education 1986, modified in 1992 (NPE 1986/92), is appropriately dealt with in this Policy. A major development since the last Policy of 1986/92 has been the Right of Children to Free and Compulsory Education Act 2009 which laid down legal underpinnings for achieving universal elementary education. The world is undergoing rapid changes in the knowledge landscape. With various dramatic scientific and technological advances, such as the rise of big data, machine learning, and artificial intelligence, many unskilled jobs worldwide may be taken over by machines, while the need for a skilled workforce, particularly involving mathematics, computer science, and data science, in conjunction with multidisciplinary abilities across the sciences, social sciences, and humanities, will be increasingly in greater demand. With climate change, increasing pollution, and depleting natural resources, there will be a sizeable shift in how we meet the world's energy, water, food, and sanitation needs, again resulting in the need for new skilled labour, particularly in biology, chemistry, physics, agriculture, climate science, and social science. The growing emergence of epidemics and pandemics will also call for collaborative research in infectious disease management and development of vaccines and the resultant social issues heightens the need for multidisciplinary learning. There will be a growing demand for humanities and art, as India moves towards becoming a developed country as well as among the three largest economies in the world. Indeed, with the quickly changing employment landscape and global ecosystem, it is becoming increasingly critical that children not only learn, but more importantly learn how to learn. Education thus, must move towards less content, and more towards learning about how to think critically and solve problems, how to be creative and multidisciplinary, and how to innovate, adapt, and absorb new material in novel and changing fields. Pedagogy must evolve to make education more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centred, discussion-based, flexible, and, of course, enjoyable. The curriculum must include basic arts, crafts, humanities, games, sports and fitness, languages, literature, culture, and values, in addition to science and mathematics, to develop all aspects and capabilities of learners; and make education more well-rounded, useful, and fulfilling to the learner. Education must build character, enable learners to be ethical, rational, compassionate, and caring, while at the same time prepare them for gainful, fulfilling employment.

The gap between the current state of learning outcomes and what is required must be bridged through undertaking major reforms that bring the highest quality, equity, and integrity into the system, from early childhood care and education through higher education. The aim must be for India to have an education system by 2040 that is second to none, with equitable access to the highest-quality education for all learners regardless of social or economic background.

2. Objectives of the study:

1. To review the Past National Educational Policies in Brief.
2. To analyse the new forwarding-looking vision for India Higher education system.
3. To find out the holistic and multidisciplinary education in India.

3. Methodology:

The study is based on secondary data only, the reference of new educational policy -2020,the main study focused on with part II new educational policy-2020.

Secondary data:-

The data are collected from secondary sources by way of access to various Government policies/ programs including published Reports, Journals, Books and available official websites, special new educational policy -2020. Is the major source of the secondary data to analyses the. new educational policy -2020.

Significance of the study:

The most important factor in the success of higher education institutions is the quality and engagement of its faculty. Acknowledging the criticality of faculty in achieving the goals of higher education, various initiatives have been introduced in the past several years to systematize recruitment and career progression, and to ensure equitable representation from various groups in the hiring of faculty. Compensation levels of permanent faculty in public institutions have also been increased substantially. Various initiatives have also been taken towards providing faculty with professional development opportunities. However, despite these various improvements in the status of the academic profession, faculty motivation in terms of teaching, research, and service in HEIs remains far lower than the desired level. The various factors that lie behind low faculty motivation levels must be addressed to ensure that each faculty member is happy, enthusiastic, engaged, and motivated towards advancing her/his students, institution, and profession. To this end, the policy recommends the following initiatives to achieve the best, motivated, and capable faculty in HEIs.

The opportunity to attain foundational literacy, obtain an education, and pursue a livelihood must be viewed as basic rights of every citizen. Literacy and basic education open up whole new worlds of personal, civic, economic, and lifelong-learning opportunities for individuals that enable them to progress personally and professionally. At the level of society and the nation, literacy and basic education are powerful force multipliers which greatly enhance the success of all other developmental efforts. Worldwide data on nations indicate extremely high correlations between literacy rates and per capita GDP.

Holistic and multidisciplinary education system.

The main thrust of this policy regarding higher education is to end the fragmentation of higher education by transforming higher education institutions into large multidisciplinary universities, colleges, and HEI clusters/Knowledge Hubs, each of which will aim to have **3,000** or more students. This would help build vibrant communities of scholars and peers, break down harmful silos, enable students to become well-rounded across disciplines including artistic, creative, and analytic subjects as well as sports, develop active research communities across disciplines including cross-disciplinary research, and increase resource efficiency, both material and human, across higher education.

Moving to large multidisciplinary universities and HEI clusters is thus the highest recommendation of this policy regarding the structure of higher education. The ancient Indian universities **Takshashila, Nalanda, Vallabhi, and Vikramshila**, which had thousands of students from India and the world studying in vibrant multidisciplinary environments, amply demonstrated the type of great success that large multidisciplinary research and teaching universities could bring. India urgently needs to bring back this great Indian tradition to create well-rounded and innovative individuals, and which is already transforming other countries educationally and economically. This vision of higher education will require, in particular, a new conceptual perception/understanding for what constitutes a higher education institution (HEI), i.e., a university or a college. A university will mean a multidisciplinary institution of higher learning that offers undergraduate and graduate programmes, with high quality teaching, research, and community engagement. **The definition of university will thus allow a spectrum of institutions that range from those that place equal emphasis on teaching and research i.e., Research-intensive Universities, those that place greater emphasis on teaching but still conduct significant research i.e. Teaching-intensive Universities.** Meanwhile, an Autonomous degree-granting College (AC) will refer to a large multidisciplinary institution of higher learning that grants undergraduate degrees and is primarily focused on undergraduate teaching though it would not be restricted to that and it need not be restricted to that and it would generally be smaller than a typical university.

Key Changes to the current system

1. Moving towards a higher educational system consisting of large, multidisciplinary universities and colleges, with at least one in or near every district, and with more HEIs across India that offer medium of instruction or programmes in local/Indian languages;
2. Moving towards a more multidisciplinary undergraduate education;
3. Moving towards faculty and institutional autonomy;
4. Revamping curriculum, pedagogy, assessment, and student support for enhanced student experiences;
5. Reaffirming the integrity of faculty and institutional leadership positions through merit appointments and career progression based on teaching, research, and service;
6. Establishment of a National Research Foundation to fund outstanding peer-reviewed research and to actively seed research in universities and colleges;
7. Governance of HEIs by high qualified independent boards having academic and administrative autonomy;
8. "light but tight" regulation by a single regulator for higher education;
9. Increased access, equity, and inclusion through a range of measures, including greater opportunities for outstanding public education; scholarships by private/philanthropic universities for disadvantaged and underprivileged students; online education, and Open Distance Learning (ODL); and all infrastructure and learning materials accessible and available to learners with disabilities.

Implementation and Conclusion:

Any policy's effectiveness depends on its implementation. Such implementation will require multiple initiatives and actions, which will have to be taken by multiple bodies in a synchronized and systematic manner. Therefore, the implementation of this Policy will be led by various bodies including MHRD, CABE, Union and State Governments, education-related Ministries, State Departments of Education, Boards, NTA, the regulatory bodies of school and higher education, NCERT, SCERTs, schools, and HEIs along with timelines and a plan for review, in order to ensure that the policy is implemented in its spirit and intent, through coherence in planning and synergy across all these bodies involved in education.

Implementation will be guided by the following principles. First, implementation of the spirit and intent of the Policy will be the most critical matter. Second, it is important to implement the policy initiatives in a phased manner, as each policy point has several steps, each of which requires the previous step to be implemented successfully. Third, prioritization will be important in ensuring optimal sequencing of policy points, and that the most critical and urgent actions are taken up first, thereby enabling a strong base. Fourth, comprehensiveness in implementation will be key; as this Policy is interconnected and holistic, only a full-fledged implementation, and not a piecemeal one, will ensure that the desired objectives are achieved. Fifth, since education is a concurrent subject, it will need careful planning, joint monitoring, and collaborative implementation between the Centre and States. Sixth, timely infusion of requisite resources - human, infrastructural, and financial - at the Central and State levels will be crucial for the satisfactory execution of the Policy. Finally, careful analysis and review of the linkages between multiple parallel implementation steps will be necessary in order to ensure effective dovetailing of all initiatives. This will also include early investment in some of the specific actions (such as the setting up of early childhood care and education infrastructure) that will be imperative to ensuring a strong base and a smooth progression for all subsequent programmes and actions.

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1. NEP National Educational Policy-2020
2. MHRD Ministry of Human Resource Development
3. MoE Ministry of Education
4. MOOC Massive Open Online Course
5. MWCD Ministry of Women and Child Development
6. NAC National Accreditation Council
7. NAS National Achievement Survey
8. NCC National Cadet Corps
9. NCERT National Council of Educational Research and Training
10. NCF National Curriculum Framework
11. NCFSE National Curriculum Framework for School Education
12. NCFTE National Curriculum Framework for Teacher Education
13. NCIVE National Committee for the Integration of Vocational Education

Githa Hariharan's Place in Indian Fiction

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Abstract: Githa Hariharan was born in Coimbatore, India and grew up in Bombay and manila she was one among them who have been writing for TV channels in New York.
Her first novel The Thousand Faces of Night (1992) own the Commonwealth Writer's Prize. She has written many books such as The Art of Living (1993) , The Ghost of Vasu Master (1994) ,When Dream Travel (1999), In Times of Siege (2003), The Winning Team (2004), Edited a Southern Harvest (1993),Sorry Best Friend (1997), and Fugitive Histories (2009). A number of Indian women novelists made their debut in the 1990s, producing novels which revealed the true state of Indian society and its treatment of women. These writers were born after Indian independence, and the English language does not have colonial associations for them. Their work is marked by an impressive feel for the language, and an authentic presentation of contemporary India, with all its regional variations. They generally write about the urban middle class, the stratum of society they know best. Gihta Hariharan was one of them who created her own place in Indian English Literature. She has given good contribution to the Indian Literature and also tried to develop the status of Indian Writing through her effective use of language.

Rationale of the Study

"Githa usually does her own editing work even while engaged in writing a novel because it is necessary to be able to wield a sharp pencil and a sharp scissors. When sending one's own writing out into the world to be able to read the reread and cut where necessary. She speaks on many issues and also reveals her formula behind her success. After writing she reads and delete where necessary because of this her writings become outstanding. She uses language so effectively and smoothly that everyone supposed it is their own story or experience. This skill put her ahead to the rest of other. "Hriharan's work has been reviewed widely and largely favorably, indicating the popularity of her work both within India and abroad. As an early recognition of her talent , in 1992 she received the Commanwealth Prize for the best first book 'The Thousand Faces of Night'. The citation for the award singled her out for her "Sharp observation of Hindu social life and the subtle depiction of the relationships of women of different generations". Even Salman Rushdie in his and Elizabeth West's The Vintage Book of India writes : 1947-1997 had applauded her as "One of the most welcome presences in the Indian Subcontinent".

She is a writer who has been read all over the world because of her style and different skills that she has used to decorate the novel achieved Commonwealths Prize in 1992 for her first novel. She observed Hindu Society particularly women's condition and feelings and realistically put all those in her novel with the different relationships of women. Welknown novelist Salman Rushdie was fascinated by her writing. He accepted her as a unique writer in Indian Subcontinent.

Objectives of Study: "Githa Hariharan's fiction is wonderful -----full of subtitles and humor and tenderness."

Michael came across the writings of Githa Hariharan and found a kind of outstanding writing with subtitles and humor. In different kinds of stories in The Ghost of Vasu Master created humor.

Such as the story of mouse create kind of humor. "Once upon a time, there was a mouse who wanted to be a teacher. He went to wise snake who lived in a hole hereby ------The snake said , you have to first become a judge , an ideologue , a priest and a doctor -----Above few lines from Hariharan's 'The Ghost of Vasu Master' easily point out her unique style to create humor. In this present novel she tells us many stories and these stories are very meaningful to us as well as to the characters those who are involved in novel. With her unique style and her point of view she put Indian novel to the highest position.

Hypothesis

'The Ghost of Vasu Master' book is full of stories that teaches and also creates humor.

Many literary thinkers examined her writings Cetzee is one of them who suppose Githa Hariharans writing is nice kind of writing . She is very much conscious about the condition and status of Indian women she depicted all these problems in her novels. She does this not only to make us aware of it but also to put these problems to an end.

Methodology

Githa Hariharan focused the relationship between woman and man. She is a very good observer of Indian society. She clearly point out that man is not ready to accept the woman's 'otherness' and this is the main problem in their relationship.

Many stories that are told by Githa Hariharan in her novel are not completely new to us but she has used the different technique to tell the known stories. Though we have heard it , we have interest to read. In short she has a unique skill to retell the known or familiar stories.

" Githa Hariharn shows that all through the ages the society sustained the same ideal of womanhood by handing down behavioral patterns".

Conclusion

Githa Hariharan has the vast knowledge of past as well as contemporary Indian society so she commented that Indian society handed over the civilization and their thinking particularly towards the woman to the next generation.

Because of limitedness woman's mind has been suppressed by the male domination. She put many such incidents through her writing and also tries to reveal the reasons behind it.

"Hariharan identifies a technique that runs as a binding thread all her work that of reinterpreting myth and legend in the service of themes and issues desert to her heart. She makes concerted use of myth and folktale to enlarge the space of the lives of 'real' people , especially women". Her techniques becomes the bridge between her work and her reinterpreted myths and legends. She used different kinds of tales to reveal the nature and focus the life of women. When we come across her tales / stories we also behave as like a one of character of story it is her technique to introduce very accessible and familiar characters.

These news paper reviews and praise in many books are the witness what she has done to raise the place of Indian English Literature. She reads a lot and then writes a lot , this essence in powerful and unique writing. Though there are many writers in India Githa Hariharan occupies the valuable place that many writers strive for.

What Farkurul Alam Writes about Bharati Mukharji seems to be true of Hariharan. –

Once begins to serve as a form illuminating female experience , it can assist humanizing and equilibrating the culture ,value system , which has served predominantly male interest. A literary work is capable of providing role models ; instill a positive sense of feminine identity by portraying women who are self-actualizing , whose identities are not dependent on men".

Like Bharati Mukharji , Hariharan also focused the different issues of female identity . She has focused the feminine identities through her entire writing and also has advocated the need to understand the female mind.

She focused the woman who are self – actualizing and not depend on the identity of their well known men. That shows the awareness of the self image.

Thus we find , Hariharan's feminine sensibility and also character's self awareness that is self-discovery is reveled in her portrayal of women characters. She makes women her central characters to portray them at psychological level. She also proved her significant place in Indian English Fiction. As per as her literature is concern we may say without Githa Hariharan we cannot define Indian English Literature.

She becomes matchless writer because of her unique style and attitude to words the woman's suppressed life. She not only depict the miserable condition of woman but try to put all these issues to an perfect end through her effective writing.

We have many characters in her novels that put first hand experience before us.

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Analysis of Anti-Rape Act With Special Emphasis on Nirbhaya Case

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Abstract: A study on the amendments came after the much highlighted incident of gang rape of a 23 year old woman in Delhi. A structured investigation was made to know the true cause of the problem of rape. The number of cases reported in India has been a massive jump in the last few years. It is observed that victims and offenders in gang rape incidents were younger. Rape is a devastating crime. Some women are badly physically injured. It also affect the mental health of the victims. Still most rapes go unreported due to shame and fear.

Introduction

Rape cases are getting worse and increasing day by day. In statistic research we found that India is the 3rd topmost country in committing rape. Most of the victims are reluctant to report rape cases due to fear, shame etc. Sometimes rapists also blackmail the victims. In most of the cases girls subjected to rape are forced by the family members to suppress the matter. After the gang rape occurred at Delhi in 2012 certain amendments are made to rape laws to give some rights to rape victims.

Anti-Rape Act After Nirbhaya Case

Rape is a type of sexual assault involving sexual intercourse against a woman without her consent or consent obtained by fraud, coercion etc. Rape can be considered as a crime against humanity. Rape may lead to serious injuries including the risk of pregnancy and sexually transmitted infections. Lack of consent is the most essential ingredient to constitute a rape. Section 375 and Section 376 of Indian Penal Code deals with rape. Rape is an unlawful sexual intercourse against the will of the victim through force or threat of force or committed upon a person who is incapable of giving legal consent due to mental illness, intoxication, unconsciousness etc.

Gang rape also known as group rape means rape of a single victim by two or more persons. It an act of forcing a person to engage in a sexual intercourse with several men one after the other against the person's will. One of the landmark case of India related to gang rape is the Nirbhaya case. It has brought many changes in the rape laws of India. This case has lead to Criminal Law Amendment Act,2013. Also known as Anti-rape Act.

Nirbhaya case has brought a drastic change to the rape laws of India. On 16 December 2012, a gang rape occurred at Delhi. A 23 year old female, who was studying physiotherapy was gang raped by 6 men in a private bus. Among the 6 men, one was the driver of the bus. This dreadful incident occurred when she was going back to her home at night after watching a movie in a theatre. Her male friend also accompanied her. When they both entered into the bus, the 6 men beat her friend and committed brutal gang rape on her. After this heartless act was committed by the 6 men, they both were thrown to the roadside. The bus driver Ram Singh, Mukesh, Vinay Sharma, Pawan Gupta, Akshay Thakur and a Juvenile were the accused involved in the gang rape.

The name of a rape victim cannot be disclosed by the press as per the Indian law. The victim is called as 'Nirbhaya' indicating 'fearless'. Her fight is a weapon for the protest of woman against rape. The name of the victim, Jyoti Singh was later published with the permission of her mother. Her mother said that her daughter has not done anything wrong, so she was not embarrassed to disclose her identity. Nirbhaya was admitted to a hospital in Singapore for medical care but it was of no use. She died after 2 days of treatment. This incident created a worldwide attention and the whole world joined together for the justice for Nirbhaya.

Immediately after the incident all the accused were arrested. They were charged with sexual assault and murder. One of the accused Ram Singh died in the police custody. That had a possibility of suicide. Rest of the accused went on trial in a fast track court. One of the Juvenile among the accused was charged for rape and murder and given a maximum sentence of three years imprisonment as per the Juvenile Justice Act. The remaining four defendants were found guilty of rape and murder and were sentenced to death. The four adults were executed on 20 March 2020.

As a result of the protests a judicial committee was formed to take public opinions for the amendment of laws for the prosecution of sex offenders. On the basis of the report of the committee Criminal Law Amendment Ordinance, 2013 was promulgated by President Pranab Mukherjee. Around six fast track courts were created to deal with rape cases . Several new laws for punishing sex offenders were passed.

Anti-Rape Act

Nirbhaya case gave rise to Criminal Law Amendment Act,2013. Also known as Nirbhaya Act. It provides for amendment of Indian Penal Code, Indian Evidence Act, Code of Criminal Procedure,1973 and POCSO Act,2012.

Amendments to Indian Penal Code

Several new offences are included such as:

- Acid Attack (Section 326A and B)
- Sexual Harassment (Section 354A)
- Attempt to disrobe a woman (Section 354B)
- Voyerism (Section 354C)
- Stalking (Section 354D)
- Sexual Assault which causes death or injury causing a person to be in persistent vegetative state (Section 376A)

Prostitution has been removed from the explanation clause in trafficking of person.

The definition of rape in Section 375 of IPC is broadened in the act of penetration.

Section 370 of IPC is replaced by Section 370 and 370A

Amendment to Indian Evidence Act

- Insertion of new Section 53A – Evidence of character or previous sexual experience of the victim is not relevant when the question of consent is in issue.
- Substitution of new Section for Section 114A – When a victim of a rape case states in her evidence before the court that she did not consent, the court shall presume that she did not consent.
- Substitution of new Section for Section 119- A witness who is unable to speak may give his evidence in any other manner in which he can make it intelligible.
- Amendment of Section 146- where the question of consent is an issue, it shall not be permissible to adduce evidence or to put questions in cross examination of the victim as to the general immoral character or previous sexual experience of such victim for proving such consent.

Amendment to Code of Criminal Procedure,1973

- Amendment of Section 26 – Section 26(a) includes offences under Section 376,376A,376B,376C,376D,or 376E of IPC
- Amendment of Section 54A- If the person identifying the person arrested is mentally or physically disabled, such process of identification shall take place under the supervision of a Judicial Magistrate
- Amendment of Section 154- Information given by the victim who is a woman shall be recorded by woman police officer.
- Amendment of Section 160- In Section 160(1), the words 'under the age of fifteen years or above the age of sixty five years or a woman or a mentally or physically disabled person' shall be substituted.
- Amendment of Section 164- The Judicial Magistrate shall record the statement of the victim as soon as the offence is brought to the notice of the police.
- Insertion of Section 198B – The Court shall not take cognizance of an offence punishable under Section 376B of IPC where the persons are in marital relationship except upon prima facie satisfaction of the facts which constitute the offence upon a complaint filed by the wife against the husband.
- Amendment of Section 273 – where the evidence of the victim below the age of eighteen years is recorded, the court may take appropriate measures to ensure that such woman is not confronted by the acused.
- Amendment of Section 309- The proceedings shall be continued from day-to-day until all the witnesses in attendance have been examined.
- Insertion of new Sections 357B and 357C- The compensation payable by the State Government is in addition to fine under Section 326A or 376D of IPC. All hospitals, public or private, shall immediately provide the first-aid or medical treatment, free of cost, to the victims.

Amendment to the Protection of Children from Sexual Offences Act,2012

- Substitution of new sections for Section 42- The offender found guilty shall be punishable under this Act or under the IPC as provides for punishment which is greater in degree.
- The provisions of this Act shall be in addition to and not in derogation of the provisions of any other law for the time being in force.

Amendment to the Juvenile Justice Act,2015

- The minor accused of age more than sixteen should present before the Juvenile Justice Board and then the Board will decide whether to send the Juvenile for trial as an adult or as an accused to rehabilitation centre. This is judged on the mental and physical ability of the child.

Conclusion

Rape is one of the most heinous crime. Not only the rape victims but also their family members suffer because of these crimes for their entire life. Most of the rape cases are unreported because of shame and fear. But now itself it is too late to realize that taking action is better than stepping back because of society's influence. Here we can realize that after the nirbhaya case our government has taken necessary steps towards rape victims. One of the most important thing to be noted is that it is not only the responsibility of our government to maintain law and order in the society, it's every individuals responsibility also to maintain law and order in the society where every girl can live without fear.

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Comparative Study Of Ascorbic Acid (Vitamin C) Content From Locally Available Fruits & Vegetables

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Abstract:
The present study deal with the comparative study of Ascorbic Acid (vitamin C) content in locally available fruits viz. lemon, orange, guava, papaya, grapes apples, & vegetables viz. tomato, cabbage, potato, green chili pepper, carrot.& cucumber. The amount of L-ascorbic acid was dissected by basic Iodometric titration technique. From the outcomes got, it is observed that new Guava organic product has biggest wellspring of L-ascorbic acid among all examples of fruits while it is lowest in apple.
The fresh green chili pepper has largest wellspring of L-ascorbic acid among all examples of vegetables while it is most minimal in potato. The Storage of leafy foods in cooler for longer length as well as cooking of products of the soil for longer time additionally diminish the substance of L-ascorbic acid. So it is reasoned that we need to eat organic products new and crude to get more L-ascorbic acid to keep our body fit & healthy.
Key Words: Fruits, vegetables, vitamin C, Iodometric Titration

Introduction:

The Vitamin C (Ascorbic corrosive) is the main nutrient in products of the soil. Over 90% of the L-ascorbic acid is available in human weight control plans are provided by leafy foods vegetables. [1] The Vitamins are very important to our health. The vitamin plays a role in maintaining a healthy diet and required for metabolism and biological processes.

Among all nutrients, L-ascorbic acid is a fundamental micronutrient needed for normal metabolic function of the human body. [2] Vitamin C, which also known as ascorbic acid, is a water-soluble and anti-oxidant compound The U.S. Food and Drug Administration (FDA) created DVs (Daily Values) to assist customers with looking at the supplement substance of food varieties and dietary enhancements inside the setting of an all out diet. The DV for L-ascorbic acid is 90 mg for grown-ups and youngsters age 4 years and older. [3] FDA doesn't need food marks to list L-ascorbic acid substance except if L-ascorbic acid has been added to the food. Food varieties giving 20% or a greater amount of the DV are viewed as high wellsprings of a supplement, however food sources giving lower rates of the DV additionally add to stimulating eating regimen.Vitamin C fights against COVID-19. In a clinical trial, daily supplementation with 8,000 mg vitamin C, 50 mg zinc, and a few other clinical preliminaries are in progress to see whether L-ascorbic acid diminishes the gamble of COVID-19 or decreases manifestations in individuals who have COVID-19, however results are not yet accessible. The Vitamin C is protected at admissions up to 400 to 1,800 mg/day for kids, contingent upon age, and up to 2,000 mg/day for grown-ups. Higher admissions can cause loose bowels, queasiness, and stomach squeezes, and could likewise cause bogus readings on glucose screens. In individuals with hemochromatosis (an iron over-burden issue), high measures of L-ascorbic acid could cause iron development in the body, which can harm body tissues. L-ascorbic acid enhancements could diminish the adequacy of radiation treatment and chemotherapy. The L-ascorbic acid insufficiency in human's outcomes in the infection called scurvy, whose manifestations incorporate drain (particularly in the gums), joint agony and fatigue. In its last stages scurvy is described by a significant depletion, looseness of the bowels and afterward aspiratory and kidney disappointment, which bring about death [4] A tiny every day admission of L-ascorbic acid (10-15 mg/day for a grown-up) is expected to stay away from lack and fight off scurvy. [5] Ascorbic corrosive is cell reinforcement helps in different capacities like Iron Absorption, Bone Building, Wound Healing, Healthy Skin, bringing down of circulatory strain, Eyesight, Immune Function and so on

Objective of the Study:

The goal of this study is to decide

content of L-ascorbic acid in locally available fresh, frozen (kept in refrigerator) & cooked fruits & vegetables. The comparative study of the content of vitamin C in fresh, cooked & storage fruits (kept in refrigerator) is done by using these data.

Hypothesis:

The L-ascorbic acid substance of food might be decreased by delayed capacity and by cooking in light of the fact that ascorbic corrosive is water dissolvable and is obliterated by heat or even saved for long time. [6, 7] To utilize products of the soil as food, mortal, and a reasonable comprehension of the healthy benefit, as well as assessing the substance of nutrient C is necessary. [8]

Materials and methods:

All the tests were completely cleaned with refined water to eliminate sticking impurities. The amount of L-ascorbic acid in various new, frozen, and cooked leafy not entirely set in stone separately. All reagents used were of analytical grade. Various methods are there for assurance of L-ascorbic acid substance in food.

Some of them are volumetric titration method, an enzymatic method, redox titration method, colorimetric estimation method & Iodometric titration technique. In this current work the amount of L-ascorbic not entirely settled by basic iodometric titration technique. Iodine is moderately insoluble, yet this can be improved by complexing the iodine with iodide to shape tri iodide, Tri iodide oxidizes L-ascorbic acid to frame dehydroascorbic corrosive, as lengthy as L-ascorbic acid is available in the arrangement, the tri iodide is changed over to the iodine particle rapidly.

However whenever all the L-ascorbic acid is oxidized, iodine and tri iodide will be available. Then, at that point, to identify titration endpoint standard marker starch is utilized. It frames a dark complex. The blue-dark tone is the end point of the titration. [9]

The titration technique is proper for testing how much L-ascorbic acid in L-ascorbic acid tablets, juices and new, frozen, and cooked foods grown from the ground.

The Iodometric titration can be performed utilizing just iodine arrangement of 0.05 M fixation and marker starch Estimation of L-ascorbic acid by Iodometric method: The experimental part, includes following parts

1. Three unique arrangements of tests previously set with 12 examples of new leafy foods second set with frozen 12 examples of products of the soil kept for 8 days in refrigerator at 3 C^0 & third set with 12 samples of cooked products of the soil for 30 minutes
2. A known load of leafy foods in 100 grams was taken independently (without seeds). Then, at that point, they were squashed well independently in mortar with pastel and afterward channel every juice with muslin material and taken in 100 ml volumetric jar. The squashed organic products are additionally squashed with a few water for 4-5 times and the washings are gathered to the jar. The arrangement is weakened to 100 ml
3. Standardization of iodine rrangement (0.05M) was finished
4. Assurance of L-ascorbic acid was done independently from three unique arrangements of tests of new, frozen and cooked leafy foods juice.
5. The amount of L-ascorbic acid was acquired by the connection 1 N 1000 ml ascorbic acid= 176 gm of L-ascorbic acid.
6. Finally every one of the qualities were determined (1 mole of ascorbic corrosive responds with 1 mole of iodine and this proportion is utilized for titration result estimations)
7. The amount of L-ascorbic acid in different fresh, frozen, cooked fruits and vegetables were determined separately in table 1

Table: 1The quantity of vitamin C in different fresh, frozen, & cooked fruits and vegetables:

Sr. No.	Name of Fruit or Vegetable	Vitamin C content in mg/100 gm of fresh Fruit or vegetable	Vitamin C content in mg/100 gm of frozen Fruit or vegetable	Vitamin C content in mg/100 gm of cooked Fruit or vegetable
1.	Grapes	60	52	45
2.	Orange	59	51	45
3.	Guava	281	268	252
4.	Papaya	68	56	41

5.	Lemon	82	74	67
6.	Apples	49	38	31
7.	Tomato	26	19	13
8.	Green Chili peeper	172	157	146
9.	Cabbage	43	37	33
10.	Potato	19	13	10
11.	carrot	32	22	17
12.	Cucumber	37	29	20

Results and discussion:

The result of determination of vitamin C in various fruits and vegetables are show in table 1.

The result shows that fresh fruit Guava has highest content of vitamin C (281mg /100gm of fresh fruit) while it is lowest in fresh apple (49 mg /100gm of fresh fruit) among all the fruits. The fresh vegetable Green Chili peeper has highest content of vitamin C (172mg /100gm of fresh vegetable) while it is lowest in fresh potato (19 mg /100gm of fresh vegetable) among all the vegetable.

As we compare the results between new, frozen and cooked organic products and vegetable then it is seen that the new leafy foods juice show maximum content of L-ascorbic acid than frozen and cooked natural products and vegetable. [10] The Storage of leafy foods in fridge for longer time expands their phenolic acids yet diminishes the all out phenolics, Anthocyanins and L-ascorbic acid with ensuing loss of their cell reinforcement limit.

The study also shows the impact of warming on L-ascorbic acid substance in various Vegetables and found that because of cooking there was decline in the substance of nutrient C. [11]

Conclusion:

In the present study, twelve locally available fruits & vegetables were studied in three different condition that is fresh, frozen, & storage for their ascorbic acid (vitamin C) content all studies samples possessed different amounts of ascorbic acid.

The result shows that fresh fruit Guava has most elevated substance of L-ascorbic acid among all examples of natural products and vegetable. The Storage of leafy foods in fridge for longer length as well as cooking of products of the soil for longer time additionally decreases the substance of L-ascorbic acid.

Suggestions/Recommendation:

The foods grown from the ground are accessible in nearby 100% of the time markets and they are also not expensive, the considerable amount of vitamin C presents in these leafy foods showed that when they are eaten in relative enormous sum, they will surely add to the every day human dietary admission of the nutrient.The Capacity of foods grown from the ground in cooler for longer length as well as cooking of products of the soil for longer time likewise decreases the substance of L-ascorbic acid. So it is inferred that we need to eat natural products new and crude to get more nutrient for fit & healthy body.

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Distress of Women Prisoners

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Abstract: There is a traditional belief that men are more prone to criminality than women. Technological development, social medias and even constitutional privileges have freed women from home and brought up to cope with men. The gender gap that was existing in the society is narrowing day by day and at the same time the traditional belief women is less disposed to crime is also thinning. It is also a notable fact that the prison life after their crime make their life worse due to the pathetic conditions of the prisons, isolation and mental shock. The trauma of the crime also severely provokes their mind. The life after release is a big huddle for most of the women prisoners. The adaptation to the society as well as to the family become a nightmare most of them. Women prisoners should have amble resources at the prisons to develop to have better psychological, moral, physical as well as intellectual backing to cope with the society and family. The study goes deep into various reasons for the increase of women criminality as well as its consequences in their life. The research study mainly rests on the secondary data.

Introduction

There is a traditional belief and concept that women are more adapted to social norms, customs, traditions, morality and making unity. It was thought till few decades ago that criminality is a male phenomenon and females do not have much role in criminal tendency and the subject matter was totally neglected. It may be noted that even history does not give much about female criminality (Mohammed J. Islam, Subrata Banarjee, Nurjahan Khatun, 2014). The constitutional as well as the social norms have been changed rapidly in the present world and thus, they have taken up added as well as remarkable political as well as social responsibilities along with nurturing their family. However, there is the sad face of women that the traditional mild nature of women is extended towards criminality and it is at an increasing pace globally for the last 50 years along with the increase of crime against women. There is the "gender gap" of male criminals compared to female criminals but the curious fact is that the crime rate in the western world have steadily declined over the past 3 decades, but the number of young women arrested for committing crimes have significantly increased (Rene Chun, 2020). In short, the 'Gender Gap' is narrowing rapidly. The gender disparity does not play much role in criminality but rather now women are more open to criminality as they are also part and parcel of the competitive world. The research study focuses on women prisoners' psychological distress with the objective to create a better opening to over come the term of imprisonment with a hope to adapt and rehabilitate in the society.

Plight of Women Prisoners

The psychological draw backs and traumas deeply affect the physiology of women. There are various reasons such as initial shock of incarceration, segregation from families and society, forced jailing with women suffering from drug withdrawal and serious mental health ailments. Many of the women prisons and cells are constructed and structured for the confinement of men now used to confine women criminals are not adaptive to their physiological needs. Lack of appropriate jail cells and cubicles which adds to unhygienic facilities disempower them to manage their own health (N Douglas, E Plugge, R Fitzpatrick (2009). Protection and preservation of women prison requires multidimensional tactics beginning from political will, police as well as prions reforms, empowerment policy and therapeutic as well as rehabilitative approach together with social reforms (Muktikanta Mohanty, 2013).

Protected Life to Isolated Life

Traditionally women are leading a protected life and it is envisaged by almost all the constitutions of the International Community. However, when they are arrested as criminals they are imprisoned and isolated. The protected life is lost and they are segregated from their family and friends. Women are more tend to love, care and protected life compared to men and the very confinement make them hard to cope with the new hard life and become prey to even psychological ailments and even mental disorders. The surroundings of love and care of their family and society is mostly lost to the female prisoners after a crime and they might be labelled, branded and segregated from the main stream of the society even after their release from prisons. The gender discrimination and disadvantage at the prisons add to their isolated suffering which lead them to psychological disorders and depressions (P.M.K.Mili, and Neethu Susan Cherian, 2015). It should be noted that though development has come in all realms of human life it is far away and lagging a lot behind in the case of prisons especially women prisons.

Causes of Female Criminality

There are number of reasons for the global increase of female criminality including diverse socio, economic, cultural as well as environmental factors, rapid industrialization, urbanization, impacts of social media, concept of gender equality etc. plays role as causes of the increase of female criminality.

Biological View Point

According to the scientific study of Caesar Lombroso, who is known as father of biological doctrine, 'female eccentricity as rooted in the biological make up or as intrinsic characteristics of the female species.' According to his research women are more conservative and play a neutral role in the family as well as in the society however women criminals are more dangerous than the mail counter parts for cruelty by a female is much more 'refined' and diabolic than men. He shares those women and child shares a lot in common and they are moderately innocent as well as deficient in intelligence and thus they are less prune to criminal tendency. Both Lombroso and Ferrero hypothesized that there is innate tendency in each and every man and the tendency of anti-social behaviour showed by women is out of their innate biological defects. However social, economic back grounds or exploitation may lead women to commit crime. Influence of hormonal changes as part of menstruation, pregnancy and menopausal stage also may tend them to have psychological and emotional changes and may even lead to criminal abnormality. The biological theories on human traits have become obsolete in the modern age where even female crime has gone up to the status of professional career for many having advanced and proficient skills and distinctive scientific perfection and techniques (P. M. K. Mili, and Neethu Susan Cherian, 2015)

Psychological View Point

The traditional roles as mothers and house wives of women are no more acceptable to many of the women. The disturbed women refuse to accept the traditional values linked with their role in the society and family as mere passive innocent sufferers between the four walls of the family. Those who having emotional insecurity and instability become prey to frustration and maladjustment and may trend to criminality. Continuous stress and isolation of maladjusted women may psychologically lead them to depression and frustration and many of them turn to criminal tendencies (P. M. K. Mili, and Neethu Susan Cherian, 2015). Continuous harassment, punitive living conditions, prolonged beating, rape etc would also turn women to become criminals (Mohammed J. Islam, Subrata Banarjee, Nurjahan Khatun- 2014). The isolated life in the prison also captive female prisoners to the various psychological traumas.

Sociological View Point

Women is part and parcel of the society and considered as equal to men however in the society women are faced inequality in every walk of her life. The inequality led to social oppression of women and may have to depend men than being independent. The role of women is evolving to the status of women in the society has become competitive with men. The superiority of better educational background of women compared to men has led to the idea of women liberation, financial freedom, move in occupation and even political autonomy in the present era. On the other hand, the women criminal tendency has also expanded extensively due to lack of education, rivalry, family conflicts, social disorders, conjugal differences etc. Poverty also plays significant role in the lives of women to become criminals to cope with the needs of the family. Many of the women criminals are maladjusted at the families and society and become prey to the ill treatment of the family members especially of wedlock relations. It is sad to indicate that society considers prison as a place of punitive measures rather than reformative centres and even after their release women prisoners find it difficult to reintegrate with the society and even with their own family.

Female Prisons and forethought of rehabilitation

The concept of jail especially women prisons as a custodial place of criminals must change to a place of pre-rehabilitation, reintegration and adaptation centre to the society. The focus point of every prison should be reassociation with the society but many of the female prisons are overcrowded, torture, understaffing, under-budgeting and lacks the basic facilities to meet the need of the day. Prison administration with colonial rules, lethargic criminal justice system and the States' and society's indifference towards jails also deficits the very concept of prisons as place of reformation (Rais Gul, 2018). They should have ample opportunities to relate with their children and family so that they may be well settled after their release. The incidences and reasons for committing fewer violation of prison rules and regulations by women prisoners should also be considered while assessing their specific needs, roles and values (Annie Bartlett and Sheila Hollins, 2018). There should be number of opening to female prisoners to adapt themselves to the society as such particular attention and care to maternal mental health, better space and time for secure parent – infant attachments, safe environment for vocational training and facilities for education to cope with the society. Jails should not be a place of perils for female prisoners for that they should have sufficient opportunities for recreation and even they should be given option for suitable community sentences as per the grade of their criminal tendency (Annie Bartlett and Sheila Hollins, 2018). Female prisoners' re-entry to society from incarceration should not be a huddle but rather an inculturation where they are well accepted in the family as well as the society by their own transformation to the expectations of the society. The practice of community-based prevention programmes even at the compound of jails can support to have a better adaptability

Conclusion

The age-old concept that women is less prone to criminality is out of place in the modern era. The responsibility to look after the family has become more gender neutral than the past. Women are more open to the society compared to the past and their opportunities to commit crime has been increased. Thus, the ration of female criminal is at increasing compared to the past decades. There are various reasons for the female to become criminals such as economic dependency, sexual exploitation, domestic violence, gender abuse, drug addiction, female victimization etc. Women prisons should focus on mainly their transformation than being merely a centre of punitive place. The moral, intellectual and technical capability to stand strong and cope with the society after their release should be the pivotal goal of women prisons.

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A Study of Cashless Economy in India and It's Trend

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Abstract: The paper has been written to study of the Cashless Economy in India. This study shows that the introduction of cashless economy in India. It can be seen as a step in right direction it will help in curbing black money, counterfeit's fake currency. The term Cashless Economy includes e-banking (mobile banking or banking through computers), debit and credit cards, card-swipe or point of sale machines and digital wallet system. It also explains the important theoretical points related to various modes of cashless economy and its trend.
Key words: Cashless Economy, Electronic channels, Black money, Trends.

Introduction:

India is the 4th largest user of cash in the world. The government has implemented a major change in economic environment by demonetizing the high value currency notes of ₹500 and ₹1000 from 8th November 2016 and this step helps to push India towards cashless future.To make India's a cashless economy during the union budget 2019-20 the finance minister had stated that 2% tax deducted at source will be levied on cash withdrawals.

The concept of Cashless Economy is one in which all the transactions are done through electronic channels such like a debit or credit cards, Immediate Payment Service (IMPS), National Electronic Funds Transfer (NEFT) and Real Time Gross Settlement (RTGS). Here are various methods of digital payment like bank cards, AADHAR enabled payment, E-Wallets and Unified Payment Interface (UPI) .The Government of India is working at various levels to reduce the dependence on cash.Prime Minister Narendra Modi discloses two schemes –Lucky GrahakYojna, DigiDhanVyapaarYojna for customers and traders like to promote mobile banking and e-payments. To encourage and strengthen cashless economy it's important to inculcate the habit of making e-payments. Government encourages cashless transactions like mobile banking, Rupay cards, UPI, USSD these are means and methods of digital payments. It means when transactions in an economy are not heavily based on the money notes, coins or any other physical form of money but are promoted by use of credit cards, debit cards and prepaid instruments such an economy is called Cashless Economy. Government have also initiated Aadhar based payment system, this is for those people who don't have cards or mobile phones. Control on counterfeit notes that could be contributing to terrorism, it also affect the monetary policy of our country and to eliminate the black money, hawala transfers can't be made without paper currency, Curbs illegal activities altogether. In financial market large part of black money is generated in illegal trades like selling drugs therefore without cash or less cash illegal trade might become difficult. That's why government have initiated to cashless economy.

Objectives of the Study:

1. To understand the concept of Cashless Economy.
2. To study the modes of cashless transactions and its trend in India.

Research Methodology of the Research Paper:

The present study is based on secondary data. This data has used for getting a real result from research paper. Secondary data has been collected from the various RBI Annual Report, Books, Journals and Government Web-Portal.

Modes of Cashless Transactions:

The cashless Economy in India has been amplified with the Indian Government's initiative of Digital India. This is a flagship programme with a vision to transform India into a digitally empowered society and knowledge economy. When the transactions in an economy are not heavily based on the money notes, coins or any other physical form of money but are aided by the use of credit cards, debit cards and prepaid payment instruments, such an economy is called cashless economy. The modes of cashless transactions are as follows.

Cheque:

Cheque is a well-known method of cashless payment. It is one of the oldest methods of cashless payment. In this method, you issue a cheque for a specific amount to someone else. The cheque gets deposited in the respective bank. The bank process a payment through a clearing house.

Online Transfer of NEFT or RTGS:

Real Time Gross Settlement or National Electronic Fund Transfer is a simplest form of online payment transfer. It is a faster source of online transfer of money using internet connection.

Mobile Banking Transactions:

It is a system of which facilitate to the customer to make the financial activities by using mobile. Mobile banking works for 24*7.

E-Wallet:

E-Wallet used for purchase products or services. The concept E-Wallet means Electronic Wallet. For using E-Wallet customer and merchant, both require a smart phone with active internet connection.

Credit Card or Debit Card:

It is another option of cash payment available for people. The usage of Debit or Credit card is increasing now a day.

Mobile Wallet:

Mobile Wallet is another option for cashless payment. For making payment using mobile wallet you do not require debit card, credit card or internet banking password.

UPI Apps:

UPI system allows you to receive or send your money using virtual payment address without entering bank information.

Aadhaar Enabled Payment System:

Aadhaar Enabled Payment System is like Micro ATM, it uses smart phones and a finger print scanner for the transaction. In order to use AEPS facility, it is compulsory to link your Aadhaar card number to your bank account. User can do as many transactions at any AEPS point without any PIN or password.

Unstructured Supplementary Service Data:

Unstructured Supplementary Service Data enables a person to access banking services with a single number. USSD can be used for payments up-to ₹ 5000 per day per customer.

Statistics of Cashless Transactions:

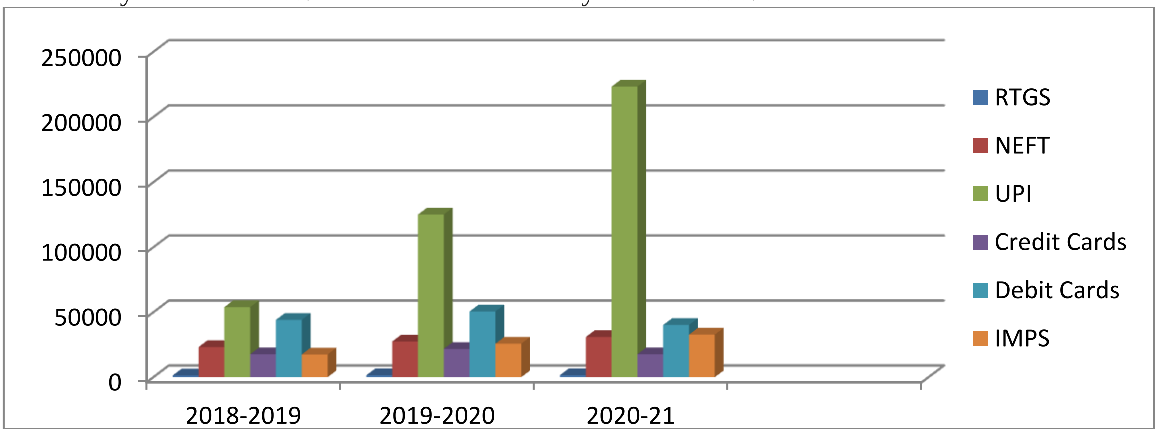
Table No. 1 explains the some modes of cashless transaction and its volumes and values since 2018-19 to 2020-21.

Table No.1
Modes of Cashless Transactions

Sr.	Item	Volume (Lakh)			Value (₹ in Crore)		
		2018-19	2019-20	2020-21	2018-19	2019-2020	2020-21
1	RTGS	1,366	1,507	1,592	13,56,88,187	13,11,56,475	10,55,99,849
2	NEFT	23,189	27,445	30,928	2,27,93,608	2,29,45,580	2,51,30,910
3	UPI	53,915	1,25,186	2,23,307	8,76,971	21,31,730	41,03,658
4	Credit Cards	17,626	21,773	17,641	6,03,413	7,30,895	6,30,414
5	Debit Cards	44,143	50,611	40,200	5,93,475	7,03,920	6,62,667
6	IMPS	17,529	25,792	32,783	15,90,257	23,37,541	29,41,500

(Source: RBI Annual Report 2021)

Note- 1. RTGS =Real Time Gross Settlement. 2- NEFT =National Electronic Fund Transfer. 3-UPI =Unified Payment Interface. IMPS = Immediate Payment Service.



The above table and chart shows that, India is in progressive step in terms of using cashless modes. In the year 2020-21 use of UPI payment and IMPS has increased as compared to 2018-19 and 2019-20. In the last three years UPI Payment is ₹ 876971, ₹ 2131730, ₹ 4103658 crores respectively. While, the Volume of UPI modes in 2018-19 it was 53915, in 2019-20 it was 125186 and in 2020-21 it is 223307lacks. Similarly, in the last three years the values of IMPS is ₹1590257, ₹ 2337541, ₹ 2941500 and the volume of IMPS is 17529, 25792, 32783 respectively.

It is observed from the table-

During the study period it is found that, the volumes and values of RTGS and NEFT shows increasing trends. Under the study period it's observe that, the Volumes and Values of Credit and Debit cards shows up & down trends. Under the study period it's observe that, the Volumes and Values of UPI and IMPS shows increasing trends. It can be conclude that, the volumes and values of cashless transactions shows increasing trends. It means peoples are move to cashless economy and it is positive sign for our economy. It is because of cashless economy helps to reduce black money in economy.

Conclusion and Suggestion:

It is concluded that, in last three years use of Cashless payment modes shows increasing trend. It is positive sign for India and Indian economy. The transparency in the economy will increased through the e-commerce transactions and the digital payment modes which will increase the GDP of the economy. As a conclusion, it can be said that going cashless provides a lot of benefits to people, businessman and the government. For the smooth implementation of cashless system in India, the following remedies are suggested government have to bring transparency and efficiency in e-payment system. A financial literacy campaign should be conducted by government time to time to make population aware of benefits of cashless economy.

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Honour Killing In India: A Sociological and Legal Perspective

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Abstract: The present study, Honour killing in India: A Sociological and Legal Perspective, examines the still existing barbaric honor killing, where families murder their kith and kin for allegedly saving their honor. These are yet another implication of the caste system, which is prevailing in India since time immemorial. In Indian societies, females of families are considered as custodians of honor of the family. So, when a woman marries or elopes with their partners who belong to a different caste or community, going against family, their family members kill them for the sake of defending their honor. There are community groups like Khap panchayats who conduct public trials and order such punishments. This study explores how in spite of a rising number of honor crimes and killings in India still, there is no exclusive legislation aiming to curb this menace. The study also focuses on how the judiciary, through its judgments, especially through Shakti Vahini Case, is addressing these issues.

Introduction

In every society, there is a certain social behavior that is governed by their status. Society had already set a pattern for every member of the community, for how they should act or behave. There are certain roles that are set by society as forbidden for particular members and, if executed, would be considered as contemptuous and dishonor. In India, these are governed by caste and religious status. As acknowledged in various studies, the major causes of honor killings include inter-caste or inter-religious marriages, loss of virginity outside marriage, pre-marital pregnancy, infidelity, refusing an arranged marriage, asking for a divorce, etc. The most thought-provoking fact is that mostly these crimes are gender-specific. Most of the time, females are the victims of these heinous crimes. The current penal law is inadequate for the direct application of these illegal acts. In 2012, the Law Commission submitted a report outlining an exclusive legal framework dealing with honor crimes. It recommends punishment for community groups like Khap panchayat, protection measures for vulnerable couples, and also counseling and legal awareness for couples. But this bill has long been pending. In March 2018, the Honourable Supreme Court of India pronounced a landmark judgment regarding honor crimes in a Writ Petition filed by Shakti Vahini, an NGO, in which the Court issued preventive, remedial, and punitive measures to eradicate the social evil of honor killing.

Conceptualizing Honour Killings

The Oxford Dictionary of Law Enforcement defines Honour killing as 'the purposeful pre-planned murder, generally of women, by or at the command of members of her family stimulated by a perception that she has brought shame on the family' (Oxford Dictionary of Law Enforcement, 2007). Amnesty International observes that "honor killings of women by a male relative is not an individual act of violence, but one which is collective, planned, sociologically predictable and socially approved by both man and women in the family and community concerned" (Amnesty International, 2011,p 3). Honor killings are a global phenomenon; it is widely reported in Iran, Turkey, Afghanistan, Iraq, Saudi Arabia, Egypt, Jordan, Palestine, Brazil, Bangladesh, Morocco, Israel, Ethiopia, Somalia, Uganda, Sweden, Germany, Italy, Yemen, India, and many more countries. It is estimated by the United Nations Population Fund that as many as 5000 females are murdered by family members each year in so-called 'honor killings around the world. The origin of honor killings can be traced to the period of Hammurabi and Assyrian tribes of 1200 BC, in which women's purity was considered an asset of their families. Most of the ancient civilizations like Assyrian tribes, Roman and Sumerian had penal codes that condemned women adulterers but allowed men to publicly have mistresses with little or no punishment. Adultery by women was considered a felony under Roman law-punishable by death. It was common throughout Europe for men to murder their wives because they suspected infidelity and to kill their daughters because they eloped. It is also an evident fact that honor-based violence, including honor killing, has a dangerous socio-cultural acceptance among those communities in which these are frequently practiced.

Honor Killing in India

Honor-based violence, particularly honor killing, is an age-old phenomenon in India prevalent for centuries. Cases are being reported in all parts of India, where the states of Punjab, Haryana, Rajasthan, and Western Uttar Pradesh are the regions where incidents are frequently reported. There is no accurate data of case reporting available with any Governmental or non-governmental agency. According to statistics from the United Nations, one in five cases of honor killing internationally every year come from India. As per the latest available published information with NCRB, a total of 21 cases in 2014, 251 in 2015, and 77 in 2016 were reported with motive as Honour Killing(which included cases registered under section 304 of IPC) in the country. It is difficult to get precise data as most cases go unreported, and many get reported as suicides or culpable homicides. In India, complex socio-cultural patterns, main intolerance of Indian upper castes to inter-caste matrimonial/pre-marital relationship of females, and also inter-religious marriages is the main ascertained reason behind people killing their kith and kin. There are caste-based customary bodies like Khap panchayat who conduct public trials and accelerate such crimes. These are groups of people who think old age customs and traditions give them authority to protect the culture and society. They patronize the honor killings and protect the killers. These traditional patriarchal bodies denounce the role of state and law to prevent these crimes by considering it as unacceptable interference into their socio-cultural pattern and familial values. Besides the socio-cultural backing, the practice of honor killing has been established largely in India due to legal inefficiency. There are no such stringent laws that could curb these honor crimes and restrain these types of unlawful bodies who consider honor killing as accepted crimes for maintaining purity of lineage.

Constitutional and Legislative Provisions

Indian constitution contains great provisions which allow every individual to exercise their choice irrespective of their religion, caste, or gender and also provides protection from honor-related crimes, including honor killings. Honor killings are violative of equality provisions under Articles 14, 15(1), and 15(3). It also violates Article 17,18 freedom provisions under Article 19 and also Article 21. Article 21 under Part III of the Constitution guarantees the Right to Life and Personal Liberty to all persons irrespective of their citizenship as a Fundamental Right. The right to marry according to one's choice is part of the Right to Life. Consent of family, community or any clan is not necessary for marriage between two consenting adults. Under the Special Marriage Act,1954, any person can marry any one of their choice irrespective of their religion or caste. This legislation was passed with an objective to provide for a special form of marriage for people of India and all Indians residing in foreign countries, irrespective of any caste or religious faith, since marriages in India were governed by personal laws based on religious rituals. Scheduled Castes and Scheduled Tribes (Prevention Of Atrocities) Act was passed by parliament in 1989 to curb the atrocities against SC and ST people. This Act is important while discussing honor killings because among the honor killings victims in India, a good majority is Dalit people. Article 16 of the Universal Declaration of Human Rights provides that the right to freely choose a spouse is a universal human right.

Honor crimes are homicides that are considered brutal crimes under the Indian Penal Code. Section 299 and 301 of IPC deals with culpable homicide not amounting to murder, and section 300 deals with murder as such. Since honor killings are made with the intention of murdering the victim to have brought Shame upon the family, the amount to murder and homicides, the perpetrators can be punished under 302 IPC. Section 120(b) and section 202 can be invoked to punish the members of the community who are suspected of deliberately concealing the information about the planning of murder and/or execution of the murder.

Judiciary on Honour Killing

Courts, through its several landmark judgments, reprised that killing someone in the name of honor is a violation of the constitution of India, and anyone going contrary will be punished. In *Lata Singh* v. *State of UP and another,* Justice Markandey Katju stated that India is a free and democratic country where any major person has the right to choose whom they want to get married to. If his or her parents do not approve, the maximum they can do is cut off social relations; if they instigate any act of violence, they deserve cruel punishment for their feudal mind. The illegality of Khap panchayat was remarked in *Arumugam Servai* v. *State of Tamil Nadu*; the Court held Khap panchayat is illegal and needs to be ruthlessly stamped out. In a matter of *Asha Rajan* v. *State of Bihar and others,* Bench of Justice Deepak Mishra and Justice Amitava Roy held that choice of women in choosing her partner in life is a legitimate constitutional right; such a right is not expected to succumb to the concept of class honor or group thinking. The most eminent judgment regarding honor killings was given by the Supreme Court of India in March 2018 in the matter of *Shakti Vahni* v. *Union of India; Supreme* Court gave ruling that any attempt by Khap panchayat or another community assembly to scamper or prevent two consenting adults from marrying is absolutely 'illegal.' Court also laid down prevention, remedial and punitive measures in this regard. A petition was filed by NGO Shakti Vahini in 2010 seeking directions to states and the center to place a plan to crush honor killings.

Need of specific legislation dealing with Honour killing and other honor-related crimes

Current penal law lacks direct application to illegal acts conducted by caste Assembles like Khap Panchayats. Even though Supreme Court has proposed guidelines through the Shakti Vahini case, this couldn't bring a considerable social transformation indicating there is a need for special legislation dealing with this issue. In India, 97% of Honour killing victims are women. Since there is no specific law to deal with these particular crimes in which honor is the common motive, it gets often reported by relatives as suicide or reported under myriad laws making them nearly impossible to track. There is a lot that comes before the murder, like Verbal Harassment, Physical Assault, Coercion, kidnapping, etc. If there is a separate law, it would define these things leading up to these crimes and hence could help to prevent loss of life. In 2012, the Law Commission submitted a report outlining a unique legal framework dealing with Honour Killings. The proposed Bill was the Prohibition of Interference with the Freedom of Matrimonial Alliances, which was amended to curb activities associated with honor crimes by criminalizing unlawful assemblies associated with Khaps or other acts of people condemning a marriage. This bill has long been pending. After the Shakti Vahini case, in 2019, when MP from Chidambaram asked about the status of this Bill, the ministers addressed the last NCRB report as the Government's official point of reference was grossly underreported to ascertain that the existing provision of IPC is sufficient to deal with the crimes. Lack of reliable data is conveniently used as a scapegoat for escaping from such legislation while vote Bank is the real issue. Social groups like Khap panchayats have considerable sway on political outcomes, and politicians are afraid of upsetting the vote Bank if they are back on such legislation.

Conclusion

It is horrible that, even in this 21st century, too many young people have lost their lives in the name of honor, and there are so many who are still at the gunpoint of this rigid barbaric belief system. Honor killings are secretly supported by society, obviously because of this deep-rooted caste consciousness of people. Even after 74 years of independence, people still believe in the superiority of caste above life. Families need to realize that there is no honor in killing one's own child .stringent legislations giving accurate punishment for honor crimes need to be formulated in addition to the present legal framework. Besides rigorous laws and punishment, the most important requirement is to change the mindset of the patriarchal societies to become lenient to matrimonial choices of their daughters, especially towards inter-caste and inter-religious marriage.

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Analytical Study on Irrigation Facilities in Adoni Division of Kurnool district, Andhra Pradesh

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Abstract: water is the basic element of life support system on the earth. Irrigation is the process of supplying water artificially to the crop to enable their growth and development, maintenance of landscape, Reduce the effect of inadequate rainfall .it is a major input to agriculture. Irrigation is one of the most effective factor in increasing agricultural production and productivity obtained from unit area. With irrigation the water need of the plants are fully met, yield is increased, suppressing weed growth in gain fields, saline soils are being improved, soil processing is facilitated, plants and crops are protected from frost damage. Kurnool is one of the four Districts of Rayalaseema Region which is often affected by Drought and other such natural calamities. Adoni division is located in western part of the Kurnool district, Andhra Pradesh. It is lies between north latitiudes $15^{0}15'00''$ to 16 $^{0}0'00''$ and Eastern longitudes $76^{0}45'00''$ to 78 $^{0}0'00''$. It is bounded by Tungabadra River and mahabubnager district in the north and Kurnool division in the east, Bellary district of Karnataka state in the west Ananthapur district in south. The main objective of examine the irrigation facilities, suggestion. The data collected for secondary data.
Key words: Irrigation, well, canal, Lift irrigation, Tank, Agriculture

Introduction:

Agriculture is back bone of society. Agriculture is not possible without irrigation .For healthy crop timely and scientific, irrigation is must. Especially rain fed areas and drought prone areas with scanty rainfall require irrigation. According to **World Bank (2017)** 69.9% of the total water is consumed by agricultural sector in the world. The increase in demand for agriculture products along with the increase in world population has increased the importance and use of Irrigation. Irrigated farming plays a crucial role in world poor production, Making a major contribution to maintain food safety **(Z.Bayramoglu et al**).It has greatly increased the agricultural production potential, Recharge brought about by seepage losses from the irrigation network and deep percolation from irrigation has accumulated in to the underlying ground water **(Kenneth K.Tnaji, 2002).**Irrigation has proved beneficial to the agricultural development of country. Infact , irrigation is the life line for sustainable and successful agriculture . its alleviates suffering, preserve life, averts famine and advance the material prosperity of country (**P. Venkata Ramana Reddy, 2006**).it is effort to overcome the rainfall fluctuation or deficiency by means of conservation and optimum uses of Ground water, surface water facilities so as to stabilize agricultural economy and to increase agricultural productivity without completely depending upon the vegetation of rainfall **(V. Veeranachari et al ,2014).**Kurnool is one of the four Districts of Rayalaseema Region which is often affected by drought and other such natural Calamities. It happens so, because the fertile land in Kurnool district is subjected to erosion, the depletion of underground water, the depletion of the flora in the zone and other such causes contributes to the down fall of the productivity in the zone. Since Adoni division is located in the western part of the Kurnool District. It has semi-arid climate, Irrigation is more important compared to other input factors and it help in stabilizing the output, yield level and plays a protective role During Drought/ famine year.

Study area: Adoni division is one of the 3 divisions in Kurnool District of Andhra Pradesh. It is lies between north latitudes $15^{0}15'00''$ to 16 $^{0}0'00''$ and Eastern longitudes $76^{0}45'00''$ to 78 $^{0}0'00''$. It is bounded by Tungabhadra River and mahabubnager in the north and Kurnool division in the east, Bellary district of Karnataka state in the west Ananthapur district in south. The division has a total Geographical area 551456 Hectares. As of 2011 the adoni division had a population 13, 21,934. The Division is divided in to 17 mandals, 344 revenue villages. Predominantly by block cotton soil. More than 70% of the people in this division engage in farming and farmed via rainfed agriculture. Forest cover presents a desolate Appearance and the vegetation that exists is confined mostly to small pockets of reserve forests. The principle rivers flowing in the Division are the Tungabhadra and (its tributary is Hundri).Parts of the division are also drained by Vedhavathi river. Surface water irrigation in the division is from Tungabhadra project low level canal, Hundri niva sujala sravanthi project, Gazuladinne project.

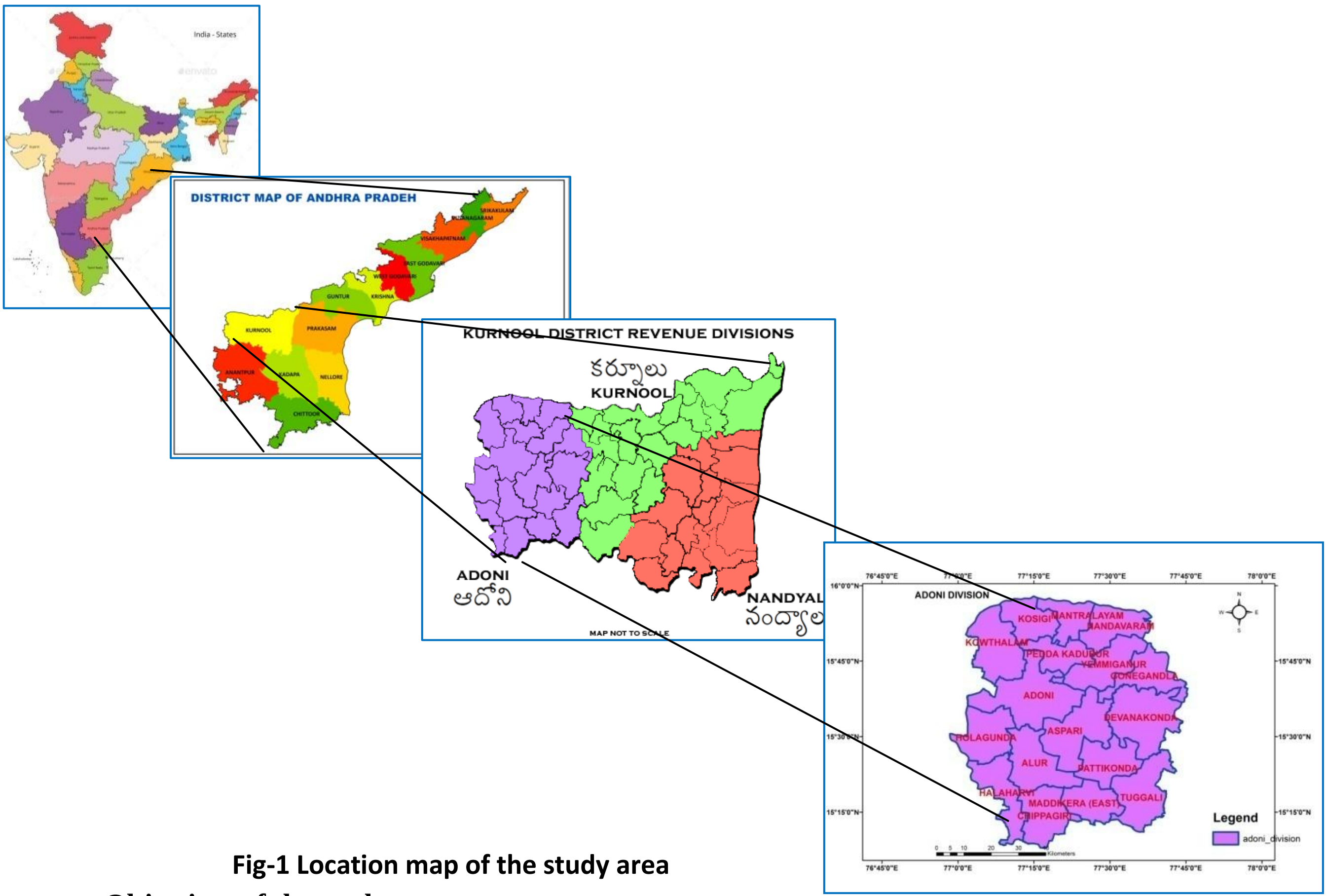

Fig-1 Location map of the study area

Objectives of the study

1. To examine the spatial irrigation facilities in the study area
2. To Benefits of Irrigation facilities and suggestions.

Methodology of the study

The present research work has been carried by collecting secondary data. The secondary data had calculated for the spatial irrigation facility at mandal level. The data has been collected from the Hand book of statistics, Chief Planning office, Kurnool in the year 2018-19.

Analysis

As per 2018-2019, wells Irrigation (tube wells and dug wells) accounts for 22,111 **(**58.16 %) hectors, The canal irrigation accounts for 10,030 (26.4 %) hectors, Lift irrigation accounts for 4637(12.20%) Hectors, Tank irrigation accounts for 816(2.15 %) hectors, other sources of irrigation facilitates accounts for 424 (1.12 %) hectors. The total irrigated area of 38,018 hectors of the division. In the fig – 2 shows high in well irrigation, least in tank irrigation and other sources respectively.

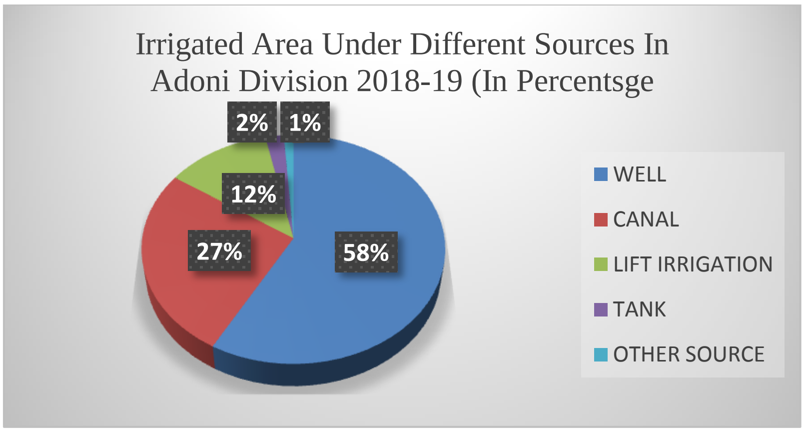

Fig-2

1. WELL Well irrigation is an indigenous method, largely suitable for individual farmers. It is simplest and cost effective source of irrigation. well(dug and tube well) are rank in order to make use of underground water for irrigation purposes (58.16%) percent of the total irrigated area under irrigated by wells in 2018-19.The wells are the primary means of irrigation in all mandals of the division. Very high in Alur with (100%), Devanakonda with (100%) Pathikonda with (100 %), Tuggali with (100%) Aspari with (99.05 %) of the division. lowest percent in three mandals are Holagunda with (8.72%), Halaharvi with (10.31 %), and Chippagiri with (17.90 %).

2. Canal Irrigation

The canals are designed on proper width and depth to carry sufficient water flow to the crop field's .The water will be distributed for cultivation in the right manner from the source point. Un-irrigated wastelands can be developed by canal irrigation which would increase the quality of biomass. Canals are fed by rain water received by rivers, and the water is used for irrigation, production of crops, as compared to un-irrigated soils, higher productivity per hectors is also.

In this source in Adoni Division high irrigation in Holagunda with (90.56 %), Halaharvi with(65.03%),Chippagiri with (63.98%) etc., respectively. In this circumstances Tungabadra River, Hundri, Tungabhadra project low level canal, Hundri niva sujala sravanthi project, Gazuladinne project Respectively. Very least canal irrigation is found in 6 mandals with (0.00%) in this source. Less canal irrigation facilities in all the mandals except three mandals Holgagunda, Halaharivi, chipaggri.

3. Lift Irrigation

A lift is installation of pump, at a height close to the river bank that taps water from the river and it allows to the field through small channels constructed for this purpose. It is used to assist in the crop growth, maintenance land scape and revalidation of distributed soils in dry areas. This facility is only found in 7 mandals of the study period. Highest irrigation facilities found in Nandavaram (59.01 %), Mantralayam (37.55 %), Kowthalam (34.58 %) etc., respectively. Very least Lift irrigation is found in 10 mandals with (0.00%) in this source.

4. Tank

Tank irrigation is practiced by constructing mud banks across small streams to make a small reservoir which collects excess water during the rainy season and same is used for irrigation during cropping season. In 2018-2019 (2.15 %) of the total irrigated area under irrigation from tanks. Less Tank irrigation facilities in all the mandals in Adoni division. In other sources in (1.24%) of the division.

Table -1 Mandal wise irrigated area under different sources in Adoni Division-2018-2019 (In hectors)

Sr. no	Name of the mandal	Net area irrigated under										
		canals		Tanks		wells		lift irrigation		other sources		Total
		Total	**%**	**Total**	**%**	**Total**	**%**	**Total**	**%**	**Total**	**%**	
1	Mantralayam	12	0.71	65	3.84	979	57.89	635	37.55	0	0.00	1691
2	Kosigi	312	11.72	8	0.30	1901	71.41	441	16.57	0	0.00	2662
3	Kowthalam	406	10.46	86	2.22	2047	52.74	1342	34.58	0	0.00	3881
4	Peddakadubur	875	21.25	435	10.56	2808	68.19	0	0.00	0	0.00	4118
5	Yemmiganur	572	18.98	6	0.20	2377	78.87	45	1.49	14	0.46	3014
6	Nandavaram	171	6.42	0	0.00	921	34.57	1572	59.01	0	0.00	2664
7	Gonegandla	403	11.25	0	0.00	3180	88.75	0	0.00	0	0.00	3583
8	Adoni	2422	56.00	0	0.00	1903	44.00	0	0.00	0	0.00	4325
9	Holagunda	1630	90.56	13	0.72	157	8.72	0	0.00	0	0.00	1800
10	Halaharvi	2062	65.03	198	6.24	327	10.31	504	15.89	80	2.52	3171
11	Alur	0	0.00	0	0.00	379	100.00	0	0.00	0	0.00	379
12	Aspari	0	0.00	5	0.85	583	99.15	0	0.00	0	0.00	588
13	Devanakonda	0	0.00	0	0.00	2501	100.00	0	0.00	0	0.00	2501
14	Pattikonda	0	0.00	0	0.00	703	100.00	0	0.00	0	0.00	703
15	Chippagiri	1165	63.98	0	0.00	326	17.90	0	0.00	330	18.12	1821
16	Maddikera	0	0.00	0	0.00	584	85.63	98	14.37	0	0.00	682
17	Tuggali	0	0.00	0	0.00	435	100.00	0	0.00	0	0.00	435
	Total	**10030**	**26.4**	**816**	**2.15**	**22111**	**58.16**	**4637**	**12.20**	**424**	**1.12**	**38018**

Conclusion

Agriculture is back bone of society. irrigation plays a vital role for the development of agriculture, it helps .for healthy crops timely and scientifically . Especially Rain fed areas and drought prone areas with scant rains require irrigation. Irrigation is the process of supplying water artificially to the crop to enable their growth and development, maintenance of landscape, Reduce the effect of inadequate rainfall .it is potential to agriculture, socio- economic growth of nation. it is a major input to agriculture. Adoni division is backward region in Kurnool District. More than 70% of the people engage in Farming farmed via rain fed agriculture. Since they are severe water crisis for cultivation of crops and therefore livestock has significant importance in rural economy. Due to lack of irrigation facilities and crop failure majority of small and marginal farmers migrating to Guntur district to work in cotton and chilli fields. Others have gone to far places like Hyderabad, Bangalore and Mumbai to work as construction workers and in unorganized sector. The school Dropout rate is also on the rise with the increased migrations. of Irrigation is high in well irrigation, low in tank irrigation in The adoni division

Suggestions

- The long-term solution to eradicate irrigation problems in the study area is to develop major irrigation schemes, in the form of diversion of Tungabhadra water and bring fourth layer ayacut area.
- Interlinking of major tanks wherever physical terrain permits and diversion of excess flow water from one tank to another tank during monsoon periods could permit to store more surface water.
- The concept of watershed development for integrated Resource utilization and land use development would bring good results in the study area
- The authorities should take measures to improve the plantation under social forest, optimum utilization of water resources like rain and ground water by using highly developed micro irrigation facilities (sprinklers and drip irrigation) to bring

more area under net area to be sown and to minimize of follow lands.

- Use of information technology, remote sensing techniques, GIS facilities, with spatial &non special data in scientific planning, implementation, monitoring and evaluation of watershed project.

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Importance of Education in Indian Rural Development- A Review

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Abstract: Education is very important issue for socio-economic development in Indian rural area, and it can be transforms human beings from downtrodden to developed, from social backwardness to social enlightenment and a country from stagnation to dynamic. In 1964, General conference of UNSCEO recognized “illiteracy is a big obstacle to socio-economic progress of a country. A country educationally forward, then automatically forward in all the sectors like agriculture, industry and service as well as rural development. Generally rural development means agriculture development, it needs education. Because through education only can achieve rural development. Ex. Proper utilization of resource, productivity, quality etc. become forward in rural areas through education. Developed countries like US, UK, Japan etc. were developed through education, their literacy rate is around 90% and above.
Keywords: Education, Agriculture Development, Right to Education, Sarva Shiksha Abhiyan

Introduction to the Study:
Education is a continuous process starting by from childhood. Child is surrounded by parents, friends, relatives, siblings and life experiences of his/her surroundings and responds. Social environment and physical environment surrounded by him/her imparts knowledge and child tries to learn from that knowledge and responds. From that, one can assess whether child development is normal, abnormal or extraordinary. Every child responds differently to the same environment at equal biological age group. Generally, the rural development refers to the process of improving the quality of life as well as economic well-being of the public.

Rationale of the Study:
The education, the economic development, the physical infrastructure and the social infrastructure plays an immense role in rural development of a country. The development of rural area in any country is characterized by its emphasis on domestically produced strategies of economic development. Whereas urban areas, which have plenty of similarities, the rural areas are mostly distinctive from each other. By this reason, there are variety of rural development programs implemented globally at present.

Objectives of the Study:
1.To know the importance of education in Rural Development
2. To understand the problems and obstacles to rural development in India
2. To know the Indian education system at all levels
3. To understand the relation between education and rural development

Essential of Education for Rural Development:
The aim of rural development is to achieve socio-economic development of rural areas. The term is not limited to only forwarding countries. But most of the forwarding countries have dynamic rural development programs. The main objective of the rural government policies is to develop the underdeveloped villages to developed one. The contribution of education to the rural development must be controlled by local. The development of rural aims at identifying the ways to progress the rural lives with high participation of the rural public themselves so as to meet their requirements of the rural areas.

Right to Education act of India:

Our India has a largest education structure in the globe after China. However, problem of the quality education and the access remains a challenge in some parts of the country. The Right to Education is now a Fundamental right for all the children in 6 to 14 years of age group. In general, RTE means that the government will be the ultimate responsible for giving education to all children up to 8th standard with free and compulsory education, irrespective of cost, region and gender.

Sarva Shiksha Abhiyan, SSA:

The education is facilitating socio-economic progress is most accepted and there has been a major thrust on education since 1947; but the quality education in rural area of India is concerned it is a biggest challenge to the government. In the view of India, education is the best way of bringing the socio-economic change in the country. Soon after independence of India in 1947, making education available to everyone had become a priority for the union government. The present operational laws of the Sarva Shiksha Abhiyan have also been revised to implement the right of children to free and compulsory education with quality, which has come into effect from 1st April 2010.

InclusiveEducation for Rural Development:

The Inclusive education is very essential to rural development in India. The aim of inclusive education is to end all form of disparities in Indian education system.

The1st Indian education minister Moulana Abul Kalam Azad said in 1948 in the parliament that "I need hardly say that, whatever be our programmes for the industrial development, the scientific development, the agricultural development, the material progress, none of them can be achieved without the improvement of human resource, which is the essential of our national development. Professor Amartya Kumar Sen also emphasized that, the solution of all issues, be they related to the economy, development, poverty, unemployment and population lies in the education.

The Elementary Education System of India:

The Indian union government lays emphasis on primary education up to the age of 14 years, is called the elementary education in India. The union government has passed child labor act, to ensure that the children do not enter unsafe working situations. However, both are difficult to enforce due to the socio-economic disparities in the country. 80 percent of recognized schools at primary level are run by the government.

The Private Education System of India:

80 percent of schools are run by government. But, because of poor quality of education, 27 percent of Indian children are studied in private sector and more than 50 percent children enrolling in private sector schools in urban areas, even in the rural areas, nearly 20 percent of the children in 2004-2005 were enrolled in the private sector schools in India.

The National Policy on Education, 1986 (NPE):

The NPE 1986, has provided for the environment, the science and technology education and the introduction of traditional activities such as Yoga into the Indian secondary school Education system. It covers the children the age group of 14–18 years, which covers 88.5 million children according to 2001 Census.

Methodology of the Study:

This is a descriptive study. The secondary data was collected from various websites including those of the Govt. of India, magazines, journals, publications etc. etc. This data was then analyzed to arrive at the inferences and conclusions.

Findings of the Study:

1.Literacy of India is less than the developed countries like US, UK etc.

2. Quality of education is very poor in India
3. Lack of infrastructure in education institutions
4. To get the quality education is very expensive in private sector
5. Quality of education in government sector is poor comparatively private sector in India

Conclusion:

Rural India is the backbone of our country. India being an agrarian country, with 60 percent population residing in rural area, is much stress on education for rural development, but still quality assurance issue has failed to stop the malpractice in education system and the same time the regulatory bodies have been accused of corruption, there is lack of self-sustained models in the country. The union government of India has been trying to bring constructive reforms at all levels of education. Ex. In India, already NEP, 2020 has implemented. In order to strengthen the rural India, it is important to provide good quality of education to all especially in rural area. Then development have taken place in agrarian sector.

Suggestions:

1. Emerging government initiatives are essential to improve literacy
2. Upgrade the infrastructure facilities in education institutions are very urgent to maintain quality education
3. Implementation of compulsory and quality education with free of cost is necessary
4. Implementation of good administrative strategies is essential to maintain quality education

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Studies on the Status of Available Micronutrients for Plant Growth in Different Soil Series of Villages near Mula River Upper Basin in Ahmednagar District (Maharashtra).

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Abstract: Soil is a natural body of mineral and organic material differentiated into horizons, which differ among themselves as well as from underlying materials in their morphology, physical make-up, chemical composition and biological characteristics. Since plants depend on the soils for their nutrients, water and minerals supply, the soil type is a major factor in determining what types of plants will grow in any area. In the present study the analyses of soil samples collected from various villages of the upper basin of mula river in Akole tehsil. In the first place soils samples from 5 representative locations were collected for their analysis. Physical parameters like pH, Electrical conductivity (EC), organic carbon (%) and chemical parameters like phosphorus, potassium, copper, iron, manganese, zinc and boron were anlyzed. Thus it is concluded that variable concentrations of various parameters and irregular distributions of micronutrients may be attributed due to the added fertilizers during the crop formation.
Key words: Soil samples, Physico-chemical parameters, Soil micronutrients, Ratio

Introduction

Soil is mixture of minerals, organic matter gases, liquids and many of micro and macro organisms, that can support plant life. Soil generally denotes the unconsolidated thin, variable layer of mineral and organic material usually biologically active that covers rest of the earth land surface. Soil properties that are sensitive to changes in the management can be used as indicators. In India, now a day's large numbers of fertilizers are used instead of manures. Due to this the crop productivity is increases speedily but the quality of soil support decreases. So it becomes essential to analysis the soil parameters. It is a real time to carry out the physicochemical analysis of soil because as with the increasing use of chemical fertilizer to the soil, it is difficult to control the adverse effects of the chemicals fertilizer to the soil, plants, animals and human being[1, 2].

Soil form a substrate for plant growth which performs many functions essential to life and in general, most plants grow by absorbing nutrients from the soil whose ability to do this depends on the nature of the soil. Soil formation is a constructive as well as destructive process [10] the predominant destructive process are physical and chemical breaking down of materials, plants and animal structures which result in the partial loss of more soluble and volatile products [3].

Different elements are essential for the healthy growth of plants; these elements are grouped in to macro and micronutrients. The deficiency or excess presence of micronutrients such as iron, manganese, zinc and copper may produce synergetic and antagonistic effects on the plant growth and crop yield [4]. The status of available micronutrients in the soil and their relationship with various physicochemical properties have been attempted by several investigators. All samples were collected in summer season. Analysis of soil is carried out for the studies of various parameters like pH, Conductivity, TDS, Organic Carbon, Available Nitrate Nitrogen, Calcium and Magnesium.

Materials and Methods:

Study Area:

Akole having highest peak of Maharashtra and heavy rain fall in monsoon season. The present study area lies between latitudes 20^{o}42'N & 26.0208''N and longitudes 77^{o}0'E & 10.6560''E with an altitude of 800m above the mean sea level. The Mula river originate from Harishchandragadh in Akole tehsil. In present investigation Soil samples S1,S2,S3,S4 and S5 were collected in the depth of 0-30 cm from Kumshet (S1), Shisavad (S2), Khadaki Bk (S3), Khadaki Kh (S4) and Shelad (S5) villages. Samples which were taken in polythene bag[5]. All the chemicals and reagents used for analysis were A.R. grade from Loba Chime and Merck.

Methods

The use for estimation of some parameters[6,7] are shown in table-1.

Methods Use for Estimation of Some Parameters

Sr. No.	**Parameter**	Method
1	Colour	By Viewing Soil
2	Moisture	By Weighing
3	pH	pH metry
4	Conductivity	Conductometry
5	Available Nitrate	Nitrogen Titration
6	Alkalinity	Titration
7	Total Dissolved Solid	TDS metry
8	Organic Carbon	Titration
9	Calcium	Titration
10	Magnesium	Titration

Physicochemical analyses were carried out in the Laboratory of Department of Chemistry, Adv. M. N. Deshmukh Arts, Science and Commerce College, Rajur District Ahmednagar, MS, India.

Results and Discussion

Physicochemical parameters of soil samples are presented in table-2.

Sr. No.	**Soil Parameter**	**S1**	**S2**	**S3**	**S4**	**S5**	**IAS for Soil Analysis8**
1	Colour	Faint Brown	Dark Brown	Faint Brown	Faint Brown	Dark Brown	
2	Moisture(%)	4.25%	6.42%	4.83%	3.75%	5.93%	
3	pH	7.45	7.81	7.21	7.34	7.67	5.8-8.3
4	Conductivity (µS)	0.21	0.36	0.17	0.26	0.31	
5	ANN(Kg/ha)	224.7	237.3	219.8	229.6	241.5	217-272
6	Alkalinity(%)	21	25	22	19	25	
7	TDS	0.36	0.47	0.32	0.29	0.42	<1
8	Organic Carbon(%)	0.85	0.67	0.71	0.63	0.78	
9	Calcium(ml/100gm)	9.0	8.0	9.0	9.0	7.0	10-30
10	Magnesium(ml/100gm)	6.14	6.55	7.12	6.21	7.31	5-10

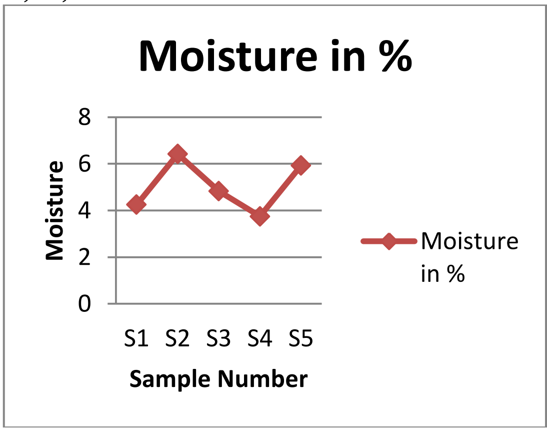
(IAS- International Agriculture Standard , ANN- Available Nitrate Nitrogen, TDS- Total Dissolved Solid)

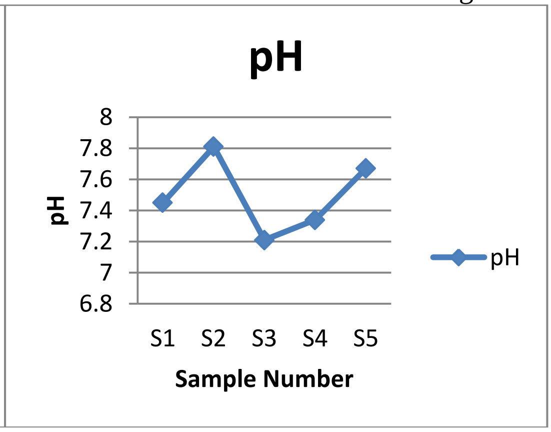
1) **Colour:** Soil samples S1, S3 and S4 are faint brown and S2 and S5 are dark brown in colour.
2) **Moisture:** The moisture content value ranges from 3.75% to 6.42%. It is clear from result sample S2 have highest moisture content than samples S1, S3, S4 and S5.
3) **pH:** The pH of soil is one of the most important physicochemical parameter. It affects mineral nutrient soil quality and much microorganism activity. The pH was observed in the ranges from 7.21 to 7.81. The samples S1, S2 and S5 are very slightly alkaline and samples S3 and S5 are medium alkaline.
4) **Conductivity:** The measurement of conductivity is for measure the current that gives a clear idea of soluble salt present in the soil. Conductivity depends upon the dilution of soil suspension. The conductivity values ranges from 0.174 µS to 0.36 µS .
5) **Available Nitrate Nitrogen:** Available nitrate nitrogen in the soil from 219.8 Kg/hectare to 241.5 Kg/hectare. The soil sample S5 has high nitrate nitrogen as compared to samples S1, S2, S3 and S4.
6) **Alkalinity:** Alkalinity was observed in the ranges from 19% to 25%. Alkalinity of sample S2 and S5 is more as compared to samples S1, S2 and S4.
7) **Total Dissolved Solid (TDS):** TDS values for soil samples ranges from 0.29 to 0.47. Soil sample S4 has lowest TDS as compared to S1, S2, S3 and S5.

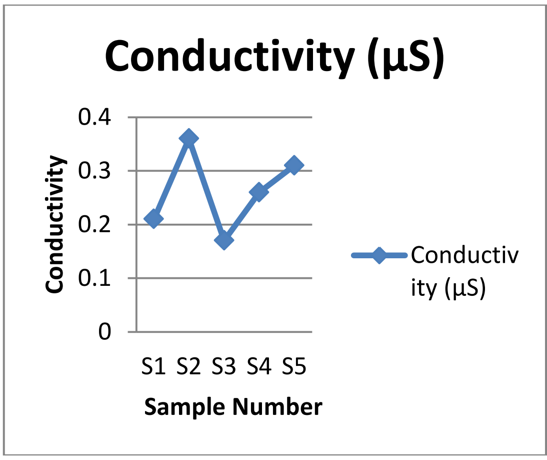
8) **Organic Carbon:** Organic carbon is the index for nitrogen content in the soil. The source of organic carbon in the cultivated soil included crop residue, animal manure, cover crops ,green manure and organic fertilizer etc. Organic carbon values ranges from 0.63% to 0.85%. Organic carbon of sample S1 is high as compared to samples S2,S3, S4 and S5.

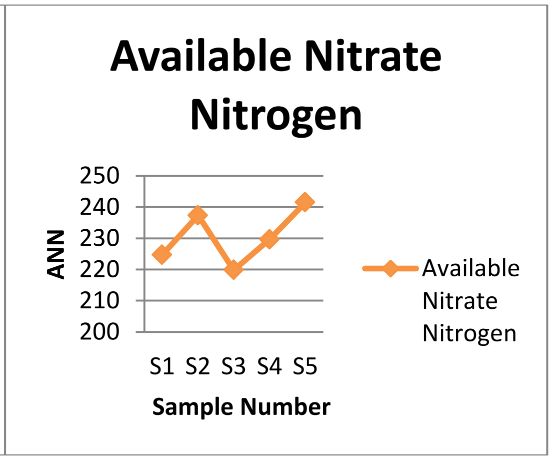
9) **Calcium:** Calcium ranges from 7 ml/100gm to 9 ml/100gm. Soil sample S5 have lowest calcium content as compared to samples S1, S2, S3 and S4.

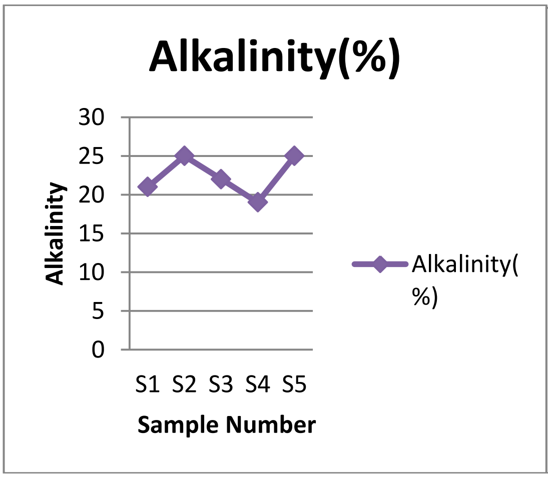
10) **Magnesium:** Magnesium available to plants as the ions Mg2+. Magnesium content in the soil samples ranges from 6.14 ml/100gm to 7.31 ml/100gm. Sample S1 contains less amount of magnesium.

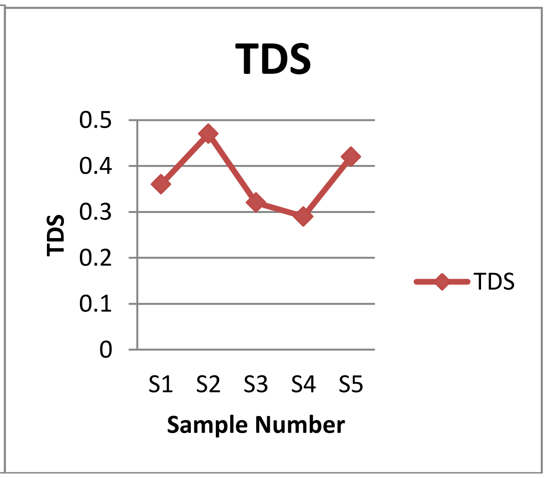


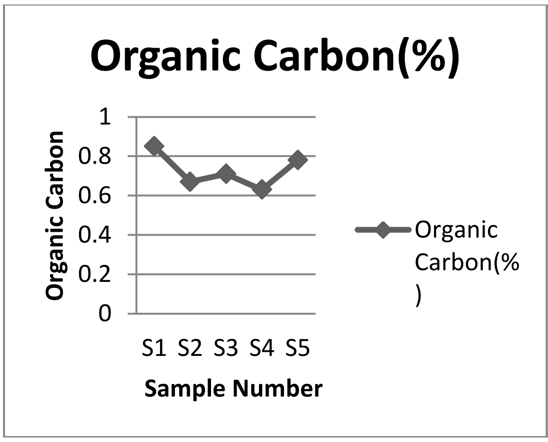


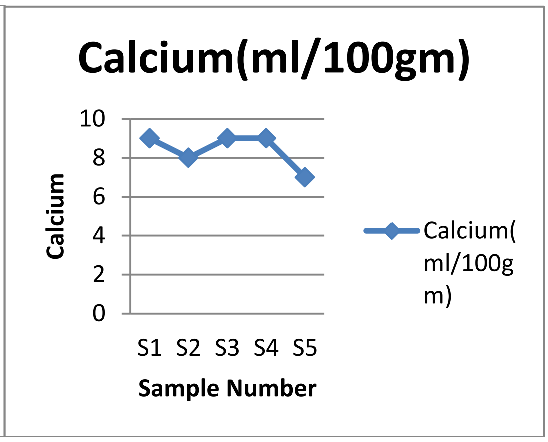


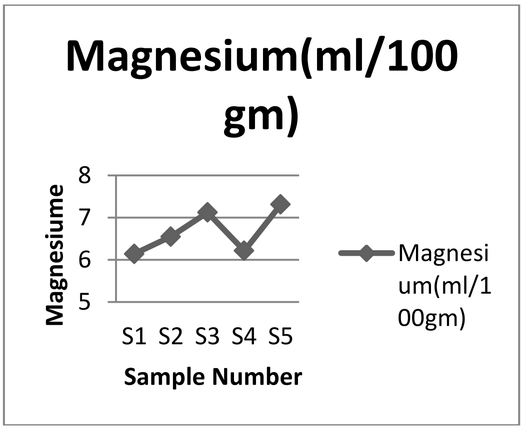












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A Study On Tony Blair's Second Term As A United Kingdom's Prime Minister With Reference To The New Labour Party's 2001 Election Manifesto

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Abstract: This paper mainly explains about Tony Blair's Labour Government's Policies Towards European Union during his second term of premiership. After UK's membership to EU in 1973, it had not actively engaged in the European Union's policies and implementation process. From 1973 to 1996, the successive UK Prime Ministers followed a negative and skeptical attitude towards various EU policy initiatives and none of the UK Prime Ministers showed any special interest to improving its relations with EU. In this context, the study of Tony Blair's second term of premiership plays an important role to understand UK-EU relations during 2001 to 2005. In reality, Tony Blair's Labour government made a huge difference in the EU-UK relationship. His Labour government from the very beginning made clear to the UK citizens that their government would take more pro-active and constructive role in the EU policy making and various developmental programmes. In this context the study of Tony Blair's Labour government's policies and perspectives towards European Union, gives better understanding of United Kingdom and European Union's relations, policies and perspectives during that period.
Key Words: European Union, United Kingdom, EMU, National interest, Referendum, Single Currency, CAP, CFP

Introduction:

The Labour party under the Tony Blair came to power in UK after the 1997 UK General election. The Labour Party in its 1997 General election manifesto introduced the pro-European policy strategy goals and this was whole heartedly supported by the UK people in the election. As a result, the Labour Party won the election by a huge majority of votes in its party history. The 1997 election gave new direction to the UK's EU policy. Tony Blair's pro-European policy initiatives made a huge change in the EU-UK relations. The crux of the policy was to establish some kind of British 'Leadership' within the EU. The policy of Labour government of Tony Blair towards EU modernization and change. It was making a break from the policies of UK in recent past, notably its 1983 manifesto of withdrawal from the European Communities, state intervention in the economy and nuclear disarmament. The Tony Blair government succeeded in placing a British imprint upon the EU; but continued as non-member of the Euro that in a way restricted its aspirations to play leadership role in the EU.

Rationale Of The Study:

The proposed research will focus on United Kingdom and European Union's relations during Tony Blair's second term of premiership. Stress here is on UK's policy towards EU during Tony Blair's period. Secondly the study aims to understand Tony Blair's foreign policy in the context of EU and does not deal exclusively with its foreign policy.

Objectives Of The Study:

In the light of above, the proposed research aims to understand the following:

- To understand the reason behind Tony Blair's involvement in EU during second term of premiership.
- To analyze as to what extent UK differs from other EU member states in EU Politics.
- Internal debate in EU regarding Tony Blair's role in various policies.
- Impact of Tony Blair's policies on EU and its wider ramification.

Hypothesis:

1) Tony Blair sought to change the role of UK in EU. Distinct to his predecessor he brought about a pro-EU image of UK.

2) Tony Blair also sought to maintain continuity in UK's policy towards EU. On core areas distinct UK identity was maintained.
3) Tony Blair's policy represented an ambivalent attitude towards EU supporting EU where it suited national interest and deviating from the general EU member's position when it did not suit the perceived national interest.
4) Tony Blair's policy perspective has had an imprint on the UK's policy towards EU and has made it difficult for successors to deviate from it.

Methodology:

This work on 'A Study on United Kingdom and European Union's relations during Tony Blair's second term of premiership with reference to the New Labour party's 2001 election manifesto.' is basically an analytical work. The proposed study will to a large extent rely on primary sources including official, Government documents and publications. The study will also critically examine the secondary sources available on the subject matter such as books, journals, periodicals magazines and tertiary sources such as newspapers.

Literature Review:

The Review of literature is an important stage of research as it provides the researcher an overview of what has been done and what is being done. In this background, there exist several works pertaining to the subject matter of the research that could be usefully employed in the research. In this study mentioned a few.

Christian Schwinger, (2007), in his book on **Britain, Germany and the Future of the European Union (PALGRAVE MACMILLAN Publications, New York,)** has analyzed the role played by Britain in the European Union. And the author also analyzed the Britain and European integration, the Britain under Tony Blair's premiership and also discussed Blair's European policies in different fields.

Alistair Jones, (2007), in his book **Britain and the European Union (Politics Study Guides), (Edinburgh University Press, Edinburgh,)** analyzed the history of the EU, its institutions and policies. The author also analyzed the British applications, the referendum on membership and Tony Blair's premiership.

Analysis and Findings:

Tony Blair's Second Term As A United Kingdom's Prime Minister: (2001-2005)

In the June 2001 UK general election, the Tony Blair's New Labour government came back to power with a moderate majority. However, the New Labour party faced much difficulty in carrying forward the Constructive European policy agenda with other European Union member countries, the promise which was made in their first term of office. The major challenge for the New Labour government was that of joining the Euro currency before 2005. However, there was opposition from some public as well as the Conservative Party as they considered it as a threat to country's sovereignty and integrity.

The New Labour government considered that the membership to Euro currency was very important and wanted to join the Euro currency after conducting referendum. However, the Chancellor, Gordon Brown argued that in order to join the European Single currency, UK has to pass the five economic tests put forwarded by the UK Chancellor of Exchequer, Gordon Brown, on October 27, 1997. In this context, the study of New Labour party's 2001 general election manifesto commitments on European policy agenda plays an important role to understand the EU-UK relations during Tony Blair's second term of Premiership from 2001 to 2005.

European Policy Commitmenta In 2001 New Labour Party Manifesto:

1. Labour will be engaged and influential, fighting for the British national interest, as we set out in 'Britain strong in the world'.
2. Referendum on entry to the single currency early in the next parliament if the five economic conditions are met.
3. Labour's position on the single currency was set out by the Chancellor in October 1997 and reiterated by the Prime Minister in February 1999.
4. Long term Economic stability, lead Economic reform in Europe.
5. Lead a Reformed and Enlarged Europe.
6. Isolation from Europe does not help anyone.

7. To strengthen abroad, in Europe and beyond, to tackle global problems.
8. Reform the Common Agriculture Policy and Common Fisheries Policy.

After its victory in the 2001 UK general election, the New Labour Party formed the second Labour government under the leadership of Tony Blair. During its second term of office, the government made some changes in the cabinet. Basically, these changes were made to develop a constructive goal-oriented EU policy initiative. Jack Straw was appointed as a new Foreign Secretary in place of Robin Cook. But, here one thing common about them was that both were Eurosceptic leaders. The New Labour government appointed Peter Hain as a minister for Europe to assist Jack Straw on European policy matters.

The New Labour party in its 2001 UK general election manifesto made a promise of 25 'Steps to a Better Britain'. The New Labour Party's European policy objectives and goals play an important role in developing EU-UK relations. Among them the major policy objective was to 'Long term Economic stability and lead economic reform in Europe'. This manifesto objective was greatly highlighted in the 2001 UK general election. The New Labour party's 2001 manifesto positively and practically supported the EU's modest policy objectives.

Over all, during its second term of power, the major source of difficulty arose from the international circumstances. The issues developed into prominence mainly in the form of Tony Blair's support to some distinct aspects of the then U.S. President George W. Bush's foreign policy objectives. During this period, the UK Prime Minister Tony Blair whole heartedly supported U.S. President George W. Bush's foreign policy in some key areas. The key areas include, 'to build and sustain a more democratic, secure, and prosperous world for the benefit of the American people and the international community'. This led to a great division within EU member countries. Some member countries supported UK's stand while others strongly criticized UK's support to the U.S.A. on certain issues.

The 2003 Iraq war had great impact on EU-UK relations in many ways. Firstly, it led to the divisions within the EU member countries. After the Iraq war, the UK's relationship with two dominant EU member countries, namely France and Germany, was declined drastically. After the war, UK's all policy initiatives and its implementation in EU were opposed by these two countries. This had greatly affected the day to-day functioning of the EU for a very long period. Secondly, after the Iraq war, Tony Blair as well as the New Labour government's popularity at the domestic and at the international level declined drastically. During this period, the Eurosceptic press and the UK Public opinion were also against Tony Blair's European policy. In order to regain his popularity, New Labour government introduced various economic reform measures, the enlargement process and also various defence and security related policy initiatives. But all these measures and policy initiatives failed to reclaim his popularity in UK as well as among EU member countries.

On June 9, 2003, the UK Chancellor of Exchequer Gordon Brown, announced UK's interest to join the Euro currency with certain conditions. He proposed UK to clear at least one test to join the Euro currency. In his study, he reiterated the benefits of Euro currency membership to UK financial services. The sustainable Convergence and flexibility tests were considered as important tests along with other tests. The New Labour government understood that conducting all these tests and referendum towards the membership to EU's single currency, Euro, would not regain their popularity for 2005 UK general election. In this backdrop, in April 2004, Tony Blair demanded for EU's Constitutional Treaty's approval through referendum. So, he set aside the treaty as an issue in June 2004 European election as well as May 2005 UK general election. In this way, Tony Blair tried to get domestic support to translate his constructive European policy objectives into practice. Notwithstanding this, he did not succeed in implementing his manifesto objectives into practice for various reasons.

Conclusion:

The second term was more fractious with partner states because of divisions within the EU that were opened up by the Iraq invasion. Although a major protagonist in the divisions, the UK was never isolated in the way that it had been on foreign policy beforehand, for instance in supporting the US bombing of Libya. It was difficult to identify the major achievement to lead economic reform in the EU. Instead, it was trying to advance the Lisbon strategy and relevant legislation on the single market and competitiveness in EU politics. The 2003 recommendation on against joining the EURO was an important step of Labour government on EU policy that went against its manifesto commitment.

With regard to developing a constructive European policy, Tony Blair's second term of New Labour government did not succeed in shaping the 2001 UK general election EU policy agenda into reality. The New Labour government did not pay much attention to implementing St. Malo initiative for the creation of a European Security and Defence Policy. During this period, along with UK, other EU member countries, namely, the Spain and Italy, also supported U.S. war on Iraq.

On the whole, we can say that, during the New Labour governments second term, it had developed a more constructive and positive European policy strategy in its 2001 UK general election manifesto, titled 25 'Steps to a Better Britain', by its EU representative Peter Hain. In the initial years, the New Labour government took various initiatives to implement the policy strategies, which was made in its 2001 UK general election manifesto. The Iraq war had great impact on EU-UK relations as well as Tony Blair's leadership. After the Iraq war, Tony Blair's popularity at national and international level declined drastically. The Eurosceptic print media gave negative publicity to Tony Blair's government's decision to hold a referendum on EU Constitutional Treaty.

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Empowerment of Tribal women through Education

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Abstract: One of the most commonly used development terms is empowerment. Because consciousness raising is primarily an educational activity, education is crucial to the empowering process. The tribal group in India has been exposed to different sorts of prejudice, violence, and other forms of abuse. Tribal women, in particular, are isolated from the rest of society, destitute, illiterate, and restricted in densely forested and hilly terrain. Tribal women's status in terms of education, work, and health is low, not only when compared to tribal males, but also when compared to women in general. It is necessary to educate them so that they can perform specific societal tasks. Tribal women's empowerment can be measured in terms of their control over economic resources. to earn a living and increase their per capita income, to have access to education, to participate in economic decision-making, and to have political chances. Education is one of the most significant ways to equip indigenous women with the knowledge, skills, and self-confidence they need to fully engage in development The purpose of this theoretical paper is to the is to comprehend the significance of tribal women's empowerment, and to find out the challenges and problems faced by tribal women and to suggest some remedies for handling the challenges faced by tribal women in India.
Keywords: Empowerment, Education, Tribal, Women

Introduction:

Education is critical to the development of every human being. It is frequently regarded as one of the most important avenues for reaching another important development goal: women's empowerment. Because consciousness raising is primarily an educational activity, it is vital to the empowerment process. It's one of the most important ways to equip women with the knowledge, skills, and self-confidence they'll need to actively participate in the extension process. It leads to increased productivity, efficiency, and greater individual and societal socioeconomic growth. One of the most crucial tools for ensuring empowerment among excluded communities is education. Tribal Women's education is viewed as one of the most potent weapons in a country's progress.There is a need to place a greater emphasis on tribal women's education in order to contribute to national development.

Women's Empowerment:

Women's empowerment is conceptualized in a variety of ways by social scientists, activists, and government officials. Empowerment is a multi-faceted societal process that allows people to take charge of their own life. It is a process that develops people's power so that they can use it in their own lives, communities, and society by acting on topics that they deem essential. Women's empowerment, in general, refers to the process by which women gain control and ownership of their life by expanding their options. It also refers to the process through which women gain equal status with men in order to engage in the workforce. It also refers to the advancement of women's standing in the home, in the community, and in society as a whole. Education and jobs can help them improve their situation. Through empowerment, women obtain a greater share of control over many resources such as knowledge, information, and ideas, as well as financial resources such as access to money and decision-making power in the household, community, society, and nation. Mahatma Gandhi rightly commented that "when a man is educated, an individual is educated; when women is educated, a family and a country are educated".

Status of Tribal women:

Tribal women play a crucial role in tribal civilization, as they account for around half of the overall population. They are hard workers that work in both the agricultural and domestic fields. They assist the men in the house and in agriculture. They are regarded as the family's centre since they are responsible for all social, economic, cultural, and religious activities. They labour hard for their family's survival, yet they live in misery and poverty. Hunting, shifting cultivation, and agriculture are among of their occupations. In general, tribal women have more independence in numerous aspects of life than women from other castes. More liberty is given to them in the matter of Traditional and customary tribal norms.

Tribal women perform greater physical labour than tribal males in their agricultural production, household, and forest. They conduct home duties such as cooking, cleaning, and fuel collecting within the family, and they also manage to work outside the house as farm labour, construction work, and brick kiln work, among other things. Within their own communities, they usually had more independence.

Tribal women are valued as economic assets and have the same status as their male counterparts. However, tribal women continue to be denied access to education and a fair level of living in terms of development. The literacy rate among Tribals is relatively low, and this is linked to their bad health.

Objectives of the Study:

-To understand the Significance of Empowerment of Tribal Women

-To understand the Challenges and Problems faced by Tribal Women.

- To suggest some remedies for handling the challenges faced by tribal women in India

Methodology:

Present paper is a theoretical paper, which is based on the secondary data. It is collected from the sources such as books, journals, Gazetteers, articles, government publications, reference papers in printed and on from website related to the topic.

Education and Empowerment of Tribal women:

Education can be used to help people gain control over their lives. Empowerment is a broad concept that encompasses all forms of female empowerment, including social, economic, political, and cultural empowerment. It aids in the development of women's self-reliance and self-confidence, as well as the attainment of equal status and the reduction of the gender gap between men and women.

In the current situation, tribal women's empowerment is a difficult subject; without their empowerment, the country's inclusive growth will be impossible. Tribal women's empowerment can be evaluated by the control they have over economic sources of income and their per capita income, as well as their access to education, professional opportunities, participation in economic decision-making, and political opportunities. Access to school is the most important indication of indigenous women's overall empowerment. It has an impact on a variety of tribal development issues.

For tribal women to be able to participate in and benefit from the development process, they must have access to education. It assists them in improving their literacy skills, maintaining better hygiene, caring for the health of their families, combating exploitation, and overcoming the disadvantages and discrimination that they face, and this is indeed the greater and foremost empowerment, because when women are educated, their dependence disappears or at least decreases. It raises their consciousness and contributes to their general growth.

Tribal women and Education:

In India, the vast majority of tribal people are poor, illiterate, and disadvantaged in many aspects of life when compared to the rest of the population. The Indian government has introduced a number of educational programmes aimed primarily at tribals in general, as well as new initiatives aimed at women in particular. Despite this, the literacy rate in primitive tribes has not improved. Education is a crucial indication for any section's socioeconomic growth, which is why tribal communities across India have been subjected to various sorts of violence and prejudice. Tribal women, for example, are cut off from the rest of society.

According to 2011 census, the tribal population in India is 10,42,81,034, that is 8.6% of the total population of India. A total of 9,38,19,162 people belonging to scheduled tribes reside in rural areas that is 11.3% of the total population of rural areas, whereas 1,04,61,872 people in urban areas that is 2.8%.

There has been a considerable increase in the literacy rates tribals from 1961 to 2001 that is 8.53% to 47.10%. Among tribal women, living in urban areas there is nearly fourfold increase in the literacy rate that is 13.45 in 1961 to 59.87 in 2001. Simultaneously, the literacy rate among tribal women also increased from 2.90% to 32.44% during these four decades. As per 2011 census, the rate of literacy in India is 72.99% whereas that of it in Scheduled Tribe is 59%.

It clearly reveals that while the total literacy rate among Scheduled Tribes has grown, tribal women's literacy rates are still relatively low at the matriculation, graduation, and technical diploma levels.

Challenges and Problems faced by Tribal Women:

Tribal women face many challenges and problems in their life which they need to overcome in order to improve their Status in the society.

1. **Economic situation**: Tribal women's economic situation is very low; they rely on agriculture, hunting, farming, and the forest to meet their basic necessities.
2. **Parents' attitudes**: Most of the time, they do not send their children to school on a regular basis or they drop out. Even impoverished parents are hesitant to send their children to school because it will diminish their ability to assist in the workplace.
3. **Patriarchal society**: The effects of patriarchy can be seen in most tribal cultures, and as a result, whatever money women earn from their labour is given to their husbands, who frequently spend it on hobbies such as drinking. This leads to a terrible economic situation in their community.
4. **Lack of transportation and communication facilities:** Many tribals live in rural, hilly, mountain, and interior areas with limited transportation and communication options. They are cut off from the rest of the world due to a lack of transportation and communication.
5. **Language barrier:** One of the major barriers to education for tribal women is a lack of a common language.
6. **Lack of Teachers**: Teacher absenteeism is a common occurrence in distant tribal regions, even if schools are there; yet, this has an impact on the quality of education.
7. **Technological challenges** : They also confront technological obstacles due to a lack of exposure to the outside world and a reliance on traditional practises, which reduces their efficiency due to a lack of skill-based education and understanding about modern manufacturing techniques.
8. **Suggestions and Remedies for empowering tribal women:**
9. Some of the important suggestions and remedies to strengthen and empower tribal women are as follows:
10. A proper awareness campaign should be organized to raise awareness about the value of education. In order to educate the tribes, a large-scale literacy campaign in tribal communities is required.
11. The government and non-governmental organizations (NGOs) should raise awareness among indigenous women about government policies and programmes.
12. The attitude of tribal parents toward education should be improved by effective counselling and supervision.
13. Microcredit programmes for indigenous women should be expanded to provide small loans for self-employment in order to create income for themselves and their family.
14. The primary areas where the government should focus greater attention to improve the socio-economic status of indigenous women are education, health, and employment.
15. Supporting educational institutions in border, hilly, remote, and educationally backward areas; appointing more local female instructors in tribal areas; and conducting parent awareness programmes about the value of women's education.

16. Providing special scholarships, fellowships, hostel accommodations, and other initiatives, especially for female students.

Conclusions:

To summarise, when compared to mainstream culture, tribals are economically, socially, and educationally backward. As a result of their overall backwardness, they are marginalised and excluded from societal engagement. When compared to the general population, the literacy rate of Scheduled tribes is quite low. Even though tribal women's literacy rates are low, a gender gap exists between tribal males and women's literacy rates. It is necessary to mobilise their social status through education for their total growth. Education is a key tool for achieving social mobility. Education is a capability that may ensure inclusive progress in and of itself. To bring them into the fold of inclusive growth, the government and non-governmental organisations (NGOs) must develop genuine policies and offer resources to help them improve their social conditions.

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Perception Regarding Digital University

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Abstract: Covid – 19 made us accept many new things, one among them is an online education, due to covid 19 pandemic many educational institutions shut for more than 2 years and changed method to online mode of teaching to students. Due to this at present many universities and educational institutions have following blended method of teaching i.e., both online and offline teaching and UGC has given permission to many universities and institutions to offer online degree programs by keeping in the mind success of online education in our country government of India in the budget has recently announced the establishment of Digital University, which offers courses through online and removes the barriers of course intake which is a major problem in offline courses, since there are many stake holders to this new concept efforts has been made through this paper to understand the perception regarding digital university from teaching community and students.
Key word: Digital University

Introduction:
Present our economy is moving towards digital, almost in all the sector we are using technology for completing the task one among them sector, where we are depending on high technology is the education sector. In earlier days the study material and other resources for study purposes were limited to the classroom only but now it's not like there are so many lectures, study material and other resources are available digitally at free of cost at 24x7. In order to give exhalatory to this online method of education, the government of India has come up with a new concept called Digital University. The Indian government introduced NEP 2020 policy, as per this a student can get multidisciplinary subjects of his interest through this digital university concept one can opt for his choice of subjects and study anywhere.

Review of literature:
1) Marta Pinto, faculty of psychology and education science of university of Porto and Carlinda Leite, faculty of psychology and education science of university of Porto (2020) in their article Digital technologies in support of students learning in Higher Education states that digital technologies are an integral part of higher education teaching, revealing a set of technologies chosen to integrate official education situations, and therefore actuality used by students in provision of education.
2) Digital technologies are an integral part of the debate on teaching and learning in higher education (Becker et al. 2017; Bullen & Morgan, 2015).
3) Institution and people's life have been greatly influenced by technological developments, such as computers, portable devices and the internet, influencing their relation with information, knowledge and ways of working (Selwyn, 2016).
4) A change in the roles of teachers and learners, and the equitable access to higher education (Conole & Alevizou, 2010; Henderson, Selwyn & Aston, 2017).

Objectives of the study:
1. To know the awareness about the digital university
2. To study the perception about digital university
3. To offer useful suggestions

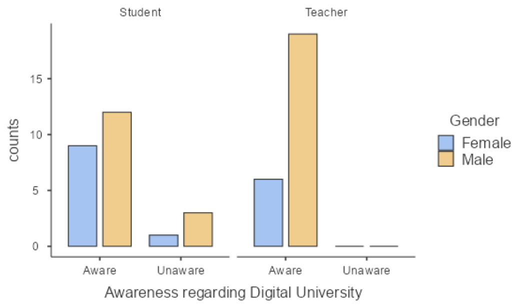
Limitations of the study:
- The study was limited to only knowing the awareness about the digital university and study the perception about digital university.
- The study covered only a few main stakeholders such as the teaching community and students.

Research Methodology:
A total of 50 respondents, consisting of 25 teachers and 25 students collected through the questionnaire in the Google Form, and convenient sampling was used to collect the data from respondents. Primary & secondary data were used in the study.

Statistical analysis of data: Descriptive statistics such as frequencies, plots, and proportion tests through binomial tests were used to analyse and interpret the data.

Frequencies of Awareness regarding Digital University			
		Gender	
Awareness regarding Digital University	Occupation	Female	Male
Aware	Student	9	12
	Teacher	6	19
Unaware	Student	1	3
	Teacher	0	0

Awareness regarding Digital University



Inference: From the above table and plot, it is clear that out of 50 respondents, 25 are teachers and 25 are students. All 25 teachers are aware of the Digital University and out of 25 students only 04 students are unaware of digital university and the remaining are aware of it.

Binomial Test					
	Level	Count	Total	Proportion	P
Digital University ensures access to world-class education	1 Agree	22	50	0.440	0.480
	2 Strongly Agree	24	50	0.480	0.888
	3 Disagree	3	50	0.060	< .001
	4 Strongly Disagree	1	50	0.020	< .001
Digital University ensures a new e-learning content delivery platforms through internet	1 Agree	18	50	0.360	0.065
	2 Strongly Agree	28	50	0.560	0.480
	3 Disagree	2	50	0.040	< .001
	4 Strongly Disagree	2	50	0.040	< .001
Digital Universities will be established in collaboration with various Indian universities	1 Agree	21	50	0.420	0.322

Binomial Test

	Level	Count	Total	Proportion	P
	2 Strongly Agree	25	50	0.500	1.000
	3 Disagree	2	50	0.040	< .001
	4 Strongly Disagree	2	50	0.040	< .001
Digital University ensures personalised learning experience at their door steps	1 Agree	18	50	0.360	0.065
	2 Strongly Agree	28	50	0.560	0.480
	3 Disagree	1	50	0.020	< .001
	4 Strongly Disagree	3	50	0.060	< .001
Digital university ensures a competitive mechanism for the development of quality e-content	1 Agree	13	50	0.260	< .001
	2 Strongly Agree	33	50	0.660	0.033
	3 Disagree	2	50	0.040	< .001
	4 Strongly Disagree	2	50	0.040	< .001
Digital University ensures to find relevant jobs and entrepreneurial opportunities	1 Agree	13	50	0.260	< .001
	2 Strongly Disagree	33	50	0.660	0.033
	3 Disagree	2	50	0.040	< .001
	4 Strongly Disagree	2	50	0.040	< .001
Digital Universities ensures to skill and upskill or reskill themselves	1 Agree	23	50	0.460	0.672
	2 Strongly Agree	23	50	0.460	0.672
	3 Disagree	3	50	0.060	< .001
	4 Strongly Disagree	1	50	0.020	< .001
Digital University will impart lessons in all regional language	1 Agree	18	50	0.360	0.065
	2 Strongly Agree	27	50	0.540	0.672

Binomial Test

	Level	Count	Total	Proportion	P
	3 Disagree	2	50	0.040	< .001
	4 Strongly Disagree	3	50	0.060	< .001

Note. H_a is proportion $\neq 0.5$

Inference: From the above table, it is clear that most of the respondents agree that digital university will provide world-class education through its quality e-content even in regional languages also and it also upgrades the skill and relevant jobs and entrepreneurial opportunities by collaborating with various universities.

Findings of the study:

- It's clear that most of the respondents are male.
- It's clear that most of the respondents are aware of Digital University.
- It is clear that 24 respondents, 0.480 proportion, and (p 0.888) have strongly agreed that digital university ensures access to a world-class education.
- 28 respondents, with a proportion of 0.560 and (p 0.480) and 18 respondents, with a proportion of 0.360 and (p 0.065), strongly agreed and agreed that digital university ensures new e-learning content delivery platforms through the internet.
- With 25 respondents' proportion of 0.500 (p 1.00), strongly agree that Digital Universities will be established in collaboration with various Indian universities.
- 28 respondents, with a proportion of 0.560 (p 0.480), strongly agreed that Digital University ensures a personalised learning experience at their door steps.
- 33 respondents, with a proportion of 0.660 (p 0.033), strongly agreed that digital university ensures a competitive mechanism for the development of quality e-content
- With 33 respondents, proportion 0.660 (p 0.033), strongly agreed that digital University ensures to find relevant jobs and entrepreneurial opportunities.
- 23 respondents (a proportion of 0.460) have expressed that digital Universities ensures to skill and upskill or reskill themselves
- Digital Universities ensures that they will impart lessons in all regional language, according to 27 respondents, proportion 0.540 (p 0.672).

Suggestion: From the study, it is very clear that almost all the respondents have awareness of the digital university. Therefore, universities and educational institutions should offer digital platforms for education so that they can reach the mass. The conventional universities and education institutions also offer blended education so that they can also slowly convert their formal education to online platforms.

Conclusion: To conclude, in order to reach higher education to all, the existence of these digital universities is the order of the day, by establishing these universities it will reach to remote places also and for successful of theses concepts requires proper infrastructure such as internet and quality of e-content, etc.

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Gender Stratification in Work – An Analysis

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Abstract: Gender stratification refers to the inequalities between women and men regarding wealth, power, and privilege. Gender is a socially structured principle and represents a hierarchical, asymmetrical, and unequal division between men and women. Gender stratification is a relatively new concept borne of the feminist perspective in social sciences, especially in sociology, around the 1970s. Gender stratification can be illustrated by the figures of unequal participation of women in the labor market, incomes, politics, and so on.

Introduction

Gender stratification refers to the social ranking, where men typically inhabit higher statuses than women. Often the terms gender inequality and gender stratification are used interchangeably. A common general definition of gender stratification refers to the unequal distribution of wealth, power, and privilege between the two sexes. Gender (in)equality can be analyzed on the bases of prestige, style of life, privileges, opportunities, association with social groups, income, education, occupation, and power (Acker 1973). The unequal distribution is illustrated by unequal figures regarding employment, participation in politics, education, land ownership, household works, and so on. "Most wealth is in the hands of men, most big institutions are run by men, most science and technology is controlled by men"

Objectives

Once researchers started to analyze gender as a principle of structuring the unequal power relations both within and outside the household, it became clear that the domestic and public spheres were closely related to each other. Housework started to be seen not as a "natural duty" of women but as unpaid work "carried on within a hierarchical relationship within which women serviced men's needs and at the same time contributed to the economy through preparing their husbands and themselves for work in the labor market" Thus, inequalities within the household made very problematic the analysis of class based on the family as the unit of analysis

Status of Gender Stratification

The stratification between the genders can be seen in different ways. For example, it is a traditional thinking that mechanical branch is suitable for boys only, thus the number of girls in this branch is much lesser than other engineering branches. Gender inequality in the workplace takes many forms — unequal pay, disparity in promotions, incidents of sexual harassment, and racism. Often, it presents itself in more nuanced ways, like fewer opportunities for women who are mothers and a higher incidence of burnout in women.15-Oct-2021 What are gender issues in the workplace? Workplace gender discrimination comes in many different forms, but generally it means that an employee or a job applicant is treated differently or less favourably because of their sex, gender identity, or sexual orientation. Even though the words "sex" and "gender" have different meanings, laws against discrimination at work often use them interchangeably. Sometimes workers experience discrimination because of their gender and something else, like their race or ethnicity. For example, a woman of color may experience discrimination in the workplace differently from a white female co-worker. She may be harassed, paid less, evaluated more harshly, or passed over for promotion because of the combination of her gender *and* her race.

Some Examples of Gender Stratification

not being hired, or being given a lower-paying position because of your gender identity or sexual orientation (for example, when an employer refuses to hire women, or only hires women for certain jobs) being held to different or higher standards, or being evaluated more harshly, because of your gender identity, or because you don't act or present yourself in a way that conforms to traditional ideas of femininity or masculinity For example, if a worker who identifies as a woman receives a negative performance evaluation that criticizes her for being too "aggressive" (while men who behave the same way are praised for showing "leadership"), or if she wears her hair short and is told she needs to be more "presentable," she may be experiencing discrimination based on gender stereotypes, which is a form of gender discrimination. being paid less than a person of a different gender or sexual orientation who is similarly or less qualified than you, or who has similar (or fewer) job duties than you being denied a promotion, pay raise, or training opportunity that is given to people of another gender identity or sexual orientation who are equally or less qualified or eligible as you

- being written up or disciplined for something that other employees of a different gender do all the time but never get punished for
- being insulted, called derogatory names or slurs because of your gender identity, or hearing hostile remarks about people of a certain gender identity or sexual orientation.
- being intentionally or repeatedly called by a name or referred to as a different gender that you don't identify with – such as when a transgender man is called by his dead name, or referred to as "Miss"
- being subject to unwelcome sexual advances, requests for sexual favors, or other verbal or physical harassment of a sexual nature.

being rejected for a job, forced out on leave, or given fewer assignments because you're pregnant.

Not all gender discrimination is intentional or explicit. It could still count as discrimination if your employer does something that ends up excluding or harming workers of a particular gender identity without intending to. Oftentimes, a certain practice or policy — say, a hiring test or requirement — does not say anything about gender, and may not have been put in place *for the purpose* of keeping women, trans, or nonbinary people out of certain jobs, but ends up having that effect. This kind of practice or policy could still be considered discriminatory, and if you've been denied a job-related opportunity, paid less, or were fired as a result of it, you might have a discrimination claim. For workplace gender discrimination to be considered illegal, it has to involve treatment that negatively affects the "terms or conditions" of your employment. Terms or conditions of employment are all the responsibilities, rules, and benefits of a job. Most of the time, they are set by an employer or negotiated by a worker and the employer at the time of hire. In unionized workplaces, they are negotiated and agreed on as part of the "collective bargaining" process. "Terms and conditions" include but are not limited to things like your job responsibilities, work hours, dress code, vacation and sick days, starting salary, and performance evaluation standards.

Difference between gender stratification and gender inequality

Specifically, gender stratification refers to the differential ability of men and women to access society's resources and to receive its privileges. As gender stratification increases, so does the level of gender inequality, reflecting greater differences between men's and women's access to power.15-Feb-2007

The person Who came up with gender stratification -

Talcott Parsons

The functionalist perspective of gender inequality was most robustly articulated in the 1940s and 1950s, and largely developed by Talcott Parsons' model of the nuclear family.

Stratification in Sociological Aspect

Social stratification is the allocation of individuals and groups according to various social hierarchies of differing power, status, or prestige. ... In this regard, social stratification is found in every society, even if it takes on slightly different forms.

Top 4 Basic Processes of Stratification

The four basic processes of stratification are as follows: (1) Differentiation of Statuses (2) Ranking of Statuses (3) Process of Evaluation (4) Process of Rewarding.

(1) Differentiation of Statuses:

Status differentiation is the process by which social positions, such as father, mother, teacher and employer, are defined and distinguished from one another by assigning to each a distinctive role—a set of rights and responsibilities. All roles involve a good deal of teaching, learning, motivating and sanctioning. This process is indispensable to any society if it is to continue for a long time.

Status differentiation operates most effectively when:

(1) Tasks are clearly defined;

(2) Lines of authority and responsibility for roles are clearly distinguished;

(3) Effective mechanism exists for recruiting and training a Gender inequality in the workplace: The fight against bias

Gender inequality in the workplace.

(4) Adequate sanctions in the form of rewards and punishments exist to motivate individuals to conscientious performance.'

(2) Ranking of Statuses:

Statuses can be ranked on three criteria:

(i) Personal characteristics such as intelligence, beauty or strength;

(ii) Trained skills and abilities such as manual dexterity, knowledge of law, command over language etc.; and

(iii) Consequences or effects upon others and upon society. Actors provide entertainment, judges ensure justice, policemen preserve order.

(3) Process of Evaluation:

This process involves assigning to various statuses different places on a scale of value or worthiness. Several different kinds of evolutional judgments, such as superior/inferior, better/worse, more/less need to be distinguished.

(4) Process of Rewarding:

Rewarding involves the allocation of various amounts of the good things in life to statuses which have been differentiated, ranked and evaluated. In every society there are rules or norms that determine how rewards will be distributed.

These rules can be very variable and operate in such a way that large portions of a population may live in poverty while others can enjoy comfort or luxury in great proportion. They can call for relatively equal allocation to all. But, some inequality in rewards is, of course, characteristic of every known society.

Critical Approach To Sociological Justice -

The fight against bias

You have the right to:

1. Work in a safe, discrimination-free environment. Your employer is required by law to provide a safe working environment that is not "hostile" to you based on your sex, gender identity, or sexual orientation.

2. Talk about or speak out against gender discrimination at work, whether it's happening to you or to someone else. You can talk about discrimination that's happening at work with whoever you want, including your co-workers and your supervisor. You also have the right to tell your employer that you believe a company policy, practice, or manager is discriminatory or engaging in discrimination. It is illegal for your employer to retaliate against or punish you for talking with co-workers about discrimination. Retaliation includes being fired, demoted, cutting your pay, switching your shifts or duties, or any other action that has a negative effect on you. If your employer retaliates, you could To consider taking legal action.

3. Report the discriminatory behaviour or policy to HR or your boss. Report to HR, your boss, or someone else at your company who has power. We highly recommend submitting the complaint or report in writing (by e-mail or letter) and making copies so you have proof later if you need it.

4. File a grievance. If you are a member of a union, your contract (known as the "collective bargaining agreement" or CBA) generally covers the "terms and conditions" of work. If you believe you're being treated unfairly or your employer isn't following the contract, talk to your union rep about filing a grievance.

5. Picket or protest against discrimination. When you get together with one or more of your co-workers to raise concerns about your pay or working conditions, you're engaging in what's "concerted activity," which is legally protected by the National Labor Relations Act.

6. Make a copy of your personnel file. You can request to see your personnel file, which could contain performance evaluations, your employment and pay history, and other useful information that could be used as evidence if you decide to take legal action. Your HR department or union representative should have information about how to get your personnel file for review.

7. File a complaint or charge of discrimination with a government agency, such as the Equal Employment Opportunity Commission (EEOC), or your state's Fair Employment Practices Agency — for example, in California, the Department of Fair Employment and Housing (DFEH). You also have the right to tell your employer that you plan to file a charge, and they cannot retaliate against you for doing so.

8. Sue / file a lawsuit against your employer for discrimination. This is only an option if you already filed a charge with the EEOC or your state's FEPA.

9. Testify as a witness or participate in an investigation by the EEOC or other government agency. Your employer can't keep you from providing evidence, testifying at a hearing, or communicating with a government

agency that is looking into discrimination at your workplace. Even if the investigation eventually finds that there was no discrimination, your participation is still a protected right, meaning your employer can't retaliate against you for cooperating.

Conclusion

Gender inequality creates discrimination, entrenches gender stereotypes and prevents women and men, girls and boys from equally reaching their full potential in the workplace, at home and in society at large – with the brunt weighing more heavily on women and girls. We should be honest in our efforts and work on changing the social attitude towards women. For full gender equality in India, both men and women must work together and bring positive changes in society. It is important to promote common values such as respect for human rights and equality between women and men as well as a common understanding that human rights are universal and apply to all, irrespective of, inter alia, sex.

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Best Practices In Changing Context; A Case Study Of G.F.G.C. Library, Bantwal, Dakshina Kannada District, Karnataka

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Abstract: The developments in Information and Communication Technologies (ICT) have changed the user's expectation from the academic libraries in different ways. The ways to build collection and services to the end users vary from the recent to past practices. To meet the end-users demands effectively, the academic libraries need to identify and adopt good practices and benchmarks. The paper attempts to define and explain the concept "Best practices". It explains the objectives of best practice in college library in the changing context. The paper also discuss about the ICT application in LIS practices and it provides a many examples of the best practices experienced in different situations in Government First Grade College (G.F.G.C) Library, Bantwal and also it express some suggestions and recommendations for best practices in academic libraries.

Keywords: Best Practices, G.F.G.C Bantwal Library, Local resources, Practical Experience, Case study, Information and Communication Technologies

Introduction:

Today we are living in electronic era; libraries are applying ICT in the library activities to fulfill the user needs. Most of the Government First Grade College Libraries in Karnataka are yet to apply ICT in their library activities. However the librarians working in these colleges can't escape from the responsibilities by stating some reason. He has to practice continuously to provide qualitative services to readers by using local available resources and opportunities.

Government First Grade College Bantwal: A profile

Government First Grade College, Bantwal was established in the year 2007. The college offers B.A, B.COM and M.Com courses. It is affiliated to University of Mangalore. More than 250 students are studying in the college and most of the students are from rural area. Well qualified and dedicated teaching and non teaching staff are serving for the overall development of the college and society.

GFGC Bantwal Library: An overview

The college has good library and information center. The main objective of the library is 'to support staff and students of B.A, B.COM and M.Com and development of academic activities and management with the view to provide up-to-date knowledge'. It is playing an important role in supplementing academic activities and boosting research in the college. The library caters to the needs of 250 readers. The Library has developed an excellent collection of books, journals and non-book materials. At present library has 7935 books, 90 bound volumes, 150 reports, 100 CD ROMs, 15 national and international journals, 14 magazines and 09 news papers. It is providing qualitative services to the students and faculties by fulfilling the user needs to achieve academic excellence.

Objective of the study:

1. To discuss the best practices experienced in our library
2. To improve existing competencies
3. To utilize the local available resources in practice
4. To satisfy user expectations
5. To keep update knowledge and skills with new technology

Scope and limitations:

The scope of the study is 'Best practices adopted in library and information services in Government First Grade College Library, Bantwal, Dakshina Kannada District, Karnataka'. It is limited to "Best practices" definition and concept, Objectives, some of the best practices experienced in our college library. It highlights the different techniques and skill applied in practice to provide effective service and motivating the reading habit among the students and faculties to fulfill the changing user needs.

Methodology:

The following methods are used to collect the data for the study

Practical experience and observations in GFGC, Bantwal library.

Studied many of the literatures on best practices to undergo this study.

Search engines like Google and AltaVista are used to prepare case study and other related issues.

Best practice: Meaning and Definition Best Practice may be innovative and be a philosophy, policy, strategy, program, process or practice that solves a problem or create new opportunities and positively impact on organizations. Institutional excellence is the aggregate of the best practices followed in different areas of institutional activities. In general, the use of technology and innovative ideas lead to evolve best practices in library and information environment. The best practice in library and information services will enhance the library activities in collection development and services.

Orientation programme:

Orientation programme is conducted at the beginning of the academic year for the fresher. In this programme, information about the library timings, rules and regulations, membership, barrowing procedure, use of library sources and ICT facilities available in library are given. It helps the students to make use of library better.

SMS alert services:

Library is practicing SMS alert service by using https://www.way2sms.com. The students receive SMS alerts about the information of library services, programes, new arrivals, exhibitions, competitions, notifications, books over due, reservations details etc.

Internet awareness programme:

Library is conducting internet awareness programme for the students frequently. In this programme librarian guide the students how to use internet, e mail, search engines, library websites, e journals, e books etc

Arranging Special Lectures:

Our college Library arranges special lecture on personality development, employment opportunities, competitive examinations, information resources, ICT, national leaders and other issues regularly.

Author and Readers Meet:

Here the author of text book meets the students in the college, to get feedback of their books. Usually it is arranged in the middle of the academic year. The authors meet help both the author and the readers, Author gets the feedback from face to face meet from the faculties and students. Students also get clarification of their doubts.

Conducting Competitions for students:

Library conducts quiz, essays, and book review competition every year to enhance knowledge about current issues and library sources. The goal of this practice is to keep update general knowledge among the students.

Library service to rural area:

This is an extension service conducted by the library. Some of the useful books, news paper and magazines have been taken to villages and facilitated them to read. The goal of this practice is to provide library services to rural peoples also.

Best user award:

Library best user award is given to the students who use the college library regularly to score better marks in their examination. Two students in each course are identified from Arts/Commerce/Management every year. The goal of this practice is to promote the students to use the library regularly and effectively.

Employment and carrier guidance:

The library notices employment and carrier guidance to the students regularly. The advertisements of job and educational opportunities are put on the college library web site as well as notice board. It also arranges special classes for IBPS, SDA, FDA, KAS, Police, railway and other examinations.

Book exhibition:

Book Exhibition is conducting by the publishers to facilitate the staff and students to see all the titles in one place. The Staff and students are able to buy the books of their choice, within the college premises.

Exhibition of National leader’s photos:

Exhibition of National leader’s photos have been conducted by the Library on special days like Independence Day, Gandhi jayanthi, teacher’s day etc. The photos contain the information of the leader’s achievements, lifestyle, education, philosophy and idea and contribution for the society. The objective of this programme is to inculcate moralities in the students by reading inspiring personalities.

Suggestions and Feedback:

Suggestion box is kept in the library to get feedback from the readers. It helps library for improving the services and clarifying the user queries.

Library forum:

GFGC Knowledge Centre Bantwal has established library forum to strengthen the library services and collection in promoting reading habits among the students and functioning library activities effectively. It meets twice in a semester and discusses about the library source and services and the user requirements. Under this forum many programs like quiz, essay and book review are conducted every year.

Reprography services:

Library provides reprography services for the students who need university syllabus, question papers, articles published in journals and newspapers and other reference source at nominal cost.

Celebration of festivals: Library celebrates national festivals and book week, librarian's day by arranging special lecture or exhibition of books, maps, renewed person photos, rare collections etc.

Summary and recommendations: When we analyze the whole process of best practices adopted in the college library, it is mainly upon the proper planning, efforts of librarian, well dedication and skills and appropriate decisions taken by the authority of the college from time to time and the user's cooperation. The study recommends for college libraries to utilize available local resources and opportunities in practice. The Library professionals has to update with new technology continually and share their strategy, skills, ideas and different programes adopted in library one among them. Librarians need to find out the proper time to perform the best practices. After this, the programes and activities are to be classified based on the time in which they are to be performed. He has to consult each department to understand the actual requirements and for suggestions. Finally he needs to prepare the year plan of the best practices and execute it. Librarians should be keen in initiating every practice at a stipulated time. This helps in achieving the best performance in every programes and activities of the library.

Conclusion:

Library is the nerve centre for any academic institution. Librarian is the catalytic agent to render effective service. The librarian has to update his/her knowledge with the scientific and technological developments that is taking place in various fields and has to apply Information and Communication Technology (ICT) in practice and the librarian should utilize available local resources and opportunities in practice to provide qualitative service to the readers to achieve academic goals and objectives.

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Female sensibility in poetry

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Abstract- Mammo Moody Come Back Girls, Reservations Come Home This dual knowledge In the twelfth century oratory literature, the Shivashanas have created many similar oaths. Likewise, the above verse is very important. In times when there is no equality, we find her courage to question gender discrimination through her own questions. Knowledge does not come under the gender of a woman and a husband. In the above verse she has asserted to stand beyond it. Equality is only possible when the gender difference of male and female is over. Constitutional equality applies to all, rich and poor, upper class, lower class, male and female. When looking at Kannada literature, we see many genres like story, poetry and fiction. Resistant writings appeared during the period of Dalit-rebellion in the sixties and seventies. Later in the seventies, writing began to shout about the status of women. Females have lost their existence and become alienated from the social, political, and economic aspects of the masculine tradition of the male dominant system. Many poets have expressed a sense of femaleness in their poetry, resisting the then discriminatory system.

Introduction-

Feminism also gained immense relevance in the context of rebel literature. Many writers were influenced by feminism and engaged in edgy writing. Among them were many writers such as BT Lalitha Nayaka, Sasikala Vastra, Savita Nagabhushana, Mallika Ghanti, Shailaja Udachana and many others who were literate in their stand against inequality in society. When talking about women's literature, the cultural and literary heritage of a woman becomes very important. Our culture is a male culture. As both male and female are constructed by the male, the female has no separate existence. Thus separate for the female

There is no history. Whatever the case, she has come after him as a male shadow. The female voice is unheard of in the voice of male culture. It is necessary today to remove and clear it. Simone de Beauvoir, the great feminist thinker, states in her 'Second Sex' that the male identifies himself as 'human'. The woman identifies herself as a Sea. This fundamental difference has created a ditch between male and female. That pushed her into second grade. Thus the expression of femininity is the expression of women from a particular female base constructed by cultural and social pressures. There is a need to recognize such expression in women's poetry.

In the poem 'Girl', Kamala says proudly that a woman who has just stepped into the realm of herself can not write her own life.

"Sit down
Weeping for what cannot be written in the dark.
In this veil, tearing the fruit of the mouth.
To the horror of not wanting to write, her blackness trembled

From the state of fear of engaging in writing, the female leans towards the 'fear of not writing', which expresses the inevitability of expressing her own blackness. The girl is writing a poem from Hatha with the intention of filling the void of life. The poem thus becomes synonymous with writing life. We see many poems that defy the exploitative tendencies that prevail behind the female models of Sanatana. The combination of Ahalya, Shakuntale and Daupadai seems to be a continuation of those eternal patterns. Similarly, the widening of the citizen's sphere of not being their mother. M. Saraswati Gowda says this in his poem Avvanki and Monsoon.

"Give me the way out
Fill up the youthful fireworks "
Says Usha in 'Poems to Mom' (Leather Doll)
"You are a wand
Bored
Live without me

In the above poem, the dam of traditions, which has been passed down from ancient times, has to be broken, she is living and living her real life, yearning for life, asking her daughter to 'let me down' with the power of 'screaming', her gut-wrenching relationship with her.

No matter what your death
Can't move around in the ring, a neck
Amma hill

Here, the female realizes her own, and builds on the tradition of female exploitation, explicating the pain that she has been deprived of. The alert woman was aware that the act of circling the ring like a magnet was fatal to progress. Such awakening poetry is very important.

On one side we see a daughter who says, 'Foster a mother.' Even the mother herself resonates with her poems. "In a way, it is also seen as a warning to the daughter not to be like her when she feels her debt is off."

An ear for a daughter of Mallika bell '(these are women)
"Keep yours
Grow up

Don't make a deal like me. If you forget my history, will you write a new history? "

It is of great importance for the mother to tell her daughter to go out of the traditions and create history. The thorn in the vigilant state is the same as the female pretends to be herself. There is a healthy gap between the two generations and the confrontation. The poem that gently mirrors the male predominance that characterizes a woman as a 'primordial force', in its introversion, is a vision of our dark system. The importance of environmental sensitivity becomes important.

"My mother's harness is so silver-clad," she says, tightening the bond of the woman, and she unveils the harsh truth of being a "sail". The daughter is saddened by the life she has lived in the frame of being a woman forever. Similarly, the silver lining to the astronaut here is to exclude the intrusion of the evil tradition. H. S. In the poem 'We are not pious' (I and Amma).

The sacrilege of your lust is our sacrifice
It's up to you to protect your man
PattakkeriPeriyakkerikkuPeriyakkari Memorial
The rest of us who suffer today are not we

He has embraced the overbearing tendency to put everything under his control. Other than the veil of womanly patrimony, the woman protested, "We declare we are not pious. The mirror-holding material for a woman's total condition is called "Farida Begum"

D.Vijaya says in the poem. College Factory by day and night
Everywhere and everywhere
She did not see the announcement

This sensational poem of a Muslim woman speaks volumes about the bundle imposed on her and the effect it has imposed on her. 'Farida's mum is a saree, hers is a piece,' says the freedom of motherhood and equality, our culture is embroiled in the patriarchal norms. Farida's eyes shattered in her eyes. Men look at her but the world just doesn't let her. Because the feminine eye cannot see the world freely. 'Laugh under the veil' tells us to keep all of its difficult pleasures in oneself. Continued

A little breeze into the air
Sweat the sweat into the water
Waking up (D.Vijaya, Farida Begum)
"So much for you
A fulfillment of dead desires
Black smoke of traditions
Shout

Always afraid of the goddamn tradition, she says she is awake. Even dead desires, like voices, can rise again and begin to speak, giving rise to the desire that black smoke requires the courage to face it all. ThisThe lines of poetry are the words of the poet himself, for all his poems appear to be the intensities of the emancipation emanating from the demands of the orthodox society, the desire to explode, the desire to explode, to meet the desire of the new society to record the wants and impressions of a new society.

I am half
On which organ
Tell me I have authority?
My laugh is on the weeper
His own authority "

When the husband comes home to dream of what a married girl is, she asks for the conventional atmosphere and the husband's misery. When I am half-hearted, I am dismayed to know that there is nothing in my body that has power over me. Half the idea of half-heartedness is that all of our working men are in circulation whether they know this or not. Our elders give us nothing but foolishness and blindness. Thus, in everyone's eyes, the fruit looks inferior.

It is not a lie that Akkamahadeva has had a profound effect on women writers. Her thought stunned all of us. Women were attracted to the personality of akkamahadevi, who was free from traditions when they came to think in new homes. In his poetry, he used a bold model. Just received her. There is no woman poet who does not name her, or occasionally. Her direct speech and continual bravery have always captivated her. Poetry has long been haunted by the old adage that society is not able to do so.

Aka You are good
My mind is naked
Look at me! Grandfather sewed
In the spiral of the county
He is the embodiment of Bawani
As a candle to the palace
I am burning inside and freezing in the heat. "

Females should always be under the husband. Poetry tells us that her body is in no way at all, and that her personality is 'frozen' with the suggestion of lust for her body.

In the poem 'KuniyaeGhuma', the accompanying blanket says:Look at these death-dealing men from the oven! We are among the dying-men There is a female sensation in the lines that tells the sister that those who destroyed the desires, the ones who sold the dreams, sacrificed their lives and sacrificed their lives in darkness. With such words Multiple middle-of-the-wall mystical parodies. She says her sister's stamina is essential for all women. Another aspect of a woman is very important here. Female Four came out and found financial independence from her labor. This gave them the power to protest. The status of a woman has been able to point to a somewhat dependent life. Similarly, VijayashreeSabara's poem 'crosses the line'.

Put Tirtha in your face
They set out to fight for self-reliance, such as washing their feet.
Live a sweaty sweat
In the poem 'Sukanya's Song of Freshman'
Freshwater Spheres, which people admire over the dead
I need you
When you have these desires are not fulfilled.

The poet talks about those who are not given the basic amenities a man needs. Those who don't provide the infrastructure make me question where do you find my personality? In the absence of a female presence in the male dominant system, a woman who is embarrassed and tolerates humiliation is told by her husband that she is rude. Wipe is broken The bullet sucked blood into the intestinal tract. One of my sister's wounds tells the art. When the earth becomes the mother of your darkest future Who will protect youThus we see the female sensation in a different tone. B. T. LalitaNayaka in her poem 'Again and again' says this.

I have not found your desire, nor have you desired
BidoRavana, leave Bido
The forest is sounding again and again,
Whatever it is, the current story here

The same cry repeatedly unveils that no female exploitation has ever existed. In the poem continued, 'It is not a find'.

Under the circumstances
My laughter is gone
I'm looking for a cigar - not a cigar!

Looking for my laughter in the cold groan of the slum hut is not The existence of a woman is trapped under them. Injustice and atrocities on women are constantly on the rise. For the same reason, many laughingly say that her laugh has also disappeared. Here is the search for female personality and femininity.Overall, looking at the poems of all poets, we find that the purpose of all poems is to search for the feminine ground, to re-discover her lost existence. Here is a serious discussion about female beasts. Females are exposed to poetry in the same way as the untouchables. Women are currently searching for a new model. It must be born in the female and grow in the same way. This is possible for the latest woman. We need to work on rebuilding and breaking up our heritage and culture. It is only when the inner mind of the woman is ready for it. Sensitivity emerges when the overall woman is aware of her whereabouts. For this she must consciously commit herself. It needs to press its mark in many aspects of literature. It is also a woman's responsibility.

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2. Waterway: MP Saraswati
3. Girl' poetry anthology for Kamala Hemi
4. M. Saraswati Gowda, Avni and Monsoon Poems

5. Ch. Sarvamangala, barrier, Amman's hillMallikaGhanti, "A daughter's ear, 'is a compilation of poetry
6. H. S. Muktayakka, We are not the pious, I and Anna are a collection of poetry F. Sharifa Poems Sasikala material - 'candle' gobimani
7. AnasuyaKambala 'Ladder Suma' is a collection of poems
8. Sunya: The song of BT LalithaNayakan

A Constructive Role of Memory in A.K. Ramanujan's Poetry

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Abstract: A.K. Ramanujan is a poet, translator, linguist, folklorist, essayist, painter, critic and a literary theorist. As an artist he had taken adequate advantage of his multicultural and multilingual background. So he had no difficulty in making a success of himself in Western Academia. His poetry exemplifies how an Indian poet in English can derive strength from going back to his roots. Ramanujan's poetry abounds in family themes. This is so dominant theme in his poetry that it has led R. Parthasarathy to remark that the family for Ramanujan is in fact one of the central metaphors with which he thinks. The country of his birth haunts his mind without end. A.K.Ramanujan, a multifaceted genius was born into a Tamil speaking family in Mysore in 1929. He was the son of Srinivasa Ramanujan, a great Mathematician and a noted scholar. After completing his education in India, he joined the University of Chicago and worked as Professor of Linguistics, Tamil and Dravidian Languages. He lived in Chicago for over three decades and died in 1993.

As a poet, translator, linguist and folklorist, he is unique in bringing together two great cultures, having been at home in both. His poetry exemplifies how an Indian poet in English can derive strength from going back to his roots. He is an example of a more polished, sophisticated and profound multiculturalism. As an expatriate Academician, he oscillates between two worlds - the country of his birth and the country of his domicile. It is rightly said that one may take a person out of his country, but one cannot take the country out of his mind. His multicultural commitment makes him a true post-colonial poet.

Like many of his contemporaries in India and abroad, Ramanujan makes poetry a vehicle of criticism of self and environs in terms of the tradition -modern conflict. He finds objective correlative in the family around him and then shapes his experience into poems. The country of his birth haunts his mind without end. Disturbed by his deep sense of alienation in the modern world, Ramanujan makes an intense search for 'relations' through his poetry. His poetry abounds in family themes. This is so dominant theme in his poetry that it has led R. Parthasarathy to remark, "The family, for Ramanujan, is in fact one of the central metaphors with which he thinks."

Ramanujan evokes the warmth of traditional Indian family life and the closeness of long remembered relationship in his poetry. His insistent preoccupation with the past produces a poetry in which memory plays a vigorous, creative role. The memories are mostly of life seen through the eyes of a sensitive and observant boy growing up in a traditional middle class South Indian Hindu Brahmin family. Memory helps to retrieve details, reinterpret them and rearrange them for the better understanding of the present. The poet thus lives in both the worlds 'inner' and 'outer' - both equally vivid and vital. Here, inner-world is his cultural determinant and the outer-world is Anthropology and linguistic situation. The tension between inner-world of the past and the need to be freed from its fears and traditions is a major concern of his poems. He assimilates the South Indian tradition to English and brings 'family', 'history' and 'mother' into the texture of his poetry.

Ramanujan's poetry thrives on memory-remembered life. The poet's family is an unchanging event around which his life revolves. The poems reveal an assured identity of the poet within the family, which he very much needs after he has settled down in the USA. Ramanujan's poetry is largely retrospective and reminiscent. In other words, he keeps looking backwards to his past life and writes poems about what stands out in his memory.

In his work 'Relations' he recreates his psyche, rejuvenates his nostalgia for the best time of childhood. His poetic landscape is crowded with family members, including dead and 'unborn'. Man's necessity for co-existence makes relations imperative. Hence the poet's frequent references to mother, father, uncles, aunts, cousins, nephews, nieces etc. There are about thirty poems that refer to his relations and almost as many that refer to birds, insects or animals.

Vinay Dharwadker, in one of his essays states, "Ramanujan's parents were with him all his life. He was both embarrassed and amused by the cover of his second book of poetry, 'Relations'(1971), which showed him full face, with his parents literally on his mind- their portrait was superimposed on the middle of his fore head".

The family relations always haunt the poet and there are many good poems which owe their origin to the recollected personal emotions. The sense of loss is most poignantly connected with the reminiscence of the mother. In his poems all the members are caricatured except his mother. The poet's otherwise rather unceremonious attitude is somehow checkmated by the presence of his mother.

In the poem '*Returning'* the poet, who was away from his motherland, in some moments of nostalgia seeks for his mother who had died years ago. The ending of the poem is really striking: "*Where are you? I'm home! I'm hungry! /But there was no answer, not even an echo-/ in the deserted street blazing with the sunshine. / Suddenly he remembered he was now sixty-one. / and he hadn't had a mother for forty years."*

In another poem *'Farewell',* though there were the poet's other relatives and friends, his mother's presence and her touching farewell to him is treasured in his mind for ever: *"Mother's farewell had no words, / no tears, only a long look. / that moved on your body / from top to toe/ with the advice that you should / not forget your oil bath /every Tuesday/ when you go to America".* In this poem, the poet's close attachment with his mother is evident.

'Obituary' is the poem in which the poet pays an ironical tribute to his father who had no control over his Brahminical birth and over his death in the fruit market due to heart attack. The poet mocks at his father who at his death left behind *"debts and daughters", "a bed-wetting grandson", "a house that 'leaned' on a bent coconut tree", "a changed mother"* and *"more than one annual ritual".*

In 'Extended Family', the poet rediscovers himself in relation to other members of his family and his culture. Even if he takes bath like his grandfather, he is deprived of the *'sanctimony'* of the bath in the *'dry chlorine water'* in the absence of the Ganges water. He slaps soap on his back like his father but dries himself with an *'unwashed Sears Turkish towel'.* Like his mother, he listens to the morning songs - but these are faint in Japanese. Likewise, the poet recalls his grandfather on the one hand and imagines his great- great grandson on the other and takes a vow not to be *"dependent / on several/ people/ yet/ to come."*

'Small - Scale Reflections on a Great House' is the poem which brings history close to the present. It stands for the undivided joint Hindu family. The house is a past, a memory, a tradition. Here in this poem, everything *'lost long ago'* revives in the poet's memory and is recorded with a touch of nostalgia and pathos. The poet tells how a family attracts its members. The poem has a wonderful beginning: *"Sometimes I think that nothing/ That ever comes into this house/ goes out. Things come in everyday/ to lose themselves among other things/ lost long ago among/ Other things lost long ago".* The wonderful assimilation and digestive power of the house, which absorbs not only good things but also bad things are very well brought out in the poem. Here the identities are lost, swallowed up in the great mass of the family.

The poem *'Snakes'* recalls the poet's childhood experience. The snakes create panic in the poet and they not only terrified him but are associated with the family. They are *'like some terrible aunt'.* The poet's mother uses them in rituals for which the father pays money to the snake charmer. But the poet screams at the sister's knee- long braid which reminds him of the scales of a snake. Fear haunts him until he kills the snake and steps on it.

"Entries for a Catalogue of Fears", refers to the fears of middle-aged father about daughters growing in age. Instead of cursing the men in line behind his daughters, he imposes all kinds of do's and don'ts on daughters. In this poem, *the* protective fatherly feeling is exposed. These various relationships are deliberately brought forward into the conscious mind by diligent exploration of his memories to evaluate them almost like a scientist carefully examining the material in front of him before analysis and conclusion. The country of his birth haunts his mind without end. He constantly tries to search for family connections. He dives deep in order to

discover the roots. Memory indeed plays a vigorous and creative role in Ramanujan's poetry. Every detail is intelligently worked out in images to describe a matrix of human relationships and a life with its private joys and sorrows.

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Digital Nomadism: The future of remote working

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Abstract: The last few years have seen the emergence of a new class of digital worker, living essentially nomadic lives on the kind of global scale that was previously only available to a tiny and privileged few. Using technology to transcend the need for a permanent base, they spend a significant amount of their time traveling around the world from place to place, enjoying the autonomy to live and work wherever they choose, building global networks of contacts and gaining perspective from the wide range of cultural experiences open to them. They are relatively small in number, but as extreme examples of mobile workers, many of them high profile in the technology field, they have the capacity to shape both technology and social trends for the rest of us.

Definition: Digital Nomads

Digital Nomads are a population of independent workers who choose to embrace a location-independent, technology-enabled lifestyle that allows them to travel and work remotely, anywhere in the world. Research has found that 4.8 million independent workers currently describe themselves as digital nomads, and many more, 17 million, aspire to someday become nomadic.

Much like independents themselves, nomads are a diverse group, made up of no single generation, profession, or socio-economic class. While they skew young and male, one-third are female and 54 percent are over the age of 38. Creative professions dominate, but IT and marketing are also strong participants in the movement. One in six earn more than $75,000 annually, although they are split relatively evenly between full- and part-time workers.

As the world went into lockdown due to the COVID-19 pandemic outbreak, people worldwide started to experience a ‘new normal.’ This ‘new normal’ has normalized remote-working and resulted in the mainstream adoption of technologies to support virtual collaboration, communication, and work from a distance. While the COVID-19 pandemic resulted in the restriction of mobility as borders were closed, airlines grounded, and daily commutes limited, visions of a potential future of ‘remote-life’ started to take shape. As professionals (and employers) around the world start to realize that they are no longer physically secured to their desks, offices, or work stations, they may now start to consider a future where they are remote working from ‘exotic’ locations, often with lower costs of living instead of working from ‘home.’ Companies around the world have extended their remote-working policies, implemented due to COVID, through 2021 and beyond, and are starting to consider a broader shift towards remote workforce models as a means for reducing overhead costs while supporting employee productivity and wellbeing.

Digital nomads shape and reshape their professional and personal lives to uphold their desired lifestyle, blending work, and leisure with travel. Traditionally, digital nomads have been employed as freelancers, travel bloggers, or independent internet entrepreneurs in tech-(supported) fields, but more recently also become increasingly common in a range of other roles and sectors, with jobs ranging from web designer to language tutor, and from software engineer to virtual assistant. Nonetheless, for many digital nomads, the desire to travel has been the leading factor in choosing to live a nomadic lifestyle, leaving serious considerations on attaining sufficient location-independent income largely unattained at first. Coinciding with the growth of digital nomads seeking a location-independent lifestyle of work and travel, the market of intermediaries offering. support services have grown. This includes mentorship programs, co-living, and co-office space, domain-specific assistance (legal, technical), and agencies to help digital nomads kick-start their new mobile lifestyle. Alongside these secondary agents is an emergent cottage industry of nomads who fund their lifestyle by teaching others how to become a digital nomad. By transforming their mobile lifestyle narratives into a primary commodity—through coaching, blogging, organizing events, and retreats—their lifestyle strategy and practical knowledge have become a 'revenue-generating system, aimed at other potentially like-minded people.

PRACTICALITIES Of A Digital Nomad

Connectivity And Costs

The nomad's most important need is to find an internet connection. Availability is less of an issue than reliability and cost: patchy wi-fi can create an unprofessional impression on a Skype call, and spending a lot of time on the move can make data costs add up significantly. Mobile broadband is often used by people who spend a significant proportion of time in their home country, but the high cost of roaming severely restricts use when travelling, and has led some highly mobile nomads to ditch their smartphones for basic talk and text models

Keeping track of costs is generally difficult, and nomads try to stick to locations with free and unlimited wi-fi, avoid using mobile data roaming, and hope for the best.

Equipment

All the nomads we spoke to carry laptops, preferably light but full-featured ones such as a small MacBook. All also carry mobile phones, but are split on the benefits of smartphone devices. Those who spend a reasonable amount of time in one 'home' country generally, have one or more of e.g. the iPhone, Sidekick, and perhaps a Blackberry. Where these have PowerPoint, Keynote or other document viewers, they can sometimes remove the need to take a laptop to a meeting, and a high-end phone can also function as compact camera and GPS device. However, fiddly text entry and small screen sizes mean they cannot replace the laptop for more than very basic tasks.

For nomads who move country a lot, the extremely high cost of roaming renders smartphones effectively useless for internet access. Some of these people will buy the cheapest possible pre-pay phone in each country and/or carry a bunch of local prepay SIMs to be swapped in and out of an unlocked handset. To some, a super basic phone has become a source of retro joy and a sense of rebellion against the networks and their perceived extortionate charges.

Most nomads also carry cameras, with compacts or camera phones for snapshots and the occasional digital SLR if they are likely to want to take better quality pictures. Those who are permanently on the move don't just need tools for work, they also need ways to entertain themselves, and even maintain hobbies. iPods are unsurprisingly ubiquitous, and some may carry small speakers and even miniature amplifiers, like the Sonic Impact T-amp. One nomad we spoke to carries a miniature guitar and practice amp, another a small projector, which doubles as a large monitor for design work and a cinema screen to host film nights.

When life is spent on the go, in hotel rooms and friends' apartments, and everything must be carried, opportunities to personalise one's space are limited. For some, bag fetishism becomes a substitute for pride in a home environment, providing a small opportunity to carry a familiar piece of personal identity anywhere in the world.

Power

Power is to digital nomads what water is to traditional desert nomads: a certain amount can be carried, but it's vital to stock up when you can, to know where the next source is, and to make what you have last until you can get to it. With planning, a flat battery may be a rare occurrence, but nomads must live with the constant fear of running out of power.

Many nomads carry spare batteries, some up to 3, perhaps even extended life batteries, but some try to avoid carrying them if they can predict where the power sources will be. Some will carry go-bags of adapters and chargers for different international power supplies, but these are easily lost. It's important to know that spares will be available locally, which has driven at least one nomad we spoke to stick to using equipment for which peripherals are easily available. Mini USB chargers are a useful, lightweight alternative to traditional phone or device chargers and mean that only one local adapter need be carried, for the laptop.

Backups and Security

We had expected nomads to be very concerned about the risk of loss or theft of data, but in reality, most felt this was something they ought to worry about more than they actually did. Their main concern was for losing data rather than the equipment itself (except in the case of treasured possessions such as a camera), and online backups were widely used, whether that was a formal backup service such as Rsync, Google Docs or simply forwarding email to a Gmail account for archiving.

The primary need is to be back up and running as soon as possible in the event of the loss or failure of any device.

However, online backup can be slow, and expensive if paying for connectivity, so there may be a need to prioritise the most important work only for online backup. Some nomads carry external hard drives, and we heard stories of people carrying multiple hard drives in separate bags wherever they go to guard against loss, as tourists may split money between wallets and money belts.

Packing Light

Nomads know the environment will provide, the less they need to bring, and the lighter they can travel. Packing light requires not just organisation, a ruthless attitude to possessions and the creativity to think of alternatives, but a confidence that certain things will be available on arrival.

You'd think packing light would be a priority for anyone who is highly mobile, but it is an organisational skill that has to be acquired, and some nomads find it hard. Some learned the hard way, after lugging too much kit around the world a few times.

Still others lack the capability or willingness to do without some of the tools they would expect in a fixed office. Small and light things that are designed to be portable (such as small laptops and the aforementioned USB chargers) are easier to carry, but some physically small things can be hard to work with, such as screens, keyboards and mice. We heard indirectly of one nomad who insists on taking a 22" monitor everywhere in a suitcase.

Finding A Place To Stay

Finding somewhere to stay in a new place is often the first need to be met. Hotels provide the comfort, convenience and facilities needed for a short stay. But for longer-term stays, perhaps of a few months, the key need is to find a place which not only offers reasonable comfort, power and connectivity, but also somewhere to relax and feel at home, where mealtimes don't have to mean eating out and potentially, meetings can be held.

Services like Craigslist can be used to find short lets in a hurry, and sharing with other interesting people can be a good way to network. Borrowing an apartment or staying with friends are viable options for many nomads, who have contacts in many cities. However, sharing a space with people over extended periods of time can be a new source of stress, especially if it must also serve as a workplace. Most of the nomads we spoke to seemed to need surprisingly few things to feel at home in a new environment. For some, wi-fi is enough, for others, it's the ability to play their own music out loud that makes the space feel like theirs.

Finding A Place To Work

It's quite possible to work from a home base or hotel room, though all the nomads we spoke to like to work alongside others, whether for active company or simply to be surrounded by people. This might mean mooching office space from a friend or client, or working from coffee shops, where they may hope to meet other nomads. Ritual Roasters coffee shop in San Francisco's Mission district has become the place that most epitomises the geek nomadic lifestyle, thanks to a combination of free wi-fi, power sockets, good sized tables, not telling people to leave, and (according to our interviewees) the "second best coffee in town". It's here that nomads go in the knowledge that they are likely to bump into friends, meet new people with similar interests, or simply to be in a familiar place where they recognise the baristas. See below for more discussion of the social life of the shared workspace. Concentration in public places tends not to be a problem, with many using noise-cancelling headphones and music to create personal space as needed.

How to Accommodate Digital Nomad Workers

There are plenty of signs that both remote work and digital nomadism are here to stay. Tech companies such as Facebook and Twitter are leading the way for the rest of corporate America by making remote work a permanent option. Other companies such as Microsoft are taking it a step further, allowing employees to relocate — even internationally if the arrangement works with their role and responsibilities.

1. **Companies that want to attract top talent and keep retention high will be forced to offer similar working arrangements.** The pros far outweigh the cons. Employees get to take care of their mental health and escape from the humdrum every day for a while. Businesses get a boost from refreshed and

recharged employees full of fresh inspiration and ideas.

2. **Foster a culture of connection.** According to Buffer's **2020 State of Remote Work** report, collaboration, communication and loneliness are the biggest challenges remote workers face. To combat these challenges, train workers on building long-lasting relationships virtually. **Skills such as being vulnerable, bringing your whole self to work and learning how to resolve conflict virtually are key to remote work success.** Incorporate opportunities for connection into virtual meetings by setting aside some time at the beginning for some virtual water cooler talk. Be sure to include nomad contractors, too.
3. **Create flexibility policies.** Policies that give remote employees the maximum flexibility to get their job done allows them the freedom to take advantage of being remote — even in different time zones. Of course, different roles have different requirements for availability. But employees should be able to take a midday break, whether that's a walk around their neighbourhood or exploring an exotic locale. Don't think of allowing employees this kind of flexibility as an indulgence. Research shows that **taking breaks throughout the day** improves performance and creativity, decreases stress and makes employees more satisfied on the job.
4. **Invest in quality collaboration software.** Without collaboration software, remote work isn't viable. Like employees working from home, digital nomads need the proper technology and tools to be efficient and successful. Features such as chat, video, screen sharing and **digital whiteboards** bring workers together, even if physically they're far apart. It's also important to configure collaboration software to seamlessly incorporate contractors who are digital nomads. **Erring on the side of allowing them access to as much information as possible will make them more effective and feel like a trusted member of the team.**
5. **Make your company easy to work with for nomads.** When you open your company up to digital nomads, you'll be able to access a far larger pool of talent. To attract and retain these individuals, develop processes and procedures to accommodate their lifestyle – examples include fast, all-digital onboarding, frictionless payment and transparency on upcoming roles.

Conclusion:

Year 2021 seems to be the year of digital nomads. However, this trend won't fade but it will rise in the upcoming years. The predictions say that the number of digital nomads will reach one billion within the next decade. As time passes remote workers will have more job opportunities, better salaries and more tech tools to do their job quicker and easily. Also, company executives are starting to realize the advantages of hiring remote workers. The main advantage is that they will have to pay less money on renting offices. At the same time, remote workers seem to be more productive as when they have the option of working flexible hours gives them greater satisfaction.

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Impact of Leadership on Student Achievement

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Abstract- A good leader (principal or headmaster) can impact and actually transform the atmosphere of a college bringing out the best in the staff and ensuring excellent performance by the students in the academic field as well as cocurricular activities. All current college reforms are concentrating on improving the quality of teaching and learning in the colleges. But there are huge differences in how they go about it. College leaders play an important role in affecting the atmosphere and reputation of their colleges. College leadership can significantly influence the quality of teaching and learning in their colleges, and consequently student achievement. Effective college leadership is essential to improve the efficiency and quality of college. College leadership as an instructional leader for the college faces a lot of challenges and obstacles to achieve their vision and mission. To be a successful and effective leader is not an easy feat. Yet, effective college leaders are desperately needed in thousands of colleges and educational institutions across this country and around the world. If we desire to have 21st century teaching and learning, we must demand 21st century leaders.

Introduction

The potential role of principals in providing academic leadership to their colleges has yet to be adequately realized. At present, they are seen largely as the administrative authority within the college, though they lack the necessary control to exercise this authority, or even to ensure regular college functioning. Often, they are equipped with neither the capacity nor the authority to exercise choice and judgement relating to the college curriculum. (NCF 2005). When colleges are being held accountable for the highest level of standards, strong leadership is critical for their success. college leaders are the corner stone on which learning communities function and grow. With successful college leadership, colleges become effective centre of learning places where students are not only educated but challenged, nurtured and encouraged. On the other hand, poor quality or absence of college leadership can undermine the goals of an educational system. College leadership can significantly influence the quality of teaching and learning in their colleges, and consequently student achievement. Effective college leadership is essential to improve the efficiency and quality of colleges. (If a college has a reputation for excellence in teaching, if students are performing to the best of their ability, one can almost always point to the principal's leadership as the key to success (U.S. Congress, 1970, p. 56). college leadership, as an instructional leader for the college faces a lot of challenges and obstacles to achieve their vision and mission. According to Sharma, Sun and Kannan (2012), the principal is challenged to create the culture of quality that penetrates to the smallest elements, processes and the systems of an institution.) When college leadership lacks vision and direction, learning is compromised, and due to this, students suffer a lot. According to a Wallace Foundation Study, "Leadership is second only to classroom instruction as an influence on student learning." If college leaders focus more of their influence on improving the quality of teaching and learning in their colleges, they are likely to have a far greater influence on students' learning outcomes. It is believed that measurable outcomes such as student progress and achievement are key indicators of effective leadership, but they are insufficient to ensure success. In order to achieve the success, colleges must strive to educate their students by promoting value education, a strong desire for lifelong learning, and fostering citizenship and skill development.

Factors that influence the leadership style

There are many factors that can influence the leadership style and its effectiveness like:

1. their personal abilities and experiences
2. leader's mentoring
3. own values
4. educational policies
5. stakeholders' interest
6. family background of the students in the college and their socio-economic status
7. positive beliefs and high expectations

The abilities and the experience of the college leader does have an effect on the leadership qualities. The college leaders must be equipped with academic qualities as well as administrative qualities. It is observed that the links between college and home were much stronger in high socio-economic status colleges. In higher socio-economic status, colleges are ready to involve community members whereas in lower socio-economic status, community members remain away from colleges and that might reduce students' attainment of learning outcomes. Here college leadership plays a vital role in bringing such students into the stream of education. college leaders should provide them ample opportunities, create an environment where such students can nurture their curiosity.

In the college we do find such things. In the cultural activities we find that the parents from higher socio-economic status support their kids to participate in it. For other students we have to support them. college leadership cannot control many of the factors mentioned above. However, college leaders need to be accountable for the influences on student achievement that do fall within their control.

College Leadership Qualities

College leadership that achieved exceptional student learning outcomes has some qualities:

1. They have a strong connection with the college and better understanding of their environment.
2. They are actively engaged with college.
3. They regularly utilized their external Networks and resources for the development of the college.
4. They actively encourage collaborative decision-making.
5. They are highly trusted by their surrounding community.
6. They spent more time in colleges with children and their colleagues
7. They emphasize establishing college culture and vision to enhance the quality of college teaching and learning.
8. They motivate and build and believe in the capacity of the teachers.
9. They must be the visionaries.
10. They must be responsive to diverse needs and situations.

To enhance teaching and learning successfully, college leadership must always look for new ways to improve teaching, learning and achievement. It is believed that when students enjoy learning, they are more effective learners. So, the colleges should have a broad range of extracurricular activities. college leaders provide a safe environment for teachers to try new models and alternative approaches that might be more effective. Where this was done, staff responded positively to the opportunity. This, in turn, had a positive impact on the way they interacted with students and other members of staff. college leaders develop and sustain positive relationships with staff at all levels, making them feel valued and involved.

Tschannen-Moran author and professor of educational leadership at the College of William and Mary, explains "In colleges with high levels of trust:

1. Teachers are motivated and willing to try new strategies because they trust leaders to support them.
2. Students are motivated and connected to the college because they trust their teachers.
3. Families are supportive because the Principal and teachers have built trusting relationships with them."

Trust is essential for the progressive and effective distribution of leadership responsibility. It is closely associated with a positive college ethos, improved conditions for teaching and learning, an enhanced sense of teacher autonomy in the classroom.

The college leaders are not the superheroes. There is not any magic wand in their hand. College leadership needs time to bloom. With positive attitude and collaborative approach, they can develop their leadership qualities and ultimately it will have its impact on student achievement and learning outcomes. At the same time there are plenty of challenges in front of them, that are the constraints. His or her experience as a teacher can be a resource for them to overcome such challenges.

Challenges for College Leaders –

1. ensuring consistently good teaching and learning
2. insufficient resources
3. resistance to innovation
4. lack of in-service training
5. issues related to students
6. the rise in pupil numbers
7. impact of technology

8. building the college as a professional learning community

The following extract from the Office for Standards in Education Framework (England), emphasizes the connection between what leaders do and what happens in the classroom:

"Effective head teachers provide a clear vision and sense of direction for the college. They prioritize. They focus the attention of staff on what is important and do not let them get diverted and side-tracked with initiatives that will have little impact on the work of the students. Furthermore, they know what is going on in their classrooms. Likewise, they have a clear view of the strengths and weaknesses of their staff. They know how to build on the strengths and reduce the weaknesses. Not only that, but they can focus their programme of staff development based on the real needs of their staff and college. They gain this view through a systematic programme of monitoring and evaluation. Their clarity of thought, sense of purpose and knowledge of what is going on mean that effective head teachers can get the best out of their staff, which is the key to influencing work in the classroom and to raising the standards achieved by students.

To be a successful and effective leader is not an easy task. college leaders are not charismatic in the traditional sense; however, they possess a number of common traits and their work is informed and driven by strong, clearly articulated moral and ethical values. Yet, effective college leaders are desperately needed in thousands of colleges and educational institutions across this country and around the world. They require more support and less pressure. If we are thinking about 21st century teaching and learning, we must demand 21st century leaders. Specifically, if we require critical thinking, problem-solving, collaboration and creativity, leaders must assess this very hour the instances in which you can observe these characteristics in classrooms.

Conclusion: The leadership is directly linked with student performance. The contribution of leadership is second in strength only to classroom instruction.

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Socio-Economic Infrastructure of Tribal Farmers in Karnataka: An Analysis

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Abstract: This study reveals the socio-economic infrastructural status of tribal farmers of Karnataka. The tribal population of Karnataka is rural traced primarily with 84%. District wise population distribution of tribes show that they are present in all 30 district of the state. The literacy rate of tribes in Karnataka is a real cause of concern, as it hs been consistently low than that of the total population. These factors such as illiteracy and poverty play off with one another in order to create the cycle of deprivation. Unequal access to schools will definitely exhibit the fact that the tribe children stay in school for the least amount of time. The occupational distribution of tribes show that majority of them are small and marginal farmers and agricultural labourers. Their land holdings are unirrigated and hence they are economically unviable. These tribes have very low monthly per capita compared to the rest farmers population.

Introduction

Agriculture is the backbone of the Indian economy. Despite the rapid progress of industries, agriculture continues to play a predominant role in accelerating the economic development. The share generated from agriculture in GDP increased to 19.9 per cent in 2020-21 from 17.8 per cent in 2019-20. Being the major producing sector in the economy, it influences the performances of other sectors also in general. Higher the income, consequently is the higher purchasing power among the rural households which further creates demand for industrial goods also. With the growth of population demand is increasing for agricultural products. Hence, the agricultural production is being increased due to the demand and rise in income is noticed. Besides, the changing standards of lifestyles of the agricultural families is promoting the farmers to adopt new areas of farming to have regular income generating criteria. India is concentrated with largest tribal population. These tribes are the aboriginal's human beings of our land who are believed to be the earlier settlers among the original inhabitants. Most of the tribes are located in isolated regions of hilly and forest areas or on and nearby mountains. There way of life is distinct in many ways compared to the society in general. Often tribes reside in in-accessible areas, they are often identified with extreme poverty, illiteracy, under-nutrition, mal-nutrition, forced migration due to lack of access towards employment in agricultural sector.

Characteristics Of Tribes:

1. Socio-cultural Traits: Tribes have their own unique culture, cosmology and belief systems. They have their own norms to be followed within their communities. The language they speak is quite different without any script to be found off. They survive as simple societies with not much rigid social stratification. They have great faith and strongly belong to their own community sentiments and they consider themselves as the sons of soil.
2. Economic Traits: Tribes are economically self sufficient as they cling with primitive technology. They lack behind with monetary economy and in large scale they are dependent on barter system even today. They are not much bothered about the future requirements and this is of concern.
3. Geographical Traits: They have well demarcated geographical territorial boundaries. Most of these tribes live in forest or hilly mountain areas. Usually, they are isolated or semi isolated from other social groups of the same region.
4. Political Traits: During the earlier days they had stateless system which means that there was a system without any tribal chief. Today this management is done with law and order through family and kinship ties. It was traced that in later days the state came to select the chief. But now this autonomy they have lost as they too are the part who come under local administration.
5. Religious Traits: tibes follow their own deities and have their own belief systems. The forms of religion they follow are: Animism – to worship soul and the ancestors
6. Animatism – to worship non living beings such as objects or things stones, rocks or any landmarks Totemism – to worship tree

or animals is one of the important practice among them

Naturism – this is to worship the nature like river, wood, hills etc.

Social Structure Of Tribes:

Generally, the size of the family among tribes is bigger due to the lack of awareness about the family planning, illiteracy, health and hygiene carrying systems. Among the total families the size of tribal holdings is 95% are illiterates and 55% belong to lower economic category. This shows that illiteracy is the main cause for larger family size in the down-trodden tribal groups of Karnataka. Large families are common among them and small and medium family size are rarely found. The majority of their houses are built either by mud or brick wall with thatched houses and huts. Majority of the tribe houses are provided under Government Housing Scheme. Most of these houses are provided with protective drinking water facility and electricity. Whereas, when it comes to drainage and sanitary facilities ,as expected likewise in rural areas it stands similar. Proper drainage system and sanitation facilities are not properly canalized. Hence, due to the lack of these facilities the environment at the surrounding areas of their residential place seems to be very poor.

Occupational Structure Of Tribes:

Agriculture is the predominant occupation of tribal population. Most of owned agricultural land of these tribals are in large dry land holdings without irrigation or with very less irrigated land holdings and of intensive cultivation. The mode of cultivation is traditional. In the tribal land holdings, it is noticed that generally they use both cow dung and chemical fertilizers to manure their fields. Using of pesticides is also very common to control crop diseases. It is paradoxical to say that the practice of hybrid cultivation is very insignificant among trial farmers. Majority of tribes are still cultivating their agricultural land with traditional seeds. Further, in order to adopt modern technology and development of land and water resources, there are multiple co-operative credit societies, co-operative agricultural development banks, nationalized banks, private banks or even private money lenders who are on way to enhance their cultivation and develop them economically. It is to be noted that if the farm credit is not available at the right time to carry out the necessary agricultural operations, then that credit for farm will not be of use for the betterment of agriculture. The occupational distribution shows that the majority of tribes are small and marginal farmers and most of them are agricultural labours. Their holdings are unirrigated and therefore they are economically unviable. Tribes also have a low monthly per capita expenditure compared with the other population. There is a need to involve tribals in biodiversity conservation which encourage them to grow fruits tress, vegetables, flower plantations on degraded forest-lands. This allows sustainable harvesting of the non-forest produce for their livelihood without endangering the biodiversity of the forest.

Conclusion

The tribal families in rural areas are mainly dependent on agricultural sector as Agriculturists or as agricultural laborers. The socio-economic conditions of tribals are low. The awareness of family planning operations are poor among the tribals and for that reason the size of the family of tribal holdings is large comparatively with other down-trodden sections in drought prone district of Chamarajanagara. The transport and communication facilities available for tribal house- holds are not satisfactory. For the purpose of medical facilities, the tribal people have been depending on local untrained doctors or rural ayurvedic doctors. The landholding sizes among the tribals are very small. The use of fertilizers and pesticides are not in productive economic status. Though they are availing various developmental schemes their economic conditions are still poor. This is mainly because of illiteracy and ignorance among the tribals/ The availability of credit facilities for agricultural operations is not satisfactory. The banking agencies are not providing credit facilities at right time and the amount sanctioned by these institutional agencies in not sufficient for their agricultural operations. The government should, provide, proper educational facilities to tribals in rural areas along with medical services. Proper training programmes for various self-Employment programmes and agricultural extension services are necessary to the tribals. Timely sanction of loans at low rate of interest from the institutional agencies increase the productivity of agriculture and also it helps to increase the socio-economic status among the tribals in rural areas.

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The Influence Of Social Networking Sites On Youths: A Review

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Abstract Social networking is a regular part of our daily lives now for billions of people around of all age groups around the world. Internet is bringing forward the propensity of social networking sites, and these sites are highly vital sites which are the precursors of communication development. Therefore, social networking enables rapid communication development. Therefore, social networking enables rapid communication and social interactions are widespread across the globe.

Since time immemorial human beings have been creating better facilities and devices to enhance their survival and leisure. The changing time has visualized the progress and developmental change which has become a hallmark of human history. Such is technology and advancement which is a wonderful move towards human progress.

Introduction

In this context, the most popular technological innovation of the 21st century is social networking. It is emerging as the most essential and enduring object, both in public and private space today. Internet subsequently has brought forward a plethora of various advantages to human society and has led to the far-reaching changes in various fields. The group of youngsters are the main users, other than all age groups nowadays. Today's youths are more prone to be attracted to these sites than any other category of people. These sites are considered to be in trend and have created a virtual revolution in youth behavior and are prone in building new attitudes. In India the trend of using social networking site is quite alarming. The college going students are drawn towards these networking sites enabling both communication and entertainment. India has always placed great value on personal relationships cultivation and growth. Traditions, customs and values are the most basic components of Indian society and these natures define interpersonal relationships that are involved into this. Interpersonal relationships are the foundation for learning and growing towards human development. Thus, it is crucial to analyse how far social networking sites are influencing interpersonal relationships among youths in the Indian context.

Types of Social Networking:

Socializing goals:

- Facebook
- WeChat
- Meetme
- Instagram
- Myspace.com
- Business Network Goals:
- Linked in
- Video
- XING

3.Match making Soulmate goals> Shaadi.com >Adult FriendFinder.com >Bharatmatrimony.com

4. Getting connected to re-unions > Facebook > Classmates.com > Orkut

For Social Connections:

Keeping in touch with friends, the family is one of the most considerable advantages of social networking. Here is a list of the most generally -used websites for developing social connections on the fine

- Facebook: Most famous social media service, Facebook provides a way for users to construct connections, share information and organizations they want to interact with online.
- Twitter: To Share your thoughts and keeping up today with others via this real network.
- Google plus: This almost new player in the social connection market is designed to allow users to build rounds of contacts that they can interact with the other Google production.

- Myspace: albeit it began as a general social media, it has evolved to focus on social fun, providing a venue for social connections related to movies, music games and more.
- Multimedia Sharing: Social networking makes it easier to share video and photography content. There are some most popular sites and websites for multimedia sharing
- YouTube: Social media program which allows users to deal with video content.
- Flickr: This site presents a compelling option for managing digital photographs online, as well as for sharing them with others.
- Professionals: Professional social networks sites are designed to provide possibilities for career growth. Some of these samples of networks provide a general discussion for professionals to connect, while others are focused on specific professions or interests.

A few types of professional social networks are listed below:

- LinkedIn: As of November 2011, LinkedIn had more than 135 million registered users, making it the most extensive online known network. Members have an opportunity to build relationships by making connections and joining relevant groups.
- Classroom: the social network is specifically designed to help the teachers to get connected and, share and help each other with the profession- in specific matters even in their classrooms.
- Informational: these types of communities are made up of people seeking answers to everyday problems.

A few examples include:

- Super Green Me (SGM): Online community where people interested in adopting green living manners can interact.
- Do-It-Yourself Community: Social media source to allow do-it-yourself enthusiasts to interact with each other.
- Educational: Educational networks are where many students collaborate with other students on scholarly projects, to manage research for school, or to interact with teachers via blogs and classroom panels. Educational, social networks are becoming very popular inside the educational system today.

Some such educational, social networks are placed following:

- The Student Room: UK-based student society featuring a modified message board and useful sources related to school
- The Math Forum: A vast educational network designed to connect students with interest belong math; this site provides interaction possibilities for students by considering age group.
- Hobbies: One of the reasons why the many people use the Internet is to research their favorite projects or subjects of interest related to individual hobbies. When people find an available social website based on their hobby, they discover a whole society of people from around the world who share the same feeling for those interests. This is the reason that why social networks that are stressed on hobbies are most popular. Examples of hobby-focused social websites include:
- Oh My Bloom: social media specifically for growing fans. It features groups, forums, blogs, movie content and more.
- My Place at Scrapbook.com: Produced particularly for scrapbooking enthusiasts, users can create profiles, share information, post updates and more.

Academic: researchers who are doing Academic works and want to share their research and review results obtained by colleagues may find academic- based social networking to be quite valuable. A few of the most popular online communities for academics are:

- Academia.edu: Users of this academic, social network can share their research, as well as follow research submitted by others.

- Connote Collaborative Research: Online resource for scientists, researchers and clinical practitioners to find, organize and share useful information.

A social network is a social structure made of generally individuals or organizations that are tied by one or more types of interdepence nature. It is like a kind of addiction to the current generation and is certainly affecting the interpersonal relationships among youths in India and the whole world in general.

Today the communication revolution has brought people together regardless of geographical boundaries. Hence, from time-to-time human race has communicated using different techniques and methods for communication. In support to this, the emergence of Internet has brought an outstanding innovation in the field of communication in the history of humankind. The rapid expansion of internet has changed the lives of youths worldwide. The whole world is brought into a single room though this social networking. The internet offers a wide variety of communication tools. There are billions of people using the facilities like webpages, e-mails, e-books, e-journals, e-newspapers, internet banking, multimedia sharing, conferencing, online news, shopping, blogging and more importantly online education mode for education and training. Today's generation is prone as an essential communication medium in professional as well as personal life.

Internet Addiction:

Spending a lot of time online or on the computer is defined as 'an impulse control problem' when it absorbs too much of one's time, causing to neglect relationships, work, school, college, and other important things in life. Youths are becoming addicted to internet to relieve unpleasant and overwhelming feelings. Risk factors are Internet or computer addiction which includes: Anxiety, depression that usually leads to addictions like drugs, alcohol, gambling, or sex. Most of the young ones are addicted to mobiles and this results to increasing stress issues in them. The signs and symptoms of addiction vary from one person to the another. Losing track of time being online, having difficulties in completing the daily tasks at home and study related issues or at work places. Besides, increasing isolation towards family and friends, feeling guilty or defensive about the continuous usage of internet. The increasing nature of lying and feeling a sense of euphoria while involved in internet activities.

Changing Lifestyles Of Youths:

The lives of people, especially youths are primarily influenced by what is posted by other people on their profiles. The habits that youths learn were decided more by what their friends do and less by the teachings of parents and teachers. Due to which the students have become prone to frequent fluctuations in mood and self-control. The present generation, the social life of everyone has become associated with online social networks. These sites have made a drastic change in the way we pursue our social life. Making friends and keeping contact with them and with their updates has become more comfortable. However, with this rapid growth, many problems like fake profiles, online impersonation has also grown.

A trend can be seen in genera that the youths first preference of getting mingling is with are groups, friends, classmates, that subsequent to the process of socialization that trace out that youths today are reaching different stages of development preferably with like-minded set of people around their circle. Peer group imitation is found to be high among the youths where these youths have similarities while posting or updating their profiles.

Youth Counselling:

Today's youths need guidance, advice, and help with regard to their personality problems, sex difficulties, and tough situations in home, college, community life, relationship issues etc., There is need for setting up youth counseling centers in towns, cities, college campuses, or even online counseling can be opted to cope up the tough hurdles faced by youths. Such centers were to be handled with matured learned, highly trained and experienced counsellors. Each individual is unique on their own, but most might require to meet a counsellor between the times, depending on the stress or trauma these youths experience. Traditionally, the most common counseling form is advise- giving.

Youth counselling includes:

1. Establishing helping relationship with youths
2. Listening to them with full attention
3. Providing correct and appropriate information about the disadvantages of being attached to social network hubs
4. Helping youths to make informed decisions
5. Leading youths towards recognizing and building their strengths
6. To have a positive outlook towards life and develop such attitudes of accepting the life chances.

A significant development in the social network sites has brought multiple changes in the ways of handling, generating, sharing and disseminating information. This has allowed youths to collaborate and create content, generate knowledge and share information online in a social media dialogue. Now a days the impact of social network services has promoted a healthy educational environment that has resulted in social mobility during covid-19 and post covid period.

Conclusion: In today's world, technological development is progressing at an unbelievable speed and continually connects the people of all ages and types, and it could be said that this is generally true for individuals in their teenage years. Present generation of youths are entering higher education that is digital natives that has been raised in a techno centric world where ubiquitous technologies play an integral role in human life and where innovations are quickly absorbed and assimilated. In order to develop learning communities with increased youth engagements, educators are increasingly adopting the use of social networks to supplement teaching and learning in both online and traditional modes of learning environment. Social network phenomena opened multiple avenues in the contemporary media age and this has been beneficial to the youths, groups, organizations and various institutions in the society. The whole advent of social network sites to the youth community leads to vitiated opinions with every new research about their social behaviors and performances. Hence, if operated appropriately social network sites perspectives investigates and analyses the issues, and attempts in the proper development of society.

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An Empirical Study on buying behavior of Consumer towards Mobile Phones in Dadra and Nagar Haveli

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Abstract: Consumer behaviour is the study of individuals, groups, or organizations and all the activities associated with the purchase, use and disposal of goods and services, including the consumer's emotional, mental and behavioural responses that precede or follow these activities. The behavior of consumers towards mobile phones is becoming increasing important topic of marketing research. Consumers are the kings of markets and they are the one who decides the future of a company. Without satisfying the consumers, no business organization can ever be successful. All the activities of the business are focused on consumers from the point of start till the end. Now a Days all the companies focus mainly on achieving consumer satisfaction. The purpose of this study is to find out various factors affecting the decision of buying mobile phone devices in Dadra and Nagar Haveli. In order to achieve the objectives of the study, a sample of 150 consumers were taken by using simple random sampling technique. Both primary and secondary data were used. Moreover, seven important factors i.e. price, social group, product features, brand name, advertising techniques, durability and after sales services were selected and analyzed. From the analysis, it was observed that consumer's value mobile phone features and also the mobile phone prices, as the most important variable amongst all. These features act as a motivational force that influences them to go for a mobile phone purchase decision. The study suggested that the mobile phone sellers should consider the above mentioned factors to increase the opportunity of sale. Excel and various statistical tools are used for the research.
Keywords: Consumer Buying Behaviour, Cognitive, Traits, Mobile Phone, Consumer Purchase Decision, advertising techniques.

Introduction

Understanding Consumer and consumer behavior has always been important and of great interest to businessmen and marketers.. The knowledge of consumer behavior helps the marketer to understand how consumers believe in few things, think about the product, feel and select from various available alternatives like products, brands and the like and all the things that influence the consumers like their environment, the reference groups, family, friends and salespersons and so on. A consumer's buying behavior is dependent on various factors like cultural, social, personal and psychological. Every consumer has different characteristics in their life and these characteristics also influences their buying behavior. Social factors such as friends, family, groups, roles and status and Personal factors such as age, occupation, lifestyle, personality and self-concept are those characteristics that could influence the buyer behavior in making the final decision Most of these factors cannot be controlled and are not in the hands of marketers but they have to be studied and considered while trying to understand the complicated behavior of the consumers. This Research Paper describes, the importance of various factors including lifestyle and its impact on the consumer buying behavior for the mobile phones. Consumer buying behaviour is the summation of consumer's attitudes, preferences, intentions and decisions regarding the consumer's behaviour in the marketplace when deciding for purchasing a product or service. The study of consumer behaviour has been drawn upon from social science disciplines of various subjects like anthropology, psychology, sociology, and economics. Satisfaction depends upon perceived performance and expectation. If the performance of the product falls short of expectations of the consumer, the customer is dissatisfied. If the performance of the product matches the expectations, the customer feels satisfied. If the performance of the product exceeds expectations, the customer is highly satisfied or delighted. Even when cheaper mobile phones are available in the market, people may prefer to buy expensive mobile phone. Price, quality, brand, country of origin, marketing, sales, word of mouth, etc. could be several factors that a consumer may analyze before buying a smartphone. A consumer's buyer behavior is influenced by mainly four major factors such as cultural, social, personal and psychological factors. These factors lead to product and brand preferences by the consumer. Although many of these factors cannot be directly controlled by marketers, but understanding of their influence on buying behaviour of consumers is essential as marketing mix strategies has to be developed in a way that it appeal to the preferences of the target market. When purchasing any product, a consumer goes through a long decision process. This process consists of up to five stages: Need recognition, Information search about the product, Evaluation of various available alternatives, the final Purchase decision, Post purchase behaviour of both firm and consumer. The main focus of analysing consumer buying behaviour is to identify, buyers reactions towards mobile phone marketing strategies that will decide the success of the mobile industry. The marketing concept stresses that a firm should design a marketing mix that satisfies (gives utility to) customers, analyses that what, when, where, and how consumers buy the product and so there is a need to predict as to how consumers will respond to marketing strategies.. Customers give a lot of importance to Prestige which is just another intangible need, and those who are constantly worried status will pay for it. However, goods catering to this type of need should be viewed as high-profile products.

Statement of Problem

The main objective behind this research paper is to study the Consumer Buying behavior towards Mobile Phones in Dadra and Nagar Haveli. The study is conducted in order to understand the following:

Why consumers make the purchases?

What are the factors that influence consumer decision?

To analyze the various factors which influence and eventually motivate the customer to purchase a mobile phone with reference to the area of Dadra Nagar Haveli.

Review of Research and Development

According to Kotler (2009), "Consumer behavior is the study of how individuals or groups buy, use and dispose of goods, services, ideas or experience to satisfy their needs or wants".

Mr. Durra Mansoor mentioned that Consumer behaviour is concern with the processes that individuals or groups go together in deciding their purchase preference in order to satisfy their needs and requirements. It is important to mention that the consumer behaviour is a grouping of customer's buying awareness combined with external motivating factors to result in a change in the consumer's buying behaviour.

Nesbitt(1959) points out that "Intelligent customers do not make their purchsing list in advance because they will wait for promotions and tend to get more advantages from them to increase their purchasing power".

Mr.G.Shaniesh in his study mentioned that Buying behaviour in a corporate market is portrayed by group decision making, long cycle times, participants from different functional areas and levels and sometimes divergent objectives, and changing roles of the participants during the buying cycle".

Consumer decision making could be defined as the "behavior patterns of consumers, that precede, determine and follow the decision process for the acquisition of need-satisfying products, ideas or services" (Du Plessis et al., 1991).

Objectives of the Study

To find out the factors that influence purchase decision of Mobile by consumers.

1. To find out the reason behind the purchase of mobile by the customer.
2. To study the socio-economic characteristics & awareness of mobile users.
3. To find out the level of Satisfaction towards mobile in the area of Dadra and Nagar Haveli.
4. To study the problems faced by the customers regarding mobile in the area under study.

Methodology

The authenticity of any research depends on the systematic method of collecting the data, and analyzing the same in an appropriate order. In the present study, an extensive use of both primary and secondary data was collected. In this study, descriptive research was used.

Data Collection: Both primary and secondary data was collected for the purpose of the study. The primary data was collected from the mobile users of Dadra and Nagar Haveli. The information was gathered through structured questionnaire method. The secondary data was collected from journals, magazines and websites.

Sample Design There are number of mobile users in the region. For collecting the information, the respondents were chosen by non-probability random sampling. For the purpose of study total 150 Respondent were selected as a sample size.

Scope of the Study The present study is confined to Dadra and Nagar Haveli. Though the main objective of the study is to analyse customer preference in Mobile Handset and the factors influencing them to purchase a Mobile. The scope of the study extends to the following related aspects viz., the socio economic characteristics of the respondents, the awareness of Mobile users, level of satisfaction towards Mobile and the problems faced by the customer.

Data Analysis:

1. **Factor Influencing Buying Decision:**

Table 1.1

Variable	Responses	
	Yes	% Yes
Price	66	44.00
Social Influence	11	7.33
Brand Name	26	17.33
Product Features	32	21.33
Social Influence	7	4.67
After Sales Service	8	5.33
Total	150	100.00

It has been observed from the table 1.1 that price is the prime influencing factor affecting the buying decision of the customer followed by features and brand name.

2. **Influence of Media**

Table 1.2

Media	Responses	%
News Paper	22	14.67
Television	32	21.33
Journal/Magazine	8	5.33
Internet/Online	88	58.67
Total	150	

It has been observed from the table 1.2 that internet is one of the major media that has great impact on buying behavior of customer. Majority of the customer get the information about the mobile through online media.

Conclusion

The researcher had made an effort to find out the nature of buying behaviour of Mobile users in Dadra and Nagar Haveli. It has been observed from the study that the price of the mobile is the prime motivators in their purchasing decision followed by features of mobile. Further it has been observed that the mobile users are very much influenced by the online advertisement on internet. Further it has been observed that mobile features as well as brand of the mobile also have considerable impact on the buying behavior of the customer. Hence it is concluded that if the mobile has come out with reasonable prices and effective online advertisement it may highly influence the consumer to purchase mobile.

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Small Production Industries in India: Opportunities and Challenges

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Abstract: Production sector is the spinal column of all advanced and emerging nations. In the current situation of competitive age and demand for diversities of product in the market the small production industries are considered as a major separation for economic development of the country. SMIs suit the Indian economic atmosphere with fewer capital investments and more employment concentrated in contrast to greater businesses. After technological progression and globalization SMIs enhanced production techniques and management process but on extra adjacent facing heaviness and challenges to tolerate in the market. The impartial of this article is to highlight the opportunities and challenges in perspective of Indian SMIs, landscape of pressure, resources, competitive significance, investment and performance.
Keywords: Small Production industries, production Sector, economy, Small and medium enterprises.

Introduction

Production has emerged as one of the high growth sector in India from last two decades. India is expected to become fifth largest production country in the world by the end of 2020. The SMI Sector has the prospective to industrial growth and can be considerable associate in the progress of comprehensive growth. In India SMIs occupy more than 36 million units, contribute to 45% of industrial production and 40 % to export sector. SMI enjoys certain inherent strength such as lower overhead costs, flexibility in production, labors, native resources etc, but now a days for SMI's in India needs to upgrade technologies on a continue basis to remain competitive. Adopting information technology tools to increase productivity.

Meaning of small production industries:

The meaning of small Scale industries differs from one country to another. The maximum of the countries of the world, the standards for defining small enterprise is connected to the size of engagement. The definition of SMIs in India has altered from period to period. It is presently defining in terms of investment upper limit on the innovative worth of the connected plant in which the investments further down fixed assets in plant and machinery and equipment, whether held on proprietorship term or on tenancy or hire purchase, does not surpass 10 Crore for production enterprise.

Production Initiatives: The initiatives involved in the production or production of goods relating to any industry identified in the first agenda to the industries (Development and regulation) Act 1951 or engaging plant and machinery in the procedure of worth totalling to the ultimate product having a different name or character or practice.

The small manufacturing businesses in India divided into three parts: 1. Production industries: These units are fabricating merchantable objects for straight consumption and similarly for dispensation businesses, example: khadi businesses, food dispensation businesses, power looms, etc. 2. Auxiliary industries: The subsidiary businesses produce parts and constituents for large businesses. 3. Feeder businesses: These businesses yield assured particular products approximating electro-plating, moulding, soldering, etc.

Objective of the study: The paper highlights the chances and encounters in background of Indian SMIs- 1.To scrutinise the guidelines and put into practise connecting to small gauge production units. 2. To emphasis on the vast development prospective and chances accessible for SMIs and part of government of India. 3. To stipulate the difficulties in the current carry out for small production Businesses in India.

Literature review: MS Chikara and A Sahay (2008) Current the report on contribution of production business segment as well as exploration of progress design of production medium initiative segment comprising the perpendicular development of small business to the medium initiatives, and the relative worldwide tendency in the past 10 years. Reetu Sharma (2012) in "complications and projections of small scale business units has determined that Small Scale Industrial units are at a emerging phase and more growth is essential but then again certain difficulties must to be resolved Jadhav Mangesh and Sandeep Gaikwad (2013) “SSI and its Current Situation in Indian industrial development” deliberated the Importance of small scale businesses in Indian economy and contribution of SSI sector in generally manufacturing sector.

Small and Medium Industries in India: Small Businesses have assured exclusive topographies, which create it be different from big gauge segment. In maximum small industries the proprietors themselves are supervisors and so they can function self-sufficiently. Small enterprises can reply rapidly to conservational tendencies. SMIs permit small businesspersons to comprehend market circumstances and quickly reply to modifications. Small industries have marvellous capability for employability generation over and done with their labour concentrated methods. Small industries essentially generate additional occupations than large industries. Hence, this kind of nature of a small-scale entity is of unlimited importance in a nation like India wherever the quantity of without a job individual is remarkable. In the present Situation big gauge segment needs massive funding while the small segment is just the contradictory. Not only is the employability investment ratio in height for the SSI but the productivity investment relation is also in height. SSIs are accommodating in well-adjusted regional growth.

EmploymentOpportunity:Labor concentrated small Production businesses generate employability prospects at greater magnitude. Employability generation through this subdivision has exposed a extraordinary development. It is a authoritative instrument of career formation. As per the National Sample Survey (NSS) 73rd round, accompanied by National Sample Survey Office, Ministry of Statistics & Programme Implementation during the period 2015-16, there were 633.88 lakh unincorporated non-agriculture MSMEs in the country involved in dissimilar economic accomplishments 196.65 lakh in Production.

It is understood that 31% MSMEs were originate to be involved in production undertakings that show business a important title role by provided that huge occupation occasions at reasonably lesser investment cost than enormous businesses as well as over and done with industrial development of rural & regressive areas. MSME segment has been generating 11.10 Crore employments 360.41 lakh in Small Production Segment.

Entrepreneurial Development: Entrepreneurial expertise from countryside and semi-urban parts leftover undamaged from the authorities of huge businesses and placed them interested in creative usage by capitalizing in small-scale entities. Small businesspersons also progress community well-being of a nation. The small business segment by means of 630.52 lakh projected initiatives accounts for additional 99% of over-all projected quantity of MSMEs. Small segment with 3.31 lakh and Medium subdivision with 0.05 lakh assessed MSMEs accounts intended for 0.52 % and 0.01 % of total predictable MSMEs, correspondingly. Out of 633.88 predictable number of MSMEs. Out of 633.88 lakh MSMEs, 608.41 lakh (95.98%) MSMEs be situated brand-named initiatives.

Provincial Expansion & Manufacturing Dispersion: There has to be situated huge assortment in manufacturing engagement obtainability in India, general public travel from countryside and semi urban parts to these extremely industrialized centers in exploration of occupation and occasionally to make a better living, it generates a encumbrance on some specific part reasons overpopulation, contamination, shantytowns etc. This category of problem is improved and resolved by small-gauge businesses which operate home-grown resources and carries approximately distribution of businesses in the numerous parts of the nation consequently encourages well-adjusted provincial expansion.

Enlargement of Technical know-how: Small and Medium Industries be responsible for plenty of chances for the improvement of technical know-how and technology in reappearance, generates an atmosphere favourable to the improvement of small entities. SMIs accepting modernization with Transformation of production progressions, Enlargement of equipment and technology, Merchandise Improvement and Branching out, Enlargement of Atmosphere Responsive Technical know-how, Technology Transmission, Development etc. As a consequence complete fabrication productivity and turnover is value-added by technical know-how.

Encourage trade: Small Gauge production businesses now generate an improved export market. SMIs Segment donates 40 % to 45% of the national exports.

Supportive Pillars for Enormous Businesses: The SMIs are supportive pillars by providing accessories, components, parts, apparatus, and semi-finished belongings obligatory for large businesses.

Encounters for SMIs: Here, two categories of small gauge exporter, business exporter and production exporter are engaged into deliberation. Responses show that maximum (75%) small gauge manufacturing exporting entities doing both accomplishments for their manufactured goods. Funding problem is fundamentally confronted by non-exporting entities while exporting entities have to look the difficulties comparable decision-making disorganization, technical hold-up, difficulties connecting to export etc. In accumulation to standing of disbursement also the most important problems which are essentially faced by mutually exporting and non-exporting entities.

Assortment of market is a vital judgement. Numerous belongings are set aside in mind to choice a possible market for their merchandises. It is originate out that magnitude of rivalry is the greatest influential reason to choice a probable market both by exporting and non-exporting entities.

SMEs engage 40% of India's personnel, but they individual underwrite 17% to the national GDP. Moreover numerous firms stay small, unregistered and un-incorporated in the disorganised subdivision so that they can sidestep assessments and guidelines. "The businesses have slight inducement to capitalize in advancement expertise of principally impermanent employees or in participating in investment equipment.

Institutional & Government Provision for SMIs: Continuous up-keeping to SMI segment by the Government in relations of infrastructure expansion, economic and financial strategies have facilitated this segment to develop as self-motivated and lively subdivision of national economy 1) Ministry of micro, small and medium enterprises (MSME) 2) Small Industries Development Organization (SIDO) 3) National Small Industries Corporation (NSIC) 4) SSI Board 5) National Institute of Small Industry Extension Training (NISIET) 6) National Institute for Entrepreneurship & Small Business Development (NIESBUD) 7) National Research Development Corporation (NRDC) 8) Small Industrial Bank of India (SIDBI).

The most important challenges confronted by SMEs in India: - 1. Nonexistence of infrastructure facilities, 2. Lack of sufficient capital 3. Labour non-availability 4. Government guidelines 5. Marketing difficulties 6. Obtainability of Raw-materials. According to the statistics, composed by Saini (2014) Nine out of ten (87%) of the SMEs had functional or procured employed capital over and done with bank finance and bank term loans. None (0%) of the ten Micro entities taken by him for sample has ever applied for bank loan owing to refusals although only 4 (30%) out of 13 Small initiatives applied for it due to extensive and multifaceted official procedure. The labour obtainability and raw material obtaining is very problematic.

To attain a production-led alteration, the Government has introduced with great vision the 'Make in India' agenda to encourage the production segment of nation and brand India a global production centre. The inventiveness pursues to increase the portion of production to 25% of GDP and generate 100 mn production occupations. The Ministry of MSME introduced numerous arrangements expected at financial support, technology backing and up gradation, infrastructure expansion, ability improvement and training, augmenting effectiveness and market support system for MSMEs.

The Government of India and many state governments introduced the scheme and programmes by the Ministry and its organizations seek to facilitate/provide:

1. Adequate flow of credit from financial institutions/banks 2. Support for technology up gradation and rejuvenation 3. Integrated infrastructural facilities, 4. Contemporary testing conveniences and superiority authorization 5. Access to current management put into practise 6. Entrepreneurship development and skill up gradation through suitable training facilities 7. Support for product growth, design interference and wrapping 8. Welfare of artisans and employees 9. Assistance for improved access to national and export markets 10. Cluster-wise measures to encourage.

Conclusion: The small production Businesses sector has accomplished tremendously healthy in India for employments, Gross Domestic

Product and industrial development. India's small production is equitably advanced but upgrading, divergence and expansion would remain to require reasonable advantage worldwide. Further down the altering of economic situation and modest superiority the corporate can contest on cost, superiority and products at national and global level only if perfect investment in technological know-how production procedure, research and development then marketing are made. Recent day's government and its organizations are in performance a very optimistic and productive part for consolidation this energetic segment. The SMIs should distillate on superior utilization of physical and technical progressions. Machines, materials and procedures with organizational and management planning, budgeting, market, and grievance administering.

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Opportunities & Challenges of Rural Entrepreneurs in India: An Overview

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Abstract: An effort has been made in this article to deliberate the vital matters related to entrepreneurship and its opportunities and challenges in India. The examination is then extended to comprehend the determinants of rural entrepreneurship and the environment favourable to its growth consequently; the guidelines that are essential to make this environment constructive have been conferred in detail. The common restrictions that are handled by rural enterprises have been recorded out. The article also highlights the significance of rural enterprise progress of emerging the economy. Further, confers entrepreneurship deeds in rural India and recognizes the challenges and deliver some strategy effect. At the end to fast-track economic progress in rural zones, it is essential to encourage entrepreneurship. Entrepreneurial direction in rural ranges is grounded on inspiring local entrepreneurial capacity and succeeding growth of native businesses in the country. This will create jobs and enhance economic worth to a section, and at the identical period, it will retain uncommon resources inside the civic.

Keywords: Entrepreneur, Countryside growth, countryside entrepreneurship, restrictions, encounters, Chances.

Introduction

Entrepreneurship takes extensive past and the term *'Entrepreneur'* instigated in the French linguistic in the mid of the 17^{th} or 18^{th} stages. The term *"Entrepreneurship"* terms separate economic sources in the late 19^{th} century. In the previous two decades, the word entrepreneurship is extensively characterized widely throughout the world by the public to business interested party. The stimulating and vital situation is that women entrepreneurs' involvement in the worldwide market is more paralleled to men at the present time. Countryside entrepreneurship is typically defined as the creation of a fresh business organization that supports to make a innovative product, services, trending market, and also adopting new technology in a countryside environment. Amongst the world population, almost 575 million people are involved in agriculture-related services while 52% of non-water land is harvested as conflicting to 11% in the environment. India has a growing of 9.2 % (2015) service segment associated to the world with the bottommost contribution overhauled employment 28 % (2014) and aids all over 66 % to the Indian GDP. Countryside Private enterprise can be defined as Entrepreneurship growing at village level which container occur in collection of arenas of endeavours, for example, agriculture, commerce, manufacturing, horticulture and goes about as a influential constituent for financial encroachment". As per KVIC (Khadi and Village Industry Commission), "town businesses implies any industry situated in countryside territories, populace of which ensures not outshine 10,000 or concentrates any managements with or without utilization of strength and in which the altered capital venture per leader of an artisan or a individual does not surpass a thousand rupees". Government of India has given the customized definition of rural industries. As per GOI "Any industry situated in local region, town or village with a populace of 20,000 and beneath and a venture of Rs. 3 crores in plant and apparatus is named a village industry."

Need for the study

Agricultural work force has a share of seventy per cent in the total work force of the country. Cultivators who own farmland come to about sixty-eight percent of this work force while agricultural labor accounts for the remaining thirty two percent. These cultivators are increasing in numbers over the years but the large increase was among the agricultural labor, which went up from twenty percent of the rural work force to thirty two percent. One also needs to keep in mind that there is a continuous growth of population. Thus, the policy for rural entrepreneurship development has to tackle, the problems by providing other occupation option to the rural youths. "Youths in the rural areas have little options", this is what they are given to believe. This is the reason that many of them either work at farm or migrate to urban land. The need is to plant other option in the minds of rural youth. Entrepreneurship could be the best option.

The living standard of the rural individuals ought to be expanded. Enterprise in rural part gives a response to the above issues. Indian rustic segment is no more primitive and separated. In this way, enterprise in the provincial and tribal territories poses a potential threat to take care of the issues of neediness, unemployment and backwardness of Indian economy. Rustic industrialization is seen as a viable method for quickening the procedure of provincial advancement. Government of India has been ceaselessly allotting expanding significance and backing for the advancement and development of rural entrepreneurship.

Research Methodology

Data have been collected with the help of various secondary sources such as articles, journals, magazines, books, website etc. The main objective of this paper is to bring out the understanding of the present scenario of rural entrepreneurship, Opportunities and Challenges in Rural entrepreneurship.

Compensations of Countryside Entrepreneurship

1. Deliver employability to beginnings, 2. Check on the immigration of rural people, 3. Stable provincial progress, 4. Promotion of imaginative achievement, 5. Check on collective problems, 6. Stimulate the rural young generation, 7. Developed standard of life style, 8. Countryside businesses will create the finest kind of objects where trained work of particular nature is obligatory. 9. Take care of mandate evolving from locality exploitation desires. 10. The countryside commercial initiatives can exploit locality assets nearby physical resources like (raw material) soft skills (expertise and experience).

Challenges for Countryside Entrepreneurs in India

1. Growth of Shopping centre Culture 2. Dispersal and logistics 3. Non-appearance of technical awareness, 4. Poor intellectual self-view of rural young generation and missing stimulation 5. Implementation of limitations and procedures 6. Task universalization 7. Removal of procedure blockages 8. Sensitization of prompting field officers. 9. Absence of gestation structure for entrepreneurship 10. Hazard mitigation or start-ups.

Modern State of Countryside Entrepreneurship in India

In spite of declining product costs and an unstipulated universal financial situation, contemporary study has validated that 82% of all respondents world widespread and 75.8% respondents from India have stated an ability to instigate additional business in their current economic atmosphere. Under altering economic condition, entrepreneurship has shaped significance universally. Financial structure is remarkably adjustable and greatly concentrated because of the rapid formation of new organizations and the way out of ancient stagnant and diminishing firms. In India there are abundant prospects in small businesses, such opportunities will modification India in the upcoming future. The magnitude of business development in our nation is massive.

The reports organised by Planning Commission to yield livelihood prospects for ten crore persons during the course of the following ten years have definitely arranged autonomous work as an departure plan for building unemployed young generation.

The fluctuating universal atmosphere brings up matters about the capacity of usual, little gauge organizations in country ranges to share the possible benefits presented by the developing atmosphere. The rapid populace growth, mutual with meaningfully speedier suburbanization, makes increasing requests. In India, town populaces when all is said in done grow about twice as rapid as the general collective, and by 2020 they may exceed the measure of country populations. Such a remarkable demographic design challenges the restrictions of some conventional small scale organizations to adjust to the increasing demands.

Opportunities for non-urban Entrepreneurship

1) Provision & Stimulus to native individuals: Rural area individuals always inspire and support entrepreneurs to enhance their business to progress socio-economic position as balanced amongst rural and urban general public.
2) Little formation cost: Rural occupational persons always planned with a smaller amount budget and wastage to the urban zones.
3) Modest benefits: The majority of rural people are involved in agro-related work, but less income and recognition of the society they migrated as unskilled and semiskilled labour.

4) Government guidelines and subsidies: Indian Government is constantly involved in the development of supportable policies and values to meet the world marketplaces by providing less interest rate loans and subsidy grant.
5) Accessibility of raw-materials: Raw Materials are major essential and issue items in any manufacture. Due to market threat and supply chain management, the availability of resources on-time is hectic to no transportation cost and flotation cost.
6) Cost of manufacturing: Rural businessperson's cost of manufacture is very low when compared to the urban productions. The factors of production are available at low cost, automatically the cost of production is also low. Because of this rural entrepreneurs can sell their goods and services at a low-priced cost.
7) Optimum utilization of produces: Optimum utilization of farm produces is only possible through rural entrepreneurship. Most of the rural entrepreneurs be determined by upon the farm produces as raw materials.
8) Employment generation for rural youth: Rural entrepreneurs are providing a hundred percent of jobs for rural youth. If the rural entrepreneurs are succeeding in this activity the migration of the people to urban from rural will be immediately stopped to a maximum extent.
9) Advancement cost: There is no promotion cost for rural entrepreneurs; the competition is very less. Principally there is no need for promotion and other advertising actions for their products.
10) Potential customer: In this 21st century rural villagers are economically robust and also severely populated. This heavy populace can be changed into possible customers. That is the motive all the MNC's are focused in countryside villages for their potential.
11) Constructing the goodwill: Countryside entrepreneurs have a lot of opportunity for constructing goodwill. Most of the countryside entrepreneurs have moral standards and also these individuals do not work for wholesome profits.

Suggestions

1) The government of India or any emerging country should generate independent organizations like Election Commission for rural business persons financing organizations.
2) These independent funding organizations should have robust infrastructure amongst the governing government in central or state with the good community relationships.
3) State & Central Government essentially initiate additional awareness and superior training programs like MSME all through the calendar.
4) Countryside businessperson's always engaged with the latest trends and technologies via television, mobile, or internet to upgrades their needs and progress with local as well as global requirements.

Conclusion

Resources in villages are copiously accessible. In future, it ought to be used sufficiently. For example, wind energy can be totally browbeaten for electrification. Significant infrastructural facilities like power, land, finance and raw materials ought to be given to the provincial entrepreneurs at concessional rates. To make awareness of creative soul among the countryside entrepreneurs, management working out is to be deliberated.

Rural entrepreneurship is one of the best instrument used by any NGO's and GO's for the renovation of emerging to advanced level. Non-urban grew up in socio-economic is the solutions for improving poverty of any countries. Hence any individual or citizens of India must buy/sell any Indian products. Therefore, there should be less strain on the addition of rural as well as the growth of the economic status of each interested party. The most hectic issues are the involvement of youth and programme in an organization should mould the scholars/faculty to speak about the significance of running a corporate relatively an employee of any organization. On the Government side, more excellence support like plan meaning, standardization, Superiority Guarantee, financial agencies, NGOs, Media, and awards will make more contribution of youth in the business atmosphere.

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Increasing Female Participation in Advanced Level Mathematics

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Abstract: The non-participation of ladies in superior arithmetic has grow to be a situation over some of years. This look at sought to locate approaches of growing woman participation in Mathematics at superior stage primarily based totally on an expertise of the constraining elements to woman participation in arithmetic. The descriptive survey studies layout became followed on this look at wherein questionnaires, interviews and observations have been used as information series instruments. Questionnaires have been finished via way of means of 99 woman college students (sixty 'O' degrees and thirty 9 'A' degrees) and 9 arithmetic instructors. Interviews have been performed with 3 arithmetic instructors, 10 'A' stage woman college students who have been now no longer taking arithmetic and twenty 'O' stage woman college students. Classroom observations have been additionally performed in six Mathematics lessons. Each lesson lasted for 40 minutes. The consequences of the look at have found out the subsequent elements as proscribing woman participation in arithmetic: perceived issue of the subject, loss of self self belief, anxiety, bad trainer attitudes, bad stereotypes approximately woman's math abilities, cultural notion that arithmetic is a male area and lack of information approximately arithmetic careers entail. The studies findings additionally found out that to sell woman participation in superior stage arithmetic, mother and father and instructors ought to: decorate ladies' self belief approximately their math abilities; create a conducive lecture room weather that complements hobby and interest in arithmetic; disclose ladies to woman position fashions who've succeeded in arithmetic and offer statistics recommendation and steerage on arithmetic careers. The look at recommends that gender and cultural biases connected to arithmetic ought to be de-emphasised at domestic and college and that arithmetic instructors ought to undertake a number of the greater current reform-primarily based totally academic techniques that actively have interaction college students even as the Government ought to provide incentives to ladies who look at arithmetic at better degrees with a view to inspire younger girls to pursue mathematical careers.

Introduction:

Science, arithmetic and era play a crucial position withinside the improvement of country wide economies. All aspects of human existence had been permeated via way of means of arithmetic as a subject (Alutu and Eraikhuemen, 2004). As found via way of means of Aguele and Agwagah (2007), there may be no technology with out arithmetic, therefore there may be no era without technology consequently there may be no present day society without era. Thus, arithmetic is the cornerstone of country wide improvement without which no state can excel scientifically and technologically. As a result, countries that aspire to increase scientifically and technologically ought to provide remarkable interest to the coaching of arithmetic at all of the degrees of training. Wadesango et al. (2012) study that arithmetic is a device which bureaucracy the premise for access into specialised careers like technology, engineering, economics and computing, amongst others. Realizing the significance of Science and Technological Education in country wide improvement, the Ministry of Education, Sports, Arts and Culture has made the coaching of technology and arithmetic obligatory all through the training device as much as Ordinary Level. The reason in the back of this coverage is that every one inexperienced persons who could have long gone thru our fundamental training device, which is going as much as O-Level ought to have obtained a base to allow them admire the clinical surroundings wherein diverse improvements and education are taking place.

Review of literature:

Attitudes and expectancies of mother and father and instructors additionally restriction woman participation in arithmetic. Asimeng Boahene (2007) asserts that generally, mother and father' expectancies had been a disincentive for Mathematics and Science training for ladies. Girls have a tendency to be given time ingesting home obligations, which depart them with now no longer a lot time for non-public look at.

Parents therefore make contributions to the ladies' low hobby in Mathematics and Sciences in that they provide ladies greater home obligations than boys, and consequently much less look at time. This influences the woman infant and reasons them to get bored of their research specially in arithmetic due to the difficult nature of the subject. According to Gutbezahl (1995) mother and father' expectancies for ladies in arithmetic have an great effect on ladies' overall performance in arithmetic. Parents have a tendency to have decrease expectancies for ladies than boys and this characteristic to their daughter's achievement in arithmetic greater to attempt than ability. What the mother and father agree with approximately arithmetic can affect their infant's beliefs. For example if mother and father have mathematical anxiety, this can have an instantaneous effect at the consolation stage in their youngsters closer to arithmetic, and additionally closer to a arithmetic career. Stereotypes via way of means of mother and father approximately careers have an effect on ladies' notion at the usefulness of arithmetic.

Gutbezahl (1995) in addition asserts that ladies generally tend to internalize parents' poor expectancies, which emerge as self-pleasurable prophecies. If ladies accept as true with that they can not reap in arithmetic, then robotically they may now no longer reap. The parents' poor attitudes and expectancies consequently make contributions to the low participation of ladies in arithmetic as they could experience much less assured in themselves. Female Education in Mathematics and Science in Africa (FEMSA) research that have been carried out in 8 African international locations with the aid of using O'Connor (2000) discovered instructors' attitudes and academic procedures as contributing immensely to the gender hole in arithmetic. O'Connor (2000) in addition exhibits that negative expectancies for ladies' overall performance at the a part of instructors ends in the form of technological know-how and arithmetic lecture room dynamics, in which ladies are dealt with very in a different way from boys. The look at exhibits that instructors do now no longer inspire ladies all through arithmetic and technological know-how lessons, and in fact, at times, actively discourage them. Some instructors direct greater challenging, excessive order questioning inquiries to boys, whilst simplest easy take into account kind of inquiries to ladies. This reinforces and confirms withinside the minds of each boys and ladies that arithmetic and technological know-how topics are for boys simplest. Boys consequently, over time, expand at those topics which they take into account a male domain.

Mathematics tension in keeping with Karimi and Venkatesan (2009) is the final results of low shallowness and the worry of failure. Mathematical tension reasons troubles for processing the incoming data in addition to the formerly found out data for trouble solving. Mathematical tension is one of the maximum first rate of mental troubles that stands withinside the ladies' manner. Garry (2005) referred to in Karimi and Venkatesan (2009) asserts that many college students who be afflicted by arithmetic tension have little self assurance of their capacity to do arithmetic and generally tend to keep away from arithmetic courses. This has significantly restricted their profession desire options. A studies finished with the aid of using Paton (2012) suggests that arithmetic tension is one of the motives why only a few college students look at arithmetic at 'A' degree and why the quantity of college students taking arithmetic at University degree is typically low. He in addition argues that due to the fact arithmetic is historically considered as a male domain, ladies can be socialized to think about themselves as mathematically incompetent. This can also additionally lead ladies to keep away from arithmetic and whilst ladies do take part in mathematical sports they'll enjoy greater tension than males.

Paton (2012) who propounds that some of mathematical tension researchers endorse that the fundamental nature of the manner we educate arithmetic and the training of instructors of arithmetic are a number of the underlying reasons of mathematical tension. It has additionally been cautioned with the aid of using Burton (2001) that imposed gaining knowledge of patterns, syllabi and exam systems can account for an growth in ladies' arithmetic tension and bring about a consequent loss of self assurance. The above statements honestly suggest that the sports withinside the arithmetic lecture room count lots as they'll have an effect on the learners' hobby withinside the subject. Much of this tension takes place withinside the lecture room because of the instructors' loss of attention of various gaining knowledge of patterns for college students. Generally, it seems that ladies are pronounced to be greater worrying all through arithmetic than boys. Mathematical tension is consequently one of the most important elements that restriction the participation of ladies in arithmetic.

Gorard et al. (2012) have discovered that secondary college students' earlier attainment in arithmetic notably expected their hobby in arithmetic. Thus, hobby in arithmetic seems to be a probably crucial component for participation in non-obligatory superior arithmetic. Matthews and Pepper (2007) discovered that college students' perceptions of the usefulness of arithmetic for college and a profession became a important component of their desire of 'A' degree arithmetic. However, college students' perceptions in their personal competence have been additionally an crucial component, specially for female college students. This became intricate due to the fact female college students have been much more likely to underestimate their mathematical competence than male college students and consequently much less in all likelihood to pursue in addition research in arithmetic.

Methodology:

Research layout

The look at used the descriptive survey studies layout. Leedy (1980) observes that the descriptive survey layout includes searching at phenomena of the instant with excessive accuracy. The layout implies the idea that some thing is determined at anyone time is regular and beneathneath the equal situations could conceivably be determined at anyone time withinside the future. The descriptive survey layout survey includes analyzing a restricted quantity of instances with the view of drawing up conclusions that cowl the generality of the complete institution beneathneath review. Thus, the descriptive survey in this example became used to discover methods wherein female participation in Advanced degree arithmetic may be increased.

Population and sample

Population and pattern The populace for this take a look at consisted of 1 hundred 'A' stage female college students (30 doing 'A' stage arithmetic and 70 now no longer doing arithmetic), hundred and seven (207) 'O' stage female college students and nineteen (19) arithmetic instructors from excessive faculties in Chandrapur city district. The pattern of the take a look at produced from thirty 9 A stage female college students (18 doing 'A' stage arithmetic and 21 now no longer doing arithmetic), sixty 'O' stage female college students and 9 arithmetic trainer who had been selected via way of means of a easy random sampling technique.

Data collection

The facts for this take a look at became accrued thru the management of a scholar questionnaire, consciousness organization discussions with college students, established interviews with arithmetic instructors and study room observations. The questionnaires consisted of each open-ended and close-ended questions. Section A became a eight object Likert-kind of questionnaire elements that restrict female participation in arithmetic. Respondents had been unfastened to agree or disagree with any announcement at the questionnaire on a continuum starting from Strongly Agree to Strongly Disagree as follows: Strongly Agree four points; Agree three points; Disagree 2 points; Strongly Disagree 1 point. Prior to the primary facts collection, a pilot take a look at that concerned one hundred 'O' stage and fifty 'A' stage female college students became carried out in any other district to make certain suitability and clarity of the questionnaire. Based at the pilot take a look at results, changes had been made. After this, the tool became dispensed a number of the members concerned withinside the gift take a look at. Section B requested members approximately a way to boom female participation in arithmetic. Classroom observations had been carried out to benefit an perception into the interactions withinside the arithmetic classrooms.

Data analysis: The facts accrued had been analyzed the use of descriptive statistics: easy probabilities and numerical values. For facts evaluation purposes, the scales Strongly Agree and Agree had been merged into Agree even as the Strongly Disagree and Disagree had been merged into Disagree. Open ended questions had been analyzed via way of means of figuring out rising themes.

Factors limiting female participation in mathematics

Item	Statement	SA (%)	A (%)	D (%)	SD (%)	Total
1	Perception that mathematics is a difficult subject	89	7	2	2	100
2	Perception of teacher attitude towards girls	91	3	4	2	100
3	Mathematics as male domain	50	5	42	3	100
4	Mathematics anxiety	88	7	3	2	100
5	Lack of personal confidence in mathematics	96	4	0	0	100
6	Lack of knowledge on usefulness of mathematics	97	0	3	0	100
7	Lack of exposure to women role models in mathematics	95	3	2	0	100
8	Parental and cultural factors	91	6	2	1	100

The records from Table three display that 96% of the scholars agree that their notion of arithmetic as a tough concern limits their participation at Advanced stage. Focus institution discussions with 'O' stage lady college students and 'A' stage lady college students now no longer doing arithmetic similarly showed that ladies sincerely understand arithmetic to be tough. Mathematics instructors who had been additionally interviewed indicated that ladies don't forget arithmetic to be a tough concern and this impacts their participation withinside the concern. This is constant with findings of Allexshaht-Snider and Hart (2001) and Saraswathi (2003) who cited that a few students harbor the notion that arithmetic is commonly tough and not possible to many learners. Focus institution discussions with 'A' stage lady scholar now no longer doing arithmetic similarly discovered that they couldn't continue with arithmetic to 'A' stage due to the fact they trust that arithmetic is a tough and taxing concern that could simplest be attained through the intellectually endowed. Some of them indicated that that they'd failed it at 'O' stage consequently they couldn't take part similarly in arithmetic at 'A' stage. Similar sentiments also are echoed through Brown et al. (2008) who explored motives why college students decide now no longer to examine arithmetic at 'A' stage and said perceived problem as a first-rate motive why college students do now no longer hold with arithmetic.

The attitudes and methods of instructors additionally play a first-rate element withinside the participation of ladies in arithmetic. The majority of the ladies blamed instructors for inflicting them to become bored withinside the concern. Some of the ladies indicated that instructors simplest deal with the ones students who're intelligent, in particular the lads. From Table three, approximately 94% of the ladies showed that their instructors' attitudes impacted negatively on their hobby and participation withinside the concern. However, the lecturers do now no longer agree that their attitudes make a contribution to the scholars' bad mind-set withinside the concern. O'Connor (2000) located that it's far exciting to be aware that instructors commonly see themselves as blame-loose for this case and appear unwilling to discover any fault with their personal coaching methods. From the lecture room observations, the researchers cited in a single elegance that the instructor became specifically targeting the lads who regarded to be pretty aware about the subject that became being learnt. Some of the ladies ended up now no longer paying interest at some stage in the lesson. This is in consonant with Asimeng-Boahene (2007), who notes that instructors generally tend to have bad expectancies for ladies' overall performance in arithmetic, and that they in flip deal with them in another way from their male opposite numbers.

Exposing girls to female role models who have succeeded in math and science

Strong lady position fashions are important to supporting younger ladies find out their ardour for arithmetic and boosting their self assurance of their instructional competencies. Mathematics instructors as wells secondary faculties are recommended to ask distinguished ladies who've excelled in arithmetic-associated careers and professions to proportion their mind and stories concerning motives they entered the field, barriers they overcame on the subject of their profession path, the sort of paintings they do on a day by day basis, realistic information (e.g., approximately pay and benefits), and effective and bad components in their jobs. Studies through Halpern et al. (2007) have proven that publicity to effective position fashions have a effective effect on younger ladies's math overall performance and might assist dispel bad stereotypes. Halpern et al. (2007) similarly endorse the usage of biographical readings approximately ladies scientists, mathematicians, and engineers to assist college students discover effective position fashions. Watt (2006) has additionally cited the position of maths-associated lady position fashions in countering the stereotypes that sell guys in mathsrelated domains.

Develop, foster and build girls' confidence about their abilities

Researchers has proven that women have much less self assurance of their math competencies than their men opposite numbers and start to become bored in maths or technological know-how careers from early adolescent (Herbert and Stipek, 2005). The ladies cited that each their mother and father and instructors have to discover way of strengthening ladies' ideals concerning their competencies in maths and technological know-how. Teachers and mother and father have to make the ladies conscious that competencies in arithmetic aren't constant and consequently may be stepped forward upon via constant attempt and difficult paintings. The faculty and the house surroundings have to for that reason be supportive to construct ladies' hobby and self assurance. Asimeng-Boahene (2007), notes that instructors additionally inspire participation and foster self-self assurance through giving constant effective reinforcement for his or her feedback and questions.

Conclusion

Both the sampled lady arithmetic college students and the arithmetic instructors stated that numerous elements account for low participation of lady in excessive faculty arithmetic. The examine has discovered that low participation in Advanced stage arithmetic is because of perceived problem of the concern, loss of self self assurance, anxiety, bad instructor attitudes, bad stereotypes approximately girl's math competencies, cultural notion that arithmetic is a male area and lack of understanding approximately arithmetic careers entail. To sell lady participation in superior stage arithmetic mother and father and instructors have to: beautify ladies' self assurance approximately their math competencies; create a conducive lecture room weather that complements hobby and interest in arithmetic; reveal ladies to lady position fashions who've succeeded in arithmetic and offer information, recommendation and steering on arithmetic careers.

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A Brief Introduction to Dewey decimal classification

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Introduction

The Dewey Decimal Classification (DDC), colloquially the Dewey Decimal System, is a proprietary library classification system which allows new books to be added to a library in their appropriate location based on subject. It was first published in the United States by Melvil Dewey in 1876. Originally described in a forty-four-page pamphlet, it has been expanded to multiple volumes and revised through 23 major editions, the latest printed in 2011. It is also available in an abridged version suitable for smaller libraries. OCLC, a non-profit cooperative that serves libraries, currently maintains the system and licenses online access to Web Dewey, a continuously updated version for catalogers.The Decimal Classification introduced the concepts of *relative location* and *relative index*. Libraries previously had given books permanent shelf locations that were related to the order of acquisition rather than topic. The classification's notation makes use of three-digit numbers for main classes, with fractional decimals allowing expansion for further detail. Numbers are flexible to the degree that they can be expanded in linear fashion to cover special aspects of general subjects. A library assigns a classification number that unambiguously locates a particular volume in a position relative to other books in the library, on the basis of its subject. The number makes it possible to find any book and to return it to its proper place on the library shelves. The classification system is used in 200,000 libraries in at least 135 countries.

History

Melvil Dewey (1851–1931) was an American librarian and self-declared reformer. He was a founding member of the American Library Association and can be credited with the promotion of card systems in libraries and business. He developed the ideas for his library classification system in 1873 while working at Amherst College library. He applied the classification to the books in that library, until in 1876 he had a first version of the classification. In 1876, he published the classification in pamphlet form with the title *A Classification and Subject Index for Cataloguing and Arranging the Books and Pamphlets of a Library*. He used the pamphlet, published in more than one version during the year, to solicit comments from other librarians. It is not known who received copies or how many commented as only one copy with comments has survived, that of Ernest Cushing Richardson.[8] His classification system was mentioned in an article in the first issue of the *Library Journal* and in an article by Dewey in the Department of Education publication "Public Libraries in America" in 1876. In March 1876, he applied for, and received copyright on the first edition of the index. The edition was 44 pages in length, with 2,000 index entries, and was printed in 200 copies.

1885 - Dewey Decimal Classification

The second edition of the Dewey Decimal system, published in 1885 with the title *Decimal Classification and Relativ Index for arranging, cataloging, and indexing public and private libraries and for pamflets, clippings, notes, scrap books, index rerums, etc.*, comprised 314 pages, with 10,000 index entries. Five hundred copies were produced.[11] Editions 3–14, published between 1888 and 1942, used a variant of this same title. Dewey modified and expanded his system considerably for the second edition. In an introduction to that edition Dewey states that "nearly 100 persons hav [spelling of 'have' per English-language spelling reform, which Dewey championed] contributed criticisms and suggestions". One of the innovations of the Dewey Decimal system was that of positioning books on the shelves in relation to other books on similar topics. When the system was first introduced, most libraries in the US used fixed positioning: each book was assigned a permanent shelf position based on the book's height and date of acquisition. Library stacks were generally closed to all but the most privileged patrons, so shelf browsing was not considered of importance. The use of the Dewey Decimal system increased during the early 20th century as librarians were convinced of the advantages of relative positioning and of open shelf access for patrons. New editions were readied as supplies of previously published editions were exhausted, even though some editions provided little change from the previous, as they were primarily needed to fulfill demand. In the next decade, three editions followed closely on: the 3rd (1888), 4th (1891), and 5th (1894). Editions 6 through 11 were published from 1899 to 1922. The 6th edition was published in a record 7,600 copies, although subsequent editions were much lower. During this time, the size of the volume grew, and edition 12 swelled to 1243 pages, an increase of 25% over the previous edition.[16]

In response to the needs of smaller libraries which were finding the expanded classification schedules difficult to use, in 1894, the first abridged edition of the Dewey Decimal system was produced.[14] The abridged edition generally parallels the full edition, and has been developed for most full editions since that date. By popular request, in 1930, the Library of Congress began to print Dewey Classification numbers on nearly all of its cards, thus making the system immediately available to all libraries making use of the Library of Congress card sets.

Dewey's was not the only library classification available, although it was the most complete. Charles Ammi Cutter published the Expansive Classification in 1882, with initial encouragement from Melvil Dewey. Cutter's system was not adopted by many libraries, with one major exception: it was used as the basis for the Library of Congress Classification system.

In 1895, the International Institute of Bibliography, located in Belgium and led by Paul Otlet, contacted Dewey about the possibility of translating the classification into French, and using the classification system for bibliographies (as opposed to its use for books in libraries). This would have required some changes to the classification, which was under copyright. Dewey gave permission for the creation of a version intended for bibliographies, and also for its translation into French. Dewey did not agree, however, to allow the International Institute of Bibliography to later create an English version of the resulting classification, considering that a violation of their agreement, as well as a violation of Dewey's copyright. Shortly after Dewey's death in 1931, however, an agreement was reached between the committee overseeing the development of the Decimal Classification and the developers of the French *Classification Decimal*. The English version was published as the Universal Decimal Classification and is still in use today.

According to a study done in 1927, the Dewey system was used in the US in approximately 96% of responding public libraries and 89% of the college libraries. After the death of Melvil Dewey in 1931, administration of the classification was under the Decimal Classification Committee of the Lake Placid Club Education Foundation, and the editorial body was the Decimal Classification Editorial Policy Committee with participation of the American Library Association (ALA), Library of Congress, and Forest Press. By the 14th edition in 1942, the Dewey Decimal Classification index was over 1,900 pages in length and was published in two volumes.

1942–PRESENT

Children being taught the top-level categories of the Dewey Decimal Classification system at a library in Edmonton, Alberta, Canada in the 1960s.

The growth of the classification to date had led to significant criticism from medium and large libraries which were too large to use the abridged edition but found the full classification overwhelming. Dewey had intended issuing the classification in three editions: the library edition, which would be the fullest edition; the bibliographic edition, in English and French, which was to be used for the organization of bibliographies rather than of books on the shelf; and the abridged edition. In 1933, the bibliographic edition became the Universal Decimal Classification, which left the library and abridged versions as the formal Dewey Decimal Classification editions. The 15th edition, edited by Milton Ferguson, implemented the growing concept of the "standard edition", designed for the majority of general libraries but not attempting to satisfy the needs of the very largest or of special libraries. It also reduced the size of the Dewey system by over half, from 1,900 to 700 pages. This revision was so radical that an advisory committee was formed right away for the 16th and 17th editions. The 16th and 17th editions, under the editorship of the Library of Congress, grew again to two volumes. However, by now, the Dewey Decimal system had established itself as a classification for general libraries, with the Library of Congress Classification having gained acceptance for large research libraries.

The first electronic version of "Dewey" was created in 1993. Hard-copy editions continue to be issued at intervals; the online WebDewey and Abridged WebDewey are updated quarterly.

Administration And Publication

Dewey and a small editorial staff managed the administration of the very early editions. Beginning in 1922, the Lake Placid Club Educational Foundation, a not-for-profit organization founded by Melvil Dewey, managed administrative affairs. The ALA set up a Special Advisory Committee on the Decimal Classification as part of the Cataloging and Classification division of ALA in 1952. The previous Decimal Classification Committee was changed to the Decimal Classification Editorial Policy Committee, with participation of the ALA Division of Cataloging and Classification, and of the Library of Congress.

Melvil Dewey edited the first three editions of the classification system and oversaw the revisions of all editions until his death in 1931. May Seymour became editor in 1891 and served until her death in 1921. She was followed by Dorcas Fellows, who was editor until her death in 1938. Constantin J. Mazney edited the 14th edition. Milton Ferguson functioned as editor from 1949 to 1951. The 16th edition in 1958 was edited under an agreement between the Library of Congress and Forest Press, with David Haykin as director. Editions 16–19 were edited by Benjamin A. Custer and the editor of edition 20 was John P. Comaromi. Joan Mitchell was editor until 2013, covering editions 21 to 23. In 2013 Michael Panzer of OCLC became Editor-in-Chief. The Dewey Editorial Program Manager since 2016 has been Dr. Rebecca Green.[31]

Dewey himself held copyright in editions 1 to 6 (1876–1919). Copyright in editions 7–10 was held by the publisher, The Library Bureau.[32] On the death of May Seymour, Dewey conveyed the "copyrights and control of all editions" to the Lake Placid Club Educational Foundation, a non-profit chartered in 1922. The Online Computer Library Center (OCLC) of Dublin, Ohio, US, acquired the trademark and copyrights associated with the Dewey Decimal Classification system when it bought Forest Press in 1988. In 2003 the Dewey Decimal Classification came to the attention of the U.S. press when OCLC sued the Library Hotel for trademark infringement for using the classification system as the hotel theme.[34] The case was settled shortly thereafter.

The OCLC has maintained the classification since 1988, and also publishes new editions of the system. The editorial staff responsible for updates is based partly at the Library of Congress and partly at OCLC. Their work is reviewed by the Decimal Classification Editorial Policy Committee, a ten-member international board which meets twice each year. The four-volume unabridged edition was published approximately every six years, with the last edition (DDC 23) published in mid-2011. In 2017 the editorial staff announced that the English edition of DDC will no longer be printed, in favor of using the frequently updated WebDewey. An experimental version of Dewey in RDF was previously available at dewey.info beginning in 2009, but has not been available since 2015.

In addition to the full version, a single-volume abridged edition designed for libraries with 20,000 titles or fewer has been made available since 1895. The last printed English abridged edition, Abridged Edition 15, was published in early 2012.

The Dewey Decimal Classification organizes library materials by discipline or field of study. Main divisions include philosophy, social sciences, science, technology, and history. The scheme comprises ten classes, each divided into ten divisions, each having ten sections. The system's notation uses Indo-Arabic numbers, with three whole numbers making up the main classes and sub-classes and decimals designating further divisions. The classification structure is hierarchical and the notation follows the same hierarchy. Libraries not needing the full level of detail of the classification can trim right-most decimal digits from the class number to obtain more general classifications. For example:

500 Natural sciences and mathematics
510 Mathematics
516 Geometry
516.3 Analytic geometries
516.37 Metric differential geometries
516.375 Finsler geometry

The classification was originally enumerative, meaning that it listed all of the classes explicitly in the schedules. Over time it added some aspects of a faceted classification scheme, allowing classifiers to construct a number by combining a class number for a topic with an entry from a separate table. Tables cover commonly used elements such as geographical and temporal aspects, language, and bibliographic forms. For example, a class number could be constructed using 330 for economics + .9 for geographic treatment + .04 for Europe to create the class 330.94 European economy. Or one could combine the class 973 (for the United States) + .05 (for periodical publications on the topic) to arrive at the number 973.05 for periodicals concerning the United States generally. The classification also makes use of mnemonics in some areas, such that the number 5 represents the country Italy in classification numbers like 945 (history of Italy), 450 (Italian language), 195 (Italian philosophy). The combination of faceting and mnemonics makes the classification *synthetic* in nature, with meaning built into parts of the classification number. The Dewey Decimal Classification has a number for all subjects, including fiction, although many libraries maintain a separate fiction section shelved by alphabetical order of the author's surname. Each assigned number consists of two parts: a class number (from the Dewey system) and a book number, which "prevents confusion of different books on the same subject". A common form of the book number is called a Cutter number, which represents the author and distinguishes the book from other books on the same topic

Main article: List of Dewey Decimal classes

(From DDC 23)

- 000 – Computer science, information and general works
- 100 – Philosophy and psychology
- 200 – Religion
- 300 – Social sciences
- 400 – Language
- 500 – Pure Science
- 600 – Technology
- 700 – Arts and recreation
- 800 – Literature
- 900 – History and geography

(From DDC 23)

- T1 Standard Subdivisions
- T2 Geographic Areas, Historical Periods, Biography
- T3 Subdivisions for the Arts, for Individual Literatures, for Specific Literary Forms
  - T3A Subdivisions for Works by or about Individual Authors
  - T3B Subdivisions for Works by or about More than One Author
  - T3C Notation to Be Added Where Instructed in Table 3B, 700.4, 791.4, 808–809
- T4 Subdivisions of Individual Languages and Language Families
- T5 Ethnic and National Groups
- T6 Languages

Relative Index

The Relative Index (or, as Dewey spelled it, "Relativ Index") is an alphabetical index to the classification, for use both by classifiers and by library users when seeking books by topic. The index was "relative" because the index entries pointed to the class numbers, not to the page numbers of the printed classification schedule. In this way, the Dewey Decimal Classification itself had the same relative positioning as the library shelf and could be used either as an entry point to the classification, by catalogers, or as an index to a Dewey-classed library itself.

CONCLUSION

Dewey Decimal Classification, also called Dewey Decimal System, system for organizing the contents of a library based on the division of all knowledge into 10 groups, with each group assigned 100 numbers. ... It was first published in 1876, and the 20th edition of the system had been published by the late 20th century. The Dewey system's numerical classification provides a shorthand identification and location tool. The notation lends itself to memory through the constant repetition of a standard pattern (area arrangement, different numbers for particular languages), through parallel subject developments (each book of the Bible given the same development as the Bible as a whole), and through patterned repetition of standard subdivisions (theory, study and teaching, history, geography, etc.). To distinguish works within a group and to expedite retrieval, many libraries add a book number created from the Cutter, or Cutter-Sanborn, Tables, which provide further specifications for author and genre.

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